



Gullen Range Wind Farm

Modification Application (MP 07_0118 MOD 1)

Submissions Report

June 2014



Prepared for Gullen Range Wind Farm Pty Ltd by Goldwind Australia Pty Ltd

Gullen Range Wind Farm - Modification Application (MP 07_0118 Mod_1)
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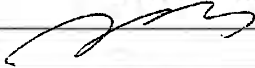

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Certification of Submissions Report (MP 07_0118 MOD 1)

This Submissions Report (SR) provides the response of Gullen Range Wind Farm Pty Ltd to submissions received by NSW Department of Planning and Environment (DPE) in response to the exhibition of the application for modification of the Project Approval (MP 07_0118 MOD 1) submitted on 01 April 2014 under section 75W of the Environmental Planning and Assessment Act, 1979 (EP&A). The modification of the Project Approval being sought by Gullen Range Wind Farm Pty Ltd (GRWFPL) is as follows:

Modification of the Gullen Range Wind Farm Project Approval to confirm the updated locations of the 73 approved Wind Turbine Generators (Turbines) from the 'Indicative' locations listed in the Environmental Assessment (2008) to the 'Final Design' locations listed in the EA (GRWFPL, 2014) document.

This Submissions Report addresses the matters raised in the submissions and for those that have not been fully addressed by the Environmental Assessment for the Modification Application additional information is provided to assist determination of the application.

<p>Project Proponent</p> <p>SR prepared for proponent based on proponent's project description, record of consultation and proposed mitigation measures</p>	<p>Mr Ning Chen, Director Gullen Range Wind Farm Pty Ltd Level 23, 201 Elizabeth Street SYDNEY NSW 2000</p>
<p>Certification by Proponent, in respect of Project Details, Consultation and updated Statement of Commitments presented in the SR.</p>	<p>I Ning Chen,  Date: 04 June 2014</p> <p style="text-align: center;"><i>Signature</i></p> <p>certify that this SR provides:</p> <ul style="list-style-type: none"> • a true representation of the proposed project as amended • accurately represents the consultation undertaken • does not seek to materially mislead, and that • Gullen Range Wind Farm Pty Ltd is committed to implementing the project in accordance with the commitments of this SR.
<p>SR compiled by Jeff Bembrick on behalf of GRWF Pty Ltd based on proponents project advice, consultation with Department of Planning and Environment, advice of relevant specialists and review of relevant matters.</p> <p>Organisation and address:</p>	<p>Jeff Bembrick, Planning and Environmental Advisor,</p> <ul style="list-style-type: none"> • Bachelor of Science 1974, University of NSW • Master of Environmental Studies 1993, University of NSW • Certified Lead Environmental Auditor (Exemplar Global) <p>Goldwind Australia Pty Ltd. Level 23, 201 Elizabeth Street SYDNEY NSW 2000</p>
<p>Certification of Submissions Report</p>	<p>I Jeff Bembrick,  Date: 04 June 2014</p> <p style="text-align: center;"><i>Signature</i></p> <p>certify that this SR:</p> <ul style="list-style-type: none"> • Objectively addresses the matters raised in submissions provided to GRWFL by NSW Department of Planning and Environment in accordance with it's letter of 03 May 2014. • provides additional assessments and comment on matters arising from consultation conducted by GRWFPL • does not seek to materially mislead

0 Executive Summary

Gullen Range Wind Farm Pty Ltd (GRWFPL) is seeking a modification of the project approval for the 73 turbine Gullen Range Wind Farm (GRWF). A Modification Application was lodged with NSW Department of Planning and Environment (DPE) on 01 April 2014. The Application sought a modified Project Approval that confirms the locations of the 73 turbines in a practical and efficient arrangement that is compliant with the objectives and requirements of the Project Approval. No additional turbines are proposed as part of this modification application and all 73 turbines remain on the same land titles as applicable for the Project Application.

The review of the Modification Application MP 07_0118 MOD 1 includes the following stages:

- placed on public exhibition by DPE for a period from 3 April 2014 to 2 May 2014.
- referred by DPE to relevant government agencies in parallel with exhibition
- About 80 submissions received during and after the exhibition period from community and government agencies
- proponent prepared this Submissions Report (SR) that comments on submissions received and matters raised in the respective submissions

Following the period of public exhibition and referrals, a total of about 82 public and government agency submissions have been received by DPE. As is the normal procedure for review of submissions, the proponent has been given the opportunity to make comments on the submissions and the proponent's comments are compiled in this Submissions Report (SR).

The source of submissions is summarised in the table below.

Source	Number		Details
Government			
DPE	1		Survey details
ULSC	1		Councillors
NSW Government agencies	4		EPA, OEH, MRB, CL
Civil Aviation Safety Authority	1		CASA
Sub-total government submissions	7 (9%)		
Public	Local	Distant	
Objection – Neighbours to the project	25	-	Neighbours to project area
Objection – Wider locality, region and interstate	-	32	More distant from project
Objection - Now associated property	4	-	2 from one submitter
Objection – Landscape Guardians	2	1	2 local and 1 at Boorowa
Support - Host and associated plus community	7	4	Local and distant
Sub totals	38 51%	37 49%	
Sub-total public submissions	75 (91%)		
Total all submissions	82		

Note: As some submitters lodged multiple submissions, approximately 75 submitters lodged the 82 submissions.

Approximately half of the public submissions 38 (51%) are from the areas immediately surrounding the wind farm and within this area, 81% of the local submissions are objections and 19% are in support. More distant areas within the region are well represented amongst public submissions and 92% appear to constitute objections to GRWF and wind farms in general rather than addressing specific aspects relating to impacts of the modifications for their residence or property. 8% of the public submissions from more distant locations are supportive.

Many of the public submissions objecting to the application include generalized statements and exaggerated claims. One aspect adopted by a range of submitters related to claims of unreliability of the proponent's survey data. That claim was tested by a surveyor commissioned by DPE and proponent's survey data was shown to be accurate and providing a sound basis for assessments.

Matters raised by submitters, in respect of the wind farm generally or the modification, included:

- Visual impact – excessive impact, photomontages not suitable, viewpoint locations unsuitable
- Noise and disturbance – excessive noise, don't trust modelling or compliance monitoring
- Property values – concern regarding devaluation and advice on property values
- Health effects – indicated as a consequence of the wind farm and turbine movements
- Request for public inquiry – this seems to have been spawned through many submissions
- Request for penalties to be applied and turbines removed from project
- Matters relating to acquisition of neighbours' properties and recommendations for process
- Damage to local roads and concerns regarding GRWFPL not addressing the damage
- Questioned benefits of wind energy and associated costs
- Concerns about impact on stock and ability to work safely near turbines
- And a range of other matters.

The proponent has provided objective comment on the various matters raised and setting out the context, assessments undertaken, results of assessments and conclusion in respect of the specific matters. The proponent's responses to submissions are provided in Sections 4 to 8.

There are some aspects of the matters raised that would benefit from discussion between the submitter and the proponent and, subject to agreement of respective submitters, GRWFPL would like to arrange meetings to discuss specific aspects of the submissions. This is proposed to enable better understanding of the submitter's specific concerns with a view to investigating whether their concerns can be remedied.

The SR also includes:

- updates on the construction status of GRWF (Section 2),
- comment on the DPE arranged survey and comparison with proponent survey data (Section 2.3)
- status of GRWFPL property negotiations and arrangements (Section 3)
- additional information including supplementary assessments (Section 9) that GRWFPL regards as being relevant to the determination of the modification application in the context of the submissions received and matters to be reviewed by DPE.
- An updated Statement of Commitments. (Appendix A11)

Additional associated lands and associated residences are also confirmed in this SR. These include; B7, B17, B121a, B122a and PW34.

Four additional residences have been identified and, where relevant, assessments are provided with this Submissions Report. These include B31a, a non-associated residence adjacent Range Road and between the wind farm and Grabben Gullen and G52 to the south east of the wind farm. Both B31a and G52 are non-associated and <2km from closest turbine. An associated residence, G37a is located near G52 and in the south eastern area of the wind farm locality. A second associated residence PW37 is located in Prices Lane to the north west of the substation.

Additional assessments included in the Submissions Report are described in Section 9 including in respect of the recently identified residences.

DPE undertakes a review of the modification application including the Environmental Assessment (GRWFPL, March 2014), the submissions from the public and government agencies and the proponent's comments on the submissions (this SR). DPE may also consider any other matters that may be relevant to the determination of the application. DPE prepares the Director-General's Assessment Report (DGAR) based on the relevant information

Where applicable, and in response to the submissions, the proponent may also make amendments to the detail of the project that is the subject of the Modification Application and would address the changes through a Preferred Project Report. The project including the modifications outlined in the EA, March 2014 is regarded by GRWFPL as being 'generally in accordance' with the Project Approval. No changes to the project are proposed other than confirming the locations of the 73 permitted turbines. Accordingly a Preferred Project Report is not deemed necessary for the project.

The additional assessments provided in Section 9 of this SR together with the EA, March 2014 and, the proponent's responses to submissions demonstrate that the project based on the final design has been implemented generally in accordance with the Project Approval and does not result in greater environmental or social impacts relative to the Project Approval.

Subject to confirmation of the turbine locations defined in the EA, March 2014, the construction of the project can be completed in the latter half of 2014 and contribute the following:

- 165.5 MW of renewable energy
- 3.1 million tonnes of greenhouse gas emissions savings by 2020
- community enhancement program
- income to host landowners and associated property owners
- indirect financial benefits to local employees and businesses

1. Introduction

This section of the Submissions Report (SR) describes the purpose of this document, the background to the modification application to which the SR relates, the associated exhibition and referral processes for the modification application and an outline of the issues raised by the submissions lodged by the public and government agencies.

1.1 Purpose of document

This Submissions Report (SR) provides the proponent's response to submissions received by NSW Department of Planning and Environment (DPE) as a result of the exhibition of the application for modification of the Project Approval for the Gullen Range Wind Farm (GRWF) Project. It also updates status of project details that may be considered by the Determining Authority in reaching its determination of the application.

Gullen Range Wind Farm Pty Ltd (GRWFPL) lodged a Modification Application (MP 07_0118 MOD 1) with DPE, on 01 April 2014. The Application was lodged under Section 75W of the EP&A Act, 1979. It sought modification of the Project Approval for GRWF granted on 04 August 2010. The scope of the Application for Modification of the Project Approval is as follows.

GRWF Pty Ltd (GRWFPL) seeks a modification of the Project Approval to confirm the updated locations of the 73 approved Wind Turbine Generators (Turbines) from the 'Indicative' locations listed in the Environmental Assessment (Epuron, 2008) to the 'Final Design' locations listed in the EA (GRWFPL, 2014).

The Submissions Report has been prepared following public exhibition of the Modification Application and provides comment on the public and agency submissions received by DPE as a result of the exhibition. The EA (GRWFPL, 2014), the public and agency submissions received and, this SR, all form part of the matters considered by the determining authority in the review of the Modification Application.

1.2 Background to the review process for the modification application

The GRWF project obtained Project Approval on 04 August 2010. The approval was made by the Land and Environment Court Order and is subject to the Conditions set out in the Approval Instrument.

Construction of GRWF commenced in 2012 and is now well advanced with completion of construction scheduled for the second half of 2014. Footings have been constructed for all 73 turbines and these have been surveyed. The turbine locations are generally in accordance with the indicative locations described in the Project Approval documents but have been adjusted to varying degrees as part of the Final Design for reasons that had been indicated in the Project Approval and Modification Application documents.

The average adjustment in turbine location from the indicative locations for the 73 turbines is 42 metres with the maximum of 187 metres for a specific turbine. The acceptability of the larger adjustments has been questioned by DPE and an application for modification of the Project Approval is required to seek confirmation of the adjusted turbine locations under a modified Project Approval.

The Modification Application MP 07_0118 MOD 1 was lodged with DPE on 01 April 2014 and was placed on public exhibition by DPE for an extended period of four weeks from 3 April 2014 to 2 May 2014. The project was also referred by DPE to relevant NSW government agencies that have a role in managing specific issues related to the potential impacts associated with the Modification Application and the project generally. DPE placed advertisements in local papers to advise the public of the exhibition. In addition, notifications of the public exhibition were made by DPE to landowners of the neighbouring properties to the project area. Representatives of DPE also visited some of the neighbours during the first week of the exhibition period. GRWFPL also arranged limited consultation with non-associated landowners within 2km of the project area.

As a result of the public exhibition and referrals to NSW government agencies, 82 submissions have been received. DPE considers each of the submissions as part of its review of the modification application. DPE also makes available copies of the submissions on its website and has required GRWFPL to respond to the issues raised in the submissions (DPE letter of 6 May 2014, Appendix A1). GRWFPL has compiled its comments on the submissions in this Submissions Report (SR) and provides the SR to DPE as part of the material for consideration in the determination of the Modification Application.

During the exhibition period, GRWFPL has also arranged consultation with landowners surrounding the project area and, in this SR, acknowledges the matters raised from the consultation process and provides comments on those matters (Section 9.7).

DPE undertakes a review of the modification application including, the Environmental Assessment (GRWFPL, 2014), submissions from the public and government agencies, this SR and, any other matters that may be deemed relevant to the determination of the application. DPE provides an assessment of the information and findings are compiled in the Director-General's Assessment Report (DGAR). DPE is also expected to make recommendations in respect of the determination of the modification application and any change to approval conditions. The DGAR and DPE's recommendations are made available for consideration by the Determining Authority.

Section 75W of the EP&A Act provides for approvals to be made by the Minister. Where more than 25 submissions have been received, as is the case for this application, then the application may be referred to the Planning Assessment Commission (PAC). This is expected to occur in June 2014. PAC will define a process to give further consideration to the matters relevant to the modification application and its review of the issues and relevant material.

1.3 Summary of submissions received

A total of 82 submissions were received from a total of about 75 respondents being individuals, organisations or government agencies. Some individuals provided multiple submissions.

The source of the submissions is indicated in Table 1-1. The respective respondents are also listed in Table 1-2, Table 1-3 and Table 1-4 and reviews of submissions are provided in Sections 4 to 8.

Table 1-1– Source of submissions

Source	Number		Details
Government			
DPE	1		Survey details
ULSC	1		Councillors
NSW Government agencies	4		EPA, OEH, MRB, CL
Civil Aviation Safety Authority	1		CASA
Sub-total government submissions		7 (9%)	
Public	Local	Distant	
Objection – Neighbours to the project	25	-	Neighbours to project area
Objection – Wider locality, region and interstate	-	32	More distant from project
Objection - Now associated property	4	-	2 from one submitter
Objection – Landscape Guardians	2	1	2 local and 1 at Boorowa
Support - Host and associated plus community	7	4	Local and distant
Sub totals	38 51%	37 49%	
Sub-total public submissions		75 (91%)	
Total all submissions		82	

Note: As some submitters lodged multiple submissions, 75 submitters lodged the 82 submissions.

About 9% of submissions were from government agencies.

In regards to the source of public submissions these included submissions from the immediate areas surrounding the wind farm, the wider Southern Tablelands area, other parts of NSW and one from Victoria.

In Table 1-3, the following numbering (1 to 5) has been used to broadly indicate the proximity of the submitter. Residence number where applicable and known is also included in Table 1-3.

1. – Immediate Neighbours (51% of public submissions, 15% of public submissions are support)
2. – Crookwell and local area but not immediate neighbours
3. – Region, Goulburn, Laggan, Binda, Gunning, Rye Park
4. – NSW generally, Sydney, Scone, etc
5. – Interstate, one from Victoria

In terms of relevance to the determination of the modification application, GRWFPL believes that the submissions can be grouped into the following categories based on proximity of the submitter and significance of the modifications to their circumstances.

- Submissions from residents in the immediate area surrounding the wind farm or with property interests for land surrounding the project. These persons are considered to have potential to be impacted by modifications to the project and warrant closer review.

- Submissions from locations in the broader region, NSW generally and, interstate are considered to more of a general nature and less relevant to the determination of the modification application. However, details of many submitter's interest in local properties is not known and the distinction may not be definitive. These submissions from more distant locations can be related to:
 - support for relatives or friends in the project vicinity
 - submitters that live remotely but own property at the locality
 - neighbours to other wind farm developments, proposed or being implemented and having an interest in opposing wind farm projects generally.

Public submissions in Table 1-3 are listed in order of proximity to the wind farm.

The submissions are also distinguished by whether they object to or support the modification application. Those that made submissions that were lodged as comments have been grouped either as an objection or supportive of the project based on the matters raised in the submission and position taken for the submission.

Some submissions have not supplied names and address details or have requested that their name be withheld. Accordingly they are not able to be placed in relation to the project and the significance of their comments can be less meaningful. Without knowledge of the location of the submitter, the proponent has less basis to comment on the issues raised by the submitter. It is also expected that DPE may similarly have difficulty assigning significance to matters raised by submitters where location has not been confirmed.

In parallel with the exhibition, consultation was also undertaken with approximately 45 non-associated neighbours to the project area. The consultation was primarily directed to notifying them of the modification application and project status generally. Consultation is discussed further in Section 9.7 of this SR.

Table 1-2 - List of government agency respondents to referral of the Modification Application

SR Section	Details of respondent organisation	DPE Website Submission Reference
4	Government Agencies	
4.3	Upper Lachlan Shire Council (ULSC)	95818
4.4	Environment Protection Authority (EPA)	94965
4.5	Office of Environment and Heritage (OEH)	96880
4.5.1	Biodiversity aspects	
4.5.2	Aboriginal heritage aspects	
4.6	Trade and Investment - Resources and Energy	94967
4.7	Trade and Investment – Crown Lands	Late submission not on website
4.8	Civil Aviation Safety Authority (CASA)	98835

Table 1-3 - List of Public Submissions received from exhibition of the application

SR Section	Submitter objecting to the Project	GRWF Residence Reference	Indicated proximity to project	DPE Website Submission Reference
5. Submitters objecting Note: indicative proximity is based on scale 1 to 5 as indicated above				
5.1	Chris Knight	K2	1	96242
5.2	Jessica Earle	K17	1	96576
5.3	John De Groot	B5	1	95964
5.4	Humphrey Price-Jones	B12	1	96702
5.5	Jennifer Price-Jones	B12	1	96625
5.6	Name withheld	B12	1	97101
5.7	Name withheld (2)	B29	1	96094 96663
5.8	Clem Carlon	B31a	1	96907
5.9	Douglas Werrin	B41	1	97142
5.10	Victoria Mendl	B44	1	96476
5.11	Name withheld	B49	1	96638
5.12	Charles Barber	PW4	1	96028
5.13	Cheryl White	PW4	1	96734
5.13	Rosemary Howe	PW4	1	96736
5.14	Kath M Kennedy (2)	G36	1	95910 96708
5.15	David Brooks	G43	1	97036
5.16	Neil Madden	G52	1	96246
5.17	Name withheld	Unknown	1	96474
5.18	Name withheld	Unknown	1	96480
5.19	Mark Coggan	NA	1	96768
5.20	Sean Egan	NA	2 - Crookwell	96739
5.21	John Carter	NA	2 - Crookwell	96031
5.22	Malcolm Barlow	NA	2 - Crookwell	96328
5.23	Robert Galland	NA	3 - Goulburn	96674
5.24	Bob & Celia Galland	NA	3 - Goulburn	96103
5.25	Name withheld	NA	3 - Cullerin	96700
5.26	Jayne Apps	NA	3 - Rye Park	96667
5.27	John Formby	NA	3 - Binda	96897
5.28	Linda Pahl	NA	3 - Gunning	96120
5.29	Grant Winberg - 1st of 3 submissions	NA	3 - Roslyn	94804
5.30	Grant Winberg - 2 nd of 3 submissions	NA	3 - Roslyn	96080
5.31	Janine Hannan	NA	3 - Roslyn	96082
5.32	Mingo S Mortimer	NA	3 - Collector	96202
5.33	Name withheld NA	NA	4 - NSW	96026
5.34	Ken Marks	NA	4 - Mosman	96407
5.35	Name withheld	NA	4 - South Turramurra	96655
5.36	Jerome Rowley	NA	4 - Wollstone-croft	96722
First Grouped Response				
5.37	Elizabeth McFadden	Unknown	1	96109
	Glenys Walkom	Unknown	1	96478
	Name withheld	NA	2 - Crookwell	96642
	Grant Winberg - 3 rd of 3 submissions	NA	3 - Roslyn	95864
	John Zubrzycki - 2 nd of 2 submissions	NA	3 - Laggan	95882
	Nicole Ceylon	NA	3 - Laggan	95868
	Christopher Lee - 2 nd of 2 submissions	NA	3 - Laggan	95908

SR Section	Submitter objecting to the Project	GRWF Residence Reference	Indicated proximity to project	DPE Website Submission Reference
	Denis Workman	NA	3 - Yalbraith	96646
	Janet Hetherington	NA	5 - Victoria	96910
	Second Grouped Response			
5.38	Name withheld	K14	1	95985
	Name withheld	K14	1	96580
	Name withheld	NA	4 - Erskineville	96747
	Name withheld	NA	4 - Randwick	96235
	Name withheld	NA	4 - Randwick	96324
	Third Grouped Response			
5.39	John Zubrzycki (1 st of 2 submissions)	NA	3 - Laggan	96084
	Christopher Lee (1 st of 2 submissions)	NA	3 - Laggan	96076
	Dr Georgina Chambers	NA	4 - Randwick	96107
	Josephine Key	NA	4 - Edgecliff	96096
	Ian Breden	NA	4 - NSW	96098
6. Submission Objecting but where property is now associated				
6.1	John and Ingrid Benjamin	PW34	1	97031
6.2	Scott Montgomery	B7, B17 B121a B122a	1	96455
6.3	Rob Post	B20	1	95714
6.3	Robert and Melissa Post	B20	1	96905
7	Submissions from Landscape Guardians			
	(See Table 1.4 below)			
8	Submissions in Support			
8.1	Charlie Prell	NA	2 - Crookwell	96498
8.2	Neville Maberly	NA	1 – (Biala)	96919
8.3	Wayne Leonard	B53	1 - Bannister	96921
8.4	Carl Banfield	B1	1 – Grabben Gullen	95853
8.5	Elizabeth and Kenneth Ikin	PW7	1 - Bannister	96570
8.6	Name withheld - Bannister	Unknown	1 - Bannister	96180
8.7	Ray Riches	NA	1 - Pomeroy	96916
8.8	Terry Bush	G37	1 - Pomeroy	96111
8.9	Name withheld	NA	2 - Crookwell	96017
8.10	Name withheld	NA	2 - Crookwell	96506
8.11	Adam Bush	NA	4 - Scone	96596

Table 1-4– Submissions from Landscape Guardians

Other Organisations	Number of Submissions	District	Notes on locality	DPE Website Reference
Crookwell District Landscape Guardians	1	Crookwell	Crookwell, about 5 kms north of the project area	97091
Parkesbourne/Mummel Landscape Guardians	1	Parkesbourne/Mummel	Southeast of project area	97830
Boorowa District Landscape Guardians	1	Boorowa	Distant from the project area, to the west	96720

1.4 Note on GRWFPL handling of public submissions

The proponent's review of submissions provides:

- A separate review of each of the individual public and agency submissions and each of the various matters raised for the individual submissions as requested by DPE.
- Commentary on the issues raised that are relevant to the modification application in respect of the material extracted from individual submissions. There is considerable overlap in the issues raised by individual public submissions. Where content is the same for a set of submissions then a single response is provided for the group of submissions that have the same content.

As a general approach to reviewing the submissions, this SR distinguishes between matters that relate to the modification of turbine locations and, those matters that relate to the submitters view of the overall acceptability of the wind farm that is subject to an existing approval. Where the proponent, considers that issues raised are unrelated to the modification application then this is noted in the SR and the matter is not subject to the detail applicable to matters relevant to the modification of turbine locations. Nevertheless, comment is provided in the event that DPE or the determining authority wish to consider the specific matter further.

1.5 Structure and content of this SR

This SR addresses the requirement of the DPE letter, 6 May 2014 (Appendix A1) for GRWFPL to respond to the issues raised in the submissions received by DPE in respect of the Modification Application and that DPE has posted on its website.

This SR document for MOD 1 provides the following:

- An outline of the process for determination of the modification application
- Lists the submissions reviewed in the SR
- Provides comments by GRWFL on the matters raised by the submissions and considered relevant to the modification application
- Provides details of additional assessments undertaken since the modification application was lodged
- Outlines the environmental impacts and mitigation measures associated with the adjustments to turbine locations and any additional measures proposed since the modification application was lodged. An updated Statement of Commitments (SoC) is provided with the SR.
- Provides a justification for the adjusted turbine locations in the context of the Project Approval and as a basis for the Minister to consider the modification application for GRWF Project

This document has been structured as follows:

Section 1 sets out the purpose of the SR and background to the application process for modification of project approval

Section 2 details the project to be implemented including an update on status of the project construction since the application was made.

Section 3 updates the status of the properties associated with the project and any acquisitions or agreements established since the modification application was lodged.

Section 4 Reviews and comments on the government agency submissions

Section 5 Reviews the submissions from the public that object to the application for modification of the approval

Section 6 Reviews submissions from objectors that are landowners for properties that are now associated

Section 7 Reviews the submissions from the Incorporated Landscape Guardian groups that object to the application for modification of the project approval

Section 8 Reviews public submissions that support the modification application

Section 9 provides details of additional assessments undertaken in association with the Submissions Report. It also outlines the consultation undertaken in association with the modification application

Section 10 provides conclusions in respect of the modification application and mitigation measures proposed. Section 10 also provides details of the updated Statement of Commitments

Section 11 provides the justification for the modification that is being sought.

Section 12 lists references for this SR document

Section 13 lists the **Appendices** to the SR which include supporting material and specialist assessments and/or statements as to the impact of the modifications relative to the specialist's field of expertise and applicable legislation. The review of the project's impacts relies heavily on the specialist assessments and opinion in the appendices. The findings of the specialists have been summarised in the relevant parts of the EA, March 2014, and this SR document.

1.6 Contributors to the preparation of the SR.

The organisations that have been directly or indirectly involved in the process for assessment of impacts and preparation of this SR are shown in Table 1-5

Table 1-5 Contributors to the Mod 1 Submissions Report preparation process

Project / Component Role	Organisation / Individual
Project management and development of Final Design, Property aspects and consultation details. Coordination of studies and preparation of SR, May 2014.	Goldwind Australia, project team members.
Assessment Requirements for modification application and independent survey results Review of draft SR and additional requests	Department of Planning and Environment (DPE)
Advice on planning legislation	K&L Gates
Noise assessment update and comments on submissions	Marshall Day Acoustics
Ecological issues assessment	nghenvironmental
Indigenous heritage assessment review	EMGA Mitchell McLennan Pty Ltd (EMM)
Telecommunications interference	Lawrence Derrick and Associates and Epuron. Consultation with NSW Telco, RFS and Telstra
Visual – Photomontage B31 and review	ERM
Shadow flicker update	Epuron
Agencies that were consulted in regard to adjustments of turbine locations and submissions made on the Modification Application	DPE NSW Office of Environment and Heritage (OEH)
Consultation with local community during exhibition period	AECOM on behalf of GRWFPL GRWFPL in respect of specific issues
Submissions in response to the public exhibition and referral of application	Local community and government agencies
GIS and graphics preparation, advice on earlier assessments of residence location.	Epuron

1.7 Role of stakeholders in respect of the Modification Application

1.7.1 The Project

The GRWF project is a State Significant Development that received project approval in August 2010 as a Major Project under Part 3A of the EP&A Act. While Part 3A of the EP&A Act has been repealed, the transitional provisions apply. It remains a State Significant Development that does not necessarily address all requirements of the Local Environmental Plan (LEP) and where the determining authority may consider other attributes and benefits of the project in determining applications. It is acknowledged that it can be of concern to local communities that such projects may obtain consideration that can be different to developments that are determined in respect of an LEP.

1.7.2 Gullen Range Wind Farm Pty Ltd (GRWFPL)

Gullen Range Wind Farm Pty Ltd (GRWFPL) as the proponent is directing the construction and operation of the wind farm. GRWFPL is a subsidiary of Goldwind International and has acquired the project from Epuron.

Epuron was the previous owner of GRWFPL and undertook the initial project planning, submitted the Project Application (07-0118) and obtained the Project Approval in 2010. Epuron sold GRWFPL to Goldwind International on 28 January 2011.

Goldwind Australia is the Engineering, Procurement and Construction (EPC) contractor for the GRWF project. The EPC role includes the following key elements:

- Catcon/Consolidated Power Projects(CCP) are contracted for the construction of the wind farm balance of plant (civil and electrical works). Catcon/CP has previously constructed the balance of plant for Cullerin Range, Gunning and Woodlawn Wind Farms within the Southern Tablelands region and other wind farm projects in Tasmania, Victoria, South Australia and Western Australia.
- Windhoist were contracted to undertake wind turbine erection. Wind Turbine erection has been delayed due to persistent strong winds during allowable working hours.
- Kepple Prince Engineering have been contracted to provide additional capacity for the wind turbine erection, doubling crane capacity at site.

GRWFPL has an interest in implementing the project in a manner compliant with the Project Approval and has taken considerable effort to achieve this outcome. It has been guided by specialist advice including that from the Environmental Representative that fulfils a regulatory role for the project.

1.7.3 NSW Government and Department of Planning and Environment (DPE)

The Minister for Planning is the relevant approval authority for modification of the project approval as defined under Section 75W of the EP&A Act. However, the role can be assigned to the Planning Assessment Commission (PAC). Determination of the Modification Application for GRWF is likely to be made by the Planning Assessment Commission (PAC).

The determination of the modification application is assisted by the NSW Department of Planning and Environment (DPE). The Director-General (DPE) has been assigned roles in relation to the project as follows:

- Approval for matters described in the Approval Conditions, eg. CEMP and OEMP.
- Oversight of regulatory compliance
- Preparation of the Director-General's Assessment Report and recommendations in respect of determination of the modification application. If recommending approval, the advice on any conditions associated with the approval.

1.7.4 Environmental Representative (ER)

The implementation of the project in accordance with the Project Approval is overseen by the Environmental Representative (ER). The ER appointment is required by Approval Condition 7.1.

The ER has throughout construction undertaken review processes for the works being undertaken and directed action to comply with the Project Approval. The ER has also assessed consistency of various aspects of the project. GRWFPL has complied with requests for information and the directions of the ER.

In March 2014, DPE withdrew support for the initially approved ER and a replacement has been approved and has commenced project reviews.

1.7.5 Host landowners and associated landowners

Landowners of properties where the project is located have leased their land to Gullen Range Wind Farm Pty Ltd for the purpose of construction and operation of the wind farm. These landowners are referred to as Associated landowners.

In some cases, landowners of neighbouring lands have entered into agreements with GRWFPL and as a consequence their properties and or residences are also referred to as '*Associated*' Property or '*Associated*' Residence. These definitions are defined in the Project Approval and the definitions are repeated in Section 3.1.

In the case of neighbouring landowners that have not entered into agreements with GRWFPL their properties and residences are referred to as '*non-Associated*' Property and '*non-Associated*' residences.

1.7.6 Local and regional community

The Upper Lachlan Shire is a rural shire with various forms of pastoral activities and low to moderate settlement density with the main town centre being Crookwell to the north of the wind farm. A smaller township, Grabben Gullen is located to the west of the wind farm. The public has had a number of opportunities to provide its comments on the proposal and most recently to comment on the public exhibition of the modification application.

1.7.7 TransGrid

TransGrid is the owner and operator of the high voltage (132kV, 330kV and 500kV) electricity transmission network in NSW and is the owner and operator of the existing Marulan to Yass 330 kV transmission line that the wind farm is connected to. The 330 kV switchyard is owned by TransGrid and is adjacent to the Gullen Range Wind Farm 33kV/330kV substation. Both have been constructed and commissioned. As TransGrid owns and operates the 330kV switchyard, at a future point in time it will arrange survey and transfer of the land to TransGrid.

1.7.8 Upper Lachlan and Mulwaree Shire Councils

Upper Lachlan Council has responsibility for the local public roads that are used to access parts of the site. GRWF has consulted with Upper Lachlan Council in respect of improvements to the local roads. GRWFPL has also consulted Goulburn Mulwaree Council in respect of access routes and transport movements through that Shire. GRWFPL has also sought and gained approval from NSW Roads and Maritime Services for use of and modifications to the RMS road network.

GRWFPL has undertaken detailed assessments of road conditions before and after transport of all large items to the site and reported results of the assessments to the Councils as the first part of the process to reach agreement on the scope of repairs to be funded by GRWFPL.

1.7.9 Environment Protection Authority

The Environment Protection Authority (EPA) is the Appropriate Regulatory Authority (ARA) under the Protection of the Environment Operations Act for scheduled premises. An application has been made by GRWFPL to the EPA for an Environment Protection Licence and a draft Licence has been issued for comment and additional information.

1.7.10 Output of the wind farm

The output of the wind farm is sold in the National Electricity Market (NEM). The Electricity Grid connects NSW, Queensland, Victoria, South Australia and Tasmania which is connected via Basslink.

Gullen Range Wind Farm has the potential to create Renewable Energy Certificates (RECs) under the Large Scale Renewable Energy Target (LRET) scheme. These RECs may be purchased by electricity retailers to meet their commitments under the Scheme.

Energy Australia has secured the production from the GRWF project through a power purchase agreement (PPA).

2. Status of project implementation

2.1 Update on Status of project implementation

As indicated in the EA, 2014, the GRWF project has progressed to an advanced stage of construction where all 73 turbine footings have been constructed, turbines are progressively being erected, the substation has been completed and energised and the initial turbines have been commissioned and are able to generate.

The status of turbine construction at mid-March 2014 was indicated in the EA, March 2014 and is updated in this SR. The turbine construction status at 14 May 2014 is shown in Table 2-1. A schematic of the turbine construction stages is shown below (Figure 2-1). The turbine construction status, by location, is also shown in the map in Figure 2-2. GRWFPL also made an undertaking to defer construction of certain turbines.

Table 2-1- Stages of turbine construction

Construction stage	Description of construction stage	Status at 14 May 2014
1	Footings only constructed. Still to undergo erection of the towers, nacelles and rotors.	6
2	Partially erected (Base and mid-tower sections erected).	1
3	Turbines erected and are awaiting commissioning	18
4	Turbines installed, commissioned and now able to generate	48
	TOTAL	73

Figure 2-1 - Turbine Construction Stages

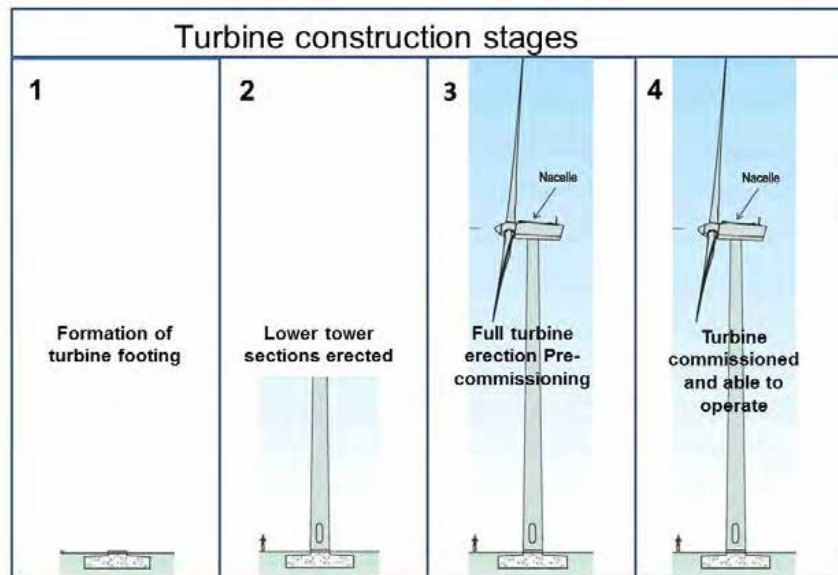


Figure 2-2 - Turbine construction status



LEGEND

Project boundary

Turbine construction status
(Accurate as at 14/05/14)

- Footing constructed
- Lower tower sections erected
- Turbine fully erected and awaiting commissioning
- Turbine erected and commissioned

Note: Grid markings in MGA94 zone 55
Aerial Photography 2006

GULLEN RANGE WIND FARM PTY LTD	PROJECT GULLEN RANGE WIND FARM		Document Number GR-PM-DWG_0104	
	TITLE Construction Status		Revision C	Layout ID 6a
PREPARED BY EPURON		SCALE 1:35,000 at A1	DATE 16/5/14	DRAWN TL

Table 2-2 - Turbine locations, Construction Status and details of adjustments to locations
(Updated as at 14 May 2014)

Turbine ID	Turbine Model	Turbine erection Status (Fig 2.2) May 2014	Surveyed Final Design Coordinates and elevation			Distance relocated From indicative locn.	Direction moved	Change in Turbine Level
			Easting	Northing	Level Base of Tower			
KIA_01	GW100	4	722206	6178258	987.42	35.7	East	7.4
KIA_02	GW100	4	722106	6178003	968.24	43.4	North	7.5
BAN_01	GW100	4	722867	6177000	961.07	47.4	SE	5.5
BAN_02	GW100	4	722816	6176718	960.89	12.6	South	-0.1
BAN_03	GW100	4	722567	6176552	959.37	36.8	South	-0.6
BAN_04	GW100	4	722477	6176299	957.8	12.8	South	-1.2
BAN_05	GW100	4	723284	6176726	964.46	12.5	South	-1.3
BAN_06	GW100	4	723235	6176463	971.72	4.5	West	2.6
BAN_07	GW100	4	723092	6176141	973.04	33.3	NW	-7.7
BAN_08	GW100	4	723327	6175886	1000.99	187.0	SSW	14.8
BAN_09	GW100	3	722740	6174867	952.9	167.0	West	-3.8
BAN_10	GW100	3	722846	6174519	959.13	80.4	South	-0.9
BAN_11	GW100	4	723242	6174950	964.19	48.5	North	1.0
BAN_12	GW100	3	723177	6174649	968.18	64.8	West	5.1
BAN_13	GW100	3	723736	6174579	960.3	168.6	ESE	-3.6
BAN_14	GW100	3	723832	6174779	974.36	85.0	South	-5.6
BAN_15	GW100	3	724314	6174314	965.87	177.9	North	2.9
BAN_16	GW100	4	724441	6173780	971.89	14.0	South	1.9
BAN_17	GW100	4	724453	6173505	975.64	13.9	West	0.6
BAN_18	GW100	4	723870	6173444	957.43	32.0	West	0.7
BAN_19	GW82	4	724307	6173286	969.32	2.2	SE	-0.7
BAN_20	GW82	4	724521	6172964	970.76	0.0	N.A.	0.8
BAN_21	GW82	4	724485	6172357	968.7	111.9	SSE	7.6
BAN_22	GW82	4	724466	6172100	981.57	22.0	South	1.6
BAN_23	GW82	4	724269	6171949	975.81	16.1	NW	1.4
BAN_24	GW82	4	724049	6171628	955.85	123.6	South	2.3
BAN_25	GW100	2	724647	6171804	986.26	50.9	NW	1.3
BAN_26	GW100	4	724630	6171532	985.61	46.6	NW	1.6
BAN_27	GW100	4	724502	6171321	980.48	20.6	East	4.3
BAN_28	GW100	4	724213	6171232	973	9.9	NW	3.0
BAN_29	GW82	4	723793	6171252	959.5	7.1	West	4.5
BAN_30	GW82	4	724099	6171000	955.16	1.0	N.A.	1.2
POM_01	GW100	4	725833	6166934	898.69	115.2	NE	-1.3
POM_02	GW100	4	726044	6166594	888.82	45.0	SW	5.2
POM_03	GW100	4	726063	6166277	884.18	102.2	West	4.2
POM_04	GW100	4	726461	6166355	873.2	96.2	SW	12.5
POM_05	GW100	4	726800	6166565	865.08	8.1	West	5.1
POM_06	GW100	4	727033	6165858	862.62	56.7	SW	2.6
POM_07	GW100	4	727112	6165618	844.99	23.4	West	-0.2

Turbine ID	Turbine Model	Turbine erection Status (Fig 2.2) May 2014	Surveyed Final Design Coordinates and elevation			Distance relocated From indicative locn.	Direction moved	Change in Turbine Level
			Easting	Northing	Level Base of Tower			
POM_08	GW82	4	725438	6165310	888.16	0.0	NA	-11.8
POM_09	GW82	4	724870	6165173	883.05	28.3	SSW	-2.9
POM_10	GW82	4	725390	6165082	892.5	92.5	East	-6.0
POM_11	GW82	4	725525	6164826	889.87	64.4	NW	-10.1
POM_12	GW100	4	724220	6164723	890.59	10.2	North	-8.6
POM_13	GW100	4	724725	6164560	888.39	6.0	North	-4.2
POM_14	GW82	4	725064	6164835	892.14	36.4	SW	1.3
POM_15	GW100	4	725079	6164566	901.81	8.5	SW	2.7
POM_16	GW100	4	725216	6164233	893.4	18.1	South	8.4
POM_17	GW100	4	725509	6163949	865.02	7.2	SW	7.6
POM_18	GW100	4	725752	6163649	849.99	11.0	North	10.0
POM_19	GW100	4	724788	6163595	899.03	56.6	North	0.2
POM_20	GW100	4	725434	6163257	833.73	7.6	West	13.7
POM_21	GW100	4	725752	6162969	828	7.2	NE	8.0
POM_22	GW100	4	726057	6162593	821.56	81.5	SE	6.0
POM_23	GW100	4	726339	6162361	812.01	20.2	East	12.2
GUR_01	GW100	3	727827	6161200	787.19	2.2	South	2.2
GUR_02	GW100	3	727730	6160921	805.09	8.9	North	-3.8
GUR_03	GW82	3	727826	6160598	820.43	10.0	North	-3.0
GUR_04	GW82	3	727464	6160571	799.12	13.5	NW	-0.8
GUR_05	GW82	3	727307	6160350	816.25	3.2	West	1.3
GUR_06	GW100	3	727298	6160051	779.65	10.8	NE	2.7
GUR_07	GW82	1	727912	6160363	836.3	101.5	North	12.0
GUR_08	GW100	3	727832	6159846	773.02	0.0	N.A.	-0.7
GUR_09	GW100	3	727269	6159369	811.32	36.9	South	1.7
GUR_10	GW100	1	727389	6158918	819.87	60.5	SSE	8.5
GUR_11	GW100	3	727520	6158639	833.15	6.4	NW	3.1
GUR_12	GW100	1	727479	6158308	839.08	59.7	South	7.5
GUR_13	GW100	3	727642	6158039	824.07	19.0	SW	4.1
GUR_14	GW100	1	727753	6157727	832.16	0.0	N.A.	2.2
GUR_15	GW100	1	727834	6157450	833.9	43.7	North	5.1
GUR_16	GW100	3	728211	6159145	785.91	12.0	SW	1.6
GUR_17	GW100	3	727997	6158925	803.51	29.4	South	3.5
GUR_18	GW100	1	728036	6158675	810.96	55.3	East	4.4
Note: GW100 is a GW100-2.5 and has hub height of 80metres. GW82 is a GW82-1.5 and has a hub height of 85metres.								

However, the levels used for the EA, 2008 were approximate and based on interpolation of 5 metre interval mapping contours. The final Design elevations are surveyed. Furthermore survey by the DPE surveyor has confirmed the turbine locations and elevation data.

2.2 Works outstanding to complete the wind farm

A significant amount of construction work and commissioning tests are still to be completed during 2014. The full wind farm comprising all 73 turbines and ancillary facilities is scheduled for completion in mid-2014. The actual completion date is subject to progress of construction works and the outcome of the MOD_1 Application which may not be determined before end of July 2014. The commencement of the wind farm operation is likely to be extended and occur within the latter half of 2014.

Based on construction status at 14 May 2014, the remaining works include:

- Erection of towers for 7 turbines
- Erection of nacelles and rotors for 7 turbines
- Commissioning of 25 turbines
- Commencement of wind farm operation during latter part of 2014
- Site restoration continuing after commencement of operations.

Once all turbines are operating, the wind farm is regarded as having commenced operation. An Operation Environmental Management Plan was approved by the Director-General on 5 December 2013. Compliance noise monitoring is conducted once the wind farm is fully operational to assess compliance for the maximum impact of the wind farm.

2.3 Further Survey of Locations of Turbines and Residences

The construction of all 73 turbine footings has been completed and surveyed coordinates of the 'Final Design' turbine locations are available. Details of the coordinates and levels for the 73 turbines were provided in the EA, 2014. Appendix A2 of EA, 2014 provided the details of survey provided by a Registered Surveyor in February 2014. The surveyed 'Final Design' turbine locations are also set out in Table 2-2 of this SR together with the turbine construction status at 14 May 2014. The distance of the adjusted turbine location from the 'Indicative' turbine locations that was provided in the EA, March 2014 is also provided in Table 2-2 of the SR.

Prior to the Modification Application being lodged, neighbours had expressed concerns regarding the accuracy of turbine locations. While the proponent had arranged a survey by a registered surveyor and provided the details in the Modification Application, DPE arranged a further survey in April 2014, during the exhibition period for the purpose of determining whether the claims by neighbours, that the proponent's surveyed turbine locations could not be relied on, were realistic.

The DPE arranged survey has been completed and, survey data for turbines and selected residences is available on the DPE website, for review by the public and proponent. To assist review, the DPE arranged survey information is included in Appendix 2 of this SR. The presentation in Appendix 2 has been slightly modified from that on the DPE website to facilitate presentation in A4 format and also to provide some additional comparison with the proponent's data from the EA, March, 2014.

Review of the two sets of survey data for the 'as built' turbine locations shows very minor differences in the locations of the turbines and nothing that is considered of any relevance to the claims of neighbours that the proponent has provided misleading survey data for the turbine locations.

The difference between the two surveys of the 73 turbine locations are summarised as follows:

- Variation in the easting (average) 0.03m
- Variation in the northing (average) 0.10m
- Variation in the elevation (average) 0.43m

It is noted that the survey reference point for turbine elevation differs for the two surveys. The proponent's survey was based on the top of the cairn (base of the tower) whereas the DPE arranged surveyor recorded the elevation of the concrete footing that is generally below the top of the cairn by about 0.5 metres. Consistent with the difference in survey points, the average difference in elevation data for the turbines is 0.43 metres. Two turbines (BAN 22 and GUR 11) showed differences in elevation of about 1.2 metres. The reason for difference in the elevation of the two surveyed levels is unclear but the difference is not significant for the assessment of the modification application.

The agreement of the two sets of survey data for the turbine locations clearly indicates that claims by some of the wind farm's neighbours, that the proponent has misrepresented the turbine locations, are wrong. Independent survey has confirmed the turbine locations reported by GRWFPL in the EA, March 2014. The claims of inaccurate survey data by specific objectors was poorly founded and is indicative of a range of emotive and unsubstantiated statements made in various submissions.

The objector's claims of inaccurate/unreliable survey locations is likely to have required a significant amount of time and expense by DPE to follow up a spurious claim. The credibility of the source of the original claim, that appears to have influenced others to question the accuracy of a Registered Surveyors location data for turbines, must be seriously questioned and the action can be considered as a frivolous and nuisance action that has drawn significant attention to a non-issue.

A second stage of the review by the DPE survey was to calculate the distance that turbines have been moved from the approved (indicative) location to the constructed (final design) location.

Comparison of the DPE arranged surveyor's data for difference between approved location and constructed location (Appendix A2 of this SR) and the data reported by GRWFPL in Table 2.2 of the EA, March 2014 and this SR, shows that the distance moved as reported by GRWFPL is consistent with the more recent independent survey arranged by DPE.

This result again questions the credibility of claims and associated actions made by specific individuals opposing the project. The proponent's data in respect of turbine locations has been shown to be accurate and distances that turbines have been moved have been accurately reported in the EA, March 2014. GRWFPL has not manipulated the survey data to misrepresent the changes in turbine locations but has presented them accurately and used the information for assessments of impacts.

It is noted that the DPE engaged surveyor appears to have incorrectly given the direction of movement of the turbine from the approved location to the final design (as built) location. The direction of movement was described in Table 2.2 of the EA, March 2014 and is also shown in

Table 2-2 of this SR. The error by the DPE arranged surveyor is the opposite direction to that shown by GRWFPL and would appear to be simply explained by which turbine set was used as the reference for calculating the direction of the move. Figures 2.1 to 2.3 of GRWFPL's EA, March 2014, show the approved and final locations for turbines and graphically represent the direction of movement that coincides with the information in Table 2-2. The three figures in EA, 2014 have been updated to include some additional residence locations and are included in this SR as Figure 2-3 to 2.5.

Thirdly DPE requested the surveyor to review locations of residences surrounding the wind farm project. The residences are on private land and had not previously been surveyed. Locations had been previously determined by Epuron as early as 2006 for the EA, 2008. The locations are indicated to have been based on review of air photographs. The accuracy of obtaining coordinates based on geo-referenced air photos can be limited by distortion in the air photographs that occurs for compilation of mapping from air photo imagery. This was also a challenge for other wind farm projects at that time. As such the residence locations were not expected to be precise but were expected to give reasonable estimates of the residence locations for assessment purposes.

The more recent assessment of residence locations has shown generally minor differences in residence locations which is not unexpected. Where these differences (approximations of residence locations) showed a location used by GRWFPL underestimated the distance from the wind farm then any assessment that relates to the residence distance from the wind farm would be conservative in predicting impact. However, in several cases the DPE surveyor showed that the residence location was closer than previously shown in the GRWFPL assessments and the impact assessment for the residence may under-predict the impact at the residence. Four residences were indicated to be closer to the wind farm by 12 to 34 metres (K18, K19, G28 and G34).

GRWFPL reviewed the circumstances of the residence locations for the four residences as to why the differences had arisen and also updated assessments in respect of the four residences.

It was unclear why the locations of the four residences are different from the recent survey which shows a lesser distance between the residence and the wind farm. The locations of the residences were originally identified by Epuron and are indicated to have been obtained from aerial photographs, which can have distortion and can lead to errors. The person that originally undertook this task for Epuron has left Epuron and moved on from the project. Epuron supplied records of information that were used for the Project Application. The images in the earlier records had poorer graphics quality than is available now. It is possible that the locations measured from the earlier imagery could have resulted in errors in locations.

In some cases, more than one building is evident at the residence locality and either the wrong building was selected as the residence in the past or an additional building has been added in the meantime. The individual circumstances of the four residence locations are described below.

Figure 2 3– Kialla and Bannister Groups – Turbine and Residence locations



LEGEND

- Houses
- Turbine Layout
- DA Approved
- Final
- Roads (Catcon Jan'14)
- Project boundary
- Medium voltage link
- Switching station
- Substation
- Permanent Met Mast
- 1km to closest turbine
- 2km to closest turbine
- Cadastre (NSW LPI Dec '12)
- Additional public viewpoints
- Original viewpoints
- Additional residential viewpoints
- 5m contours

GULLEN RANGE WIND FARM PTY LTD

PREPARED BY

EPURON

PROJECT

GULLEN RANGE WIND FARM

TITLE

Bannister area - Wind turbines and aerial

Document Number

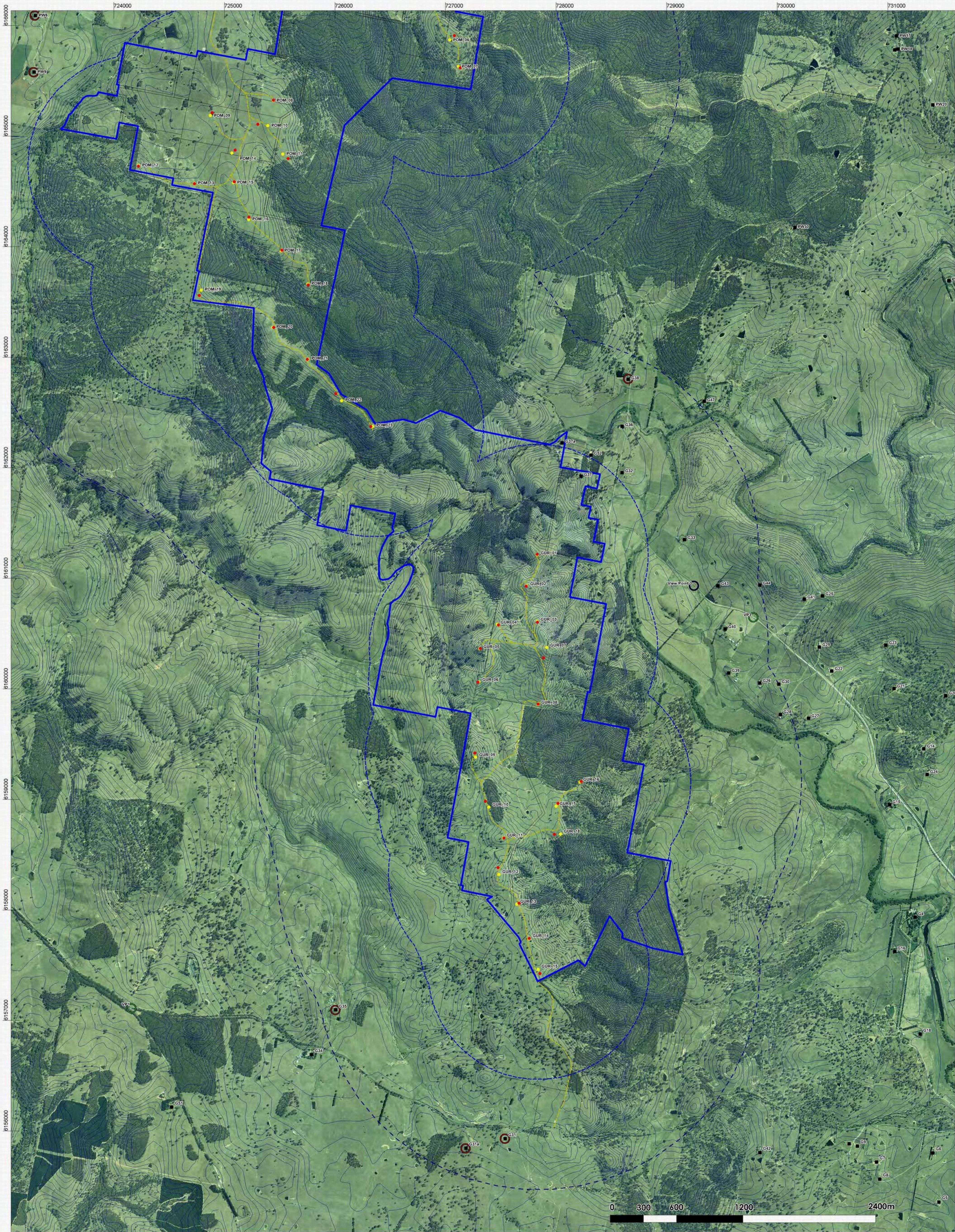
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Revision		Layout ID
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Figure 2 4– Pomeroy Group – Turbine and Residence Locations



Figure 2 5– Gurrundah Group – Turbine and Residence Locations



- LEGEND**
- Houses
 - Turbine Layout
 - DA Approved
 - Final
 - Roads (Catcon Jan'14)
 - Project boundary
 - Medium voltage link
 - Switching station
 - Substation
 - ◆ Permanent Met Mast
 - 1km to closest turbine
 - 2km to closest turbine
 - Cadastre (NSW LPI Dec '12)
 - Additional public viewpoints
 - Original viewpoints
 - Additional residential viewpoints
 - 5m contours

Note: Grid markings in MGA94 zone 55
Aerial Photography 2006

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WIND FARM PTY LTD**

PREPARED BY

EPURON

PROJECT

**GULLEN RANGE
WIND FARM**

TITLE

Gurrundah area -
Wind turbines and aerial

Document Number

GR-PM-DWG_0094

Revision

E

SCALE

1:15,000 at A1

Layout ID

6a

DATE

02/06/14

DRAWN

VR

- K18 – 21m – Recent imagery shows there are two buildings at the K18 locality. It is possible that the larger one closer to the wind farm is a newer one, but this has not been confirmed.
- K19 – 16m – There is a single building at this locality. It is not clear why the original location is incorrect other than if gaining the data from the air photo led to error.
- G28 – 12m - There are two buildings located close to each other and it is possible that the one closer to the access was assumed, incorrectly, as the residence.
- G43 – 34m - There are three separate detached buildings at this location. The larger one appears to have been overlooked and a smaller one to the north east (and further away) may have been selected. Reasons for overlooking the larger one may be, roof colour blends in with ground or the building was not constructed at the time. The DPE uses the smaller building closer to the wind farm as the residence location.

The following image shows the relationship of the DPE survey location and the Epuron location for residence G43. Neither relates to the most likely position of the main residence. If the image below accurately reflects the locations identified from the two surveys and, the residence is actually the building in between the survey points, then the error in G43 location is less than 34 metres. The significance of the changes in locations of the four residences with marginal reductions in separation distances in respect of relevant assessments is reviewed in this SR.

While the reasons for the differences in the four residence locations are not confirmed, GRWFPL has used the updated locations to assess impacts and record the information in the Submissions report.



Figure 2-6 – Review of G43 residence location and Epuron and DPE survey data

Overall, the changes for the four residence locations, by 12m to 34m, is not expected to result in significant changes to noise visual or shadow flicker assessment results due to the following reasons:

Noise - distance of the residence from the nearest turbine, the difference in predicted noise level and criteria (previous location) and small change in predicted noise level as a consequence of a location change in the order indicated.

Visual – The visual impact is unlikely to have significantly changed due to the absolute distances between the turbines and the marginal change in separation of the residence and turbine and, the reasons given in the ERM assessment.

Shadow Flicker – K18 and K19 are outside the area subject to shadow flicker. G28 and G43 are potentially subject to low levels of shadow flicker and the adjustments to residence locations will not significantly increase the extent of shadow flicker, the levels will be compliant.

A list of the non-associated residences within 2km of the closest turbine and data in respect of movements of the closest turbine to the residence is provided in Table 3-1. This has been updated from the EA, March 2014.

Additional residences have also been identified and are addressed in this SR. They include; non-associated residences (B31a, and G52) and associated residences (PW37 and G37a).

Locations of the four residences are listed below:

Residence	Easting	Northing	Category
B31a	722179	6173136	non-associated
PW37	723838	6167843	associated
G37a	728049	6162215	associated
G52	728309	6162105	non-associated

2.4 Update on Status of EPL

A draft Environmental Protection Licence (EPL) has been issued by the Environment Protection Authority (EPA) and is still to be finalised. EPA has recently updated the draft EPL to standardise it with other wind farm EPLs.

The progression of this matter has in part been delayed by the modification application process that seeks approval for the final design turbine locations and the applicable assessment data.

Commencement of wind farm operation is followed by operational impact noise compliance assessments as required by the Project Approval and detailed in relevant plans approved under the Project Approval. EPA will have a regulatory role in relation to matters covered by the EPL.

3. Property Issues

This section provides an update on the status of property associated with the GRWF and in relation to the identification of residences in the areas surrounding the wind farm.

3.1 Overview of property issues

The Environmental Assessment, March 2014, reviewed details of:

- Properties applicable to the approved project
- Leased land for the project (turbines and ancillary features)
- Status of land acquisition associated with the Project Approval Conditions 2.25 to 2.32
- Other agreements reached with neighbouring landowners to change their status to Associated landowners
- Status of agreements or negotiations in respect of Crown Lands
- Non-Associated landowners for properties surrounding the wind farm that are within 2km of the nearest wind turbine and which may require closer examination of environmental impacts.

The Project Approval defines 'Associated property' and 'Associated residence' as follows:

'Associated property' - A property comprising one or more lots, that is owned, leased or otherwise lawfully used by the Proponent or where there is a written agreement between the owner of the property and the Proponent (but only during the currency of the agreement) that part of the property in relation to which the agreement is established.

'Associated residence' A residence within a property, comprising one or more lots, that is owned, leased or otherwise lawfully used by the Proponent or where there is written agreement between the owner of the property and the Proponent (but only during the currency of the agreement) that part of the property in relation to which the agreement is established.

The following sections update details for the various properties and residences.

3.2 Project lands

The land on which the project is located is the same as it was described in the EA, March 2014. The project spans 12 privately owned properties and additional lands, over which GRWFPL has obtained easements for access purposes or placement of electrical cabling. There has been no change to the land described in Section 3 of the EA, 2014. In respect of the modification of turbine locations, all turbines remain on the land where they were located for the approval documents and to which the Project Approval applies.

The project lands are shown in Figure 3-1. This figure has been updated from that provided in the EA, March 2014 to show additional associated properties and additional residences.

Two additional associated residences are shown in Figure 3.1, these are G37a and PW37.

NSW Crown Lands made a submissions in respect of the Modification Application. This is addressed in Section 4.7 of this SR.

The map displays the Gaza Strip with various administrative divisions and military operations. The map is color-coded: green for administrative areas, orange for military operations, and red for other areas. It includes a grid of coordinates (71000 to 735000) and a scale bar (0 to 5.6 km).




Key locations and areas marked on the map include:

- Administrative Areas (Green):**
 - Area 1:** Located in the north, containing sub-areas KIA_01, KIA_02, BAN_01, BAN_02, BAN_03, BAN_04, BAN_05, BAN_06, BAN_07, BAN_08, BAN_09, BAN_10, BAN_11, BAN_12, BAN_13, BAN_14, BAN_15, BAN_16, BAN_17, BAN_18, BAN_19, BAN_20, BAN_21, BAN_22, BAN_23, BAN_24, BAN_25, BAN_26, BAN_27, BAN_28, BAN_29, BAN_30, BAN_31, BAN_32, BAN_33, BAN_34, BAN_35, BAN_36, BAN_37, BAN_38, BAN_39, BAN_40, BAN_41, BAN_42, BAN_43, BAN_44, BAN_45, BAN_46, BAN_47, BAN_48, BAN_49, BAN_50, BAN_51, BAN_52, BAN_53, BAN_54, BAN_55, BAN_56, BAN_57, BAN_58, BAN_59, BAN_60, BAN_61, BAN_62, BAN_63, BAN_64, BAN_65, BAN_66, BAN_67, BAN_68, BAN_69, BAN_70, BAN_71, BAN_72, BAN_73, BAN_74, BAN_75, BAN_76, BAN_77, BAN_78, BAN_79, BAN_80, BAN_81, BAN_82, BAN_83, BAN_84, BAN_85, BAN_86, BAN_87, BAN_88, BAN_89, BAN_90, BAN_91, BAN_92, BAN_93, BAN_94, BAN_95, BAN_96, BAN_97, BAN_98, BAN_99, BAN_100, BAN_101, BAN_102, BAN_103, BAN_104, BAN_105, BAN_106, BAN_107, BAN_108, BAN_109, BAN_110, BAN_111, BAN_112, BAN_113, BAN_114, 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- Houses
- Turbine Layout
- Final
- DA Approved
- 1km to closest turbine
- 2km to closest turbine

Cadastre (NSW LPI Dec '12)

- Associated landowners by project area
- Associated landowners by agreement
- Land subject to consent condition 2.25
- Non-associated landowners
- Property numbers

-  Project boundary
- Medium voltage link
-  Switching station
- Substation
-  Permanent met mast

**GULLEN RANGE
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EPURON

GULLEN RANGE WIND FARM

Associated & non-associated landowners, cadastre, final and DA turbine layout

GR-PM-DWG_0090

Layout ID

69

DRAWN

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3.3 Associated land

The following updates are identified in respect of associated properties and residences.

Residence PW34 and property. GRWFPL is aware that PW34 residence and property are subject to a sale process and that the new owner will be associated with the project. The extent of the associated land for PW34 is shown in Figure 3.1 and includes:

- Lot 2, 56, 93, 106 and 125 of DP 750043; and
- Lot 2 of DP 132144

Residences B7, B17, B121a and B122a.

The proposed residence locations, B121a and B122a are subject to Project Approval Condition 2.25. GRWFPL made an offer to the landowner to acquire these potential residence sites in accordance with Project Approval Condition 2.25. The landowner chose not to accept this offer to acquire. GRWFPL and the landholder instead entered into a separate agreement and the proposed residence sites **B121a** and **B122a** are now associated with the project. The agreement with the landowner also covers two existing residences, **B7** and **B17** and these residences are now associated.

The land the subject of this agreement is:

- Lot 1 of DP 1783347;
- Lots 53, 54 and 59 of DP 754115;
- Lots 33 and 89 of DP 754126; and
- Lots 193 and 176 of DP 754115.

The above land is now shown as 'associated' in respect of the Project Approval in Figure 3-1 and includes the two existing residences and two proposed residence sites.

All requirements relating to Condition 2.25 have now been fully addressed.

3.4 Mapping of neighbours residences

The EA, March 2014 showed the locations of residences surrounding the project area. GRWFPL has become aware of several additional residences and has updated records to address these residences. The attached Figure 3-1 includes the recently identified residences

These include:

G52. Residence G52 is a non-associated residence about 1km north of GUR_01 and approximately 2km east of POM_23. It was not previously identified on project plans and has not been subject to assessment for the Modification Application. After becoming aware of the residence, GRWFPL has met with the landowners to discuss the project and potential impacts. GRWFPL has also arranged additional assessment for the Residence location and the results are provided in this SR. A residence datasheet and figure, similar to those presented in Appendix 11 of the EA, 2014 are provided in Section 5.16 of this SR to address G52.

G37a – This is an associated residence that is northwest of the associated G37 residence and west of the non-associated G52 residence. This residence location has been added to Figure 3-1. As it is an associated residence it has not been subject to additional assessment other than ensuring that the predicted noise levels will be below the criteria for associated residences.

PW37 – A new residence has been constructed on the eastern side of Prices Lane. This is an associated residence and has been added to Figure 3-1 for completeness. As it is an associated residence it has not been subject to additional assessment other than ensuring that the predicted noise levels will be below the criteria for associated residences.

In addition to the above residences, that have been added to an updated Figure 3-1, the following residences have changed from non-associated to associated

Residence **PW34** and the property on which it is located are now subject to an acquisition process. On completion of the acquisition process PW 34 will be an associated property. The property where PW34 is located is shown on Figure 3-1 as an associated property.

Existing residences **B7** and **B17** are also now associated. Future residence sites, B121a and B122a owned by the same landowner are also now associated.

An additional residence **B31a** has been identified adjacent Range Road and close to a group of residences, B30, B31 and B32. B31a is a non-associated residence that is located within 2km of the closest turbine. The owner has two 25acre blocks of land one which has a residence, B31a and shed and the second where he would like to develop a further residence.

In addition to the above updates, the locations of residences has been subject to review by a DPE engaged surveyor and has required minor adjustments to figures that show the locations of residences and also where applicable, updates to assessments in relation to the Modification Application. The DPE survey did not include locations for B31a and G52 as they had not been identified in the EA, March 2014. The locations of these residences has been obtained using Epuron GIS and Six Viewer software.

The DPE arranged survey was discussed in Section 2.3 in the review of independent survey of turbine locations and non-associated residence locations. In respect of assessment of impacts at neighbouring residences there are four non-associated residence locations where the independent survey showed the residences to be closer to the wind farm by 12 to 34 metres than indicated in previous assessments. These residences are K18, K19, G28 and G43.

Where applicable, the assessment of potential social impacts for adjoining properties arising from adjustments to turbine locations has taken into account the new survey information. Additional assessments are provided in appendices to this SR with summary details in Section 9.

Table 3-1 provides an update on summary details for non-associated residences within 2km of the wind farm. More details for non-associated residences within 2km were previously provided in Appendix 11 of the EA, March 2014. Additional data sheets are provided in this SR for B31a (Section 5.8) and G52 (Section 5.16).

Table 3-1– Relevant non-associated residence locations <2km of closest turbine

Residence Code	Distance nearest turbine (m)	Closest turbine	Distance turbine relocated (m)	Change in distance to residence (m)	% change in distance to residence
K1	1,921	BAN_05	13	13	0.7%
K2	1,001	KIA_01	36	20	2.0%
K3	1,987	KIA_01	36	-32	-1.6%
K4	1,549	KIA_01	36	-15	-1.0%
K14	1,572	KIA_02	43	-18	-1.1%
K18	1,691	KIA_01	36	2	0.1%
K19	1,923	KIA_01	36	5	0.3%
K20	1,589	KIA_01	36	-5	-0.3%
B4	Not assessed, not a residence, only a shed				
B5	1,790	BAN_15	178	-121	-6.4%
B7 ^{*1}	This residence is now associated				
B10	1,462	BAN_30	1	1	0.0%
B11	1,753	BAN_30	1	1	0.0%
B12	1,611	BAN_14	85	62	4.0%
B13	1,534	BAN_15	178	-134	-8.0%
B14	1,691	BAN_15	178	-81	-4.6%
B17 ^{*1}	This residence is now associated				
B19	1,297	BAN_25	51	34	2.7%
B21	1,565	BAN_30	1	0	0.0%
B22	1,635	BAN_30	1	0	0.0%
B23	1,714	BAN_30	1	0	0.0%
B24	1,454	BAN_30	1	0	0.0%
B26	1,752	BAN_05	13	5	0.3%
B28	1,251	BAN_09	167	-166	-11.7%
B29	1,147	BAN_09	167	-161	-12.3%
B30	1,578	BAN_10	80	-79	-4.8%
B31	1,494	BAN_10	80	-79	-5.0%
B31a ^{*3}	1,535	BAN_10	80	-80	-5.0%
B32	1,606	BAN_10	80	-78	-4.6%
B54	1,697	BAN_30	1	0	0.0%

Residence Code	Distance nearest turbine (m)	Closest turbine	Distance turbine relocated (m)	Change in distance to residence (m)	% change in distance to residence
B55	1,431	BAN_09	167	-166	-10.4%
B77	1,111	BAN_09	167	-155	-12.2%
B121a ^{*1}	This proposed residence site is now associated				
B122a ^{*1}	This proposed residence site is now associated				
PW4	1,882	POM_01	115	80	4.5%
PW8	1,650	POM_12	10	-7	-0.4%
PW9	1,270	POM_12	10	-5	-0.4%
PW29	1,300	POM_01	115	89	7.4%
PW34	This residence is subject to a sale process and will be associated				
G26	1,855	GUR_16	12	11	0.6%
G28	1,914	GUR_16	12	12	0.6%
G31	1,559	GUR_15	44	37	2.4%
G32	1,067	GUR_01	3	-1	-0.1%
G33	1,335	GUR_01	3	-2	-0.1%
G35	1,866	GUR_14	0	0	0.0%
G36	1,394	GUR_01	3	0	0.0%
G38	1,789	GUR_01	3	0	0.0%
G39	1,659	GUR_07	101	-19	-1.2%
G40	1,619	GUR_07	101	-43	-2.6%
G43	1,644	GUR_07	101	-63	-3.7%
G52 ^{*3}	1,025	GUR_01	3	0	0.0%
<p>Notes: In relation to the change in distance to residence, a positive distance represents movement away from the residence while a negative change is toward the residence</p> <p>^{*1} – Agreement has been reached in respect of residences B7, B17, B121a and B122a.</p> <p>^{*2} – B124 previously indicated in EA, 2008 as a residence location but no residence is evident DPE arranged survey has given survey data for B124 that actually coincides with B41.</p> <p>^{*3} – B31a and G52 were not addressed in the EA, March 2014.</p>					

4. Review of issues raised by Government Agency submissions

This section of the Submissions Report (SR) reviews the individual matters raised by the respective submissions arising from referral of the Modification Application to government agencies. The treatment here is by review of each respondent's submission and the individual matters in the submissions.

4.1 Details of Government submissions

Submissions from NSW Government agencies included the following:

- NSW Department of Planning and Environment (survey data) reviewed in Section 2.3
- Upper Lachlan Shire Council (ULSC) (95818)
- Environment Protection Authority (EPA) (94965)
- NSW Office of Environment and Heritage (OEH) (96880)
- NSW Trade and Investment - Mineral Resources Branch (MRB) (94697)
- NSW Trade and Investment – Crown Lands ()
- Civil Aviation Safety Authority (CASA) (98835)

Details of the submissions and the proponent's response are provided below. It is noted that all matters raised in the agency submissions are mostly specific to the modification application but some relate to matters where processes for management of the issues are available and can be actioned independent of the modification application.

Rural Fire Service (RFS) and the NSW Telco have also been consulted in respect of point to point telecommunications services. Copies of the Lawrence Derrick and Associates (LDA) assessment (Appendix A6) were provided to these organisations.

4.2 NSW Department of Planning and Environment

NSW Department of Planning and Environment (DPE) has an assessment role for the modification application and prepares the Director-General's Assessment Report (DGAR). It is understood that DPE has consulted with specific neighbours to the wind farm in the time before the modification application and during the public exhibition period.

While DPE does not make a submission in respect of the application, it has arranged an independent survey of turbine sites and neighbouring residence locations. The survey was arranged by DPE in response to concerns of some neighbours that the proponent's survey records may not be accurate or reliable. The results of the independent survey have been provided on the DPE website and are attached in Appendix A2. The proponent's comments on the survey results in respect of the Modification Application are provided in Section 2.3.

4.3 Upper Lachlan Shire Council (95818)

The Upper Lachlan Shire Council supplied a submission in its letter of 28 April 2014. The response reflected a resolution, of its meeting held during the exhibition period on 17 April 2014, and recorded in its Minute No 84/14. The resolution included the matters set out in the Table below.

ULSC Issue/Comment	Proponent's Response
<p>Requested that the modification application be put on hold pending a full enquiry, preferably of judicial status for the reasons in the following items.</p>	<p>The Council position is noted. However, the modification application process represents a comprehensive review of the issues relevant to changes in the detail of the project. The review is undertaken in accordance with Section 75W of the EP&A Act.</p> <p>A substantial effort has been made to compile relevant information and assessments in EA, March 2014, which accompanies the modification application. The material lodged by the proponent in the application has been subject to public exhibition (extended to four weeks) and referral to relevant government agencies during the same period. The proponent provides comment on submissions received and Department of Planning and Environment systematically reviews all matters relevant to the determination of the modification application and prepares the Director-General's Assessment Report and recommendations for determination of the application and if relevant, updated conditions of approval.</p>
<p>Developer's numerous breaches of Conditions of Construction Consent</p>	<p>GRWFPL does not agree that it has made numerous breaches of Conditions of Construction Consent. The statement appears to have been initiated and propagated by individuals but does not appear to have been substantiated by facts.</p> <p>The Council News of 30 April 2014 indicated that Councillor Barlow had been asked in the meeting, <i>"Do we have a file on the numerous breaches?"</i> Councillor Barlow stated, <i>"They could be verified"</i>.</p> <p>Councillor Barlow's response appears to indicate that the statement has been made in advance of compiling facts as to the accuracy of his statement.</p> <p>GRWFPL has gone to considerable effort to implement the project in accordance with the Project Approval conditions. In respect of construction, a Construction Environmental Management Plan (CEMP) was prepared by the proponent and submitted to DPE. The comprehensive CEMP was approved by DPE and works have been conducted in accordance with the CEMP and approved sub-plans. The construction works have also been subject to oversight by the independent Environmental Representative that has undertaken audits, consistency checks and reviews to confirm compliance.</p>
<p>The wholesale re-siting of scores of turbines without seeking consent</p>	<p>The <i>'wholesale re-siting of scores of turbines'</i> conjures up an image of gross changes to the structure and form of the development and is considered an emotive and inaccurate representation of the adjustments to turbine locations.</p> <p>An objective review of Figure 1.2 of the Modification Application (EA, March 2014) shows that the form of the project is very close to that which was indicated in the Project Approval documents. Minor relocations are also permitted under the Project Approval.</p>
<p>Major damage caused to one of the Shire's main roads</p>	<p>GRWF acknowledges that some damage to local roads has occurred as a result of the movement of the large vehicles to the site. However, that was expected and a process to address that issue was defined in the Project Approval. Additionally, GRWFPL has made a significant contribution (\$4.6 million) to the upgrade of local roads that will benefit the local community and Council.</p> <p>GRWFPL has arranged a detailed dilapidation report for the roads used to transport equipment to the site. The report has been provided to Council and the agreement will be sought on details of GRWFPL</p>

ULSC Issue/Comment	Proponent's Response
	responsibility for rectification of any damage to the local roads arising from the project. Further details are provided in Section 9.6.
A general disregard by the developer during construction of negative impacts upon nearby non-host residents.	GRWFL disagrees with this statement. GRWFL wishes to undertake the GRWF project responsibly, to comply with its project obligations and to be accepted as a good neighbour. It is acknowledged that construction of large projects can result in non-routine impacts that constitute a variation to the normal characteristics of the environment but the Project Approval has applied conditions on construction activities and these are incorporated in the environmental management documentation and associated procedures. GRWFL manages its work to comply with the conditions and amongst other things to work within the agreed hours and to comply with noise, dust and safety requirements. In the event of receipt of any complaints, GRWFPL has a process to record the complaints, investigate the circumstances and if necessary take corrective action to resolve any deviation from the approved procedures.

GRWFPL expects to undertake further consultation with ULSC in respect of:

- Road dilapidation repairs
- Community Enhancement Program
- Television reception upgrade
- Other matters as applicable

4.4 Environmental Protection Authority (94965)

The Environmental Protection Authority (EPA) reviewed the supporting information for the proposed modification (MP 07_0118 MOD 1) and provided a response to Department of Planning and Environment, in EPA's letter of 9 April 2014.

The EPA also has a regulatory role for the wind farm and is responsible for issue of Environment Protection Licence and enforcement of relevant conditions.

The EPA has concluded that:

- "the current project approval conditions contain appropriate noise limits" and
- "The difference in location of the wind turbines between the final design layout and the layout in the project approval, in terms of noise impacts on surrounding (non-involved receivers) is not considered audible or significant."

4.5 Office of Environment and Heritage (96880)

The Office of Environment and Heritage (OEH) reviewed the supporting information for the proposed modification (MP 07_0118 MOD 1) and provided a response to Department of Planning and Environment (DPE), in letter of 2 May 2014. The OEH submissions separated matters relating to Biodiversity and Aboriginal Heritage and these are discussed below with the benefit of specialist advice as follows:

- Biodiversity aspects – ngenvironmental
- Aboriginal archaeology – EMM

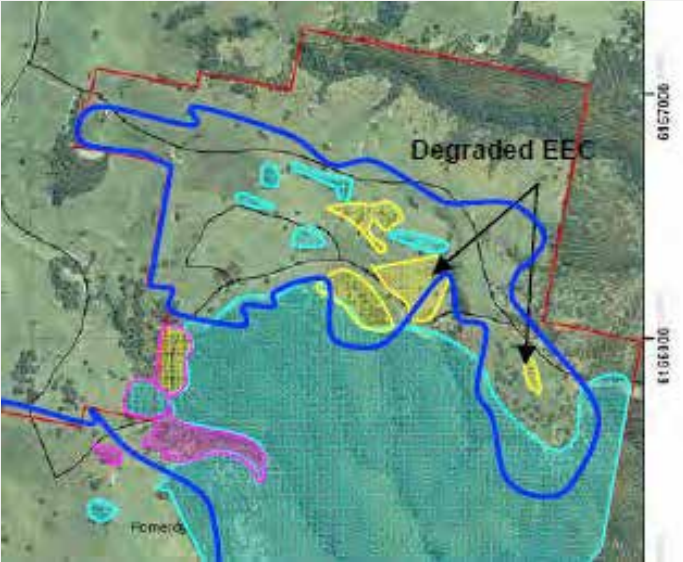
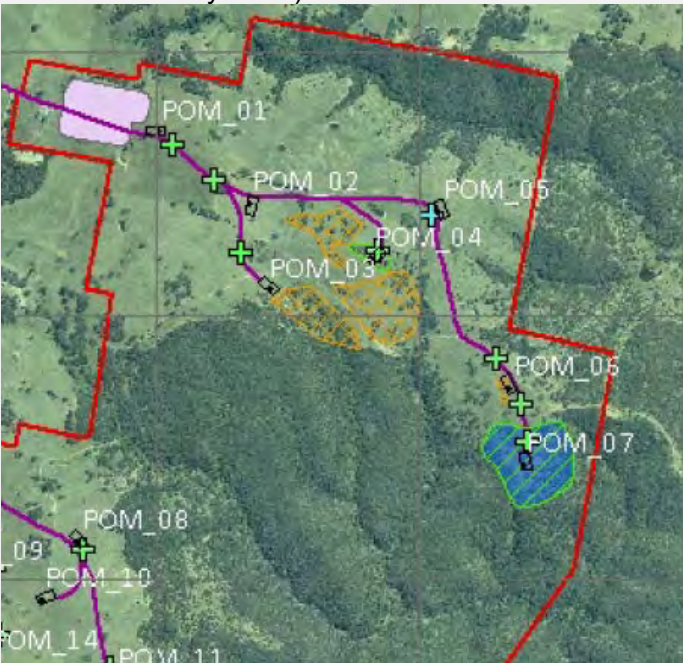
The proponent's responses to these aspects are set out in sections 4.5.1 and 4.5.2. OEH was also consulted during the preparation of this SR and additional information provided to OEH in respect of the specialist reviews of the matters from the OEH submissions. GRWFPL will arrange provision of further information, undertake additional consultation and potentially participate in an on-site meeting with both OEH and the relevant specialists to clarify details of the matters raised with a view to resolving any outstanding items.


GRWFPL expects that some of the matters raised by OEH are matters that can be determined independent of the determination of the Modification Application. GRWFPL believes that aspects such as adequacy of the Compensatory Habitat Package (CHP) are matters where the final offset requirements and measures implemented are able to be assessed by post construction impact assessment, reporting and reconciliation in accordance with approval conditions.

4.5.1 Biodiversity aspects

Nghenvironmental has been involved with mapping of biodiversity aspects and provides specialist advice in respect of the matters below. NGH has assisted with responding to the OEH submission and provided an initial response and further information to address the OEH response (Appendix A4). At the time of lodging this SR, not all comments from OEH have been fully addressed and further consultation is required in respect of the OEH submission. This includes matters other than the details relevant to the modification application.

OEH Issue/Comment	Proponent's Response with reference to specialist advice
Comprehensive map or series of map showing correct boundaries and locations of all EEC, threatened fauna, threatened fauna habitat and buffers, the PVP offset area in relation to the changes	NGH has compiled biodiversity maps with the relevant information. See Figure 4-1 to Figure 4-3. OEH has requested further details be added to the mapping and GRWFPL will arrange updates and supply these to OEH. An onsite meeting will also be arranged with OEH to confirm suitability of the mapping and CHP.
Discrepancy between vegetation descriptions in EA March 2014 report vs CHP and EA (and BBMP and POMP) – see Attachment 1	There are differences in the mapping. These largely explain the differences in the vegetation descriptions. Refer to detailed responses for Attachment 1 below.
Is infrastructure proposed in the offset area?	Yes. Refer to detailed responses for Attachment 1 below.
OEH strongly recommends vegetation mapping in the offset site be examined	Updated mapping was only undertaken for the offset site. Refer to detailed responses for Attachment 1 below. It is expected that the suitability of the biodiversity mapping will be reviewed during the site visit.
OEH will provide advice upon receipt of this information and participate in further discussion regarding CHP	Information was provided to OEH by nghenvironmental and information has been requested by OEH. nghenvironmental is compiling the information. A site meeting is also envisaged to review the mapping prepared in respect of CHP requirements and PVP suitability. GRWFPL aim to ensure all information required by OEH to consider the modification has been provided and is adequate but expect that some aspects may be progressed separately from the modification application.
OEH Attachment 1 - Why does the CHP have more EEC than the MR (Figures 6.3, 6.4, 6.5)	<p>The constraints mapping shown in the EA, March 2014 Figure 6-4 is originally derived from the Biodiversity Assessment (BA), included within the EA 2008. In the BA, the vegetation type mapping was used to define key biodiversity constraints. The mapping was based on field surveys undertaken in 2007 and can be seen to be coarse. The degraded EEC is deemed 'vegetation of conservation significance' in the constraints mapping.</p> <p>The constraints in the EA, 2008 are the subject of a condition of approval – 'avoid constraint areas'. The same layer was reproduced in construction environmental management plans for the purpose of implementing this condition. A protocol was developed to detail how constraint areas would be</p>

OEH Issue/Comment	Proponent's Response with reference to specialist advice
	<p>avoided and included a 20m buffer and actions to manage indirect impacts. The layer is consistent in the BA, EA 2008, Flora and Fauna Management Plan (FFMP) and EA, March 2014. The latter two are slightly coarser due to re-digitisation of the layer but the layers are essentially the same. The aim of this mapping is to manage impacts on areas of higher value.</p>  <p>Figure 4-1 - Vegetation types (Biodiversity Assessment July 2008)</p>  <p>Figure 4-2 - Key biodiversity constraints (Biodiversity Assessment July 2008)</p> <p>Appendix A site map showing constraint areas; orange hatching (Flora and Fauna Management sub-plan July 2012)</p> <p>Field validation and remapping of vegetation was undertaken as part of the Compensatory Habitat Package (CHP) in order to account for any changes onsite since the biodiversity assessment surveys and to provide greater precision for areas that may be offset as part of the CHP. As such, the CHP vegetation mapping is more up to date and accurate. The CHP mapping does</p>

OEH Issue/Comment	Proponent's Response with reference to specialist advice
	<p>not aim to remap constraints areas rather, to focus on areas available for offsetting (designated offset area) and areas proposed to be offset (proposed offset area – a subset of the designated offset area).</p> <p>The Apple Box – Yellow Box Woodland mapped as part of the CHP was based on the definition of the EEC provided in the most recent NSW Scientific Committee Determination for the EEC at the time of the survey (2012).</p>  <p>Figure 4-3 - Vegetation types within designated offset area (green boundary) and proposed offset site (orange boundary); Compensatory Habitat Package September 2012</p>
<p>a. Clarifications regarding vegetation in the offset area. OEH query:</p> <ul style="list-style-type: none"> i) 70% of the offset area being EEC ii) In reasonable condition <p>90% treed</p>	<p>These figures relate to the vegetation mapped in the CHP.</p> <ul style="list-style-type: none"> I. Confirmed. Based on the mapped areas, 70% of the offset area is EEC. II. The CHP states that the Box Gum Woodland is generally in reasonable condition implying that the majority falls within this definition while acknowledging that there may be small areas of lower quality vegetation. The term reasonable condition is clarified by stating that this means there is a predominately low diversity native groundcover. It is not suggesting that the vegetation is in good condition. It is acknowledged that Serrated Tussock had heavily invaded areas in the vicinity of the offset site boundary but at the time of the survey (2012) these were generally confined to areas outside of the offset site boundary. Treatment of serrated tussock occurred in 2013/2014. <p>Confirmed. Based on the mapped polygons, 90% of the offset site is treed. The woodland polygon was based on trees being within 100m of each other, a distance used in the Bio-Banking methodology to determine if areas are connected. Of course this means that there are gaps between trees so when viewed purely on a landscape scale, it would appear that the site is less treed.</p>
<p>OEH disagree that the offset is achieving 'like for better' outcome</p>	<p>The endorsed CHP, which in its final form includes input from OEH, defines the criteria for how a 'like for like' or 'like for better' offset will be achieved as follows:</p> <ul style="list-style-type: none"> • p.3 <i>In defining the extent of the final 'offset site', additional consideration will be given to: ... Ensuring a 'like for like' or 'like for better' offset (in terms of the conservation significance of habitat to be</i>

OEH Issue/Comment	Proponent's Response with reference to specialist advice
	<p>removed).</p> <ul style="list-style-type: none"> • p. 6 ...<i>considering both vegetation type and fauna habitat values.</i> • p.6 <i>Areas will be selected that provide like or better conservation values, in comparison to the areas being impacted. That is, vegetation of the same conservation status or greater conservation status (clearing of common vegetation type in a modified landscape offset with Endangered Ecological Communities or vegetation within more intact areas).</i> <p>p.7 notes a 'like for better' approach has been taken at the offset site, where specific matching of vegetation types, condition and habitat value could not be met. The CHP notes 'like for like' is not obtained as only 2 of the vegetation types to be impacted by the development occur within the offset site. It is therefore required to demonstrate 'like for better' according to the criteria above.</p> <p>Vegetation value – A larger than 2:1 offset is achieved for Apple Box – Yellow Box Woodland and derived grassland EEC; a ratio of 50:1 is achieved. No Tablelands Basalt Forest EEC is included within the offset however the impact area is small (0.55 ha) and given the large ratio exceedance for Apple Box – Yellow Box Woodland and derived grassland EEC, the plan considers this sufficient to meet the like for better criteria.</p> <p>Condition of vegetation – Considering the mapped extent of Apple Box – Yellow Box Woodland and derived grassland EEC, shown above in yellow shading (Figure 4-1 Vegetation types within designated offset area and proposed offset site, CHP 20), and not the smaller area of degraded EEC mapped in the figures above...<i>The area to be protected represents the largest occurrence of this community within the site boundary. In general it is in reasonable condition with an intact overstorey and mostly native understorey (although low diversity).</i> ... It is noted that the periphery including areas around two turbines near its mapped extent are more highly degraded and weed infested. It is however, of better quality in general, than the areas that would be impacted, these occurring in areas with limited overstorey and generally higher degrees of weed infestation.</p> <p>Fauna habitat value – The plan demonstrates that in comparison to the impact areas, the offset site provides better fauna habitat values, while acknowledging that the best areas of forest habitat within the site boundaries, while not being offset, would not be impacted by the project. The offset site is contiguous with these areas. Overall, conservation of any continuous area of forest or woodland in an agricultural setting is an improved outcome for biodiversity values.</p> <p>The changed turbine locations do not affect the accuracy of these statements from the CHP. The offset as shown in the EA March 2014 is still considered to achieve these outcomes.</p>
Final layout as it relates to infrastructure required, as per consent condition	Refer Figure 4-1 to Figure 4-3.

OEH Issue/Comment	Proponent's Response with reference to specialist advice
Turbines within the offset area	<p>The endorsed CHP shows that the boundary of the offset site excludes any project infrastructure. This plan was endorsed by DPE with input from OEH. The intention was to locate the border of the offset to exclude infrastructure. In accordance with the plan, the local Catchment Management Authority (CMA) were contacted to set up a Conservation Property Vegetation Plan (CPVP) for the site. They were provided with a copy of the endorsed plan.</p> <p>The Catchment Management Authority (CMA) undertook their own mapping to define the offset site boundaries and this varied from that in the endorsed plan. It is noted that:</p> <ul style="list-style-type: none"> • The CMA are a key stakeholder in the development of the offset site. • The CMA mapped offset site is larger than the CHP defined area and contains all areas included in the CHP defined area. <p>As such, the offset as shown in the EA, March 2014 is still considered to achieve the outcomes of the CHP.</p>
Removal of tree in constraint area near POM 6. Ecologist did not identify area as EEC, due to Serrated Tussock infestation. How did this happen considering the offset site is stated as being 70% EEC?	<p>The EA, March 2014 explains that due to a mapping error an area of constraint was missed. No on-ground ecological inspection was involved. After the clearing, photos were assessed to determine the significance of the breach. This is documented in the EA, March 2014 as follows, taken from Brooke Marshall's correspondence, and included in Appendix A5 Ecology:</p> <ul style="list-style-type: none"> • <i>Diary note 12/12/14 of conversation with Ben Batemen where we discussed POM 6. He thought Richard Sharp had inspected this location in terms of EEC (but this was not to be the case, see email of 11/12/14. Ben confirmed one tree had been removed, I confirmed it was in EEC. I said I would investigate its significance to the EEC. He suggested CATCON did not have this area marked as EEC and queried the commitment to 'avoid EEC where possible'. I confirmed that the area of additional EEC impact would not affect the offset requirement of the project (already in surplus for this community).</i> • <i>Tim[e] logging record 12/12/14 of my discussions with Dave Maynard (botanist). I sat at his computer and we considered the mapped boundary and the photos of the clearing provided by Goldwind, sometime after the phone call above. Dave had not been to this location in the last survey but we both considered given it appeared only one tree of small stature had been removed, the impact would not lead to a significant impact on this EEC. We discussed the mapping being coarse and the community fragmented, with respect to the significance of the clearing. We were not sure about the understorey but thought it was weedy – serrated tussock – given the extensive distribution of this weed in the local area.</i> • <i>Email to Ben Batemen 12/12/14 asking if his field team could check out the understorey at POM 6 (not identified specifically in email): request photos of understorey</i> • <i>Photos provided by Goldwind 12/12/14: FW Photos of POM06 and Photos</i> <p>Based on this investigation above, the following conclusion was reached:</p>

OEH Issue/Comment	Proponent's Response with reference to specialist advice
	<p><i>"POM 6's hardstand is now located approximately 5m within an EEC area. The turbine has been relocated from the location indicated in the FFMP and approved layout to an area of degraded EEC. In this location, the constraints mapping is designed to protect the viability of the overstorey vegetation which in this location is sparse; However a survey of the area revealed that the understory is weedy including Serrated Tussock, a noxious weed. One small tree was felled in this location. The tree was not a habitat tree (did not contain hollows). The removal of this tree does not affect the viability of the EEC. Additional controls to manage impacts on the EEC, including weed controls, still apply to this area. This area is included in the offset area and will be subject to management measures to improve biodiversity values over time. When considering the actual impacts to vegetation at POM 6, the mitigation measures employed during construction to avoid overstorey species, and that the offset strategy adequately offsets the changes in biodiversity impacts associated with this relocation, this change on balance does not increase the biodiversity impacts associated with the project."</i></p> <p>Nghenvironmental have noted that the use of the terms 'in-depth' and 'onsite investigation' in the EA, March 2014 are not accurate as we understand it.</p> <p>References to 70% EEC, as described in the point b) relate to the whole of the offset site, not this specific area at POM 6.</p>

GRWFPL has requested that nghenvironmental provide any additional information to OEH and will support arrangements for an onsite meeting with OEH and nghenvironmental, during June 2014, to clarify the adequacy of the CHP and any other matters raised by OEH.

Ongoing consultation will be undertaken with OEH and CMA as relevant to address the biodiversity related conditions of the Project Approval. As such, it is expected that these matters can be dealt with independent of the Modification Application.

4.5.2 Aboriginal heritage aspects

GRWFPL engaged EMGA Mitchell McLennan (EMM) to review the submission by the Office of Environment and Heritage (OEH) and provide advice on the matters raised by OEH. An initial response was provided by EMM and sent directly to OEH on 14 May 2014 (Appendix A5).

EMM's initial response to OEH provided information and updates as outlined below:

- Details of sites that were salvaged and the status of sites subsequently impacted by project turbines and infrastructure.
- EMM undertook to provide Aboriginal Site Impact Recording (ASIR) Forms for each impacted Aboriginal site within two weeks of its letter response to OEH.
- EMM notified the AIHMS Registrar on 8 May 2014 of errors in the database and the correct data. The AIHMS registrar advised on 13 May 2014 that all AIHMS results for the project have been corrected and are now up to date.
- EMM provided explanation of the salvage in relation to the project footprint.
- EMM also provided explanation on the status of Aboriginal objects that were salvaged/collected. EMM is consulting with Onerwal and Pejar LALCs regarding reburial locations.
- EMM provided further advice on 50 sites designated for collection and their current management status.
- A set of three maps was provided to OEH to assist their review of the management of Aboriginal heritage issues. These are provided in Appendix A5.

OEH reviewed the information provided on 14 May 2014 and responded on 22 May 2014, seeking further clarification on a number of matters. A further response was prepared for these matters and a letter response (2 June 2014) provided to OEH, included in Appendix A5 of this SR.

A third response to the matters raised by OEH has also been prepared to outline further information and status of response. The updated AHMP has been distributed to the Pejar and Onerwal Local Aboriginal Land Councils for their review and agreement.

Some of the above matters relate to procedural aspects of the archaeological assessments and salvage collection, is not essential to the determination of the modification application and, can be addressed independently. The information does not indicate that the adjustment to turbine locations has increased the impact on Aboriginal heritage items. Consultation on reburial of collected items is still to be completed.

4.6 NSW Trade and Investment, Resources and Energy (94697)

The Mineral Resources Branch (MRB) of NSW Trade and Investment, Resources and Energy provided comment on the Modification Application (MP 07_0118 MOD 1) to NSW Department of Planning and Environment in letter of 9 April 2014.

MRB has previously commented on the Gullen Range Wind Farm development and noted consultation with titleholders of mineral exploration leases, including appropriate timing has been included in the Revised Statement of Commitments.

MRB stated that it:

- “has no issues with Modification 1 of the Gullen Range Wind Farm.”

In mid May 2014, GRWFPL was contacted by TriAusMin Limited (TAML). TAML is a mineral exploration company that holds an Exploration Licence (EL) 7954, centred on Breadalbane and to the north overlapping the Gurrundah and Pomeroy parts of the GRWF. TAML is actively assessing EL 7954 and during the period 12 to 16 May 2014, an airborne geophysical survey was underway including areas in close proximity to the GRWF wind turbine structures. The geophysical contractor, GroundProbe Geophysics corresponded with the GRWF Site Manager in respect of the activity and safety issues relative to airborne surveys in proximity to the wind turbines and construction works.

Goldwind Australia (GWA) also contacted TAML in respect of the current geophysical survey and potential future exploration activities involving ground based surveys that may be undertaken by TAML. It was agreed that further consultation will occur after the geophysics results have been assessed and when future exploration activities are being planned.

GRWFPL also received and responded to a complaint relating to the low level airborne survey. The complainant was advised of the details of the company conducting the survey.

4.7 NSW Trade and Investment, Crown Lands (Late submission)

The Crown Lands Agency of NSW Trade and Investment, provided comment on the Modification Application (MP 07_0118 MOD 1) to NSW Department of Planning and Environment in letter of 22 May 2014 that was copied to GRWFPL on 30 May 2014. This is not on the DPE website.

It notes the need for closure of a Crown Road directly south of GUR_01 within the project lands. It also notes any impacts of construction of GUR_07 on the Sugarloaf Trig Reserve have been appropriately mitigated by the proponent during the construction phase.

GRWFPL thanks Crown Lands for the response and its assistance during implementation of the project. GRWFPL will continue to consult directly with Crown Lands in respect of any other Crown Land matters.

4.8 Civil Aviation Safety Authority (CASA) (98835)

The response from CASA, dated 6 May 2014, acknowledges the modification request and notes the reduction in number of turbines from 84 to 73 and the reduction in height from the original maximum turbine height of 135 metres to turbine heights of 126 and 130 metres.

It notes that:

- the approach taken by DPE is consistent with the National Airports Safeguarding Framework (NASF), Guideline D (Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation) and
- that CASA has no further comment

4.9 NSW Telco Authority and Rural Fire Services

In parallel to, and separate from the referrals for the Modification Application, GRWFPL has consulted directly with NSW Telco Authority and the Rural Fire Services (RFS). GRWFPL provided an assessment of telecommunications links and associated clearances required in the vicinity of the wind farm (Appendix A6). A response has been obtained from the NSW Telco (Appendix A6) but RFS is still to respond. Further consultation will be undertaken with RFS as the relevant stakeholder due to proximity of one of its licensed services with respect to the turbine locations.

5. Review of issues raised in public submissions with objections

This section of the Submissions Report (SR) reviews the individual matters raised by the respective submissions arising from public exhibition of the Modification Application. The five character reference number in brackets for each submission is the DPE submission number. The treatment here is by review of each respondent's submission and the individual matters raised. Where the submissions by a range of submitters used the same material, the set of matters raised was only addressed once for the groups of submitters with the same content.

Some of the community submitters provided more than one submission (up to three per submitter) and the matters for these submitters may be treated together or separately with other grouped submissions, as relevant.

The review of public submissions objecting to the development has been sequenced in respect of their geographic relationship to the wind farm, those in immediate surrounds appearing first and the more distant treated later. In some cases the location is not clear and assumptions have been made in respect of the location to which they apply.

For ease of accessing responses, submissions from the three Landscape Guardian Groups, Crookwell, Parkesbourne-Mummel and Boorowa District Landscape Guardians are reviewed separately (Section 7) from individual submissions. Submissions from owners of three associated properties are also treated separately (Section 6) as are the submissions received in support of the modification application (Section 8).

5.1 Chris and Katrina Knight of Chisholm ACT, Residence K2 (96242)

This submission is made in respect of the Fernhill residence (K2) that is 1km from the closest turbine KIA 01 that is at the northern end of the layout.

Submitter's Issue/Comment	Proponent's Response
Fernhill has no wind turbines however does have two situated on the neighbouring property approximately 800 to 1100 metres from the Fernhill homestead.	The two turbines KIA 01 and KIA 02 are at distances of 1,001 and 1,137m from the K2 residence. The submitter's estimate of 800 metres understates the distance by 201 metres. The separation has been stated in the EA, March 2014 and confirmed by the DPE arranged survey. Turbine locations and residence K2 location were accurately reported in the EA, March 2014.
From the reports and information provided by The Gullen Range Wind Farm Pty Ltd, the two above mentioned wind turbines are situated no closer than approximately 1.9 to 2 km from any residence. This is based on findings in the Environmental Resources Management Australia Pty Ltd report dated 31 March 2014 to Mr Ben Bateman of GRWF. Page 12 shows a table where one of the two turbines on the fence line of Fernhill is stated as being 2001 metres from a residence at approval and then	Appendix 11.1 of the EA, March 2014, provides a clear diagram of the location of the K2 residence relative to the Kialla and Bannister turbines. Additionally a data sheet accompanies the figure for K2 and clearly shows the distance of closest turbines from the residence as 1,001 metres and 1,137 metres. These distances have been used for assessments of impacts. It appears that some confusion has arisen from the renumbering of the two Kialla turbines. The construction contractor has referenced the northern

Submitter's Issue/Comment	Proponent's Response
<p>1966 metres at construction. This is a negative of -35 metres and is closer to the residence. This turbine is known on maps as KIA_01(DA).</p>	<p>one as KIA 01 and the southern one as KIA 02. This differs to the presentation in the EA, 2008. The revised numbering strategy is consistent with the general sequence of turbine numbering from north to south and has been accepted for the project and referenced in the EA, March 2014. The submitter does note the confusion in the following paragraph of their submission and GRWFPL apologise for any confusion as result of the change to numbering.</p> <p>The EA, 2014 provides the assessment relevant to the Modification Application and while the consistency reports have been mentioned they are not relied upon for the Modification Application.</p>
<p>Both of the turbines neighbouring Fernhill have been measured at being approximately 800 - 850 metres (KIA_02(DA)) and 1 km – 1.2km (KIA_01(DA)) This was measured using a vehicle and it was found that it was impossible to take a 'Direct' route from the residence to the turbines due to passing through gates and a slight zig zag pattern from the homestead back door. While this is an approximation it is still well and truly within the quoted distances in all reports from Goldwind's website. If a measurement was taken from the back door of the homestead on Fernhill and using a direct line drawn or "as the crow flies" finding, it would be less than that found by the vehicle measurement.</p>	<p>The submitter's statement is noted but appears partly inconsistent with GRWFPL data that has been confirmed by the independent DPE arranged survey of turbine locations. GRWFPL has also changed the numbering of the turbines. The data obtained by GRWFPL indicates the closest turbine, KIA 01 is 1,001 metres from the K2 residence.</p> <p>This agrees with the independent survey assessment arranged by DPE and GRWFPL review using Google Earth.</p> <p>On this basis, GRWFPL disagrees that the separation could be as low as 800 to 850 metres as indicated by the submitter.</p>
<p>The "viewpoint" findings from Goldwind are in itself misleading as no mention at all is made of Fernhill. "Viewpoint K1" is made from Kialla Road side of the hill (opposite side to Fernhill) and "Viewpoint K2" is taken from the Fernhill side of the hill but does not show the impact that can be viewed from the Fernhill homestead because photos have been taken from much further up the road towards Grabben Gullen.</p>	<p>Where access could not be made to residences then the visual assessment has utilised nearby viewpoints. While not as useful as obtaining photographic imagery and preparing photomontages for the actual residence locations this is often the only option where access is not available to the residence location.</p> <p>GRWFPL appreciates that residents may not want to be disturbed for the proponent's purpose of gaining imagery from the residence. In that situation, GRWFPL has needed to reference nearby viewpoints.</p>
<p>Goldwind were not given permission to photograph from the homestead due to the impact of the intrusion to our elderly parents from strangers and as our mother is in poor physical and mental health is not capable of understand nor coping with the number of vehicles or strangers on the property.</p>	<p>GRWFPL appreciates the circumstances described by the submitter and does not wish to disturb the elderly residents. However, to reliably assess social impacts it is helpful to visit residences but where this cannot be done, access to nearby locations assists the assessment.</p>
<p>Throughout the earlier application process by Epuron, we were informed that no turbines would be constructed near Fernhill. This is in writing by Epuron. Because Goldwing took over from Epuron, everything promised and written down by Epuron is invalid we have been told. Mr Ben Bateman has verbally</p>	<p>The determination process for the Project Approval involved review of assessments of surrounding residences including Residence K2 and incorporated conditions to protect the amenity of neighbouring residences.</p> <p>In relation to the Modification Application, the closest</p>

Submitter's Issue/Comment	Proponent's Response
informed Katrina Knight that if it is not on Goldwing letterhead, they "won't look at it". At no time were we asked permission for the turbines to be built so close to the farm and Homestead of Fernhill.	turbine to Residence K2 is KIA 01. The change in KIA 01 location has meant that the turbine is 20 metres further away from the residence than for the position indicated in the Project Approval documents.
Two wind turbines towering over the farm of Fernhill that appear to be right on the back door	The two turbines KIA 01 and KIA 02 are 1km and 1.1km from the Residence K2. At this distance they can be regarded as having high visual impact.
The health impacts of our elderly parents who wake up each morning able to view the turbines from their bedroom	It is understandable that siblings have concerns for their elderly parents. It is also possible that elderly residents will be more inclined to be more anxious about changes to their local setting. The landscaping treatments may be of interest to mitigate the parts of the scene where turbines can be seen.
The impact of the percussion of the blades both in the day and especially at night when trying to sleep is already stressing our parents	There would be benefit in GRWFPL visiting the residence and discussing the circumstances and noise characteristics described but we note the previous statement about disturbance of elderly residents. It would be helpful to discuss the matter with the submitter (on behalf of their parents) to gain more details and examine ways that the impacts could be assessed without causing stress to the elderly parents. This aspect will be discussed with the submitters to assess how this matter may be further investigated.
The impact of not being able to have fire assistance on Fernhill due to plane restrictions for firefighting. Planes are not allowed within the proximity of the turbines	The property is immediately adjacent Grabben Gullen Road and in close distance to Crookwell. As such there is potential for evacuation of the parents in the event of fire and ability to bring in fire fighters to defend the residence against bushfires. At 1km distance from the closest turbine it could be expected that there is still likely to be potential for use of a plane or helicopter for firefighting if required.
With the turbines being moved without permission, they are now higher than what the plans reflected and therefore are now more prominent from the homestead which lies north/west of the turbines	The closest turbine to Residence K2, KIA 01, has moved to the east, away from Residence K2. Elevation of KIA 01 is indicated to have varied by 7metres but the data on the change is approximate due to the approximate value used for the level of the approved location in 2008.
Aerial view of the turbines does not show Fernhill or the homestead and how the impact would relate to Fernhill. Fernhill is just out of view of the wide view photo	A number of figures in the EA March 2014 show the location of Residence K2. These figures include: Bannister Group turbines and topography EA, 2014, Figure 2.1 Property Map EA, 2014, Fig 3.1 Appendix 11-1 Residence K2
The aerial views do not appropriately reflect the 'approved' and 'final' positioning of the turbines. The move of 36 metres is up hill as mentioned in point 5 and promotes the visual impact and concern of being closer than expected	The move of 36 metres involves a 20 metre component away from the residence and an increase in elevation of approximately 7 metres. The change in elevation at a distance of 1km is a minor change and would be difficult to discern. The ERM assessment confirms that the changes to visual impact are not significant.
The stress and impact placed on livestock that are to graze near to the turbines. This has led to further stress to both our parents and to Katrina.	There are many wind farms where pastoral activities coexist with wind turbine equipment. On Farm properties that host wind farms cattle and sheep are often seen grazing peacefully below operating

Submitter's Issue/Comment	Proponent's Response
	turbines. On hot days in summer, sheep can also be seen sheltering in the shadow of the towers. Any impact for stock on neighbouring properties could be expected to be less than for host properties. Farmers utilise off-road vehicles, quad bikes and ag bikes and various machinery and seem to accept them as normal impacts for pastoral activities. GRWFPL is not aware of any authoritative reference articles that document stress and impacts on livestock for wind farm lands or neighbouring lands.
The impact already found of the land value decreasing substantially since the turbines have been installed.	The impression that land values have decreased substantially appears artificially created by an agent that has been indicated to be active in the area providing advice that property values following the wind farm installation are reduced by about 30%. The advice seems poorly founded and GRWFPL recommends that individuals consider whether the advice is manufactured by the agent for dubious purposes. GRWFPL is aware of studies that show views other than the spurious view being spread and encourages landowners to carefully review any information they receive. GRWFPL experience in relation to properties it has acquired is that it has received significant expressions of interest for the properties.
There should not be a modification application filed at all as the developer should have adhered to the approved project plan as set out originally. As tax payers, there should not be Wind Turbine Industrial sites at all with which our taxes are subsidising	<p>The Modification has been lodged, exhibited and is subject to determination over the next couple of months.</p> <p>The submitter is incorrect in suggesting that taxes are subsidising Wind Farm facilities. These facilities are usually privately owned electricity generating facilities that sell their products in market situations.</p>
<p>There should be an "Independent Public Inquiry" held as not only have the developers openly violated Project Approval but the Government Department should not have helped the developer benefit from it.</p> <p>The Department has not been impartial as government departments should be by not preventing the developer's violation and also for not halting continuing construction until an investigation is completed and a resolution is found. The department has let the public down in these matters. Construction is still continuing illegally.</p> <p>The department has also failed to halt operation of illegally operating turbines. The turbines that are not in the correct approved spots are now operating and illegally earning Renewable Energy Certificates.</p>	<p>The processes for assessment and determination of planning applications for State Significant projects are well defined and subject to provisions of the EP&A Act. The modification application has been lodged in accordance with provisions of Section 75W of the EP&A Act.</p> <p>GRWFPL does not agree that DPE has somehow aided the proponent in constructing and operating the wind farm. DPE has involved itself in the process of regulation of the works and issued requirements in respect of the Modification Application. It also has a significant role in preparing the Director General's Assessment report and recommendations in respect of determination of the application.</p> <p>The operation of the constructed turbines is a normal part of the development process. The proponent has not been advantaged by the modification application process and has incurred significant costs associated with the Modification Application process that include application fees, costs for planning assessments, delays to construction and extra charges accruing.</p>

Submitter's Issue/Comment	Proponent's Response
The fact that the turbines have been constructed in the incorrect locations does not alleviate the primary fact that they pose a substantial "Nuisance" to the residence of Fernhill and also to those in the area affected by the other turbines both legally and illegally constructed by Goldwind.	The turbines have been constructed in modified locations not incorrect locations. In the case of KIA 01 and KIA 02 these have been moved by 36 metres and 43 metres respectively. KIA 01 which is the closest turbine to K2 has moved about 20 metres further from K2 residence. If the application were rejected then KIA 01 may need to be moved 20 metres closer to residence K2.
The impact of noise, the ruin of views, increased danger and risk of fire hazards, stress to livestock and negative effects to primary production, danger to local and migrating bird life and the decrease in value of our property has created a great deal of stress with both our parents and my wife who suffers from Multiple Sclerosis and the negative health effects she is going through.	These matters listed in this statement have been discussed above and include overstatement of the impacts. The impacts relating to the Project Approval were extensively assessed as part of the Project Approval process. The focus of the modification application relates to significance of the changes in impacts due to adjustment of turbine locations.
<p>This developer should never have been allowed to relocate the vast majority of turbines in this development without Department of Planning approval.</p> <p>We oppose the modification on these grounds – relocating turbines will have the following effects for local residents The submitters then refer to the standard set of issues that are dealt with in the proponent response to grouped submissions.</p>	<p>The adjustments to turbine locations are subject to the outcome of the Modification Application. The EA, March 2014 provided the assessment of the changes in turbine locations. The changes in impacts have not been assessed as significant.</p> <p>See grouped response in Section 5.37.</p>

5.2 Jessica Earle of Grabben Gullen, Residence K17 (96576)

This submission is from a neighbour with a residence about 2.5 km to the northwest of the closest turbine. The submission raises a number of issues related to the project and the Modification Application and others in respect of the impact of the project generally. The submission provides specific detail and photos that assist comment on the matters. The note on the signage for gates is appreciated and this will be addressed by GRWFPL.

Submitter's Issue/Comment	Proponent's Response
<p>What constitutes minor?</p> <p>Regards distance turbine has moved relative to the setback to residences (up to 12% as not being minor)</p>	<p>The physical measure of the adjustment to turbine location is one measure of the project change. An alternative approach is to base the degree of significance of adjusted locations on the extent of the change in impact. The EA, March 2014 has shown that the actual changes result in a layout that has turbines at similar locations to the approved indicative layout and which has impacts of the same order as for the approved indicative layout. The change in noise impacts have been assessed as minor. Similarly ERM has assessed the changes in visual impact as insignificant. The extent of shadow flicker shows minor change but is still well below the criteria, in some cases it has reduced.</p>
A major concern is what the	GRWFPL did not seek to install any of the deleted turbines that the

Submitter's Issue/Comment	Proponent's Response
submitter believes is total disregard for community safety involving relocation of turbines in close proximity to Crookwell Aerodrome.	<p>LEC deleted from the Project Approval as a result of concerns with proximity of turbines to the Crookwell airstrip.</p> <p>Adjustments of turbine locations has not been such as to intrude on the area where turbines were deleted. The review by Aviation Projects concluded that <i>"The changes to turbine locations and elevations from the approved to the final design layout are minor and do not increase aviation impacts specifically with respect to aircraft operations at Crookwell and Ashwell Aerodromes."</i></p> <p>CASA has also responded to the Modification Application and has not raised any additional issues.</p>
69 turbines are built in unauthorised locations. The submitter suggests heavy penalties be applied.	The project has been constructed generally in accordance with the approval documents set out in Approval Condition 1.1. These documents included indicative turbine locations that formed the basis of the Project Approval. It has been acknowledged by DPE that minor relocation from the indicative locations is permissible. The modification application seeks confirmation of the final design turbine locations and is subject to a comprehensive review process and determination potentially by the Planning Assessment Commission (PAC).
Attachment 1 of submission	
The submitter raises the issue of the ULSC DCP that references a 2km setback from dwellings and setbacks from roads.	The project was assessed and approved as a Major Project under Part 3A of the EP&A Act. The provisions of DCPs are not mandatory for Major Projects although consideration can be given to them.
The submitter is resident at K17, which is 2 to 3 km from the nearest turbine of the Kialla Group. They note they received 3 communiques all of which have been newsletters placed in an unused letterbox. Only recently become aware of a community consultation program.	<p>GRWFPL acknowledges that more effort could have been made in respect of consultation and aims to increase its efforts in respect of consultation.</p> <p>A difficulty in contacting neighbours has been that Council needs to respect privacy regulations and has not released the names of ratepayers to GRWFPL.</p>
Signage at entrance gates to Bannister sites from Range Road is not consistent with the Complaints Procedure in Project Approval Condition 5.4.	<p>The required details are shown on the entrance to the main site office and substation site (see photo below).</p> <p>GRWFPL acknowledges that the other site entry gates could include more details and will upgrade existing signage at the two Bannister entrances and the southern entrance to the Gurrundah group of turbines.</p>

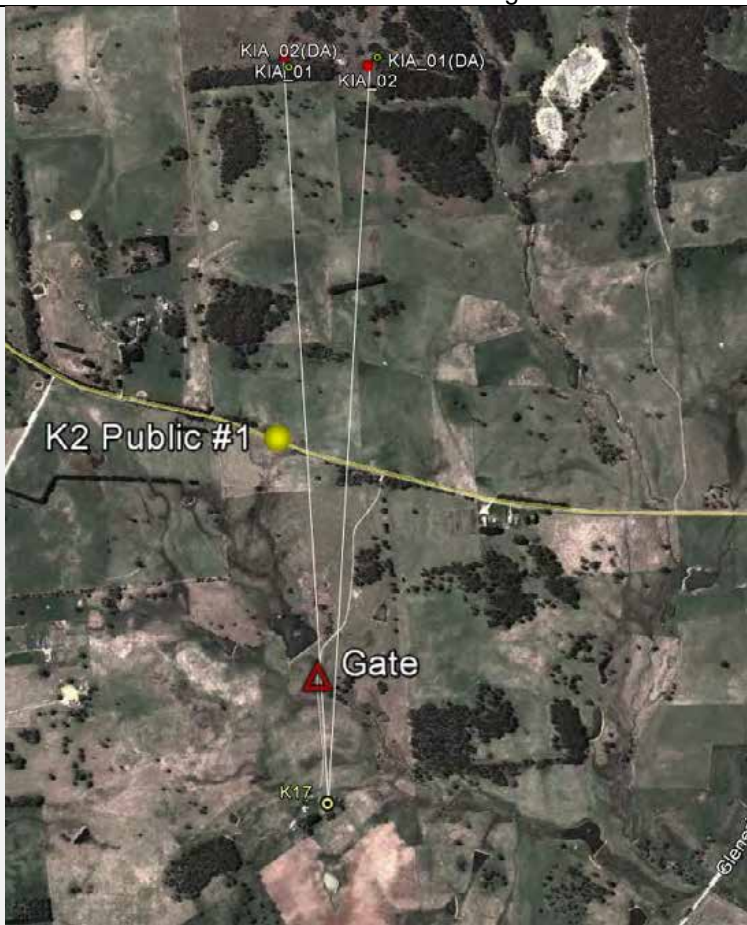
Submitter's Issue/Comment	Proponent's Response
	
<p>The submitter indicates that they use Range Road on a daily basis to travel to Goulburn for work and that they have experienced vehicle damage, a flat tyre and cracked windscreen that in case of the flat tyre is attributed to the broken bitumen and the windscreen due to an oncoming gravel truck that went onto the side of the road to allow room for the vehicle in front of the submitter to pass</p>	<p>It is unclear from the information provided and the circumstances as to whether the incidents were directly related to the GRWF construction works. However, GRWFPL regards safety of the local road users as a high priority. Where GRWFPL has been aware of damage to local roads, requests and funding have been made to rectify that.</p> <p>Overall GRWFPL has to date, provide, \$4.5 million to upgrade local roads. The works have included, increased pavement widths, increased pavement thickness, sealing of some sections of local roads and realignment of corners to allow access by long loads. GRWFPL has also worked with Council to get temporary speed limits and provide additional line marking. Upgrades have been made to Range Road as well as Kialla Road. Edge repair work was supported. Some repairs were undertaken by the contractor, CATCON while the Council and its contractors undertook others with funding from GRWFPL.</p> <p>The delivery of the large items has been completed and GRWFPL has commenced discussions with Councils in respect of repair of roads where damage is reasonably attributed to the GRWF project. GRWFPL has completed detailed road condition assessments and provided these to the Councils (See Section 9.6)</p>
<p>The photomontages greatly diminish the visual impact of the turbines.</p>	<p>The preparation of the photomontages uses a rigorous procedure to ensure realistic scaling in the photomontages. Nevertheless, ERM agree that presentation in A4 and A3 formats for reporting purposes is not ideal. However when printed at full size the photomontages provided accurate representations of the views to the wind farm. Fig 2 in the submission (repeated below) clearly demonstrates the visibility of the two turbines from the viewpoint. However, the bulk of the scene is still visible including pastures and woodland. The turbines do not obscure those features but are visible. However, the photo appears to be taken with a telephoto lens, as evidenced by the narrow field of view, shortening of the near/middle ground and the apparent size of trees in the drainage line around the dam. The view field angle of only about 10 - 12 degrees (much less than viewed naturally by the human eye) appears to exaggerate the impact and make the turbines that are at about 2.5 km appear larger in the scene.</p>

Submitter's Issue/Comment

Proponent's Response



Review of mapping and the content of the photo shows an angle of view of about 12 degrees which indicates a telephoto lens has been used to take the photo from 2.5km from the turbines. That will increase the size of the turbines in the image relative to the normal appearance.



5.3 John de Groote, Residence B5 (95964)

The submitter is indicated to be located at receiver B5 which is 1,790 metres from the closest turbine

Submitter's Issue/Comment				Proponent's Response							
The submitter notes a reduction in shadow flicker to 0 hours per annum which is pleasing to see.				Shadow flicker is compliant at all non-associated residence locations. Some residences such as B5 will be unaffected by shadow flicker.							
In the document Gullen Range WF Mod_1 EA_01 April 2014 - Part 4 table 6.3, it notes an increase of 0.1DB. However this goes against their submitted table showing that a more realistic increase would be in the range of 2-5DB which is a significant change.				The 0.1dB is the difference in wind farm noise levels comprising the selected turbines at the final design locations compared to approved indicative locations. The change in noise level as a result of the modification of turbine locations is insignificant. Noise data that was provided in the EA, March 2014 is shown below.							
Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout											
	3	4	5	6	7	8	9	10	11	12	
Predicted Noise	29.5	29.5	29.6	30.4	31.5	32.2	32.7	33.5	33.8	33.7	
Noise limit Criteria (Condition 2.15)	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	
Amount Below Criteria	5.5	5.5	5.4	4.6	3.5	2.8	2.3	2.5	1.2	1.3	
The document shows that instead of 2 towers within 2km of the property I now have one, this is clever writing as it is clearly taken from a point in my house paddock that just places this outside the 2km range by a small margin. I have attached a pdf file showing the relative changes.				The GRWFPL statement is based on: <ul style="list-style-type: none">GRWFPL data for turbine locations that has been confirmed as correct by the DPE survey, andthe coordinates of the residence. The DPE survey indicates the residence is 5 metres further away from the wind farm than for data in the EA, March 2014. <p>The EA, March 2014 has reported the facts as per the applicable data and has not tried to misrepresent the situation. The submitter's efforts to clarify the details for their location are impressive and shows a degree of rigour in their submission. However, GRWFPL does not agree with the submitter's result.</p> <p>Our analysis finds that the closest turbine, BAN15 is at 1,790 metres. The second closest turbine is at 2,026 metres using DPE residence location data. The submitter's mapping differs to the analysis used by GRWFPL and provides a different outcome with the difference being about 100 metres.</p>							
No one ever consulted with our family about the change, which is what upsets us the most. We knew there were issues as works had stalled on that particular tower (it was skipped in the sequence prior to construction)				GRWFPL recognises that its consultation could have been better. GRWF is Goldwind's first wind farm development in NSW and follows the Mortons Lane project in Victoria which did not encounter the degree of community concerns that has been experienced for GRWF. GRWFPL is upgrading its capability in respect of consultation and aims to improve its performance for current and future stages of the development.							

Submitter's Issue/Comment	Proponent's Response
I see any increase in noise levels as unacceptable to previously approved locations therefore we oppose BAN15 to remain in its current position. This could have been prevented through positive community consultation and a more proactive approach by the proponent.	The EA, March 2014 has shown that the modifications do not result in any significant increase in noise levels at any neighbouring non-associated residence within 2km of the nearest turbine.
It is very disappointing to see our new corporate citizen behave in such a manner.	GRWFPL notes the submitter's concern and is committed to improving its acceptance within the community.

5.4 Humphrey Price-Jones, Residence B12 (96702)

The submitter is a non-associated landowner that has a residence about 1.6km to the east of the wind farm. He has indicated that he is the President, NSW Landscape Guardians Inc. and a spokesman of Crookwell District Landscape Guardians Inc.

Submitter's Issue/Comment	Proponent's Response
I am ill prepared to address certain parts of this modification application as some of the information available to me comes from the developer including the exact positions of turbines. This information may therefore be unreliable as there is no independent assessment available to me.	<p>The survey information is now available and has been posted on the DPE website. The survey confirmed the GRWF turbine locations and the data used in the March 2014 EA.</p> <p>The location of the B12 residence was also consistent with the GRWFPL data used for the EA, 2014.</p> <p>The assessment for B12, in the EA March 2014 is therefore based on appropriate turbine and residence location data.</p>
There has been no reasonable or informed assessment of this development's original DA/EIS. Submissions regarding this development, no matter how well researched and presented, have been ignored. My wife and I have spent many thousands of hours in research and writing such submissions to the detriment of our financial position and our amenity.	<p>The Modification Application reviews the changes to the project that has been approved. It therefore focuses on the impacts of the proposed modifications. Accordingly there is not a requirement to provide extensive review of the prior assessment material as that has been considered by the Project Approval. The impacts are assessed in the context of the outcomes permitted by the Project Approval.</p> <p>The Land and Environment Court (LEC) gave due time and consideration to hearing the oral evidence of these submitters, visiting their residence and reviewing their written submissions during the hearing of the appeal to the LEC. Those submissions were therefore considered in the decision of the LEC to approve the project with conditions.</p>
" Pursuant to section 75J(4) of the <i>Environmental Planning and Assessment Act 1979</i> the project is modified to remove the ability of the Proponent to relocate turbines from the locations indicated in the document referred to under condition 1. 1b) by up to 250 metres without further assessment and approval in accordance with the requirements	The project approval documents including the EA, 2008 and the LEC judgement demonstrate that the project planning anticipated adjustments to the layout. Adjustments were reviewed by the approved ER and declared to be consistent with the Project Approval. A modification application has been lodged under Section 75W of the EP&A Act. The EA, March 2014 provides the assessment of the impacts of adjustment

Submitter's Issue/Comment	Proponent's Response
of the <i>Environmental Planning and Assessment Act</i> ."	of turbine locations. Based on the assessments in the EA, March 2014, the application seeks approval for the adjustments to turbine locations.
The ruling also states that an independent Environmental Representative should be appointed to oversee that the development complies with the conditions of consent. This process is essentially flawed as the <u>developer</u> suggests a suitable person for this position and the Director General of the DoPI then appoints this person.	<p>An ER was nominated for the construction of the project and subsequently approved by DPE. The approved ER was an employee of ngehvironmental and as a consequence would have knowledge of the project and the matters to be managed.</p> <p>Consultants are often required to participate in various project roles and at the same time to maintain independence as per their obligations as certified practitioners and commonly involving being signatory to their discipline's code of ethics.</p> <p>GRWFPL believes that the ER took a responsible approach to the role but acknowledges that advice of the ER differs to the DPE view of circumstances.</p>
Due to his lack of independence, Erwin Budde has since been dismissed by the developer at the insistence of the DoPI.	DPE has withdrawn approval for the original ER and a replacement has now been appointed. GRWFPL understands that the question was not the actual lack of independence but the perception that the ER may have lacked independence. The withdrawal of approval and appointment of an ER without connection to or previous relationship with the proponent addresses that issue. Given the efforts expended by the ER to oversee compliance with many aspects, GRWFPL believes that the claim that the ER was not independent has not been substantiated.
<p>The developer Goldwind has prepared a modification document to try to prove that these movements of turbines will still satisfy the conditions of consent.</p> <p>WE FEAR THAT THIS WILL BE AN ATTEMPT BY THE NSW DOPI TO COVER THEMSELVES - by that , we mean that if the developer provides some information , no matter how spurious, to indicate that moving turbines has not affected the neighbours or the environment negatively, the NSW DoPI will pass the modification and the developer and the DoPI will have erased their incompetence and lack of compliance – therefore the DoPI will feel that it can no longer be criticised for not ensuring compliance and not protecting those who will be more greatly effected by this development.</p>	<p>The EA, March 2014 provides specialist assessments of the relevant impact issues and demonstrates that the modifications have not significantly increased impacts for the non-associated residences with 2km of the closest turbine.</p> <p>The assessments in the EA, 2014 have been provided for scrutiny by the DPE, government agencies and the community. GRWFPL will review any assessments that are assessed as inaccurate or inadequate and if necessary address any criticisms. GRWFPL does not accept unsubstantiated claims about supposed motives of the proponent to form a basis for invalidating the EA, March 2014 or the assessments in the EA.</p> <p>Despite the assessments for the modifications demonstrating that the changes in impacts are insignificant and this information being available through the public exhibition, the submitter still refers to "<i>those who will be more greatly affected by this development</i>".</p> <p>It would appear that the submitter is convinced that they will be more significantly impacted as a result of the adjustments to turbine locations. This is not indicated by the assessments of the relevant matters. The statement clearly exaggerates circumstances.</p>

Submitter's Issue/Comment	Proponent's Response
<p>This development has been dogged by examples of non-compliance.</p>	<p>The submitter lists six examples against this statement and GRWFPL acknowledges that it has had to follow up instances of non-compliance. However, where these occur, the proponent has brought the issue to the attention of the contractor and sought measures to improve performance and ensure compliance. For some issues that has required several follow-ups to address the issue.</p>
<p>We don't understand why, when the Land and Environment Court ruling has been ignored by the developer constructing 95% of the turbines in the wrong places without approval, the developer is simply permitted to submit a Modification Application.</p>	<p>The project approval documents anticipated minor adjustments of turbine locations. DPE has advised that Project Approvals under the EP&A Act allow for minor relocations.</p> <p>The DPE approved ER reviewed the modifications and declared them consistent with the Project Approval and the proponent proceeded with the construction. The Modification Application responds to the DPE request for assessment and gaining approval for the modifications as per the due process in Condition 1.5 of the Project Approval.</p>
<p>The H & J Price-Jones residence is referred to as B12. According to the modification application there are 5 turbines within 2kms of this residence, the same number as in the original design and BUT the developer's Micrositing Consistency Review Final (December 2013) shows that there are 10 turbines within 2kms of this residence. One of these turbines has been relocated by 187m and 166m closer to this residence as far as can be ascertained.</p>	<p>The EA, March 2014 provides the basis of the assessment for the Modification Application. Its assessment for Residence B12 includes a figure (GR-PM-DWG_0117 (Appendix 11-2 of EA, 2014) that clearly represents the location of the B12 residence relative to turbines of the Bannister and Kialla Groups. The circles indicate the distance from B12 at 1km intervals. Five turbines (final design location) are within the 2km circle.</p> <p>One turbine moved 187 metres (BAN 08) however that was in a SSW direction and was not towards the B12 residence. In fact it is 68 metres further away.</p> <p>Turbine BAN 15 was moved 178 metres and is closer to the B12 residence by about 166 metres and after the movement is at a distance of 1,664 metres from B12. Predicted noise levels and criteria are shown below. The assessment in the EA, March 2014 shows that there has been no significant increase in noise impact for the B12 residence.</p>
<p>Due to unavailable independent survey information, the precise distance from these turbines to the boundary and the residence cannot be precisely ascertained and therefore neither can the full extent of the negative impacts created.</p>	<p>As could be expected the survey data for turbines is consistent between the two surveyors.</p> <p>The DPE survey of the B12 residence does not show any significant change from the location used by the EA, March 2014.</p> <p>Accordingly, the data used in the EA, March 2014 is deemed to provide an accurate representation of the distances between turbines and the B12 residence and is a reliable basis for the assessments provided in the EA, March 2014.</p>
<p>The placement of these turbines has had a profoundly detrimental effect on working conditions on the Glan Aber property, both agricultural work and work as a painter of landscape and wildlife. The excessive noise and shadow flicker created by these turbines</p>	<p>The predicted noise and shadow flicker are both assessed as compliant.</p> <p>The submitter's claims regarding potentially inaccurate survey were not confirmed and claims of excessive noise, shadow flicker and unacceptable OHS issues</p>

Submitter's Issue/Comment		Proponent's Response									
also pose an occupational health and safety issue which is totally unacceptable.		are not supported by the available evidence.									
If allowed to continue to operate these turbines will have a significant land drying effect on parts of this property and BAN 5 will have this effect upon the biodiversity constraint area.		The claims made by the submitter appear exaggerated. However, monitoring could be undertaken of this aspect if post operational indications support further investigation.									
These turbines have also deprived the Price-Jones family and its company, Glan Aber Pty Ltd, of the potential of rural residential subdivision. These turbines have greatly reduced the value of the property and had impinged upon the family's ability to enjoy its home and its environs - note: the garden and surroundings are this artist's workplace.		The issue of the neighbour's potential for subdivision of their property is not a matter that relates to the Modification Application for the approved project.									
Noise - At considerable private expense, my wife and I have commissioned an acoustician to conduct a noise monitoring and assessment study. This has indicated major flaws in the developer's modelling and assessment of the full audible and infrasound noise impacts which will be suffered at our house and in our garden. Full details of this will be lodged with the DoPI in the next few days, but I make the following pertinent comments regarding the noise assessment in the developer's application.		<p>GRWFPL has not seen the submitter's noise assessment and is unable to comment on the results.</p> <p>GRWFPL would be pleased to have its noise specialist review the submitter's assessment when available.</p>									
In respect of the Marshall Day Noise assessments, the submitter states that the margin between the noise criteria and predicted noise level at B12 is not provided.		<p>The data sheets in Appendix 11-2 of the EA, March 2014 provide the information sought by the submitter. This information is provided below.</p> <p>The margin in that data for the Goldwind turbines is 0.4dB to 4.2dB at B12.</p> <p>The minimum 0.4dB occurs for 9m/s. Predicted noise levels for wind speeds less than 9m/s vary from 1.4 to 4.2 dB below criteria.</p> <p>Predicted noise levels for wind speeds above 9m/s, vary from 0.9 to 3.1 m/s below criteria.</p>									
		Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout									
		3	4	5	6	7	8	9	10	11	12
Predicted Noise Final Design Layout		30.8	30.8	30.9	31.7	32.8	33.6	34.6	35.0	35.4	35.2
Noise limit Criteria (Condition 2.15)		35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.9	37.1	38.3
Amount Below Criteria		4.2	4.2	4.1	3.3	2.2	1.4	0.4	0.9	1.7	3.1
Our property is described as B12 in the Marshall Day reports and predicted sound levels in the OEMP at B12 are shown in a chart for monitoring location B26 where it is shown that the predicted sound level at B12		One outcome of wake effects for a turbine are that a turbine downwind receives a lower wind speed than would otherwise be the case. It may also be subject to more turbulent airflow which is not ideal for maximum turbine efficiency.									

touches the noise limit at 9m/s hub height wind speed. Our concern is that the predicted sound levels for our property show no room for error in the prediction process, yet, the NGH Environmental report clearly states that there are wake effects at turbines near to us.	The submitter indicates that his review of a reference regarding wake effects indicates the following (<i>1dB and 1.5dB increase in sound levels were measured in the wind speed range 3m/s to 5m/s</i>) As can be seen in the Table above, a margin of 4dB is indicated at these wind speeds.
It is now stated by Karen Jones (DoPI Director) and the developer that this modification application will be finally assessed by a PAC. This development was originally approved under Part 3A legislation prior to the introduction of PAC determinations.	The relevant determining authority is the Minister for Planning. But under certain circumstances, the Planning Assessment Commission may provide the determination. The PAC is comprised of persons that been appointed to the role based on their relevant expertise in the planning system and issues posed by development applications. The PAC is regarded as an appropriate vehicle for determining such applications. GRWFPL is not assuming any outcome from that process.
The submitter has also provided recommendations that may be considered by DPE.	The submitter's recommendations ignore the fact that the project has been approved and the Modification application is focused on the permissibility of the adjusted turbine locations. The recommendations made by the submitter are not deemed relevant to the determination of the modification application. The determining authority will identify whether any conditions should be applied to the modification, if approved, and the nature of the conditions.

5.5 Jennifer Price-Jones, Residence B12 (96625)

The submitter is a non-associated landowner that has a residence about 1.6km to the east of the wind farm. This submission complements that from Humphrey Price-Jones and for the same residence location. Her husband has indicated that he is the President, NSW Landscape Guardians Inc. and a spokesman of Crookwell District Landscape Guardians Inc.

Submitter's Issue/Comment	Proponent's Response
Members of the public, especially those who neighbour the GRWF are asked to write submissions about movement of turbines when the only information available about the exact, final distance from turbines to homes is provided by the developer - a-proven unreliable source of information in the past.	<p>This assertion by the submitter that the proponent is an unreliable source of information is not supported by the survey results arranged by DPE to check this aspect. The locations of the turbines stated by the proponent in the EA, March 2014 have been confirmed by the DPE arranged survey. The assertion has been shown to be incorrect and is discredited.</p> <p>Similarly, the B12 residence location details in the proponent's EA, March 2014 compares with that obtained by the independent surveyor arranged by DPE.</p> <p>The view spread by objectors that the proponent's turbine location data is unreliable or manipulated has been shown to be false and raises questions as to credibility of statements made by some objectors. In contrast to the submitter's claims, some objectors have made inaccurate or exaggerated claims in their</p>

Submitter's Issue/Comment	Proponent's Response
	submissions.
<p>Occupational Danger/Income Loss. The submitter claims that the turbines and pose a significant occupational health and safety hazard. It is stated that it will become too dangerous to carry out normal farming along the property boundaries adjacent the wind farm. That is attributed to the 'incredible' noise – impossible to hear machinery and, shadow flicker as it may form a distraction, an example of use of a chain saw is mentioned. The submitter concludes that the situation leads to loss of productivity as these paddocks cannot be utilised when such danger is posed.</p>	<p>The issues raised as hazards are misrepresented.</p> <p>In respect of noise, the claim that machinery may not be heard due to 'incredible' noise of wind turbines indicates a lack of knowledge of the relative noise levels. The wind turbine noise reduces with distance and the maximum predicted noise level at the B12 residence at wind speed of 11 metres/second is 35.4 dB which is likely to be well below the levels of most farm machinery that could be in excess of 50dB Where the wind farm noise level is well below the machinery noise level then the wind farm noise may not be audible.</p> <p>In respect of shadow flicker, the effect at residence B12 is well below the level for compliance (30 hours per year). The effect will only occur in the evening for certain locations on the B12 property for a low number of hours per year. The effect also diminishes with distance as the effect becomes more diffuse.</p> <p>The submitter will need to make their own assessments of any danger in undertaking tasks on their property. GRWFPL does not agree with the statements made and regards them as exaggeration of the circumstances.</p>
<p>Further Income/Loss Husband's income from artworks is also hampered. Indicated as an internationally renowned wildlife painter.</p>	<p>As a wildlife painter, her husband has apparently tried to create a wetland to attract birds. It is expected that access to wildlife will be available throughout the region at the many wetlands.</p>
<p>It is very often impossible to spend time outdoors (let alone concentrate) due to the noise of the turbines.</p>	<p>This appears to be an exaggeration of circumstances but warrants further discussion with the neighbours to better understand their experiences.</p>
<p>Restriction of Outdoor activities</p>	
<p>The option to spend time with family outdoors in no longer available</p>	<p>This appears an extreme view. The turbines are often not operating and even when operating the noise levels are indicated to be compliant at the residence. Nevertheless the wind farm will be audible at times. The property is on land zoned primary production which can include pastoral activities and wind farm activities. As such, it is reasonable to expect that there may be audible noise associated with the primary production.</p>
<p>Property Devaluation Claim that greater visual pollution and noise nuisance led to significant devaluation of the property as well as destroying the tranquil lifestyle</p>	<p>The assessments have shown that the modifications have not significantly increased the noise or visual impact. The devaluation does not appear to be substantiated and is not considered to be due to the modifications that are assessed as not having significantly increased impact relative to the approved project.</p>
<p>Lack of subdivision ability</p>	<p>The issue of subdivision potential appears to be at odds with maintaining the productive capability of the rural land zoned for primary production. It is understood that greater attention has been given over the last decade to ensuring that planning provisions do</p>

Submitter's Issue/Comment					Proponent's Response					
					not allow excessive subdivision of agricultural land and reduce the total resource of agricultural land. Finally, the proponent is not responsible for ensuring alternative uses for neighbour's land that may be sought at a point in the future.					
Noise										
There is no information available to us as to what "curtailment" involves.					Curtailment means constraining the operation of a turbine at specific integer wind speeds to achieve a lower noise profile for certain wind speeds and achieve compliance. Due to slight non-compliance found in the original modelling at B12 when the wind is coming from the west, a noise curtailment strategy has been developed in collaboration with Marshall Day specifically to ensure compliance at B12. This has resulted in four wind turbines being curtailed to reduce rotational speeds during specific wind conditions and therefore reduce sound power levels. The predicted levels in the B12 residence data sheet (EA, 2014, Appendix 11-2) are with these four WTGs curtailed.					
There is no information available to us as to how this "curtailment" is monitored.					The SCADA system that records wind farm operation can be interrogated in the event of any complaints to confirm wind farm operation at the time.					
The modification document in relation to noise (Marshall Day March 2014) provides no information concerning cumulative noise from a number of turbines.					The noise modelling process utilises the noise levels contributed by all turbines to report the level resulting from all operating turbines.					
Difference between Compliance Review (Dec 2013) and EA, March 2014					The EA, March 2014 is the reference for the Modification Application					
The increase in proximity to our house of BAN 8 will undeniably increase the noise heard at our residence.					The EA, March 2014 included assessments of noise impacts and indicated that there was no significant increase in wind farm noise level at B12 due to the modification of the turbine locations. See below.					
	Difference in predicted noise level – Final design layout and approved indicative layout									
	3	4	5	6	7	8	9	10	11	12
B12	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.10	-0.01	-0.01	-0.01
We do not feel satisfied that the developer will undertake genuine noise monitoring when it has given false information in the past					The submitter did not trust the survey locations of the turbines provided by a registered surveyor. The claim that GRWFPL survey data could not be trusted has been discredited. The noise specialist undertakes monitoring in accordance with standards, guidelines and approval conditions for monitoring and reporting.					
The submitter indicates that they have commissioned their own noise survey but no results are provided.					No results have been provided and no comment can be made on their assessment.					
The submitter has made suggestions in respect of potential acquisition offers.					This is a matter for the determining authority.					
The submitter requests a public inquiry					The 75W process represents a significant review process that addresses the modification of the turbine locations.					

5.6 Name Withheld, Residence B12 (97101)

While the submitter's name is withheld, they refer to Residence B12 which is about 1.6km to the east of the wind farm. This submission is the 3rd individual submission in relation to B12. A fourth submission has also been submitted by the landowner on behalf of the Crookwell District Landscape Guardians.

Submitter's Issue/Comment	Proponent's Response
Goldwind should never have been allowed to relocate the vast majority of turbines in this development without prior Department of Planning approval.	Consistency reviews of variations to the approved project were undertaken progressively by the DPE approved Environmental Representative, as per Approval Condition 7.1. A comprehensive EA, March 2014, was lodged with the modification application and includes relevant assessments for the modifications. The determination of the Modification Application will either approve or reject the various adjustments to turbine locations.
This is a flagrant abuse of the Department of Planning processes and the rulings of the NSW Land and Environment Court.	Consistency reviews of variations to the approved project were undertaken progressively by the DPE approved Environmental Representative, as per Approval Condition 7.1. A comprehensive EA, March 2014, was lodged with the modification application and includes relevant assessments for the modifications. The determination of the Modification Application will either approve or reject the various adjustments to turbine locations.
To allow such vast changes to a project without significant penalties to the developer and significant recompense to landowners within 2 kms of turbines will send a message to ALL future developers that it is advisable to ignore conditions of consent if doing so provides higher financial returns.	The changes were not made to reduce construction costs which are likely to be relatively unchanged by the adjustment to turbine locations. In some cases, changes may have increased costs. The proponent will also incur at least an additional \$1 million to work through the modification process.
In the majority of cases, the reason given for the relocation of turbines is to reduce wind shear and gain higher wind resource - ie improve profit margins. The impact on local residents was never considered by this developer.	The distance for relocation of turbines is variable and the reasons for individual adjustments varies, including wind resource. The impact of the relocation of turbines was considered in the Modification Application.
To relocate turbines closer to homes and at higher elevation, OR only at higher elevations, increases the visual impact of the turbines at many non-host residences. This is an unfair impost on these residents	The changes in visual impacts as a result of the modification of turbine locations was assessed in the EA for the Modification Application. The ERM assessment did not indicate any significant change to visual impact as a result of the modification of turbine locations.
Cumulative noise impacts have not been addressed in the modification documents. Only noise created by individual turbines has been modelled. It is apparent that resiting turbines in any way will have impacts on the cumulative noise created.	The noise modelling process utilises the combined noise levels contributed by all turbines to report the predicted noise levels resulting from all operating turbines. The information presented in the Modification Application outlined the difference in predicted noise levels for the Approved Layout and the Final Design Layout of the Gullen Range Wind Farm. These predictions indicated a maximum difference of 0.4dB, taking account of all receivers identified for the RNA assessment and simultaneous operation of all proposed wind turbines. A number of factors influence an individual's perception of sound, however for context, a change in noise level of 1dB is generally not subjectively discernible.
My parents have commissioned an independent acoustician to conduct noise	GRWFPL has not seen the submitter's noise assessment and is unable to comment on the results.


Submitter's Issue/Comment	Proponent's Response
monitoring (both audible and infrasound) and this shown that the developer's processes and results are lacking in rigour and accuracy.	GRWFPL would be pleased to have its noise specialist review the submitter's assessment when available.
<p>There has been NO independent government assessment of the noise monitoring/modelling done by the developer and provided to local residents.</p> <p>In assessing this application, NSW government agencies MUST not simply accept the figures provided by the developer, but undertake independent noise monitoring. To do otherwise is simply indicating to developers that any information they provide will be regarded as accurate.</p> <p>In the case of this developer, it has been proven on many occasions that the information it has provided to the DoPI is inaccurate.</p>	<p>The noise assessment satisfies the requirements of the Approval Conditions. The revised noise assessment referenced the selected turbines at the amended locations and has demonstrated compliance for the final design, layout 6a.</p> <p>Noise compliance monitoring is conducted by an independent acoustic consultant that must conduct testing and reporting according to the relevant standards, guidelines and the approval conditions. DPE has its in-house noise specialist that is able to review the assessments undertaken and advise on the relevance of results.</p> <p>We also note the submission by the EPA (Section 4.4) that concludes that "<i>the current project approval contains appropriate noise limits</i>" and that "<i>the difference in location of wind turbines between the final design layout and the layout in the project approval, in terms of noise impacts on surrounding (non-involved receivers) is not considered audible or significant.</i>"</p>
<p>The increase in noise and visual pollution drastically reduces residents' enjoyment of outdoor activities. Our family spent the majority of its leisure time in the garden. The noise which is currently evident is astounding and makes it impossible to enjoy our outdoor areas</p>	<p>The assessments have shown that the modifications have not significantly increased the noise or visual impact.</p> <p>Characterisation of the noise as '<i>astounding</i>' appears to be theatrical and to exaggerate the impact. However, the comment warrants review with the submitter to seek clarification on the nature of audible noise at the residence location.</p>
<p>Ours is a working farm! The noise and shadow flicker already apparent in our top paddocks, makes it dangerous to work there.</p>	<p>The statement is regarded as extreme view of the impacts. The assessments undertaken for the modification application and presented in the EA, March 2014 do not indicate any significant increase in noise or shadow flicker at the residence. The project has been assessed as compliant for both noise and shadow flicker. Host farmers are able to continue to work their properties, it appears unlikely that neighbouring farms will experience any limitation.</p>
<p>The increase in noise indicated in the noise assessment commissioned by my parents will further reduce the value of the family property. This will be the case for many landowners.</p>	<p>Noise and visual impacts of wind farms are not confirmed as causing very significant reduction in property value. In any case the impact on property values is not a matter that is generally considered in determination of projects.</p>
<p>The increase in noise levels and shadow flicker effects can mean that some farmers will find it too dangerous to work in certain parts of their properties, reducing the amount of land from which income can be made. This will be the case for property B12</p>	<p>As above, the assessments undertaken for the modification application and presented in the EA, March 2014 do not indicate any significant increase in noise or shadow flicker at the residence. The project has been assessed as compliant for both noise and shadow flicker. As indicated previously, stock are often seen grazing peacefully below operating turbines.</p>
<p>B12 will no longer be able to be subdivided. For some farmers, including my family, the ability to subdivide their property to gain additional income is lost due to the local</p>	<p>The potential for subdivision of rural land is a one off opportunity that a landowner may have to gain a return for part of their land but which also means a loss of the income earning potential over the longer term.</p>


Submitter's Issue/Comment	Proponent's Response
Council's restrictions in regard to proximity to wind turbines	Additionally, subdivision of rural land can reduce the pastoral utility of the land and reduce the net availability of productive rural land with a transition from pastoral activities to lifestyle residences.
The Department of Planning and Infrastructure may find that the relocation of turbines closer to dwellings, or the extra potential cumulative noise from turbine resiting, could best be dealt with by the developer acquiring the effected properties.	Where the modification of the Project Approval does not significantly change the impacts on neighbouring residences then the submitter's request does not seem justified in the context of the project approval. The determination of the Modification Application will determine whether the modified turbine locations are accepted or rejected.
The Department of Planning should offer the property owner the right to decide if he/she wants to have their property bought by the developer OR	Where the modification of the Project Approval does not significantly change the impacts on neighbouring residences then the submitter's request does not seem justified. The request appears to seek to change the intent of the existing Project Approval.
Have the most offensive turbines removed/relocated	This is a possible outcome if the application is rejected.
Gain other forms of compensation from the developer – financial or significant turbine curtailment (especially at night)	Turbine curtailment is a mitigation measure that is identified in the Noise Management Plan that forms part of the approved OEMP. Turbine curtailment can be applied if necessary to achieve compliance.
As this developer has breached of its conditions of compliance on numerous occasions and as the Department of Planning has been unable to ensure that the developer complied with conditions of approval	GRWFPL does not agree with the submission that there have been many breaches of compliance. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits.
Call for a public inquiry into the processes involved in approving / monitoring this development to provide the residents of NSW some form of assurance that their rights are respected.	The project is subject to well defined processes under the EP&A Act. The State Government undertakes regular review of the EP&A Act and planning processes but it would be impractical to review the processes on a project by project basis

5.7 Name withheld, Residence B29 (96094 / 96663)

The submitter is a non-associated landowner that has a residence approximately 1,147 metres from the closest turbine BAN 09 and is located to the west of the wind farm adjacent Grabben Gullen Road. The property is indicated as a 5 acre block and is indicated to be used solely as a residence and not for farming or commercial purposes. Comments in relation to matters raised in the submissions 96094 & 96663 (DPE website reference numbers) are listed below.

Submitter's Issue/Comment	Proponent's Response
Visual aspects	
Requests removal of BAN 08 based on greater visual impact on the residence	GRWFPL confirms that BAN 08 has moved closer to B29 by 146 metres.
Request that BAN 09 be removed due to increased visual impact	GRWFPL advises that BAN 09 has moved closer to B29 by 161 metres (not 167m)
The submitter regards their residence as the worst affected of the sensitive receiver locations.	The residence is one of the closer non-associated residences to the wind farm but not the closest. The residence has a higher background noise than is the case for some other sensitive receivers. This is expected to be due to the exposed location of the residence in the terrain and potentially the proximity to a farm dam that

Submitter's Issue/Comment	Proponent's Response
	<p>with wetland species such as frogs can often contribute background noise up to 50dB level or more. The submitter does note that turbine noise can be heard at the same time as the noise of wind rustling through the trees. Where these are both heard at the same time, it is expected that they may be producing similar noise levels and turbine noise is close to the background level.</p>
<p>Photomontages supplied in reference to B29 (Viewpoint 1 for B28) have no relevance. Photo of BAN 09 from near B29 is supplied in submitter's document.</p>	<p>The photo was indicated to have been taken at 10 metres from the residence but a review of the photo against ground features using triangulation indicates the viewpoint may be about 80 to 90 metres from the residence and closer to the BAN 09 turbine thereby exaggerating the visual impact at the residence. Also the focal length for the photo is not indicated.</p>
	<p>The submitter indicates the photo has been taken from about 10metres from the residence but a review of the turbine positions relative to ground features and the foreground indicates that the photo may have been obtained at a location about 80 to 90 metres from the residence and closer to the turbines. Perhaps the submitter meant 100 metres rather than 10 metres. If taken from closer to the residence but with a zoom lens that would exaggerate the visual impact and the triangulation based on the photo features would give a different result to the approximate viewpoint location identified by this review.</p> <p>ERM visited this property and offered to gain imagery for preparing a photomontage however, the owner refused permission for a photomontage to be prepared. ERM indicated that existing vegetation filters most views to turbines and that landscape mitigation may be appropriate to filter views from the dwelling (see inset in the ERM Figure several pages over indicating a location for potential landscaping if suitable to the landowner. ERM prepared two photomontages in close proximity to this dwelling.</p>

Submitter's Issue/Comment	Proponent's Response
	
<p>Lost the view to the northeast.</p>	<p>The photo supplied by the submitter is to the east of the residence. The turbines to the northeast of B29 are set back further from the residence with minimum distance of 1,377m. The views have not been lost, they still contain many of the same elements.</p>
<p>Noise Impact</p>	
<p>On 4 April, BAN 3, 4, 6, 7 & 11, four turbines operating and were audible</p>	<p>It is expected that turbines will at times be audible at the residence location however, predicted noise levels shown below indicate that wind farm noise levels are well below criteria.</p>
<p>On 25 April, BAN 1, 2, 3, 4, 5, 6, 7, 8 & 11 were operating. Clear increase in noise outside the residence</p>	<p>The noise assessment by Marshall Day indicates that the predicted noise is well below criteria. Predicted noise data for Residence B29 is shown below.</p>
<p>Request removal of BAN 2 & 3 to mitigate noise or reengineering of this cluster and checks on compliance and ongoing monitoring of noise.</p>	<p>It is not clear why these two turbines have been proposed for removal by the submitter. A noise compliance monitoring program has been approved for GRWF.</p>
<p>Request removal of BAN 08 due to noise impact</p>	<p>Unclear why the submitter suggests removal of this turbine in relation to noise impact</p>
<p>BAN 11 is at a distance of 1618 metres. The noise it generates during particular wind directions is unacceptable, disturbing and disruptive to our lifestyle.</p>	<p>The submitter has made observations that warrant investigation. GRWFPL would be interested in discussing the submitter's experiences and investigating the indicated impacts further in the context of the wind farm noise compliance. Were the noise impacts assessed as non-compliant then GRWFPL is obligated to addressing the impacts.</p>
<p>BAN09 at 1146m is expected to have a greater impact and its removal is sought.</p>	<p>BAN 09 is the closest turbine. In respect of noise, its impact has been assessed together with the other turbines and there is a reasonable buffer between predicted noise levels and criteria to</p>

Submitter's Issue/Comment					Proponent's Response					
					ensure compliance when all turbines are operating.					
Noise from the limited number of operational turbines that are currently operational is proving to be an irritant and disturbance causing stress					As indicated above, GRWFPL would like to meet with the submitter to discuss their experiences and the matters that are of concern to assess whether there is a need for variation to the operation of the wind farm.					
Turbine noise can be heard at the same time as the wind rustling through trees can be heard.					This indicates that turbine noise is similar to background noise levels. Significant differences in noise levels of either the trees or the turbines would be likely to lead to dominance of that form of noise.					
We don't know the full impact of the noise from the turbines as not all operating but we expect the impact to be greater					The wind farm noise levels will be greater with the full wind farm operating and that is why compliance testing is only done once the full impact is occurring. The predicted noise levels and margin below criteria are shown below					
Noise criteria and predicted noise – Goldwind turbines and Final Design layout (6a)										
(m/s)	3	4	5	6	7	8	9	10	11	12
Predicted noise	32.6	32.6	32.7	33.5	34.6	35.4	36.2	36.9	37.3	37.2
Noise limit criteria	38.4	38.4	39.5	40.7	42.0	43.3	44.6	46.0	47.3	48.6
Amount below criteria	5.8	5.8	6.8	7.3	7.4	7.9	8.4	9.1	10.0	11.4
The aerodynamic noise from the blades referred to as a “swish” can clearly be heard. An additional noise is also detected from the operational turbines and we request that this be investigated.					GRWFPL would be pleased to visit the property and discuss the noise experienced with the submitter with a view to assessing performance of this part of the wind farm in the context of the project approval requirements.					

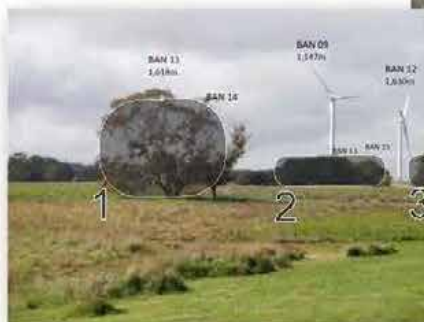
Analysis by ERM of the viewfield for B29. (Viewfield angle about 25 degrees)

Gullen Range Wind Farm - Consistency Review
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Submitter B29



Dwellings and surrounding landscape



Submitter photograph



5.8 Clem Carlon, Grabben Gullen, Residence (B31a) (96907)

The submitter has two 25 acre blocks of land with frontage to Range Road that runs between Grabben Gullen and the wind farm. A residence is located on the eastern block at about 1.53km from the closest turbine, BAN_10. Four turbines are within 2km of the residence. The residence was not included in previous assessments and accordingly this SR provides the data sheet similar to those provided in the EA, March 2014 for other non-associated residences within 2km of the wind farm as well as Figure 5.1 showing the turbines within 5km of the residence.

Submitter's Issue/Comment	Proponent's Response
The nearest turbine (BAN 10) is 1535m from the house on a 25 Acre block. I have another 25 acre block with no building on it.	The house has not previously been identified and is about 170 metres to the east of B31 that has previously been assessed. A photo has been taken from a roadside location 172 metres to the WNW of the B31a residence location and on the roadside near B31. A photomontage has been prepared for that location and is provided with this SR (Appendix 9).
I am at a point of confusion for being able to get Building Requirements and Restrictions information in writing for future buildings. The question in my submission is could this be caused by the proximity of the wind turbines to my farm.	This submitter does not refer to any specific aspect of the modification but is directed to the potential limitations on building on the vacant title. GRWFPL would be pleased to discuss this matter with the submitter.

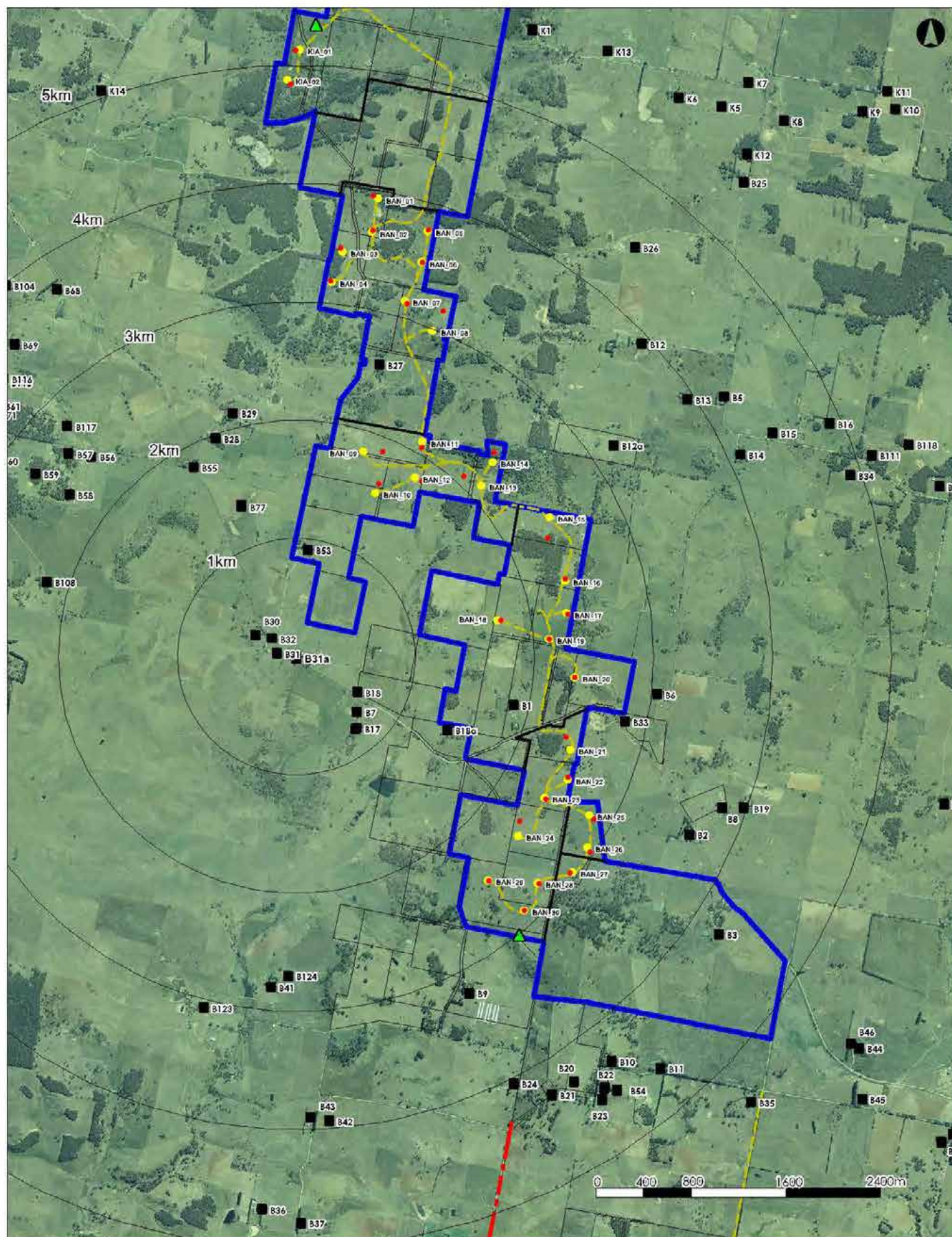
The predicted noise levels for B31a have been assessed for this SR as having a maximum of 35.7dB at hub height wind speed of 11 m/s. A report will be provided confirming these values. The predicted noise levels are 2.1 to 7.2 dB below criteria based on criteria derived from background monitoring at B18. The differences between the approved and final design layouts will be about 0.1 dB and similar to B31 that is approximately 170 metres to the west.

B31a - Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout										
	3	4	5	6	7	8	9	10	11	12
Predicted Noise (dB LAeq) Final Design Layout	31.5	31.5	31.6	32.4	33.5	34.2	34.8	35.4	35.7	35.6
Noise limit Criteria (Condition 2.15)	35	35	35	35	35.6	36.9	38.2	39.7	41.2	42.8
Amount Below Criteria	3.5	3.5	3.4	2.6	2.1	2.7	3.4	4.3	5.5	7.2

Shadow flicker for the residence location B31a, has been assessed as 3 hours / year.

Visual impact for the modifications is indicated by reference to the photomontage for Viewpoint B31 (Appendix 9), at 172 metres to the west of B31a residence location. A photomontage for Viewpoint 2 was included in the EA March, 2014 and is about 780 metres southeast of B31a.

Figure 5 1 Residence B31a location and turbines within 5km



<div>LEGEND</div> <div><div><div>■ Residence</div><div>● Turbine Layout</div><div>● DA Approved</div><div>● Final Design</div><div>— Roads (Catcon Jan '14)</div><div>— Medium voltage link</div></div><div><div>□ Cadastre (NSW LPI Dec '12)</div><div>■ Project boundary</div><div>▲ Permanent met mast</div><div>— Substation</div><div>— Switching station</div></div></div>		<div>GULLEN RANGE WIND FARM PTY LTD</div> <div>Prepared by</div> <div>EPURON</div>	<div>PROJECT</div> <div>GULLEN RANGE WIND FARM</div> <div>TITLE</div> <div>Non-associated residence B31a</div>	<div>Document Number</div> <div>GR-PM-DWG_0166</div> <table><tr><td colspan="2">Revision</td><td colspan="2">Layout ID</td></tr><tr><td colspan="2">A</td><td colspan="2">6a</td></tr><tr><td>SCALE</td><td>DATE</td><td colspan="2">DRAWN</td></tr><tr><td>1:40 000 at A4</td><td>03/06/14</td><td colspan="2">TL</td></tr></table>	Revision		Layout ID		A		6a		SCALE	DATE	DRAWN		1:40 000 at A4	03/06/14	TL	
Revision		Layout ID																		
A		6a																		
SCALE	DATE	DRAWN																		
1:40 000 at A4	03/06/14	TL																		

5.8.1 Residence: B31a Data Sheet

B31a - Table 1 – Sensitive Receiver Location Information

Coordinates - Easting	722179
Coordinates - Northing	6173136
Elevation	
Aspect	Wide view field including wind farm
Extent of vegetation screening around residence	Low to moderate
Visual - Photomontage Availability	No But one from roadside point 172m to west

B31a - Table 2 – Summary of Changes to Turbine locations within 5 km of Residence B31a

Reference Turbine Layout	Number Turbines			Distance to Closest Turbine (m)
	<2 km	2-5 km	<5km	
Indicative Approved	4	27	31	1616
Final Design	4	27	31	1535
Net Change – Indicative to Final Design	0	0	0	81

B31a - Table 3 – Distances - Turbines within 2km of Residence

Turbine	Distance Turbine moved for Final Design (m)	Distance from Residence to indicative Approved Layout (m)	Distance from Residence to Final Design Layout (6a) (m)	Total Change in Distance Residence to Turbine * (m)	Percentage Change * (%)
BAN_09	167.0	1876	1820	-56	-3.0
BAN_10	80.4	1616	1535	-80	-5.0
BAN_12	64.8	1821	1813	-8	-0.4
BAN_18	32.0	1750	1719	-31	-1.8
* Negatives indicate a move closer to residence			Net Change	-176	

B31a - Table 4 – Marshall Day Noise Assessment (June 2014)

Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout										
(m/s)	3	4	5	6	7	8	9	10	11	12
Predicted Noise Final Design Layout	31.5	31.5	31.6	32.4	33.5	34.2	34.8	35.4	35.7	35.6
Noise limit Criteria (Condition 2.15)	35	35	35	35	35.6	36.9	38.2	39.7	41.2	42.8
Amount Below Criteria	3.5	3.5	3.4	2.6	2.1	2.7	3.4	4.3	5.5	7.2

5.9 Douglas Werrin, of Bannister, Residence B41 (97142)

The submitter is expected to be located at B41, a residence at > 2km from the closest turbine, BAN 29. B124 is mentioned in the submission but this location does not correspond with a residence and appears to be an error in the Epuron residence data. The DPE survey seemed to confuse the B124 and B41 locations and represented them as the same point

Submitter's Issue/Comment	Proponent's Response
The objections are submitted in relation to the Modification and Consistency Review Project	The Consistency Review Report does not form part of the Modification Application. The EA, March 2014 provides the relevant reference for the Modification Application.
Review documentation is inadequate and it is difficult to interpret, firstly A – Obscure coordinates made it difficult for the ordinary person to check accuracy of the position of turbines.	The coordinates were provided by a registered surveyor and are based on Map Grid of Australia coordinate system which is the currently used system of coordinates. AMG coordinates are shown on older map sheets and are progressively less used in recent times. Mapping in the EA showed the locations of turbines and residences. The coordinates of turbines reported in the EA, March 2014 have been shown to be accurate.
Two houses at the B124 not listed as sensitive receivers or mentioned in various input tables	The residence at the location labelled by DPE as B124 was actually shown by Epuron as B41 and that residence location is beyond 2km. The B124 location as shown by Epuron did not appear to be associated with a residence.
Review documentation is inadequate and it is difficult to interpret, secondly B – Report should have used commonly used latitude and longitude so interested parties could use them in conjunction with topographic maps and GPS system.	The latitude and longitude are less frequently used for this type of project than MGA coordinates. Conversion programs are freely available on-line but can be confusing to apply. A GPS can reference latitude and longitude or the coordinate system equivalent to those reported in the EA. For GPS units it is usually a matter of selecting the coordinate system in 'Set Up' in the GPS. The Global Positioning System (GPS) coordinates are similar to MGA coordinates.
Questioned the independence of the Consistency Review.	The Consistency Review was prepared by ngenvironmental but has not been used as the reference for the Modification Application.
In the submitter's opinion the project has not been adequately supervised by DPE. Adequate supervision would not have resulted in the majority of the turbines incorrectly placed.	The ER provided the field supervision of the project while DPE undertook review and approval of management documentation. It is possible that closer supervision by DPE could have led to earlier resolution of the issue.
Turbines incorrectly placed had been allowed to operate before the determination.	Constructed turbines are subject to commissioning and run-test trials. As mechanical and electrical equipment, the machinery once installed, is best maintained through regular operation. It would be wasteful to not maintain the installed turbines.
Noise and destruction to local traffic forced by the project had been totally unacceptable	This statement does not identify specific detail of noise and destruction to traffic that are being referred to and GRWFPL considers the statements exaggerate circumstances. The predicted noise levels for the B124 (Epuron) location are shown below but that location does not correspond to a residence. B41 is more distant from the wind farm and will have marginally lower predicted noise levels that are expected to be less than 32dB and well below criteria.
The inadequate noise guidelines in NSW used for the project will cause severe nuisance. This together with damage to the	The statements do not appear to be substantiated. NSW has set a stringent requirement for wind farm noise relative to other jurisdictions. This is shown in the NSW wind Farm Planning Guidelines and illustrated in EA, March 2014, Section 6.3.

Submitter's Issue/Comment	Proponent's Response
landscape is causing a very significant reduction in property value and retirement services. Recent property sales in the area together with experience from other sites indicate a reduction of at least 30%.	Noise and visual impacts of wind farms are not confirmed as causing very significant reduction in property value. The property value of rural land is in part due to its pastoral capacity and part due to its residential status. The pastoral capacity of neighbouring lands has not changed as a result of the wind farm. The residential status may also be little changed. GRWFPL has had interest in purchase and lease, expressed for properties it has acquired in the wind farm vicinity.
Many properties are now considered unsaleable	This statement appears extreme.
Request an independent public inquiry.	The modification application is a review process that is allowed for under the provisions of the EP&A Act.

Assessment of predicted noise levels and compliance was undertaken for B124 that is 1,862 metres from the closest turbine, BAN 29. The noise results for this location are shown below with the maximum predicted noise level being 31.4dB. As can be seen compliance is achieved across all integer wind speeds. Residence B41 is beyond 2km from the closest turbine and will have lower predicted noise levels and similarly has a reasonable margin of noise compliance.

B124 Noise results from Marshall Day Noise Assessment (March 2014)

Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout										
(m/s)	3	4	5	6	7	8	9	10	11	12
Predicted Noise Final Design Layout	28.0	28.0	28.1	28.9	30.0	30.5	31	31.3	31.4	31.2
Noise limit Criteria (Condition 2.15)	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Amount Below Criteria	7.0	7.0	6.9	6.1	5.0	4.5	4.0	3.7	3.6	3.8

5.10 Victoria Mendl, of Bannister, Residence B44 (96476)

The submitter is understood to be resident at Residence B44 that is almost 3km from the closest turbine.

Submitter's Issue/Comment	Proponent's Response
If amended DA is approved a precedent will be set that an approved DA is virtually meaningless and council will lose control, if it is good enough for Goldwind it is good enough for all. In other words there cannot be one law for wealthy multinationals and one for local residents.	This objection does not refer to any specific aspect of the modification. With regards to the general statement that an approved Modification Application will render the original approval meaningless, GRWFPL does not agree. The modification sought is seeking to confirm locations of the turbines that are generally in accordance with the project approval and for which impacts have been shown to be not significantly different to the approved project. GRWFPL will continue to implement the project in accordance with the Project Approval conditions and any variations imposed by the determining authority.
If the incorrect placement is not rectified, they should forgo their huge subsidies.	This objection does not refer to any specific aspect of the modification. The submitter's view of huge subsidies is incorrect. The project is a commercial project that

Submitter's Issue/Comment	Proponent's Response
	operates in a competitive market.
These huge multinationals have shown total disregard for the local residents during the construction phase and I see no reason why this should continue by allowing the amendment.	GRWFL has strived to undertake the GRWF project responsibly, to comply with its compliance obligations and to be accepted as a good neighbour. The submitter does not give any substantiated reasons why the modification should not be allowed.

5.11 Name Withheld of Bannister, Residence B49 (96638)

This submission is understood to be from Residence B49 that is about 3km from the closest turbine of the Pomeroy group. The submission raises a number of issues but they appear unrelated to the detail of the Modification Application (opposed to any modifications) and address the impact of the project generally rather than specific impacts of adjustment to turbine locations.

Submitter's Issue/Comment	Proponent's Response
View from south facing boundary and our west facing boundary now dominated by massive wind turbines. Change in landscape has had a massive impact and has contributed to our decision to sell our property.	The residence appears to be about 3km from the nearest turbine. At the distance indicated, these residents may have a moderate visual impact. The ERM assessment did not identify any significant change in visual impact as a result of the modification of turbine locations.
We now feel as though our small farm is smack bang in the middle of an industrial area. The increase of heavy vehicles in the area as well as the high level of traffic past our front gate during construction has been horrendous. Locals had to erect a sign to prevent work vehicles from using our small country lane as a thoroughfare to the worksite.	The construction phase involves a significant amount of traffic with movement of large vehicles to the site and daily coming and going of construction staff. This traffic will decline as the construction reaches completion and the project moves into the operational stage. All of the large components have now been delivered to the site. The turbines will still be visible but over time they are expected to become better accepted in the local landscape and less contentious. It is reasonable for the submitters to expect that construction traffic not use Walkoms lane and the construction team has gone to considerable effort to enforce this requirement but despite the efforts, 100% compliance has not been achieved. It is understood that signage at the end of Walkoms Lane, to direct wind farm traffic to other routes, has largely been successful, but GRWFPL apologises for any individuals that have not complied with the signage.
GRWF development has an impact on local property values which will affect the ability to sell.	Some neighbours in the region that oppose wind farm projects have been very prominent in the media expressing views that excessive impacts may influence potential purchasers' views. As such these neighbours can contribute to a market position. It would be difficult to quantify that impact on valuations. There are also indications of advice being spread in the community that claims devaluation well beyond that which has been experienced for other wind farm developments. In any case the impact on property values is not a matter that is generally considered in determination of projects. GRWFPL has acquired several properties in the locality and has received expressions of interest to lease or buy the available properties. More interest has been received than properties available.
The local roads and environment will not be restored	A process has been defined in the Project Approval for making good any damage to roads as a consequence of the construction of the

Submitter's Issue/Comment	Proponent's Response
to the condition they were in prior to commencement of the GRWF development. The poor state of Range Road together with increased traffic means that travelling to and from Goulburn is not only hazardous but increases overall vehicle wear and tear.	wind farm. GRWFPL has prepared a detailed dilapidation report that has incorporated sophisticated monitoring of the condition of relevant roads. The dilapidation report has been submitted to the Councils and a process is underway to define GRWFPL responsibility for reparation of the affected roads. Given the works already undertaken, it is possible that the final situation could represent an improvement to local roads relative to their prior condition.
The area has lost a great deal of its charm as a quiet and peaceful country location that is not too remote. The GRWF development is one of the main reasons we are selling.	GRWFPL acknowledge that the project is visible in the local area and represents a change to the locality. GRWFPL would also expect that the peacefulness of the area that could have been impacted by construction works will be largely restored with completion of construction and commencement of operation. It is true that the turbines will be visible and that the turbines will add movement to the vistas when the wind is blowing. However, many areas through the world are increasingly seeing wind turbines in the landscape as there is greater adoption of renewable energy. The land at Gullen Range where the wind farm is located forms part of the Great Dividing Range (GDR) that has the suitable wind energy resources for such projects and a number of projects are now distributed along the GDR.
We are opposed to any modifications to the project	This objection does not refer to any specific aspect of the modification and appears more related to a general objection to the approved project.
Also want to know how GRWF developers intend to compensate the residents of the local community particularly those who live within the 5 kilometre zone.	GRWF will <ul style="list-style-type: none"> • fund the Community Enhancement Fund • provide landscaping for eligible residences within 3km • make good damage to local roads that is attributed to the project • provide income to the local region through direct and indirect employment and other payments
We feel that the Community Enhancement Program proposed by the developers does not come anywhere near making up for the potential and current losses incurred by residents in this community.	The Community Enhancement Fund has been established as part of the Project Approval Conditions that would not have been available except for the presence of the project. The total benefit to the regional community through all sources is significant. The inferred losses are not confirmed and may well be over-stated.

5.12 Charles Barber, Residence PW4 (96028)

The submitter's residence is PW4, located to the northwest of the 330kV Substation and 1.89 km from the closest turbine. The submitter is a non-associated landowner and has objected to the modification.

Submitter's Issue/Comment	Proponent's Response
Request an independent enquiry (perhaps by the NSW Ombudsman) outside of the NSW Department of Planning and Infrastructure into the planning process which resulted in the current planning debacle that has taken place with reference to the Gullen Range Wind Farm	The adjustment of the turbine locations is subject to a comprehensive review process in accordance with Section 75W of the EP&A Act. This addresses the assessment and approval requirements of Condition 1.5 of the Project Approval. An additional inquiry could be seen as a wasteful exercise in view of the defined planning process being followed.
The primary question that I have is why is a	The project approval documents anticipated minor

Submitter's Issue/Comment	Proponent's Response
<p>retrospective modification to the development application being considered? Should not a retrospective consideration be given to the Upper Lachlan Shire Council's two kilometre setback for wind turbines? The NSW State Government has draft legislation regarding a two kilometre setback as well. Cannot this be retrospectively applied to the Gullen Range Wind Farm?</p>	<p>adjustments of turbine locations. DPE has advised that Project Approvals under the EP&A Act allow for minor relocations. The DPE approved ER reviewed the modifications and declared them consistent with the Project Approval and the proponent proceeded with the construction. The Modification Application responds to the DPE request for assessment and gaining approval for the modifications as per the due process in Condition 1.5 of the Project Approval.</p> <p>The Modification Application does not represent an application for a new project or a major change in either the footprint of the project or the scale of the project. As such the appropriate planning path is for a modification of an existing Project Approval.</p> <p>Consideration of ULSC's 2km setback is not required for this project. Additionally the State Wind Farm Planning Guideline is not a mandatory planning instrument for this project.</p>
<p>The development has severely breached the conditions of consent in the original approval by the NSW Department of Planning and Infrastructure as well as the conditions imposed by the NSW Land and Environment Court.</p>	<p>GRFWPL has directed considerable effort to addressing compliance and completed many of the requirements of the Project Approval.</p> <p>The project approval documents anticipated minor adjustments of turbine locations. DPE has advised that Project Approvals under the EP&A Act allow for minor relocations.</p> <p>The EP&A Act provisions allow for the application for modification of the Project Approval.</p>
<p>The overwhelming majority of turbines (69 out of 73) have been relocated in defiance of the Court's decision regarding the Gullen Range Wind Farm.</p>	<p>The distance for relocation of turbines is variable and the reasons for individual adjustments varies. DPE have acknowledged that minor variations are allowable. The specialist assessments have shown that the modifications do not give rise to any greater impact from the project. GRWFPL believes that the implementation can be regarded as 'generally in accordance' with the Project Approval.</p>
<p>Lack of oversight on the Department of Planning and Infrastructure as to how the development was allowed to proceed from the planning phase to the actual construction phase without appropriate scrutiny of these major changes.</p>	<p>DPE has provided oversight in many respects by reviewing and approving management plans and liaising on project progress. DPE has also required the modification application which has been prepared by GRWFPL and is subject to community and government agency review. As indicated above minor relocations were anticipated and are allowed for under the EP&A Act. The application provides for the formal review of relocations.</p>
<p>What is equally concerning is the Department of Planning and Infrastructure is permitting a number of these illegally constructed turbines to operate (and presumably earn Renewable Energy Certificates) under the guise of "testing" the turbines. This is a level of corporate chicanery that is stupefying in its sheer gall.</p>	<p>This is an aspect that does not directly impact the submitter. It indicates an emotive response to the project rather than objective consideration. The project is a State Significant project that has been determined as a beneficial and legitimate project. The EA, March 2014 stated that the operating turbines can provide approximately 47,000 tonnes of greenhouse gas savings per month of operation. It would appear short-sighted to forgo this opportunity for generation of renewable energy and mitigation of greenhouse gas emissions.</p>
<p>Turbine Pomeroy 1 is particularly obtrusive since it has been moved 123 metres. The loss of visual amenity, which would have been ameliorated by the landscape and</p>	<p>The turbine has moved marginally further away (by 81 metres) from the submitter's residence (PW4). The POM_01 turbine is at 1,888 metres from PW4.</p>

Submitter's Issue/Comment	Proponent's Response
topography if the turbine had been located as per the development, is particularly offensive.	In addition to landscape screening of turbines, GRWFPL will give consideration to options for screening the substation which is acknowledged as a significant structure that is visible from a limited number of locations including parts of the submitter's property.
In the same league is the scope of the switching/substation located within approximately 400 m of my back boundary. The size of the substation depicted photographically in the original development proposal is quite small compared with what has actually been constructed. My reality is that the substation is quite visible from many points on my property (including my garden) and the loss of visual amenity has rendered my property difficult, if not impossible to sell.	<p>The 330kV switchyard is subject to electrical design and electrical safety requirements and will be part of TransGrid facilities. The highest items in the substation are structures that support the 330kV lines within the switchyard and that must exceed minimum clearance requirements for safety reasons.</p> <p>It is noted that the 330kV switchyard is located adjacent the existing 330kV transmission line that is supported on large lattice framework transmission towers. As such the locality was not without visual impact of transmission works.</p>
Whether or not I choose to sell my property or stay here in my retirement is really not the point. The option to sell (at a fair market price) has been removed; my freedom of choice has been removed. To confirm this I have consulted with a number of local real estate agents from both Crookwell and Goulburn who have confirmed that my proximity to the development devalues my property by hundreds of thousands of dollars and that to sell, I would have to accept a significantly discounted figure in the order of 40-50% of the worth of my house and landholding.	The stated reduction in value appears to overstate the impact. Firstly as a rural property with pastoral use, this capability does not appear to have changed as a result of the project implementation or, more relevantly in respect of the application, due to the modification of turbine locations. Furthermore, reviews of property values at other wind farm development sites do not appear to have substantiated large reductions in property values. GRWFPL expects that the information referred to is exaggerated and not substantiated. GRWFPL experience is that it has received significant interest in the properties it has acquired.
There really is no appropriate recompense that can be offered to me for the imposition of this development and the proposed modifications, considering the financial and personal investment I have made in this property. The only possible alternative is that my property is acquired at pre-development prices; although as I stated previously, that is not sufficient for what I have personally invested, not only in money, but in time, effort and sheer hard work. I have worked thousands of hours and invested hundreds of thousands of dollars to improve the landscape and establish an environmentally coherent environment on this property. All that work and investment has been effectively and efficiently negated by this wind farm.	GRWFPL has discussed the submitter's existing landscaping with the landowner. GRWFPL has also arranged a further landscaping inspection to ascertain additional assistance that can be provided in regards to landscaping. It is considered that an effective placement of landscaping may significantly change the submitters' concerns in respect of visual impact.
Again, permit me to reiterate my objection to the developer's modification application. This particular developer has been unco-operative and insensitive to the point of	As indicated above, the adjustment of the turbine locations is subject to a comprehensive review process in accordance with Section 75W of the EP&A Act. This addresses the assessment and approval requirements of

Submitter's Issue/Comment	Proponent's Response
being a corporate rogue without a shred of consideration for the neighbours to this inappropriately sited industrial installation.	Condition 1.5 of the Project Approval. GRWFPL continues to address its requirements under the Project Approval and is committed to ensuring compliance and improving acceptability of the project within the local community.

5.13 Grouped Response R. Howe/C. White (96736 / 96734)

The responses from the above submitters are identical, and therefore to avoid repetition a single response to both is provided below. The submitters have indicated their locations as Goulburn and Crookwell and it is not clear whether either is resident in the locality surrounding the wind farm. They have made reference to Pomeroy 1 which may indicate proximity.

Rosemary Howe of Goulburn and Cheryl White of Crookwell, NSW

Submitter's Issue/Comment	Proponent's Response
Request an independent enquiry (perhaps by the NSW Ombudsman) outside of the NSW Department of Planning and Infrastructure into the planning process which resulted in the current planning debacle.	The project is subject to well defined processes under the EP&A Act. The State Government undertakes regular review of the EP&A Act and planning processes. It would be impractical to review the planning processes on a project by project basis.
Comments regarding consideration of ULSC 2kms setback and NSW State government draft legislation regarding 2km setback in any retrospective modification.	The Modification Application does reference the NSW Government draft guidelines for wind farms. The guideline is not a mandatory requirement for this project. The ULSC minimum setback for turbines from non-involved residences is not applicable to the project.
Development has seriously breached the conditions of consent in the original approval by the NSW Department of Planning and Infrastructure as well as conditions imposed by the NSW Land and Environment Court.	GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits. A modification application lodged under Section 75W of the EP&A Act has been submitted in respect of the adjustment of turbine locations.
Overwhelming majority of turbines (69 out of 73) have been relocated in defiance of the Court's decision. This constitutes an illegal development.	The project approval documents anticipated minor relocation of turbines and it has been acknowledged that minor relocations are allowed for under the EP&A Act. The assessments in the application and the EA, March 2014 show that the impacts associated with changes in turbine locations are consistent with those for the Project Approval. The project implementation has been subject to reviews by the DPE approved Environmental Representative and GRWFPL was advised by the ER that the final design turbine locations are consistent with the Project Approval. GRWPL does not agree that GRWF is an illegal development. GRWFPL has lodged an application under Section 75W of the EP&A Act which enables modifications of Project Approval subject to determination based on relevant assessments. GRWFPL prepared a comprehensive environmental assessment of the modifications that was lodged with the application. The EA (March 2014), the

Submitter's Issue/Comment	Proponent's Response
	submissions and this SR will be reviewed by DPE and recommendations made in respect of the determination of the application. This process addresses requirements of Approval Condition 1.5.
Public or judicial enquiry regarding the lack of oversight on the Department of Planning and Infrastructure as to how development was allowed to proceed from the planning phase to the actual construction phase without appropriate scrutiny of these major changes.	As above, the project was subject to reviews by the DPE approved Environmental Representative and GRWFPL was advised by the ER that the final design turbine locations are consistent with the Project Approval. In addition, GRWFPL has worked with DPE and relevant NSW government agencies to ensure responsible implementation, compliance and scrutiny of the development.
DPE permitting a number of these illegally constructed turbines to operate (and presumably earn Renewable Energy Certificates) under the guise of 'testing' the turbines.	GRWFPL is continuing construction but has made an undertaking to defer construction of certain turbines. Commissioning tests of some turbines has also continued as part of the overall construction process. GRWFPL has consulted with DPE to ensure implementation of the project is in compliance with all applicable legislation, approvals, licences and permits.
Turbine Pomeroy 1 is particularly obtrusive since it has been moved 123m. The loss of visual amenity, which would have been ameliorated by the landscape and topography if the turbines had been located as per the development, is particularly offensive.	Turbine POM1 has been relocated 115.2m to the north east, with a decrease in elevation of 1.3m, not 123m as noted by the submission. The specialist assessments for the modification application have not indicated greater visual impact relative to the approved indicative layout.
Developer has been unco-operative and insensitive to the point of being a corporate rogue without a shred of consideration for the neighbours to this inappropriately sited industrial installation.	The submitter's statement is regarded as an exaggeration and misrepresentative of GRWFPL's role and conduct in project implementation. During the exhibition period, GRWFPL has also arranged consultation with all non-associated landowners surrounding the project area to ensure awareness of the Modification Application. A summary of issues raised during the consultation is also provided in this SR. GRWFPL wishes to undertake the GRWF project responsibly, to comply with its project obligations and to be accepted as a good neighbour. To ensure this occurs, GRWFPL is reviewing its public consultation performance and will strengthen this to improve effectiveness.
Request for independent enquiry,	The project is subject to well defined processes under the EP&A Act. The State Government undertakes regular review of the EP&A Act and planning processes but it would be impractical to review the planning processes on a project by project basis

5.14 Kath M Kennedy, Residence G36 (95910, 96708)

Submitter's Issue/Comment	Proponent's Response
Before any modification application is put on public exhibition, the NSW Department of Planning and Infrastructure undertakes an independent survey of the distances of turbines from non-host residences and also the distance	In addition to the survey undertaken by a registered surveyor engaged by the proponent, DPE arranged a separate survey. This has been at the government's expense. The results of the DPE arranged survey for turbines and selected residences has been made available for review by the public and proponent.

Submitter's Issue/Comment	Proponent's Response
between turbines.	<p>DPE requested the surveyor to review locations of residences surrounding the wind farm project. The residences are on private land and had not previously been surveyed. Locations had been determined by Epuron for the EA, 2008 and are indicated to have been based on review of air photographs. The accuracy of obtaining coordinates based on geo-referenced air photos can be limited by distortion that occurs for compilation of mapping from air photo imagery. As such the residence locations were not expected to be exact but to give reasonable estimates of the residence locations.</p> <p>The DPE assessment of residence locations has shown differences in a number of residence locations which is not unexpected. Details of the location differences are provided in Section 2.3. GRWFPL has used the updated locations to assess impacts and record the information in the Submissions report.</p> <p>Details of the DPE survey of residence locations and associated distances to the wind farm are provided in Appendix 2.</p>
Further that this independent study includes a comparison of these distances to those provided in the projects original ES.	<p>Comparison of the DPE surveyor's data for difference between approved location and constructed location and the figures reported by GRWFPL in Table 2.2 of the EA, March 2014 shows that the distance moved as reported by GRWFPL is consistent with the more recent independent assessment.</p> <p>Details of the DPE survey results and comparison with turbine locations included in the EA are provided in Appendix 2.</p>

5.15 David Brooks of Pomeroy, Residence G43 (97036)

The submitter has made a submission on behalf of the Parkesbourne/Mummel Landscape Guardians Inc. (PMLG) but also has a personal interest in the modification application as a neighbour to the wind farm (1.66km from closest wind turbine). A map of the residence location and turbines within 5km together with a data sheet for the G43 residence were provided in Appendix 11 of the EA, March 2014. The data sheet has been updated and the revised data sheet is provided below.

The DPE survey identified the residence location as being one of four residences where the location obtained by the DPE arranged surveyor:

- differed to that provided in the EA, March 2014; and
- resulted in reduction of distance from wind farm to residence by 12 to 34 metres .

As a consequence, the impacts for the four residences were reviewed and updated assessments are provided in Section 9.

Matters that the submitter has raised for his residence location are discussed below.

Submitter's Issue/Comment	Proponent's Response
In the original Environmental Assessment (2008), as in other documents concerning this development, including the Modification Application, my house is designated G43. In the original EA it is said that my house is 1.7 kilometres from the nearest turbine. According to the Modification Application, the nearest turbine, GUR 01.	<p>The EA, March 2014, provided a data sheet for Residence G43 that provided relevant data for the residence (Appendix 11-4). The data sheet and associated figure was provided to assist non associated neighbours within 2km of the wind farm and the Determining Authority to understand the positioning of the project relative to their residence and in relation to movements of turbines and assessments undertaken.</p> <p>The DPE arranged survey indicated a change in the residence location that reduced the distance between the wind farm and the residence. The DPE survey results may overstate the change in location, as the actual residence location as indicated in Google earth images appears to be between the original Epuron derived residence location and the DPE survey location. Nevertheless, conservative use of the DPE location has been used to reassess distance to turbines and noise and shadow flicker effect. The updated data sheet for Residence G43 referencing DPE arranged survey data follows.</p>
From my knowledge of experiences of neighbours of other existing wind farms and of the experiences of Gullen Range neighbours where turbines have already been allowed to operate and from my reading of scientific and professional articles and reports of peer reviewed status, I expect that I and my neighbours will suffer adverse noise impacts from the operation of the wind farm and that in some cases this will lead to adverse health effects probably stress related symptoms and sleep disturbance.	<p>The assessments for the G43 residence have indicated compliance and no significant change in impacts from that for the Project Approval. Noise has not significantly changed. Shadow flicker has only marginally increased by 1 hour from 17 to 18 hours per year and is well below the criteria in the Project Approval.</p> <p>The submitter has gone into more detail in the PMLG submission which has been addressed separately in Section 7.2 of this SR.</p>

Residence G43 – Data Sheet – Updated from EA, March 2014 to reflect DPE Survey.

G43 - Table 1 – Sensitive Receiver Location Information

Coordinates – Easting (DPE Survey)	729457.6
Coordinates – Northing (DPE Survey)	6160922.8
Elevation	678m
Aspect	Away
Extent of vegetation screening around residence	High
Visual - Photomontage Availability	No – Nearest is Viewpoint 3, on roadside about 300 metres closer to wind farm and without the vegetation screening at the residence

G43 - Table 2 – Summary of Changes to Turbine locations within 5 km of Residence G43

Reference Turbine Layout	Number Turbines			Distance to Closest Turbine (m)
	<2 km	2-5 km	<5km	
Indicative Approved	5	19	24	1,656
Final Design	5	19	24	1,644
Net Change – Indicative to Final Design	0	0	0	-12

G43 - Table 3 – Distances - Turbines within 2km of Residence

Turbine	Distance Turbine moved for Final Design (m)	Distance from Residence to indicative Approved Layout (m)	Distance from Residence to Final Design Layout (6a) (m)	Total Change in Distance Residence to Turbine * (m)	Percentage Change * (%)
GUR_01	2	1656	1654	-2	-0.1%
GUR_02	9	1732	1728	-4	-0.2%
GUR_03	10	1665	1664	-1	-0.1%
GUR_07	102	1707	1644	-63	-3.7%
GUR_08	0	1986	1950	0	0.0%
* Negatives indicate a move closer to residence			Net Change	-70	

G43 - Table 4 – Marshall Day Noise Assessment (March 2013)

Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout											
(m/s)	3	4	5	6	7	8	9	10	11	12	
Predicted Noise Final Design	30.4	30.4	30.5	31.3	32.4	33.0	33.6	34.1	34.3	34.1	
Noise limit Criteria (Condition 2.15)	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	
Amount Below Criteria	4.6	4.6	4.5	3.7	2.6	2.0	1.4	0.9	0.7	0.9	

The change in coordinates of the residence location has not significantly changed the predicted noise levels. Highest value remains 34.3dB at 11 m/s (Marshall Day, 23 May 2014).

5.16 Neil Madden of Gurrundah, Residence G52 (96246)

The submitter has a family residence about 1.02 km north of the Gurrundah group of turbines and approximately 2km to the east of the southern end of the Pomeroy group of turbines. The residence (G52) is not associated with the project and was not shown in either the EA, 2008 for the original Project Application or the EA, March 2014, for the modification application. The landowner contacted GRWFPL and DPE in early 2014 to draw attention to the oversight. GRWFPL has visited the residence and discussed the project with the landowners and will undertake further consultation. As an initial response, GRWFPL has updated plans to show the residence and also undertaken further assessments for the residence. The additional assessments are described in this Submissions Report and it is expected that the Determining

Authority will take account of this new information that has not been available for previous determination proceedings.

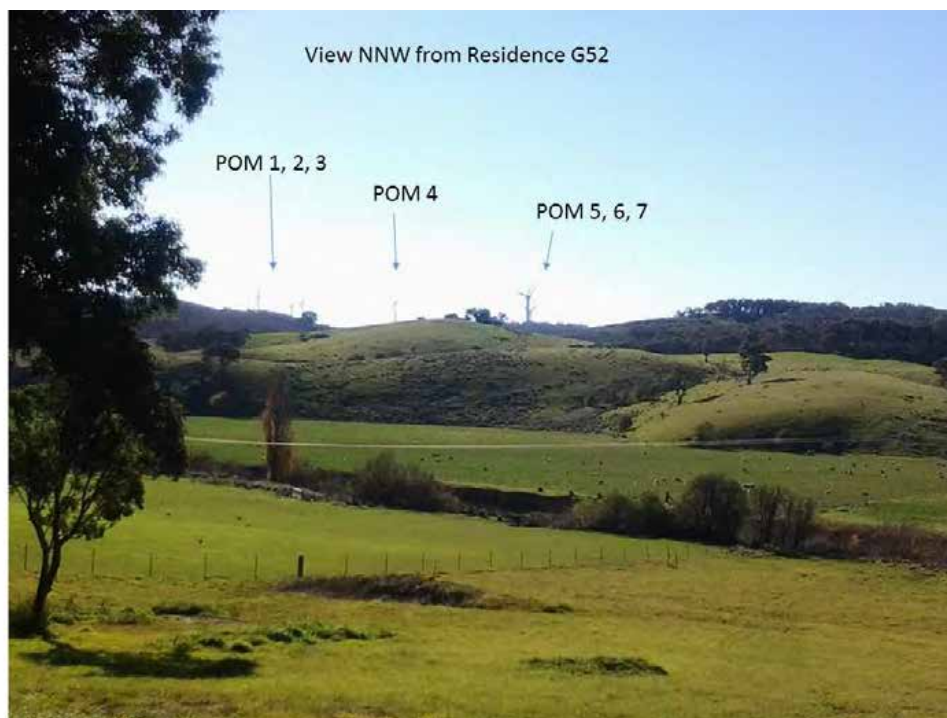
The reasons for the oversight are not confirmed. The landowner indicates that development consent was obtained for the residence in 1999 and that the residence has been occupied for about four years. The occupation appears to coincide approximately with the time the project was approved and the residence construction may have occurred prior to the approval being granted but after the time that neighbouring residences were identified. The residence site appears to be within an area of remnant woodland which appears to be partly cleared for the residence and due to this screening of the residence site it may have been overlooked. It is also possible that the residence was not shown on air photo imagery available at the time and that was reviewed when neighbouring residences were being identified. It appears the residence was only completed and became occupied about the same time as the Project Approval was obtained and that they were not resident at the property during the site investigation phase.

A map of the residence location and turbines within 5km has been prepared together with a data sheet for the residence and are provided with this SR. These items are of the same form as those provided in Appendix 11 of the EA, March 2014. They are provided for the benefit of the landowners and the Determining Authority in relation to the current modification application and its determination.

Submitter's Issue/Comment	Proponent's Response
We have had zero consultation from the wind farm company and our residence has been left off maps entirely	GRWFPL acknowledges the oversight. The details of the residence and relevant assessments are included in this SR for the consideration of the Determining Authority in association with the Modification Application.
The only way we were made aware of the situation was through communications with our neighbours not long before the turbines were actually erected	This matter has been discussed with the landowners. GRWFPL is surprised that a landowner at this location has been missed and secondly that the landowner has not been aware of the planning process and sought consideration at the time of the original planning proceedings. The original project application would have been associated with notification and advertising by DPE and GRWFPL has also provided community newsletters with proponent contact details. Furthermore, the application has been subject to a long drawn out process, a series of appeals and significant media attention. Given the level of community interest and apparent community dialogue, it appears unusual that a resident in the area would not have been aware of the project and its details at an earlier stage.
Shadow flicker may affect us but has not been assessed.	The information shadow flicker has been reviewed and updated in respect of the G52 residence location. Shadow flicker has been conservatively assessed as 2 hours per year which is well below the criteria specified in Approval condition 2.7.
Noise may affect us but has not been assessed	The information on noise has been reviewed and updated in respect of the G52 residence location and are shown below The predicted noise levels are compliant for the residence location. The change in noise level from the approved layout to the final design layout is only 0.1dB.

Submitter's Issue/Comment				Proponent's Response						
	Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout									
(m/s)	3	4	5	6	7	8	9	10	11	12
Predicted Noise Final Design Layout	32.0	32.0	32.1	32.7	33.8	34.5	35.2	35.7	36.0	35.9
Noise limit Criteria (Condition 2.15)	35.0	35.0	35.0	36.2	37.5	38.8	40.2	41.5	42.9	44.4
Amount Below Criteria	3.0	3.0	2.9	3.5	3.7	4.3	5.0	5.8	6.9	8.5
We have contacted Department of Planning numerous times in an attempt to gain some response, to no avail. It is hardly likely the oversight is coincidental, after so many attempts to contact.				GRWFPL received a call in late March 2014 from the Department but due to the departure of the employee receiving the call, no response occurred. A further call from the Department in April was responded to. GRWFPL phoned the landowner and arranged a meeting at the residence location on 6 May 2014. Further consultation is proposed. As the initial landscaping inspections are being undertaken, the residence was also scheduled for inspection. The inspection was undertaken on 16 May 2014. The turbines seen in the image below (obtained during the inspection) have been indicated by the landowners as the turbines that are of concern to them in respect of visual impact. While screening of the turbines could be arranged using vegetation, this may not be the landowner's preference.						

The following photo was taken by the Landscape Architect that is providing advice on landscaping at residences. The landscape architect stated that "There were other turbines visible further to the West but Sue (Madden) indicated that the ones that I photographed were the only ones of concern." The landowners indicated they are not concerned by the turbines of the Gurrundah Group to the south. This is due to their northerly aspect and mature trees immediately to the south of the residence.



5.16.1 Residence: G52 – Data Sheet – Tables 1 to 4

G52 - Table 1 – Sensitive Receiver Location Information

Coordinates - Easting	728309m
Coordinates - Northing	6162105m
Approximate Elevation	697m
Aspect	North and northwest
Extent of vegetation screening around residence	Moderate, mostly cleared on north side
Visual - Photomontage Availability	No, nearest location 2014, G38

G52 - Table 2 – Summary of Changes to Turbine locations within 5 km of Residence G52

Reference Turbine Layout	Number Turbines			Distance to Closest Turbine (m)
	<2 km	2-5 km	<5km	
Indicative Approved	6	33	39	1,025
Final Design	6	33	39	1,025
Net Change – Indicative to Final Design	0	0	0	0

G52 - Table 3 – Distances - Turbines within 2km of G52 Residence

Turbine	Distance Turbine moved for Final Design (m)	Distance from Residence to indicative Approved Layout (m)	Distance Residence to Final Design Layout (6a) (m)	Total Change in Distance Residence to Turbine * (m)	Percentage Change * (%)
GUR_01	2	1025	1025	0	0.0%
GUR_02	9	1327	1318	-9	-0.7%
GUR_03	10	1592	1583	-9	-0.6%
GUR_04	13	1754	1751	-3	-0.2%
GUR_07	102	1888	1787	-101	-5.3%
POM_23	20	2006	1987	-19	-0.9%

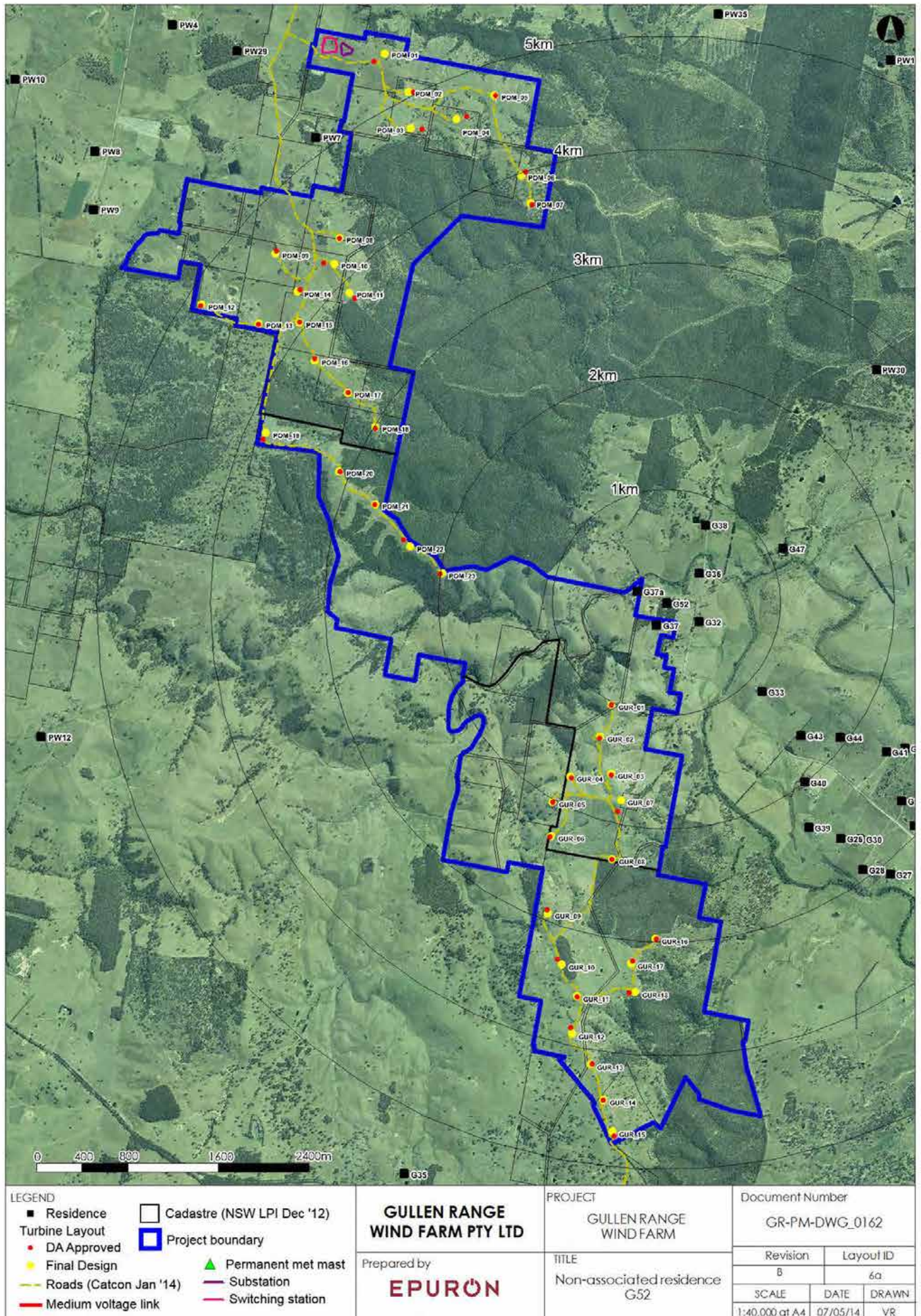
* Negatives indicate a move closer to residence

Net Change -143

G52 - Table 4 – Marshall Day Noise Assessment (May 2014)

Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout										
(m/s)	3	4	5	6	7	8	9	10	11	12
Predicted Noise Final Design Layout	32.0	32.0	32.1	32.7	33.8	34.5	35.2	35.7	36.0	35.9
Noise limit Criteria (Condition 2.15)	35.0	35.0	35.0	36.2	37.5	38.8	40.2	41.5	42.9	44.4
Amount Below Criteria	3.0	3.0	2.9	3.5	3.7	4.3	5.0	5.8	6.9	8.5

Figure 5-2– Map of Residence G52 location and Turbines within 5km



5.17 Name Withheld of Bannister NSW (96474)

It is unclear where the submitter is located

Submitter's Issue/Comment	Proponent's Response
Turbines to be removed ASAP	Gullen Range Wind Farm was approved in August 2010 by the Land and Environment Court of NSW. Such approval allows for the construction of a wind farm at Gullen Range. The modification application seeks approval of the final design turbine locations. The submission lacks any specific details and is irrelevant to the Modification Application.

5.18 Name Withheld of Bannister NSW (96480)

It is unclear where the submitter is located.

Submitter's Issue/Comment	Proponent's Response
Blatant disregard for compliance by the developer.	GRWFPL does not agree with this assertion. Significant effort has been directed to achieving compliance and there are records to demonstrate this.
To rectify the position the non complying turbines should be relocated onto the correct site.	The project approval documents anticipated minor relocation of turbines and it has been acknowledged by DPE that minor relocations are allowed for under the EP&A Act. The application seeks approval for the modified turbine locations. The locations are assessed as generally in accordance with the Project Approval. The submitter's suggestion if actioned could mean that in some cases turbines may be moved closer to neighbouring residences.
If not resited, considerable compensation should be paid to any non-hosting resident who is disadvantaged by the turbines located closer to their house, no matter how small the distance.	The submitter makes an unsubstantiated statement that the non-host resident is disadvantaged by turbines located closer to the house. That view differs to the result of the independent specialists.

5.19 Mark Coggan of Goulburn NSW (96768)

The submission is in relation to a property that immediately adjoins the project area and is currently used for pastoral purposes. The submitter has a Goulburn address but has also indicated an interest in developing a future residence on site at 3614 Range Road Grabben Gullen which could be with 1 to 1.5 km of the closest turbine.

Submitter's Issue/Comment	Proponent's Response
I support the principle of renewable energy but I object to the manner in which it is inflicted on neighbouring lifestyle properties, with no communication ie neighbouring land values & lifestyle changes.	This objection does not refer to any specific aspect of the modification of turbine locations. Renewable energy projects such as GRWF are only able to proceed after comprehensive assessment, review and approval processes that include provision for community review and comment. As a State Significant Development, the determination of the project is also not limited to the local planning provisions. GRWFPL acknowledges that the level of consultation with neighbours can be improved and will strengthen its efforts in respect of consultation.

Submitter's Issue/Comment	Proponent's Response
Turbine BAN10 has been relocated toward our property from its original plan which has put it closer to the edge of the ridge which directly overlooks our property meaning that wherever we are on our property we are now looking up at this turbine.	BAN10 has been relocated 80.4m south, with an altitude change of approximately -0.9m. It is acknowledged by GRWFPL that the turbine has moved towards the property in question but it also noted that the rural property does not have a residence.
Comments regarding turbine noise distracting sheep dogs and truck driver during sheep loading. Noise was the BAN10 turbine turning and creating a wind noise.	It appears that for most wind farm projects, landowners where turbines are located are able to continue with their pastoral operations. Cattle and sheep are often seen grazing peacefully below operating turbines and it seems an exaggeration to suggest that turbines will affect the ability to work the land when that has not been the experience on wind farm properties elsewhere. It is expected that these turbines will become more familiar parts of the landscape as time goes on and, on that basis, would attract less attention
This tower is now approximately 1000m or less away from our stock yards and cabin.	GRWFPL does not believe this contravenes any aspect of the Project Approval.
Found noise to be of an irritating manner and unpleasant to have in background. The position we had chosen and hoped to build our home is in fact about half the distance from the turbines and the yards.	The specialist assessments for the modification application have not identified any significant change in noise impact as a result of the modification of turbine locations. If there was no approval for a residence prior to the Project Approval being granted then there is no requirement on the project to ensure compliance at a residence location developed after the approval. While this matter is not considered relevant to the modification application, GRWFPL would like to discuss the submitter's circumstances in relation to the approved project and their experience of turbine noise characteristics and any future plans they have for development of the property.
Turbine BAN14 has now relocated from behind the bush of our property to be on the back corner which has much more exposure to us and not so hidden.	BAN14 has been relocated 85.0m south, with an altitude change of -5.6m. It is acknowledged by GRWFPL that the turbine has moved towards the property in question but as the property does not have a residence the impact is lower than if a residence was affected.
Expressed concerns through email to Ben Bateman of Goldwind regarding: the impacts of the wind farm the lack of consultation from Goldwind to us. We have never received any correspondence back except a phone call to ask permission for a photographer to come and take photos.	Ben Bateman is no longer employed by Goldwind. GRWFPL acknowledges that its consultation can be better and has initiated strengthening of its capability to provide better consultation. The recent contact in regard to collection of photographs was for the visual impact assessment of turbine location adjustments to inform the modification application. GRWFPL will include the submitter in future consultation to better understand the concerns raised in their submission and whether these can be addressed.
Disappointed with DPE for the little thoughts that seem to go into such a large project. The effect this has on the little people involved.	This objection does not refer to any specific aspect of the modification. GRWFPL is aware of considerable effort made by DPE to regulate planning for the project.
In our opinion these developments would be suited to a large land holders property, so that the flow on effect is limited to a few surrounding farms, not where there is approximately 130 non-	GRWFPL agrees that wind farm sites on larger landholdings and with less neighbours is a preferred position but with the recent trends for increased settlement and carving up of larger rural lands including for rural lifestyle living this has significantly reduced the locations for wind farm projects that would suit the

Submitter's Issue/Comment	Proponent's Response
involved, surrounded farms.	ideal profile. The bulk of NSW wind farm developments have aligned with the more elevated parts of the Great Dividing Range as these locations provide the most suitable wind resources. The introduction of wind farms appears consistent with primary production zoning but does appear to present conflicts with trends over the last couple of decades for residential development of rural lands to achieve lower acreage rural lifestyle living.

5.20 Sean Egan of Crookwell (96739)

The submitter has indicated their location as Crookwell. They have raised a range of matters, many of which are considered to be not applicable to the Modification Application. The proponent's responses to the matters raised by the submitter are set out below.

Submitter's Issue/Comment	Proponent's Response
Turbines are not now in the position indicated in evidence. Some, by comparatively insignificant margins, others, however, have been grossly relocated.	Adjustments for GRWF have included turbine location changes from zero up to 187m for the maximum relocation. The average adjustment for the 73 turbines is 42m. While GRWFPL agrees that there is a range in the distance that turbines have been moved, it does not agree that turbine locations have been 'grossly' relocated. The overall form of the development has not changed, there is still the same number of turbines that are located generally in accordance with locations shown in the approval documents and they are on the same properties as approved. Impacts for the modified turbine locations have also been assessed as not significantly different from those for the approved indicative layout.
The submitter regards the LEC determination as being made on a substantially incorrect basis.	The submitter also mentions that approval was given after a long and complex hearing. The judgement did set out the reasons for the determination reached and can be considered as a carefully considered determination that includes measures to protect the community and the environment. The modification application does not constitute a basis for an appeal of the 2010 determination.
Comments regarding the LEC proceedings and GRWFPL being bound by the Court's ruling.	This objection does not refer to any specific impacts of the modification of turbine locations. It relates to the proceedings of the L&E Court. GRWFPL agree with the submissions assertion that they are bound by the LEC determination and Approval Conditions. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits.
Turbines have been moved contrary to the terms of consent, and contrary to the ruling of the LEC and DPE has been complicit	Consistency reviews of variations to the approved project were undertaken progressively by the DPE approved Environmental Representative, as per Approval Condition 7.1. A comprehensive EA, March 2014, was lodged with the modification application The determination of the Modification Application will either approve or reject the various adjustments to turbine locations.

Submitter's Issue/Comment	Proponent's Response
Comments regarding the 'cavalier attitude' of the wind farm industry and complicity of Department. Comments also reference the Crookwell 2 wind farm.	GRWFPL does not agree that it has taken a cavalier approach to project design and implementation. GRWFPL has a considerable volume of management documents for a broad range of activities that were directed to ensuring compliance. Many of these documents were submitted to DPE for review and approval. The reference to Crookwell 2 wind farm is not relevant to the Modification Application.
Visual Impacts	See Section 5.37 to 5.39.
Property Devaluation	See Section 5.37 to 5.39.
Loss of Amenity	See Section 5.37 to 5.39.
Loss of Income	See Section 5.37 to 5.39.
Mitigation	
Relocation of turbines closer to dwellings could be best dealt with by the developer acquiring the effected properties.	Where the modification of the Project Approval does not significantly change the impacts on neighbouring residences then the submitter's request does not seem justified in the context of the project approval. The determination of the Modification Application will determine whether the modified turbine locations are accepted or rejected.
The Department of Planning should offer the property owner the right to decide if he/she wants to have their property bought by the developer OR	Where the modification of the Project Approval does not significantly change the impacts on neighbouring residences then the submitter's request does not seem justified. The request appears to seek to change the intent of the existing Project Approval.
(a) Have the most offensive turbines removed/relocated	This is a possible outcome if the application is rejected.
(b) Gain other forms of compensation from the developer – financial or significant turbine curtailment (especially at night)	Turbine curtailment is a mitigation measure that is identified in the Noise Management Plan that forms part of the approved OEMP. Turbine curtailment can be applied if necessary to achieve compliance.
Public Inquiry	
Due to the developer's many breaches of compliance and the Department of Planning's inability to ensure that the developer complied with conditions of approval	GRWFPL does not agree with the submission that there have been many breaches of compliance. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits.
Request a public inquiry into the processes involved in approving /monitoring this development	The project is subject to well defined processes under the EP&A Act. The State Government undertakes regular review of the EP&A Act and planning processes but it would be impractical to review the processes on a project by project basis

5.21 John Carter of Crookwell, NSW (96031)

The submission does not provide any details of impacts of the modifications. It does not appear to recognise the significant review process being undertaken in accordance with Section 75W of the EP&A Act.

Submitter's Issue/Comment	Proponent's Response
The turbines that have been misplaced must be dismantled and re-erected on the originally permitted sites.	<p>The project approval documents anticipated minor relocation of turbines and it has been acknowledged by DPE that minor relocations are allowed for under the EP&A Act.</p> <p>The acceptability of the final design turbine locations is the subject of the modification application. The submitter is ignoring the legitimate process defined under the EP&A Act. If the turbines were relocated as suggested this would mean some moving closer to neighbours.</p>
The damage on the misplaced sites must be corrected.	Regardless of the final locations of the turbines, the rehabilitation of areas of disturbance is an integral part of the project construction. Site rehabilitation is progressive and will continue into the operational phase.
Anything less makes the Department of Planning irrelevant and allows multinational companies to do what they feel like doing, irrespective of the damage to householders. Householders haven't the money to fight multi nationals in court.	The submitter has had the opportunity to provide a response to the public exhibition. The response must be considered as part of the matters considered by the determining authority. It is expected that the PAC will determine the modification application.
Correction of this series of misplacements is the responsibility of the Department of Planning. If they won't act they should be closed down.	DPE has required the modification application that has been lodged under Section 75W of the EP&A Act. DPE will prepare the Director-General's Assessment Report and provide this to the Determining Authority (probably PAC) to assist determination of the application.

5.22 Malcolm Barlow of Crookwell (96328)

The submitter, Malcolm Barlow is a Councillor on the Upper Lachlan Shire Council. It is understood that he resides in Crookwell and is not an immediate neighbour to the wind farm. However, it is appreciated that he represents interests of Upper Lachlan Shire and has indicated that he has also objected to Crookwell III and Paling Yards wind farms and associated transmission lines. The submission is dated 3 April 2014 and based on the statements in his submission was lodged prior to reviewing the Modification Application and EA, March 2014. As a result it does not provide comment on the specific matters for the modification application but relates to wind farm projects generally and his concerns with the GRWF project generally.

Submitter's Issue/Comment	Proponent's Response
The developer has placed its own interest above those of the local community	The developer has been undertaking significant construction works for a major project that is approved under the EP&A Act and is subject to a wide range of approval conditions. The proponent has been addressing the compliance requirements and has tried to work in with the community in a safe and practical manner to implement a project that extends along more than 20km of the Great Dividing Range. The proponent has considered the community and is disappointed that the submitter has formed the view presented in their submission. The proponent aims to improve its relationship with the community and is reviewing its project management and consultation processes.
The developer has been aggressive and even bullying to some locals who dared to raise concerns	A reference is made to the proponent seeking details of a complainant so it could respond to the complaint. This is not unreasonable request by the proponent. Where complaints are made then it is reasonable that the proponent has the opportunity to review the circumstances based on the facts. Without details of the complainant and more importantly, the location and time that the

Submitter's Issue/Comment	Proponent's Response
	complaint refers to it is very difficult for the proponent to respond in a meaningful way. While complainants may wish to keep their details confidential this limits the ability to verify circumstances and also for the proponent to complete its investigation and as applicable implement corrective actions. Provision of relevant details with complaints assist the investigation and follow up. Without details the complaints are unsubstantiated and difficult to respond to.
The original EIS was a shoddy document (view is due to the lack of detail on final design)	The process of project planning is mostly based on preliminary plans prior to turbine selection and final design layout. The EA, 2008 explained this and it did not claim to present detail of the final design but allowed for worst case scenarios. The EA provided only an indicative turbine layout in recognition that the turbine model(s) was still to be selected and specific details on site characteristics would only be confirmed pre-construction. The information on the turbine model and detail site characteristics has impacted the final turbine locations.
Some 16 turbines were moved closer to a non-host receiver	The consistency report that is referred to by the submitter does not form the basis for the Modification Application but both draw on similar information. The EA, March 2014 provided the basis for the application and is the key reference document. The detail in the EA, March 2014 is considered to systematically and more accurately reflect the project implementation and its current status.
Reasons given for re-location are unconvincing	The submitter does not appear to have reviewed the EA, March 2014 at the time of making the submission and the comment is less relevant. The reasons for the moves reflect a wide range of considerations. The results of the adjustments to turbine locations are considered more important than the actual physical distance of the movements.
Many neighbours beyond the nearest receiver also have turbines closer to them.	It is true that if a turbine has moved towards a neighbouring residence then it similarly moves toward residences beyond the closest residence but also true that impacts reduce with distance. As indicated in the EA, March 2014, the non-associated residences within 2km of the closest turbine were assessed in respect of changes to impacts as a result of the adjustments to turbine locations. The EA also stated that the approach to residences beyond 2km was that those residences would only be further assessed, if the residences <2km showed significantly greater impact and if the changes were indicated to extend beyond 2km. Where this is not the case, then assessment of residences beyond 2km is not warranted
Developer made many relocations without reference to the Department	The adjustments to turbine locations were made after assessment and review by the ER as the approved representative for reviewing performance and compliance. The ER role has often been referred to as the Department's representative.
The developer has consistently failed to comply with the Conditions of Consent (approval), eg operating hours, noise constraints) its oversize and overmass vehicles have ruined local roads and they now dispute remediation requirements and they arrogantly dismissed complaints for local impacted residents.	The proponent acknowledges that on occasion, some complaints have been received in respect of matters such as operating hours or large vehicle movements and impact on local roads. Each of these instances is followed up by the proponent. In regard to any deviations from the approved working hours, the proponent has investigated the very limited number of those complaints and sought to ensure compliance by the relevant contractors. In regards to the damage to roads, GRWFPL has sought to have any damage that represented a safety issue fixed as it occurred and that following completion of the large vehicle movements has commenced a process to address rectification of any damage arising from the works. This process has involved GRWFPL undertaking detailed assessment of road conditions (see Section 9.6). At present, the Council and GRWFPL have not agreed on the proportion of damage attributable to the

Submitter's Issue/Comment	Proponent's Response
	project and this is still to be resolved.
The submitter has recommended that 3 turbines be removed (indicated as BAN 09, BAN 15 and POM 03) and 8 non-host receivers be compensated.	The recommendations of the submitter were made prior to seeing the detail provided in the Modification Application and EA, March 2014. As such the submitter would not be aware that the assessments showed no significant increase in impacts for non-associated residences as a result of the relocated turbines. While it is not clear what form of compensation is contemplated, it is not open to the DPE or the Minister to direct that non-host receivers be granted financial compensation.
The submitter also recommended that the developer be required to rebuild the damaged areas of Range Road to a standard required by ULSC engineer's	As indicated above, a process for addressing any damage to roads has been defined in the Project Approval and the proponent has undertaken detail of road conditions (Section 9.6) before and after the transport of the large items and has made available documentation of the assessments to ULSC for review and discussion. This matter is still under negotiation.
The submitter also requests that the vote of the proponents representative on the 6 member Community Enhancement Program Committee must be withdrawn or discounted in the event of a 3-all vote	As a representative on the Community Enhancement Program Committee, GRWFPL does not seek to control outcomes of the committee deliberations and may make suggestions for operation of the fund but respects community preferences on application of the fund.
The submitter also requests that the Modification Application must not be determined by the Department but rather be subject to the Planning Assessment Commission (PAC).	The process for this application involves an assessment by DPE but the determination is made by the Minister or PAC. It is expected to be by PAC as requested by the submitter.

5.23 Robert Galland of Goulburn (96674)

The submission from Robert Galland, of Goulburn NSW is lodged on the NSW DPE website as a 'comment'. Given the content of the submission, it has been considered under the 'objection' section of the SR report.

Submitter's Issue/Comment	Proponent's Response
Failure of the Department to protect the community.	From GRWFPL perspective, DPE has taken an active role in regulating the development and has undertaken a series of reviews of environmental management documentation and provided direction on additional measures as required.
Comments relating to breach of L&E Court conditions.	GRWFPL does not believe they have breached any conditions of the L&E Court. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits. The Modification Application addresses a requirement for assessment and approval.
Planning Department has allowed the breaches to proceed; Department to tighten conditions and its oversight requirements and systems.	GRWFPL does not agree that it has breached the Project Approval.

Submitter's Issue/Comment	Proponent's Response
The developer has treated the Courts with disdain.	The submission does not specify in what specific way GRWFPL has treated the courts with disdain. GRWFPL does not believe they have breached any conditions of the L&E Court. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits.
The developer be required to move to a monthly reporting regime against the various conditions set out in the Court's orders until all developments and community works are complete The reports to be posted on their website within 7 days of the end of the month.	GRWFPL commits to further compliance monitoring, as required by the Project Approval and detailed in Plans approved under the Project Approval. The details and outcomes of compliance monitoring will be made available for review by the public as required by the Project Approval and DPE.
Comments regarding noise testing regime, at 6 month intervals by an independent external noise expert using actual measurements. Summary reports to be posted on the developers' website.	There is no significant increase in the predicted wind farm noise levels at non-associated residences with 2km of the closest turbine. The final design layout has been assessed as consistent with the objectives of the Project Approval. Compliance assessments are required once the wind farm is operational. GRWFPL will report on noise testing regimes and results as required by the Planning Approval.
Department to retire the current auditor and contract an external independent auditor.	It is assumed that the submission is referring to the ER. The appointment of the ER was approved by DPE. As a result of concerns about the independence of the approved ER, a replacement ER has now been approved by DPE.
Full costs of recommendations should be paid for by the developer including the costs spent by the Department's contractors.	GRWFPL has paid a substantial application fee to DPE that is in excess of \$300,000. The comment is not considered by GRWFPL relevant to the determination of this Modification Application.
These are all reasonable requests and if implemented would show that the Government's commitment to consider the NSW community is being genuinely addressed.	The comment is not considered by GRWFPL to be relevant to the detail for determination of this Modification Application.

5.24 Bob and Celia Galland of Goulburn (96103)

Submitter's Issue/Comment	Proponent's Response
Dept of Planning has failed to ensure court determined conditions are enforced	<p>The proponent is aware that DPE has been involved with reviews of various aspects of the proponent's response to the Conditions of Approval. DPE has reviewed and approved the CEMP, OEMP and various sub-plans required by the approval.</p> <p>DPE also approved appointment of the Environmental Representative. The Environmental Representative has compiled a substantive set of documents recording assessments of compliance. Nevertheless, the ER and DPE have formed different views of project</p>

Submitter's Issue/Comment	Proponent's Response
	<p>consistency and this has led to a requirement for a Section 75W Modification Application.</p> <p>DPE also engaged a third party to audit aspects of the project compliance. No deficiencies were communicated to GRWFPL and no actions were required of GRWFPL.</p>
<p>Department has not kept on top of the situation on site and has not instituted common sense pre-construction check points to ensure adherence to approvals.</p>	<p>The Approval Conditions required a pre-construction compliance report which was prepared and submitted to DPE. However, it is apparent to the proponent that the pre-construction compliance report could have provided more detail that may have triggered an earlier review of the adjustments by DPE.</p> <p>An earlier resolution of the current matter would have been preferred by the proponent who has proceeded on the basis of the ER advice that the turbine locations were consistent with the Project Approval. The need for a review of these matters at an advanced stage of the project has not been in the interests of the proponent or the community. The proponent recognises a need to strengthen management of project risks to ensure smooth conduct of state significant developments such as GRWF.</p>
<p>Appointed the developer's environmental consultant as the auditor (Environmental Representative) for this construction.</p>	<p>The ER appointment was based on:</p> <ul style="list-style-type: none"> • an excellent understanding of the project and the issues to be managed • The ER's capability to provide the environmental management audits <p>The appointment of the ER was not inconsistent with appointments for other major projects where the ER has knowledge of the project and experience in environmental management roles.</p> <p>Following appointment, the ER has conducted audits of the implementation against conditions of approval and given directions to the proponent for ensuring compliance. As such there is a significant record of the ER undertaking the required role as defined by the Condition of Approval 7.1.</p>
<p>The developer appears to be bending things to fit its purposes.</p>	<p>The proponent does not agree that it has 'bent things to fit its purposes'. No details of how or where this is supposed to have taken place and the submitter relies on unsubstantiated inference. To the contrary, the proponent has made substantial effort to deliver the project in a compliant manner. The community would not be aware of the full extent of measures to address the requirements of the Conditions of Approval but it is substantial and the proponent has made genuine effort to ensure compliance. There are many examples of areas where GRWFPL has responsibly addressed the conditions of approval. It is of significant concern to the proponent that the project has been indicated as not compliant when it had received professional advice that the project was consistent.</p>
<p>Requested immediate commissioning of an independent survey of the distances of turbines from non - host residences and also the distances between turbines.</p> <p>Further that this independent study includes a comparison of these distances to those</p>	<p>The proponent engaged a registered surveyor to survey the footings of the 73 turbines that have been constructed. This is important to the proponent for its construction and operations management and for addressing matters such as assessment and notifications to air safety stakeholders in relation to locations of the wind turbines.</p> <p>Based on the survey by a registered surveyor, the locations of the turbines can be regarded as accurate and the proponent has an interest in ensuring that the data is accurate. The neighbour's view that this data has been manipulated appears to assume that the</p>

Submitter's Issue/Comment	Proponent's Response
provided in the projects original EIS.	<p>proponent has misled authorities and that the registered surveyor is party to this action. The implication by a number of submitters that survey data had been manipulated or falsified does not do justice to the level of regulation of major projects and as indicated below has been shown to be a false claim.</p> <p>As a result of the neighbour's concerns, DPE has arranged a separate survey of the turbine locations. This has been at the government expense and the results are consistent with the proponent's survey results. The proponent believes that the view spread within the local community was spurious and not based on any evidence other than suspicions. The proponent expects that it is reasonable for concerns to be investigated but where the substance is not backed up by evidence then they should not be taken as fact.</p>
This data should be released in time to allow the community to prepare submissions based on reliable and independent information (i.e. the appointment of the developer's surveyor would not be seen as appropriate).	The data was provided on the DPE website following the end of the exhibition period. The comparison of the proponent's survey data and the DPE appointed survey data shows that the locations are consistent and that the EA for the Modification Application can be relied upon.

5.25 Name withheld of Cullerin (96700)

This submission raised a number of issues that mostly appear unrelated to the detail of the Modification Application and the specific impacts of adjustment to turbine locations. As such the issues are mostly not relevant to determination of the Application. Nevertheless, comment is made in respect of the issues raised.

Submitter's Issue/Comment	Proponent's Response
Seismic acoustic induced vibration impacts of health damaging low frequency noise and infrasound from multiple Industrial Wind Turbines weighing upwards of 200 ton each on neighbouring residents which is already occurring with other Industrial Wind Developments in the area.	The Dalton area to the west of the GRWF site is a known area of seismicity and is understood to have recorded the strongest event in NSW. These preceded the wind farm installation and may occur again. The wind turbines are large but would only represent a fraction of the weight that is loaded on City areas through construction of large buildings at close spacing. There is no indication that the turbine installation will add to the area's seismicity or that they will add damaging low frequency noise. Indeed recent studies indicate that natural low frequency noise in the rural environment may often be greater than any produced by wind turbines.
Seismic impacts from Industrial Wind Turbines on local and surrounding geology, especially layering, as may play an important part in determining vibration transmission. Energy may propagate via complex paths including directly through the ground or principally through the air and then coupling locally	<p>Wind farms have been operating at Crookwell (8 turbines) and Blayney (15 turbines) since 1998 and 2000 respectively and more recent installations have occurred at Cullerin (15 turbines) and adjacent Lake George, Capital (67 turbines) and Woodlawn (23 wind turbines).</p> <p>The speculation in the submission indicates that "energy may propagate by complex paths" but does not provide examples of the effect. This item does not appear to provide useful information for the determination of the modification application.</p>

Submitter's Issue/Comment	Proponent's Response
into the ground.	
<p>Seismic impacts from Industrial Wind Turbines on the Hydrology and Hydrogeology of the local area and surroundings. Serious risks to the contamination of groundwater resource within and surrounding the area that may in turn impact on downstream watercourses, wetlands, public and private water supplies. Negative issues arising from unassessed permanent long-term changes in the site hydrological regime with extremely adverse outcomes for residents.</p>	<p>The speculation in the submission indicates that "seismic impacts may give rise to serious risks to contamination of the groundwater resource" The submission does not provide examples of the effect. This item does not appear to provide useful information for the determination of the modification application.</p>
<p>The Developer has appeared to have shown a complete disregard of construction best practice guidelines and based on results clearly did not use a qualified Surveyor/GPS in the micro-siting of the Industrial Wind Turbines. This will also present problems regarding the wind loading/turbulence on the turbines as the turbine to turbine separation distances have also been changed. A Structural Engineer would not have made this mistake so it is reasonable to assume that a Structural Engineer was not used in the micro-siting of the turbines thus there may now be serious turbine structural adequacy issues arising from the Developer's 'misplacement' of the turbines in complex, turbulent terrain.</p>	<p>A registered surveyor was used to survey the locations of turbines. It is unclear what mistake is being alluded to and on this point the submitter appears to have a confused view of the information provided.</p> <p>Every turbine location has been reviewed for constructability. This has included both wind engineering and geotechnical investigation of each location in respect of the final layout.</p> <p>The submitter appears to be representing themselves as knowledgeable in terms of the effects of wind loading and turbulence on turbines. No details are given of the submitter other than the Cullerin location but such matters are at the proponent's risk and the proponent presumably has the best knowledge of the turbine equipment and its robustness for the site conditions. The submitter's item appears to lack detail and is not useful for the determination of the application.</p> <p>The proponent is likely to be better placed to decide placement of turbines than the submitter, misplacement is considered an erroneous statement by the submitter.</p>
<p>The negative health impact to residents from electrical grounding of multiple individual 3,000,000 watt Industrial Wind Turbines discharging into the ground and surroundings.</p>	<p>There are two turbine models, being 1.5 MW and 2.5 MW. These are not 3MW turbines. Regardless of the capacity of the turbine, GRWFPL is not aware that the proper installation of the turbines has any likelihood of negative health impact for neighbouring residents, particularly when living at distances from the wind farm in excess of 1km</p>
<p>This Gullen Range DA amendment application appears to disregard the NSW Government draft guidelines and the Upper Lachlan Shire Council minimum setback</p>	<p>The Modification Application does reference the NSW Government draft guidelines for wind farms. However, the guidelines are not a mandatory requirement for the project.</p> <p>The ULSC minimum setback for turbines from non-involved residences is not applicable to the project.</p>

Submitter's Issue/Comment	Proponent's Response
distances from the homes of residents.	
This Development in the present form appears to breach human rights.	The submitter does not indicate which human rights are breached. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, conditions, licences and permits and aims to be good neighbour.
Has the Occupational Health & Safety Act been applied to this Development with rigor?	OHS is given high priority for all aspects of the project. A comprehensive safety management system applies for the project. Safety performance is subject to regular reviews by the executive staff.

5.26 Jayne Apps, of Rye Park NSW (96667)

Submitter's Issue/Comment	Proponent's Response
The application for modification to the Gullen Range Wind Farm should not be approved, and the entire project should undergo a complete and comprehensive review before being able to continue work on any part of the development.	<p>The project is currently subject to a comprehensive review in accordance with provisions of the EP&A Act. A comprehensive EA (March 2014) was prepared and lodged with DPE, it has been placed on public exhibition for a four week period and also referred to relevant NSW government agencies.</p> <p>The submitter's suggestions would not represent a practical application of planning requirements.</p>
In this day and age of outstanding surveying technology the sighting of the individual turbines should have been finalised at the time of submission of the original application.	The submitter does not appear familiar with the process for development of major project designs and may not appreciate that the planning decision precedes, tenders for selection of equipment and contractors and that these decisions then require design review and fine tuning for implementation in relation to selected turbine models, layout options and social and environmental constraints. The project approval documents indicated that minor modifications would apply and DPE acknowledge that minor modifications were expected.
The fact that sixty nine wind turbines have been relocated, ranging from 1m to 187m at the whim of the developers, without gaining consent from either NSW Department of Planning or those living within the proximity of the project, should not be accepted	<p>The project approval documents anticipated the need for minor adjustments of turbine locations and DPE has acknowledged that minor relocations are allowed under provisions of the EP&A Act.</p> <p>The project was subject to reviews by the DPE approved Environmental Representative and GRWFPL was advised by the ER that the final design turbine locations are consistent with the Project Approval. GRWFPL has now undertaken comprehensive environmental assessment of the modifications and the assessment has been placed on public exhibition for four weeks and subject to review by NSW government agencies. The EA, submissions and this SR will be reviewed by DPE and recommendations made in respect of the determination of the application.</p>
Non associated residences within 2 km now have turbines up to 155m closer to their homes than what they originally anticipated, with associated residences within 2km having	The assessment of impacts on non-associated residences at distances of less than 2km from the nearest turbine has been compiled in the EA, March 2014 and demonstrated compliance with the Project Approval conditions. The assessments in the EA

Submitter's Issue/Comment	Proponent's Response
turbines up to 166m closer to them.	particularly focused on the consequences of the modifications of turbine locations.
<p>Taking into consideration the fact that NSW Department of Planning considered living within 2km's of wind turbines a significant factor when putting together their NSW Draft Wind Farm Guidelines,</p> <p>I feel the entire project should be stopped immediately until a guarantee from the proponents can be given to these residents that their health and quality of life will not be impacted in any way, and that the entire project is compliant with all rules, regulations and permissions.</p>	<p>The Project Approval pre-dated the most recent planning guidelines and was the basis on which the development planning and financing was based. Developers need surety to allow confidence to commit to investments. If that is not maintained then there could be significant disincentive to investment on NSW projects.</p> <p>The EA, March 2014 provides a comprehensive assessment that demonstrates the level of impacts for various issues relevant to the project and the modified turbine locations. The community has had the opportunity to comment on the assessments and DPE will review the assessments using experienced planners with knowledge of wind farm assessment issues and their mitigation. The DPE assessment will be made available to PAC to assist its review and determination of the application.</p>
Photo Montages included in the application are not clear and, although they are probably an accurate representation of the view, do not give a true picture of being on the site and living in view of the turbines.	The photomontages are provided in the document in a form that they can be printed at A4 or A3 or viewed on a computer monitor screen. GRWFPL acknowledges that this format is not ideal and arranged professionally printed copies that could be viewed at the ULSC Council office. It is understood that DPE has visited the site and gained an appreciation of the visual impact and it is also possible that the determining authority may also visit the site to acquaint decision makers with the visual impact.
<p>The concerns noted by the proponent on page 21 of the Modification Application - 'The alternative activities that would be required to reconstruct parts of the project that are not approved by the modification application involve significant time, work and expenditure. A refusal of this modification application will seriously impact the commercial viability of the project' - are minor compared with the impact to those people living in close proximity to these turbines for the next 25 years, and the probable inability to be able to sell their properties on the open market. Any other citizen or business in Australia pay the price of not complying to rules, regulations and permissions, so why should this company be exempt.</p>	<p>GRWFPL has included the note that is referenced by the submitter to explain that the process has significant risks for the proponent and it is not a situation that it would have planned to be exposed to. Indeed it has made considerable effort to ensure compliance and is disappointed that the advice it has received by an experienced consultant that has been approved by DPE is not accepted as a basis for the final design locations. GRWFPL has provided a range of specialist assessments that show that impacts of the modifications are insignificant.</p> <p>GRWFPL expects that the submitter's statement as to 'probable inability to be able to sell their properties on the open market' is a position that is not confirmed and is not related to the modified turbine locations as impacts are not significantly different.</p> <p>GRWFPL has experienced definite interest in purchase and lease of the properties that it has acquired in close proximity to the wind farm.</p>
I feel an example needs to be made of this project to ensure that the companies planning and proposing further wind power development do not think they can also treat the people and environment within the footprint of their proposals with the same	The submitter appears to have a strong interest in penalising an approved state significant development that is serving a beneficial purpose and which has a range of beneficial outcomes for host and associated landowners, local businesses and those who have gained direct or indirect employment as a result of the

Submitter's Issue/Comment	Proponent's Response
contempt and misinterpretation of the rules that Gullen Range Wind Farm Pty Ltd appear to have done.	project.
It is also my concern that this may be only one of many non-compliant issues.	The submitter expresses a concern that lacks knowledge of a wide range of compliance matters which the proponent has complied with.
One point of concern that may not have been complied with is the prevention of noxious weed spread. I have visited the Gullen Range site on an arranged tour and noticed one of the sites was a mass of serrated tussock. When asked what was being done to mitigate spread of the weed seed we were told by the employed tour guide that there are washdown sites for all vehicles at the boundary of all properties. However, our bus drove from one property to the next, was not washed down, and I could not see any equipment or facilities for this to be done.	<p>The weed control measures are generally applied to earthmoving vehicles and construction vehicles that have potential to introduce weeds. The wash-down procedure only applies to vehicles that leave the site roads.</p> <p>Existing areas of serrated tussock that are present on the site have been subject to weed control herbicide spraying programs. Follow up surveys will monitor the effectiveness of control programs.</p> <p>The project may result in reduced weed infestation on the project lands relative to the situation prior to the development.</p>
In closing I again strongly urge the NSW Department of Planning to refuse this application on the grounds that there has been a breach of the approvals given to the developer, and there may also be many other non-compliance issues. All work should cease on the project until both the original and current applications have been investigated to ensure what is said to have been done is actually done.	<p>No breach has been declared for this project. A modification application is currently being reviewed in accordance with provisions of the EP&A Act. The project approval documents indicated that minor modifications would apply and DPE acknowledge that minor modifications were expected.</p> <p>Works are occurring on aspects of the project that have been discussed with NSW DPE and for which there are reasonable grounds to proceed with those elements.</p>

5.27 John Formby of Binda, NSW (96897)

The submitter is located at Binda, NSW. Binda is about 20 kilometres north of Crookwell.

Submitter's Issue/Comment	Proponent's Response
The changes in turbine sites are illegal.	The proponent does not agree with this statement. The proponent has entered into a legitimate process under the EP&A Act. The project approval documents anticipated minor relocations of turbines and DPE has acknowledged that minor modifications are allowed under the EP&A Act. The permissibility of the turbine locations is being assessed through the process that is provided for by Section 75W of the EP&A Act.
The developer has a history for disregard for planning procedures during implementation.	The submitter indicates that they have practical and academic experience in environmental impact assessment. If they also have experience in project implementation (not stated in their submission) they would be aware of the substantive number of requirements to be managed during implementation including the preparation of environmental management plans and obtaining approval of the plans. It is not clear what planning procedures the

Submitter's Issue/Comment	Proponent's Response
	submitter is suggesting have been disregarded by the proponent, however GRWFPL denies that it has disregarded planning procedures and to contrary has directed considerable effort toward compliance with the Project Approval.
The submitter criticises the original EA and extends that criticism to the current modified DA.	The modification application including the EA, March 2014 was on exhibition for a period of four weeks. The EA, March 2014 has significant information of use to the determining authority, the community and relevant government agencies. Review of location data used in the EA, March 2014 has been shown to be suitable despite a range of statements by objectors that the data could not be relied on.
The developer's information on the proposed siting of turbines cannot be relied upon.	The DPE arranged independent survey of turbine locations has confirmed the turbine locations stated by the proponent. The results of the independent survey are on the DPE website and are also reviewed in this Submission Report (Section 2.3). The submitter's statement does not appear to be based on any facts and raises questions about the matters raised by the submitter.
The developer appears not to understand the impact that even small changes in turbine location may have on affected residents.	The proponent has relied on assessments by relevant specialists to determine the impact and significance of the change in impact as a result of adjustments to turbine locations. Those assessments in the EA, March 2014, are provided for consideration by the public and the determining authority. As for the previous matter, the submission does not appear supported facts.
It appears that the consultants used studies such as noise that are mostly the same as for the original EA. They are most likely to support the conclusions they have reached before.	<p>The submitter does not appear to appreciate the basis for assessment or differences in the assessment undertaken relative to the original EA. The Project Approval conditions included requirements for assessment and these have been followed by the noise consultant.</p> <p>In respect of noise impacts, the principal matter to be addressed by the Modification Application was whether the changes in turbine locations have resulted in any significant increase in noise impacts. This was assessed by identifying the difference between the noise level for the approved turbine locations and for the adjusted locations. The submitter indicates that they have many years practical and academic experience in EIA and on that basis it is expected that they would be aware that a maximum variation in predicted noise level of only 0.4dB for the assessed residence locations across all integer wind speeds is insignificant. This has been appreciated by EPA who have also responded to referral of the Modification Application.</p>
Some residents are already affected by noise from turbines.	<p>The wind farm will be audible at some residence locations. It is possible for it to be audible and still compliant where the actual wind farm noise level is below the relevant criteria.</p> <p>Compliance monitoring will be undertaken when the full wind farm commences operation and the full impact can be assessed.</p>
The developer cites the reports of the NHMRC and the AMA on the noise effects of wind turbines on health without acknowledging the limitations of these reports or that they have been subject to a great deal of informed criticism.	At the time of the modification application these two references represented current, independent and relevant sources of information on health impacts. GRWFPL is not in a position to challenge their findings or statements on health impacts but has presented them as the independent source of information in respect of health impacts for the information of those reviewing the application. GRWFPL is aware that NHMRC has undertaken further consultation and may provide further statements on this issue.

Submitter's Issue/Comment	Proponent's Response
The photomontages used to purportedly represent the visual aspects of turbines have been recognised as having little relationship to actually viewing a turbine in 3D reality.	Photomontages are an accepted tool of visual impact assessment and 18 additional photomontages were prepared for the Modification Application. The provision of material on the website and in hardcopy documents may not be the same as being on site and viewing the turbines. However, they do represent an evaluation tool that can serve to provide assessors and those who may not know the situation of a residence on private lands the extent of the wind farm that is visible and the relative scale of the turbines in the landscape from specific viewpoints. Additionally with many turbines constructed assessors and the determining authority are able to visit the site to gain their own impression of the development.
The submitter suggests that the Department cannot make decisions on the approval and questions its original approval	The proponent disagrees with the submitter's statement. Notwithstanding, DPE is not the determining authority. The project approval was granted by the NSW Land and Environment Court after the Court visited the site and conducted a rigorous assessment of the expert and lay evidence filed in the proceedings. It is likely that the Planning Assessment Commission will determine this Modification Application and it can also be regarded as independent.
The submitter claims the information in the modification application is unreliable	The submitter has misunderstood several aspects of the planning process and the assessment methodologies despite claiming to have practical and academic experience in EIA. The submitter has not provided any details that are relevant to the assessment of the modification of turbine locations and determination of the application.
The submitter seeks an inquiry into the modification application and the whole process of planning and implementing this project.	<p>The modification application is considered to be a comprehensive review of the adjustment to turbine locations and assessment of impacts.</p> <p>The EA March 2014, provides comprehensive details of the project design and implementation processes. The submitter has not raised comments on the detail of this information, is not local to the project and does not provide relevant contribution to consideration of the modification application.</p>

5.28 Linda Pahl of Gunning, NSW (96120)

This submission is, in the main, similar to the grouped responses above with slight variation. The submitter is distant from the project but within the region.

Submitter's Issue/Comment	Proponent's Response
Disregard for NSW Govt's draft guidelines and ULSC requirements in regard to setback.	<p>The Modification Application does reference the NSW Government draft guidelines for wind farms. The guidelines were prepared after the Project Approval and the requirements are not mandatory for the project.</p> <p>The ULSC minimum setback for turbines from non-involved residences is not applicable to the project.</p>
The application for retrospective approval for turbines should only be considered when matched with a retrospective requirement to have those turbines within ULSC 2km	The project approval documents anticipated minor relocations of turbines and DPE has acknowledged that minor modifications are allowed under the EP&A Act. The permissibility of the turbine locations is being assessed through the process that is provided for by Section 75W of the EP&A Act. The ULSC minimum setback for turbines from non-involved residences is not applicable to the project.

Submitter's Issue/Comment	Proponent's Response
minimum setback removed.	
Noise Impacts	See Section 5.37 to 5.39.
Visual Impacts	See Section 5.37 to 5.39.
Property Devaluation	See Section 5.37 to 5.39.
Loss of Amenity	See Section 5.37 to 5.39.
Loss of Income	See Section 5.37 to 5.39.
Mitigation	See Section 5.37 to 5.39.
Public Inquiry	See Section 5.37 to 5.39.

5.29 Grant Winberg of Roslyn (94804)

The response below related to DPE submission number 94804. Additional submissions from Grant Winberg (95864 & 95864) dealt with in First Grouped Response above and separately above (respectively).

Submitter's Issue/Comment	Proponent's Response
Goldwind has not complied with reasonable community consultation processes by deliberately moving these turbines with no prior notification to either the Department or to those non-host residents most affected by any new developments.	Consistency reviews of variations to the approved project were undertaken progressively by the DPE approved Environmental Representative, as per Approval Condition 7.1. A detailed consistency review, prepared by nghenvironmental in December 2013 and approved by the Environmental Representative was submitted to the Director-General in December 2013. In tandem with DPE consultation, GRWFPL has maintained active consultation with ULSC, GMC and specific NSW Government Agencies throughout project construction.
Incomprehensible Goldwind could breach Land & Environment Court judgement without being required to cease construction.	GRWFPL does not believe they have breached any conditions of the L&E Court. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits.
Goldwind should be required to alter application for amendment to remove those turbines which do not comply with current draft guidelines (in particular those turbines within 2kms of non-host residences)	The ULSC minimum setback for turbines from non-involved residences is not applicable to the project. The draft wind farm guideline and setback provisions are not relevant to this approved project.

5.30 Grant Winberg of Roslyn (96080)

The response below related to DPE submission number 96080. Additional submissions from Grant Winberg (95864 & 94804) dealt with in First Grouped Response above and separately below (respectively).

Submitter's Issue/Comment	Proponent's Response
Department of Planning to commission a truly independent survey of the distances of turbines from non-host residences and also the distances between turbines.	The proponent engaged a registered surveyor to survey the footings of the 73 turbines that have been constructed. In addition, DPE has arranged a separate survey of the turbine locations. This has been at the government expense and the findings have vindicated the proponent's survey results. The DPE arranged survey has been made available for review by the public and proponent.
Independent study to provide a comparison of these distance to those provided in the original EIS.	DPE has prepared an assessment of relevant data for turbine locations and for non-associated residences within 2km of the nearest turbine. The EA, March 2014 provides details on distance between residences and the closest turbine as well as changes in distance from approved layout to the final design layout.
I believe independently sourced information is essential given that Goldwind has offered no accurate information to date.	Coordinates and levels, as surveyed by a Licensed Surveyor, of the 'Final Design' were provided in Appendix A2 of EA, 2014 by Goldwind. Comparison with the separate survey undertaken by DPE demonstrates the accuracy of the initial survey, as well as providing independently sourced information. The submitter's claim is wrong and poorly founded.
Goldwind acting in an underhand way by deliberately moving these turbines with no previous notification to either the Department or to those non-host residents most affected by any new developments.	Consistency reviews of variations to the approved project were undertaken progressively by the DPE approved Environmental Representative, as per Approval Condition 7.1. A detailed consistency review, prepared by nghenvironmental in December 2013 and approved by the Environmental Representative was submitted to the Director-General in December 2013. Therefore, GRWFPL does not agree with the submission that it has acted in an underhand way. Assessment by specialists has shown that that there has been no significant increase in social impacts as a result of the modifications.
Incomprehensible Goldwind could breach Land & Environment Court judgement without being penalised.	GRWFPL has not breached any conditions of the L&E Court. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits. The modification application is allowed under the provisions of the EP&A Act.

5.31 Janine Hannan of Roslyn (96082)

Submitter's Issue/Comment	Proponent's Response
Department of Planning to commission a truly independent survey of the distances of turbines from non-host residences and also the distances between turbines.	The proponent engaged a registered surveyor to survey the footings of the 73 turbines that have been constructed. In addition, DPE has arranged a separate survey of the turbine locations. This has been at the government expense and the findings have vindicated the proponent's survey results. The DPE arranged survey has been made available for review by the public and proponent.
Independent study to provide a comparison of these distance to those provided in the original EIS.	DPE has posted the results of the independent survey on the website. The data in the EA March 2014 shows the change in distance between the residence and closest turbine for the indicative approved and final design layouts.
I believe independently sourced information is essential given that Goldwind has offered no accurate	Coordinates and levels, as surveyed by a Licensed Surveyor, of the 'Final Design' were provided in Appendix A2 of EA, 2014 by Goldwind.

Submitter's Issue/Comment	Proponent's Response
information to date.	Comparison with the separate survey undertaken by DPE demonstrates the accuracy of the proponent's survey, as well as providing independently sourced information.
Goldwind acting in an underhand way by deliberately moving these turbines with no previous notification to either the Department or to those non-host residents most affected by any new developments.	<p>Consistency reviews of variations to the approved project were undertaken progressively by the DPE approved Environmental Representative, as per Approval Condition 7.1. A detailed consistency review, prepared by nghenvironmental in December 2013 and approved by the Environmental Representative was submitted to the Director-General in December 2013.</p> <p>Therefore, GRWFPL does not agree with the submission that it acted in an underhand way, nor that procedures for notification of variations were not followed appropriately.</p>

5.32 Mingo S Mortimer of Collector (96202)

This submission is, in the main, similar to the grouped responses above but includes a matter relating to Native Title.

Submitter's Issue/Comment	Proponent's Response
There has been no 'Due Diligence' on Native title under Act (Cth) 1992 and or Common Law Native Title, as required by Law. Therefore the Gullen Range Wind Farm is non-compliant and the development is required to cease forthwith until 'Due Diligence' on Native Title under the Act (Cth) and/or Common Law Native Title is complete and all Gandangara People are satisfied.	<p>An Aboriginal Heritage Assessment was undertaken for the project area in consultation with the Pejar and Onerwal Local Aboriginal Land Councils.</p> <p>In September 2012, Shane John Mortimer commenced proceedings in the Supreme Court of NSW against Goldwind Australia Pty Ltd, seeking an order stopping Goldwind from developing the GRWF until Goldwind performed due diligence in relation to Native Title under the <i>Native Title (New South Wales) Act 1994</i> and under common law. See <i>Mortimer v Goldwind</i> [2013] NSWSC 143</p> <p>In its Judgment, the Supreme Court took the following facts into consideration:</p> <ul style="list-style-type: none"> • An objectors' appeal was commenced in the LEC against the Minister's approval of the project. Mr Mortimer had not objected to the development and was not an appellant in those proceedings. • The Commissioners of the LEC granted approval to the project, subject to conditions. • In July 2007 New South Wales Archaeology Pty Ltd were commissioned to undertake an archaeological and heritage assessment of the project area. • A condition of the Project Approval granted by the LEC includes a requirement in relation to statutory approvals (Condition 1.7) requiring that "The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals..." • Goldwind submitted that this condition requires it to abide by any determination of Native Title and the

Submitter's Issue/Comment	Proponent's Response
	<p>conditions that would accrue as a consequence thereof.</p> <ul style="list-style-type: none"> There were two Native Title claims in respect of land within the Upper Lachlan Shire, and neither of those claims, included the land upon which the GRWF project sits. <p>In summarily dismissing the proceedings, with costs, the NSW Supreme Court held that:</p> <ul style="list-style-type: none"> The developer obtained and submitted a report of an expert dealing with any archaeological or land rights significance in the development and relating to the land upon which the development will occur. The documents before the Court suggest that consideration has been given to the rights of the local Aboriginal community in dealing with the approval There is no arguable basis to show that the approval was without jurisdiction or based upon an error of law, relating to a failure to take into account Aboriginal Land Rights. <p>The claims by Mr Mortimer have been considered and dealt with by the NSW Supreme Court, and those proceedings were summarily dismissed.</p> <p>GRWFPL has undertaken due diligence in respect of Native Title obligations and has been assessed as fully compliant. Accordingly GRWFPL is not in contravention of any Native Title obligations.</p>
Disregard for NSW Govt's draft guidelines and ULSC requirements in regard to setback.	<p>The Modification Application does reference the NSW Government draft guidelines for wind farms. The guidelines are not a mandatory planning instrument for the project.</p> <p>The ULSC minimum setback for turbines from non-involved residences is not applicable to this project.</p>
Goldwind should never have been allowed to relocate the vast majority of turbines in this development without prior Department of Planning approval.	<p>The project approval documents anticipated minor relocations of turbines and DPE has acknowledged that minor modifications are allowed under the EP&A Act. Consistency reviews of variations to the approved project were undertaken progressively by the Environmental Representative approved by DPE, as per Approval Condition 7.1. The EA, March 2014 and this SR provide the basis on which modification of project approval is sought. The Modification Application seeks to confirm the adjusted turbine locations.</p>
The application for retrospective approval for turbines should only be considered when matched with a retrospective requirement to have those turbines within ULSC 2km minimum setback removed.	<p>The retrospective nature of the application is due to the differences arising between the current DPE view and the previous DPE approved ER advice previously provided to GRWFPL. Had the ER advised GRWFPL that the modifications were inconsistent then it would have had the opportunity to either change the layout or submit a timely application for modification of the Project Approval. GRWFPL would have preferred to have resolved this issue at an earlier stage of the development process.</p> <p>The ULSC minimum setback for turbines from non-involved residences is not applicable to the project.</p>

Submitter's Issue/Comment	Proponent's Response
Noise Impacts	See Section 5.37
Visual Impacts	See Section 5.37
Property Devaluation	See Section 5.37
Loss of Amenity	See Section 5.37
Loss of Income	See Section 5.37
Public Inquiry	
Failing the Department enforcing a retrospective requirement to immediately remove all turbines within 2kms of non-host residences, due to the developer's many breaches of compliance and the Department of Planning's inability to ensure that the developer complied with conditions of approval	<p>The ULSC minimum setback for turbines from non-involved residences is not applicable to the project.</p> <p>GRWFPL does not agree with the submission that there have been many breaches of compliance. GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits.</p>
Call for a cessation of construction until such time as a public inquiry is completed into the processes involved in approving/monitoring this development.	<p>Any significant construction delays would represent a significant financial risk to the business and project viability. The status of turbine construction at mid-March 2014 was indicated in the EA, March 2014 and is updated in this SR. GRWFPL also made an undertaking to defer construction of certain turbines (Appendix A2).</p> <p>The project is subject to well defined processes under the EP&A Act. The State Government undertakes regular review of the EP&A Act and planning processes but it would be impractical to review the processes on a project by project basis</p>

5.33 Name Withheld of N/A NSW (96026)

Submitter's Issue/Comment	Proponent's Response
This Wind farm development clearly demonstrates the cunning practices of the developers to purposely install turbines in unapproved sites.	Gullen Range Wind Farm was approved in August 2010 by the Land and Environment Court of NSW. Such approval allows for the construction of a wind farm at Gullen Range. The proponent received advice from the ER that the turbine locations were consistent with the approval and the proponent proceeded on that basis. A pre-construction compliance report was submitted to DPE prior to construction proceeding. The proponent believes that this submitter's assertion of cunning practices is inaccurate and provides no basis for consideration of the Modification Application.
These will continue to have a long lasting terrible impact on residents of the ULSC	The submission does not specify impacts. The Modification Application contains assessments of changes in impacts as a result of the modification of turbine locations and these have been shown the impact of the changes to be insignificant.
Provides no confidence in the NSW Government to control such developments.	GRWFPL has acted in accordance with the Project Approval conditions and has implemented the many controls required by the Project Approval.

Submitter's Issue/Comment	Proponent's Response
Turbines can be seen from almost every direction from within a 10km radius.	The changes in visual impacts as a result of the modification of turbine locations was assessed as not significant as set out in the EA for the Modification Application. The submitter appears to include reference to other wind farm developments which is not relevant to the modification application.
All the evidence is that wind power is totally unsustainable economically while causing horrific visual pollution, detrimental health effects and loss of property values.	This objection does not refer to any specific aspect of the modification and appears more related to a general objection to wind energy generation. It characterisation of wind energy is incorrect.
The only ones who benefit is foreign private equity who on-sell their interest at the first opportunity.	This objection does not refer to any specific aspect of the modification. Substantial benefits flow to the local region and community and all those people employed through the development. The project is also consistent with National and State programs to increase renewable energy generation and reduce greenhouse gas emissions.

5.34 Ken Marks of Mosman, NSW (96407)

Submitter's Issue/Comment	Proponent's Response
No consideration was given to the residents of the area. The proposal affect more residences than any other similar proposal in Australia	The adjustments to turbine locations have considered social impacts for neighbouring residents. Assessments of the impacts associated with the modifications have not indicated any significant increase relative to the Project Approval.
the developer has shown utter contempt to both the local residents and the original development approval	GRWFPL has demonstrated compliance with a comprehensive range of Project Approval Conditions.
the land on which the development stands is good agricultural land over 30 inches rainfall and basalt soils to pit a wind farm on such good country is a gross mismanagement of our natural resources land as good as this is a very small proportion of our total land mass.	<p>The wind farm occupies only a very small part of the properties where it is located and the pastoral activities on the subject land can be continued. For the landowners involved the wind farm development provides additional income and makes their farm more commercially sustainable.</p> <p>Other objectors propose that the wind farm limits potential for subdivision of their land which can mean replacement of agricultural use with rural lifestyle. The two objectors use quite different reasoning, one says the wind farm will reduce agricultural capability while other neighbours objecting to the wind farm use for the reason that it limits subdivision of their land that may well contribute to a greater reduction in utilisation of the agricultural land.</p>
the development has split the community we now neighbours fighting with one another some of whom have been friends for many years	GRWFPL is aware of some divisions amongst the local community and regrets that some individuals have allowed community relationships to be degraded due to personal differences in respect of the development. GRWFPL would encourage all community members to value the relationships with rural neighbours and seek to heal any differences that may be evident.
we have had our roads destroyed particularly Range Road. We have had Kialla road resurfaced but it was such a cheap job the road is now in a worse state than it was. I trust that the non-	There is a process defined in the Project Approval conditions to ensure that any damage to local roads as a result of the project is repaired. Detailed assessment of road conditions before and after transport of the large items to site has been undertaken (see Section 10.6). The process is underway and

Submitter's Issue/Comment	Proponent's Response
Australian development company will not get favourable treatment over local population.	has not been completed. The upgrade works undertaken to Kialla Road are considered as over and above that required and have provided a considerably better pavement than existed previously which is a clear benefit to the community.
The area will become an industrial wasteland with an invasion of noxious weeds such as thistles, blackberries, serrated tussock which is one of the greatest threats to Australian agriculture	<p>The submitter does not state why the presence of the wind farm will result in invasion of noxious weeds. The project has already been associated with control treatments for existing weeds such as serrated tussock.</p> <p>It is possible the properties where the wind farm is located may see an improved status of weed control relative to condition prior to the development and perhaps relative to some neighbouring lands. Provided controls on the wind farm are effective, neighbouring lands may also benefit from reduced weeds adjacent to their property.</p>

5.35 Name Withheld of South Turramurra, NSW (96655)

This submission was submitted as a comment. The submitter is from South Turramurra well outside the region.

Submitter's Issue/Comment	Proponent's Response
Support environmentally sustainable developments such as wind and solar projects	Good to hear the submitter's recognition of wind energy as an environmentally sustainable development.
Believes that changes are due to cost cutting (savings in construction)	This is not the basis of the relocations. Some included avoidance of sensitive habitat. Others moved to more practical locations while many changes were for a more, practical, efficient and effective layout.
Expect penalty to be applied to reflect cost savings achieved	The changes were not made to reduce construction costs which are likely to be relatively unchanged by the adjustment to turbine locations. In some cases, changes may have increased costs. The proponent will also incur at least an additional \$1 million to work through the modification process and delays to construction.
Thanked Department of Planning for requiring the process to review changes	The Modification Application represents a process allowed under the provisions of the EP&A Act to assess and determine applications for modifications of existing approvals.

5.36 Jerome Rowley of Wollstonecraft NSW (96722)

Submitter's Issue/Comment	Proponent's Response
I am astonished that this developer has the temerity to seek approval, "after the event", to regularise deliberate changes to the original approvals and those subsequently amended by the Land and Environment Court.	<p>The Modification Application responds to the need for assessment and gaining approval as per the due process in Condition 1.5 of the Project Approval.</p> <p>GRWFPL would much prefer that this matter was resolved at an earlier stage. However, as the ER had advised GRWFPL the project was consistent it proceeded with the project based on the final design layout. The project approval documents indicated that minor modifications would apply and DPE acknowledge that minor modifications were expected.</p>

Submitter's Issue/Comment	Proponent's Response
If they had wanted /needed to relocate turbines in order to obtain better wind outcomes, they should have sought approval to do so and then have been subjected to the prerequisites such as a new EIS and proper community consultation.	The distance for relocation of turbines is variable and the reasons for individual adjustments varies, including wind resource. DPE has acknowledged that minor variations are allowable The Modification Application responds to the need for assessment and gaining approval as per the due process in Condition 1.5 of the Project Approval. A comprehensive EA, March 2014 was lodged with the application but much of the detail provided in it appears to be ignored by many of the objectors.
the developer has treated the approval process and the impacted communities with contempt beyond belief.	GRWFPL acknowledges that the consultation for the project could have been better managed and aims to improve its efforts in this regard. To that end, GRWFPL is reviewing and strengthening its consultation processes to ensure that consultation receives the attention that is required for a project of this nature.
The developer argues that the breaches do not constitute a worse position and that approval should be given, post event, to regularise the breaches.	No breach has been declared for this project. A modification application is currently being reviewed in accordance with provisions of the EP&A Act. The EA provides assessment of relevant matters to be considered in determination of the application.
the "make good" principle must apply. Under this scenario, at the very least, the developer should be required rectify the breaches, with penalties.	No breach has been declared for this project. If any of the modifications were rejected by the determining authority then the proponent would need to adjust the constructed form of the project to comply with the determination.
the Dept of Planning and Infrastructure should have been more proactive in supervising the development, particularly as some members of the local community brought the breaches to the attention of the Dept officers much earlier.	No comment, a matter for DPE to address.

5.37 First Grouped Response to Similar Submission Content

The following is in response to a number of submissions which followed a similar structure, and to prevent duplication in this report we have provided a single response for submissions with the same content. This group of submitters includes one person from Victoria, 3 from Laggan, one from Roslyn and another from Yalbraith. Submissions in this group were received from:

- Kathleen Kennedy of NSW, NSW (95910);
- Nicole Ceylon of Laggan, NSW (95868);
- John Zubrzycki of Laggan, NSW (95882) – NB Additional submission from John Zubrzycki (96084) dealt with separately, Section 5.38;
- Janet Hetherington of VIC, VIC (96910);
- Grant Winberg of ROSLYN, NSW (95864) – NB Additional submissions from Grant Winberg (96080 & 94804) dealt with separately below;
- Glenys Walkom of Bannister, NSW (96478);
- Elizabeth McFadden of Grabben Gullen, NSW (96109);
- Dennis Workman of Yalbraith, NSW (96646);
- Christopher Lee of Laggan, NSW (95908) – NB Additional submission from Christopher Lee (96076) dealt with separately above ;

- (Name withheld) of Crookwell, NSW (96642).

Submitter's Issue/Comment	Proponent's Response
Noise impacts	Response by Marshall Day in respect of noise impacts is provided in Appendix A3. Respective items from A3 are repeated below.
<ul style="list-style-type: none"> - Lack of vigour in noise assessment 	<p>The noise assessment satisfies the requirements of the Project Approval conditions. Specifically, a Revised Noise Assessment (RNA) was conducted for the Final Design Layout in September 2013. The RNA provided updated noise criteria and detailed noise predictions in accordance with the requirements of the Project Approval conditions. Supporting information for all aspects of the noise assessment was documented in the RNA. The RNA was included in the OEMP that has been approved by DPE.</p> <p>The noise predictions presented in the RNA demonstrated compliance with the noise criteria specified in accordance with Project Approval conditions for all assessed receivers and wind speed conditions. Importantly, compliance was demonstrated on the basis of predictions which give rise to the highest noise levels, comprising simultaneous operation of all wind turbines and each receiver location being simultaneously downwind of every turbine.</p> <p>The scope of the information provided in the Modification Application was to demonstrate how predicted noise levels associated with the Final Design Layout, assessed in accordance with the Project Approval conditions, differed from the Approved Layout. Reference must therefore be made to the RNA for the full details of the assessment of the Final Design Layout.</p>
<ul style="list-style-type: none"> - Many residences will suffer greater noise impacts 	<p>The information presented in the Modification Application outlined the difference in predicted noise levels for the Approved Layout and the Final Design Layout of the Gullen Range Wind Farm. These predictions indicated a maximum difference of 0.4dB, taking account of all receivers identified for the RNA assessment and simultaneous operation of all proposed wind turbines. A number of factors influence an individual's perception of sound, however for context, a change in noise level of 1dB is generally not subjectively discernible.</p>
<ul style="list-style-type: none"> - Cumulative noise impacts have not been addressed. Only noise from individual turbines has been modelled 	<p>Cumulative impacts is a term generally used to describe the net impact of more than one development in an area. In this respect, we have been advised that there are no other existing or proposed wind farms in the immediate vicinity of the Gullen Range Wind Farm which could give rise to cumulative wind farm noise impacts. Accordingly, cumulative noise impacts are not applicable to the development and have therefore not been documented in the RNA or the Modification Application.</p> <p>The statement concerning the modelling of individual turbines is incorrect. The difference in noise levels presented in the modification application is based on the total noise of all turbines operating at the same time. Please see the RNA for a full description of modelling methodologies.</p>
<ul style="list-style-type: none"> - Increased Van der Berg effect from increased turbine elevation has not been assessed 	<p>There is no specific definition for the Van den Berg effect cited in the extract comment, however the expression is generally used to refer to the effects of increased wind shear at a site.</p> <p>The LEC addressed the issue of the Van den Berg effect in its Judgement at paragraph 133. Based upon expert meteorological and acoustic evidence presented to the Court, the acoustic experts agreed</p>

Submitter's Issue/Comment	Proponent's Response
	<p><i>"that the Van den Berg modulation is unlikely to occur at any relevant location, or if it does, it would occur infrequently. We accept this uncontradicted expert evidence that the Van den Berg effect is unlikely to occur and it thus cannot be the basis for any modifications to the proposal."</i></p> <p>The findings of the LEC in relation to the Van den Berg effect do not change in any way as the consequence of the Modification Application.</p> <p>Considerations relating to the effects of site-specific wind shear conditions have been addressed in the RNA, and therefore implicitly within the Modification Application, by conducting the noise assessment on the basis of wind speeds referenced to the proposed hub-heights of the Goldwind turbines at reference mast locations within the Final Design Layout. The adoption of hub-height wind speeds was a requirement of the Project Approval which is specified on account of considerations relating to site-specific wind shear.</p> <p>An explanation of the effects of increased wind shear and the adoption of the hub-height in lieu of conventional 10m height wind speeds is provided below.</p> <p>The on-site wind shear conditions at a wind farm development site can be higher than those assumed in turbine sound power level testing data. This can occur as a result of increasing terrain complexity and ground coverage, or importantly as a result of wind shear conditions being dominated by atmospheric stability effects rather than ground roughness effects. Stable atmospheric conditions may occur for a range of reasons such as the relative cooling of the air near ground level at night.</p> <p>The effect of stable atmospheric conditions and increased wind shear can lead to situations where an assessment referenced to conventional 10m wind speed heights will underestimate the level of turbine noise expected at surrounding locations for a given wind speed.</p> <p>The influence of increased wind shear was particularly relevant for older types of turbine design which utilised stall based speed regulation systems which often produced persistent and significant increases in noise emission with increasing wind speeds. In contrast, modern pitch regulated machines tend to show an initial increase in noise emissions until reaching a typical maximum emission, above which noise levels do not generally increase with wind speed.</p> <p>Accordingly, the Project Approval conditions for the Gullen Range Wind Farm include a requirement for background noise levels data to be correlated to the wind speed at hub height rather than the historically used 10m reference height when determining noise criteria for the development. This requirement was addressed in the RNA which includes criteria referenced to the proposed hub- heights of the wind turbines. These hub-height reference criteria form the basis for assessing the compliance of the wind farm as part of the commissioning tests for the project.</p>
<p>- To impose increased constant noise nuisance is unjust</p>	<p>The RNA for the Final Design Layout was conducted on the basis of noise criteria defined in the Project Approval conditions for the Gullen Range Wind Farm. The noise criteria are defined on the basis of policies designed to protect the amenity of rural residential locations in the vicinity of wind farms whilst permitting the development of</p>

Submitter's Issue/Comment	Proponent's Response
	<p>renewable energy infrastructure.</p> <p>It is important to note that the predicted noise levels contained in the RNA represent the total noise associated with a receiver being downwind of all turbines simultaneously operating at the wind farm. In calm conditions, the wind turbines do not operate and will therefore not produce noise at the receiver locations. When wind speeds are low, or when the wind blows in other directions, the wind farm will produce noise levels significantly lower than predicted in the RNA.</p>
Visual impacts	
<ul style="list-style-type: none"> - Visual impact of many turbines increases at many non-host residences. 	<p>The changes in visual impacts as a result of the modification of turbine locations was assessed in the EA for the Modification Application. The ERM assessment did not indicate any significant change to visual impact as a result of the modification of turbine locations, including at non-associated residences</p>
Property devaluation	
<ul style="list-style-type: none"> - Greater noise/visual pollution will result in even greater devaluation of the effected properties 	<p>The specialist assessments for the modification application have not indicated greater visual or noise impact. The modifications are therefore unlikely to be associated with any change in valuation of the neighbouring properties.</p>
Loss of amenity	
<ul style="list-style-type: none"> - The increase in noise and visual pollution drastically reduces resident's enjoyment of outdoor activities 	<p>The specialist assessments for the modification application have not indicated greater visual or noise impact as a result of the changes to turbine locations.</p>
Loss of income	
<ul style="list-style-type: none"> - Increase in noise levels and shadow flicker effects mean some farmers will find it too dangerous to work in certain parts of their properties. 	<p>The statement is regarded as extreme view of the impacts. The assessments undertaken for the modification application and presented in the EA, March 2014 do not indicate any significant increase in noise or shadow flicker. The project has been assessed as compliant for both noise and shadow flicker.</p> <p>The properties on which wind turbines are located continue to be used for the pastoral purposes that were undertaken prior to development. If these activities can continue on land subject to the development then it is very unlikely that the submitter's statement in respect of neighbour's properties has any credibility.</p>
<ul style="list-style-type: none"> - For some farmers the ability to subdivide their property to again additional income is lost due to Council's restrictions in regard to proximity to wind turbines. 	<p>The potential for subdivision of rural land is a one off opportunity that a landowner may have to gain a return for part of their land but which also means a loss of the income earning potential over the longer term.</p> <p>Additionally, subdivision of rural land can reduce the pastoral utility of the land and reduce the net availability of productive rural land with a transition from pastoral activities to lifestyle residences.</p> <p>Other objectors have stated that the wind farm development reduces agricultural potential while it may be that subdivision has a greater impact on reduction of agricultural land.</p>
Mitigation	
<p>The Department of Planning should offer the property owner</p>	<p>Where the modification of the Project Approval does not significantly change the impacts on neighbouring residences then the submitter's</p>

Submitter's Issue/Comment	Proponent's Response
the right to decide if he/she wants to have their property bought by the developer OR	request does not seem justified. The request appears to seek to change the intent of the existing approval.
a. Have the most offensive turbines removed/relocated	The assessments have indicated that the impacts of the turbines at the final design locations are consistent with the approval and compliant.
b. Gain other forms of compensation from the developer – financial or significant turbine curtailment (especially at night)	The application of additional benefits for non-involved parties over and above those defined in a project approval would undermine the certainty of investment budgets and be counterproductive for attracting business to NSW.
Public inquiry	
Request a public inquiry into the processes involved in approving /monitoring this development	The project is subject to well defined processes under the EP&A Act. The State Government undertakes regular review of the EP&A Act and planning processes but it would be impractical to review the processes on a project by project basis

5.38 Second Grouped Response to Similar Submission Content

A second group of submitters have responded with submissions of similar content. In part these submissions include items raised in the First group of submissions (Section 5.6). To prevent duplication in this report, we have provided a single response for the five submitters. Three of the submitters in this group are from Sydney and are not immediate neighbours while two are indicated to come from Crookwell. Submissions relevant to this group include:

- (Name withheld) of Crookwell NSW Residence K14 (96580);
- (Name withheld) of Crookwell, NSW Residence K14 ; (95985)
- (Name withheld) of Randwick , NSW (96324);
- (Name withheld) of Randwick, NSW (96235);
- (Name withheld) of Erskineville, NSW (96747);

Submitter's Issue/Comment	Proponent's Response
Noise Impacts	See Section 5.37
Visual Impacts	See Section 5.37
Property Devaluation	See Section 5.37
Loss of Amenity	See Section 5.37
Loss of Income	See Section 5.37
Mitigation	See Section 5.37
Public Inquiry	See Section 5.37
Additional Comments	
- Disregard for NSW Govt's draft guidelines and ULSC requirements in regard to setback.	<p>The Modification Application does reference the NSW Government draft guidelines for wind farms. However, the setback is not relevant to this project.</p> <p>The ULSC minimum setback for turbines from non-involved residences is not applicable to the project.</p>

Submitter's Issue/Comment	Proponent's Response
<ul style="list-style-type: none"> - Application for retrospective approval for turbines should only be considered when matched with a retrospective application by the Gullen Range citizens to have turbines removed that have been erected within ULSC minimum setback 	<p>The comment appears to be a reflection on the NSW planning process, and is therefore not considered by GRWFPL relevant to the determination of this Modification Application.</p> <p>The submitters may not appreciate the significance of this statement if applied more broadly to other planning decisions across NSW. Applied more widely it could erode the confidence of developers and investors in the planning regime in NSW.</p>
<ul style="list-style-type: none"> - Developer has demonstrated gross incompetence during erection of those turbines and an astounding disregard for the authority of the Planning Department, behaviour which surely should not be rewarded. 	<p>GRWFPL has at all times sought to implement the project in compliance with all applicable legislation, approvals, licences and permits.</p> <p>In addition, GRWFPL has worked with DPE and agencies to ensure responsible implementation and compliance of a comprehensive range of Project Approval Conditions.</p>

5.39 Third Grouped Response to Similar Submission Content

A third group of submissions had similar content and requested independent survey of Gullen Range Wind Farm and the turbine locations. To prevent duplication in this report a single response is provided for this group of submissions.

The matters raised by these submitters have been dealt with by provision of the DPE arranged survey data on the DPE website (Section 2.3 and Appendix A2). The claim made by the submitters that the survey data provided by the developer is not accurate or credible has been shown to be inaccurate and the EA, March 2014 and its assessments used relevant data.

This group of five submitters includes two from Sydney and one from Laggan. Relevant submissions include:

- Christopher Lee of N/A, NSW (96076) – NB Additional submission from Christopher Lee (95908) are dealt with separately below;
- Georgina Chambers, of Sydney NSW (96107);
- Ian Breden, of N/A NSW (96098);
- John Zubrzycki of Laggan, NSW (96084) – NB Additional submission from John Zubrzycki (95882) dealt with separately Section 5.36;
- Josephine Key, of Edgecliff NSW (96096).

Submitter's Issue/Comment	Proponent's Response
<p>Before any modification application is put on public exhibition, the NSW Department of Planning and Infrastructure undertakes an independent survey of the distances of turbines from non-host residences and also the distance between turbines.</p>	<p>In addition to the survey undertaken by a registered surveyor engaged by the proponent, DPE arranged a separate survey. This has been at the government's expense.</p> <p>The results of the DPE arranged survey for turbines and selected residences has been made available for review by the public and proponent. It is on the DPE website</p> <p>DPE also requested the surveyor to review locations of residences surrounding the wind farm project. The residences are on private land and had not previously been surveyed. Locations had been determined by Epuron for the EA, 2008 and are indicated to have been based on review of air photographs. The accuracy of obtaining coordinates based on geo-referenced air photos can be limited by distortion that occurs for compilation of mapping from air photo imagery. As such the residence locations were not expected to be exact but to give reasonable estimates of the residence locations.</p> <p>The DPE assessment of residence locations has shown differences in a number of residence locations which is not unexpected. Details of the location differences are provided in Section 2.3 above. GRWFPL has used the updated locations to assess impacts and record the information in the Submissions report.</p> <p>Details of the residence locations and associated distances to the wind farm are provided in Appendix 2.</p>
<p>Further that this independent study includes a comparison of these distances to those provided in the projects original ES.</p>	<p>Comparison of the DPE surveyor's data for difference between approved location and constructed location and the figures reported by GRWFPL in Table 2.2 of the EA, March 2014 shows that the distance moved as reported by GRWFPL is consistent with the more recent independent assessment arranged by DPE.</p> <p>Details of the DPE survey results and comparison with turbine locations included in the SR are provided in Appendix 2.</p>
<p>In order to write submissions to this modification application I believe that this independently sourced information is essential. Local residents, affected by this development can no longer feel that information provided by the developer is accurate and credible.</p>	<p>A review of the two sets of data (GRWFPL and DPE arranged surveys) for the 'as built' turbines locations show very minor differences. Details of the minor difference are provided in Section 2.3.</p> <p>The proponent considers, therefore, that the turbine locations reported in the EA, March 2014 as accurate and credible. The DPE survey results do not significantly change any of the assessments provided with the EA, 2014 and do not provide a basis for objection to the project.</p>

6. Review of submissions where the land is now Associated

A number of objections related to properties that were previously not associated but for various reasons (refer Section 3) these properties have changed in status and are now associated. The submissions in relation to these properties are reviewed below.

6.1 Scott Montgomery of Grabben Gullen (96455)

The response relates to a neighbour to the wind farm that has two existing residences (B7 and B17) and two proposed (approved) residence sites (B121a and B122a). The neighbour has made a submission that has been lodged as comment but on review appears to contain objections. This submission was lodged at a time when the submitter was not associated with the project but was subject to negotiations undertaken in respect of Condition 2.25 of the Project Approval. The neighbour has subsequently reached an agreement with GRWFPL by which they are now an associated landowner in respect of their properties and residences and proposed residence sites. Nevertheless their submission is reviewed below.

Submitter's Issue/Comment	Proponent's Response
Whether the turbines are in the old or new locations GRWF will disturb many households with noise because it was a poorly planned project from the start. When all the turbines are operating the noise problem will become apparent and reductions in property value are inevitable.	While the submitter raises concern about the noise impact they do not indicate that the concern is due to the modifications and seem to regard both layouts as being of concern to them. When all turbines are operating the proponent will be required to demonstrate noise compliance by implementing the Noise Compliance Plan and the Noise Management Plan. GRWFPL does not agree that reductions in property value are inevitable.
If wind farms are considered to be critical infrastructure, it is therefore critical and only fair The Department release their guidelines to the benefit of all involved - the developer, the host land owner, the neighbouring land holders and the community in general. If there were guidelines, GRWF would not be the embarrassing mess that it is today.	DPE has advised that the project is not critical infrastructure and consequently the provisions relevant to critical infrastructure would not be applied.
If valuations are needed, please ensure one valuer is appointed to represent the Director General to maintain consistency and fairness throughout the acquisition process. There needs to be more accurate research on how disturbance is determined, this should become part of your guidelines. What we have experienced here with the GRWF is a great variation of the percentage of disturbance calculated.	The submitter's properties are now associated and it is assumed that the terms of agreement were favourable to the submitter. Lengthy reviews of wind farm impacts have been undertaken internationally, nationally and at state level. The planning guidelines draw on findings of the collective reviews but do warrant review and update from time to time. The NSW draft wind farm guidelines do not form a mandatory document for the GRWF project and were issued after the Project Approval was granted.
If acquisition is to be granted over a neighbouring property it should be the	The submitter's properties are now associated and it is assumed that the terms of agreement were favourable to the

Submitter's Issue/Comment	Proponent's Response
land owner's decision as to whether it is to be a portion of the property or all of the property. Each situation is different.	submitter.
In relation to our acquisition process our independent valuer considered our case to be Just Terms Compensation. The valuer acting for the Director General stated in his report that the GRWF is not for a public purpose and therefore is not Just Terms Compensation. This would appear to be a grey area, is it or is it not for a public purpose? One would assume based on the project being critical infrastructure it would therefore be for a public purpose.	The project is not critical infrastructure but is State Significant Development. The submitter has reached agreement with GRWFPL.
Still in relation to our acquisition we would like to draw your attention to page 31 of the Valuation Assessment & Report by Colin Davies & Associates on behalf of the NSW Planning and infrastructure. "The acquisition by the proponent provides an advantage to the land owner in that the properties are acquired at market without deduction. The land owner's intention was to subdivide the land and sell or retain the blocks created. The purchase by the proponent satisfies the objects of the land owner who might otherwise have to wait for a sale on the open market." This paragraph clearly highlights the arrogance and lack of understanding of our situation. To suggest this is an advantage to us is outrageous. The statement by the author is an assumption made on our behalf. Our objective was based on succession planning and did not involve selling to a developer which would in turn have a negative impact on the rest of our holdings/ business. This alone would seem to be cause enough to revisit the acquisition process in relation to us.	The submitter's properties are now associated and it is assumed that the terms of agreement were favourable to the submitter.
Noise - currently there are three turbines operating, 1x 2.5MW and 2 x 1.5 MW approximately 1 - 1.5 km ENE from our bedroom window, which under normal circumstances we choose to leave slightly open. Those 3 turbines are clearly audible from our residence depending on certain wind speeds and direction. This is a real concern to us once all 30 turbines are operating in our location and particularly in the dead of night when we are used to blissful silence. There are two households on this property, Kimbe Homestead and	Noise data from the existing residences B7 and B17 are provided below these proponent responses. The noise data shows that the predicted noise levels are very close to the criteria relevant to the residence locations. At the maximum predicted noise levels of about 36.8 dB, the criteria are about 4dB above the predicted noise levels. At wind speeds of 7metres/second the margin is only about 0.5dB. The observations made by the submitter are less relevant now the property and residences are associated but nevertheless warrant further discussion with the landowner to gain a full appreciation of the wind farm noise and neighbour's concerns.

Submitter's Issue/Comment	Proponent's Response
<p>Kimbe Cottage. At Kimbe Homestead there is a self contained unit which is used as a B&B. Currently there is a young man renting the unit. Last week when paying his rent he commented that the 3 turbines woke him during the night, he got up and went on the verandah to see what the noise was, he quickly realised it was the turbines. He is considering moving to Crookwell.</p>	
<p>We would like to again bring to the Departments attention In the Consistency Review dated December 2013, Appendix F Revised Noise Assessment, Marshall day Acoustics, 2.3 Receiver Locations paragraph 2, with the exception of receivers B121a and B122a and paragraph 3, the reference to "the subdivision for these locations is incomplete" is incorrect as we have building entitlements for both these lots and we provided GRWF with a DA Consent Notice and Plan on three occasions, the third in a letter dated 8th October 2012 in which the department was cc in. We now feel that in view of the current situation, the proponent should be asked to re visit the noise monitoring in relation to B121a and B122a before the turbines begin operating, and in order to comply with the original Project Approval, along with SRS oC 139 Impact on Future Rural Subdivisions, page 65 (c-xxxii) Changes to Turbine Layout in the Consistency Review, December 2013.</p>	<p>The consistency review does not represent the key reference for the Modification Application. The EA March 2014 provides the relevant assessments for the modification application.</p> <p>At the time of preparing the EA, March 2014, GRWFPL had made an offer to the submitter in accordance with Section 2.25 of the Project Approval.</p>
<p>When our neighbours made a decision for their families future and signed on to the GRWF project they also made a financial decision for our families' future. With the impact of a possible 60% devaluation of land (we refer to the Preliminary Report - Impact of wind turbine developments on surrounding rural land value in the Southern Tablelands NSW by Peter Reardon dated September 2013, who incidentally visited our property on two occasions as the valuer for Goldwind) and noise pollution near a wind farm would seem a gross imbalance for the neighbouring non host farmers. We feel that the Department should recognise this and should consider a fairer system in relation to their guidelines.</p>	<p>GRWFPL does not accept that the statement of 60% devaluation is at all accurate and regards it as unsubstantiated. It is inconsistent with other assessments undertaken following wind farm developments.</p> <p>GRWFPL has acquired a number of properties at the locality and has received expressions of interest for both acquisition and lease of the acquired properties.</p>

Submitter's Issue/Comment	Proponent's Response
Wind farm developments should only be approved on large holdings, 2000 ha plus, this would limit the amount of non-host neighbouring farms the project affects. We are all looking to the Department for direction and clear cut guidelines on wind farms. As affected neighbouring landholders of the GRWF we feel the points we have made are valid - and we hope the Department is listening.	The designation of minimum size property and specific distance for setbacks from residences are both physical measures that do not necessarily reflect the impacts associated with wind farm projects. The conservatism introduced can restrict the available resource for future wind farm developments and limit future generation's ability to access the sustainable energy generation option that wind energy offers. It is expected that over time, the requirement for larger proportions of renewable energy generation and emissions savings will only increase and while planners need to balance the project requirements against social and environmental impacts it may not be wise to unnecessarily limit options.

The following tables are provided in respect of existing residences B7 and B17.

Residence B7 Data from Marshall Day Noise Assessment (March 2014)

Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout										
(m/s)	3	4	5	6	7	8	9	10	11	12
Predicted Noise Final Design Layout	33.0	33.0	33.1	33.9	35.0	35.6	36.1	36.6	36.8	36.6
Noise limit Criteria (Condition 2.15)	35.0	35.0	35.0	35.0	35.6	36.8	38.2	39.7	41.2	42.8
Amount Below Criteria	2.0	2.0	1.9	1.1	0.5	1.3	2.1	3.1	4.4	6.2

Residence B17 Data from Marshall Day Noise Assessment (March 2014)

Noise Criteria & Predicted Noise (dB) - Goldwind Turbines and Final Design Layout										
(m/s)	3	4	5	6	7	8	9	10	11	12
Predicted Noise Final Design Layout	33.0	33.0	33.1	33.9	35.0	35.6	36	36.5	36.7	36.5
Noise limit Criteria (Condition 2.15)	35.0	35.0	35.0	35.0	35.6	36.8	38.2	39.7	41.2	42.8
Amount Below Criteria	2.0	2.0	1.9	1.1	0.5	1.3	2.2	3.2	4.5	6.3


6.2 Rob and Melissa Post, Bannister, Residence B20 (96905)

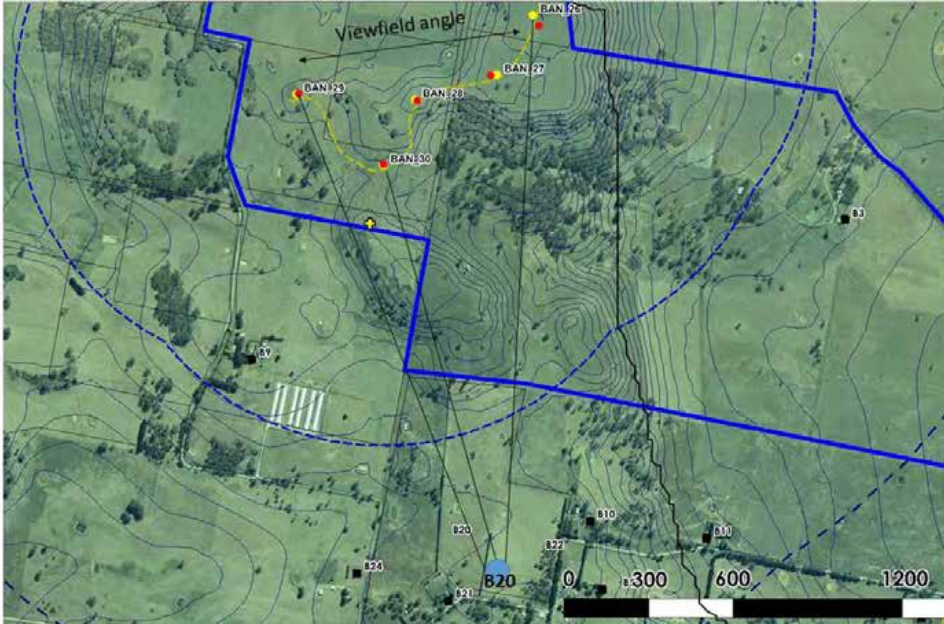
The following is in response to two submissions lodged on the DPE website. The submissions are identical and are from the following (DPE website reference number in brackets):

- Rob Post of Bannister, NSW (95714)
- Rob and Melissa Post of NSW, NSW (96905)

GRWFPL note that the submitters are associated landowners and have an agreement with GRWFPL. In addition to the agreement, and following a request from the submitter, GRWFPL has arranged for the submitters to have temporary access to farm land to graze horses free of charge.

Submitter's Issue/Comment	Proponent's Response
Content of Assessment	
<ul style="list-style-type: none"> - Applicant has not included residence for consideration, being omitted from tables and comments 	<p>As an associated residence, B20 has not been subject to the same level of assessment as if it was a non-associated residence. Nevertheless the residence has been considered in the preparation of the Modification Application. For instance the Residence is included in the EA, March 2014, Table 6.6 that shows the results of the Shadow Flicker assessment which indicates the effect is not applicable for the residence.</p> <p>The EA, 2014 emphasised assessment of social impacts for non-associated residences within 2km of the closest turbine. Residence B20 is not in this category. The submitter has, entered into a confidential agreement with GRWFL.</p>
The Application	
<ul style="list-style-type: none"> - Relocation of turbines is not 'minor adjustment' 	<p>The movements in turbine location in relation to the overall 25km project length are minor variations and the selected turbines are marginally smaller than the maximum dimensions allowed. Both the noise and visual assessments have shown that the changes in impacts as a result of the modification of turbine locations is insignificant. Adjustments of turbine locations has involved changes from zero to 187m for the maximum relocation. The average adjustment of location for the 73 turbines is 42m. The adjustments of turbine locations are practical moves to optimise the wind farm operation while at the same time managing environmental or social impacts to ensure compliance. The acceptability of the impacts arising from the turbine location adjustments is the focus of the modification application and a key consideration for the determination of the application.</p>
<ul style="list-style-type: none"> - Provision for movement of turbines in approval was removed. 	<p>The approval documents anticipated adjustments for turbine locations DPE has acknowledged that minor relocations are allowed under the provisions of the EP&A Act. The condition 1.5 only removes the ability to relocate turbines without further assessment and approval in accordance with the requirements of the EP&A Act. Relocation of turbines can be approved in accordance with the process in Section 75W of the EP&A Act. As requested by the DPE, GRWFPL has submitted a Modification Application and the EA, March 2014 provides the assessment of the changes. This process is allowed for under the provisions of the EP&A Act.</p>
<ul style="list-style-type: none"> - A new development application should be considered, subject to 	<p>The application is for a modification of an existing approved project and does not constitute a new development or a change that is of sufficient magnitude to trigger a separate review and decision process. Commencement of a separate process to address</p>

Submitter's Issue/Comment	Proponent's Response
2km set back condition	adjustments such as involved with the turbine locations would not be in the interests of NSW planning processes and would lead to considerable additional time and inefficiencies required to progress not only major projects but also other developments.
Visual Amenity	
<ul style="list-style-type: none"> - Photomontages were not provided on request by GRWFPL or DDPE. 	The landowner is associated with the project. The project impact is now visible as most turbines, except BAN 25, have been fully constructed. BAN26 has moved marginally further from B20.
<ul style="list-style-type: none"> - Twice number of turbines visible to north than indicated verbally by applicant. 	GRWFPL is not aware of detail of the discussion referred to by the submitter. A photograph from Bannister Lane looking to the ridge beyond the B20 residence is provided below. Turbine numbers have been annotated on the image. BAN 29, while not visible from the road is likely to be visible from the residence. The view to the Pomeroy Group of turbines from B20 is likely to be more screened by vegetation Residence B20 is in the foreground.
	
The photo shows the view to residence B20 and the turbines on the hill north of B20. The map below shows the locations of the residence B20 and the closest turbines.	

Submitter's Issue/Comment	Proponent's Response
 <p>This image shows the wind farm viewfield angle (about 30degrees) from the B20 residence and turbines within 2km. The turbines are generally at the approved locations. BAN 26 has moved further away from B20.</p>	
<ul style="list-style-type: none"> - Issues relating to effective screening to north of home and lack of solution from GRWF. Also emphasises the need for use of mature trees for screening so that screening is immediate and effective 	<p>GRWFPL is undertaking landscaping requirements as set out in the Project Approval, conditions 2.1-2.3. Written notifications have been distributed to relevant properties, with inspections underway. Given the number of properties it is a substantial task and until property B20 is inspected and assessed, it is not possible to provide a site specific response as to options for wind farm screening for the residence.</p> <p>GRWFPL appreciates that at some properties landscaping options may be challenging, However, where landowners wish to have screening provided, then all reasonable steps will be undertaken, with the assistance of relevant landscaping professionals, to facilitate landscape treatment to reduce visual impact of the project. Inspections have commenced.</p>
<ul style="list-style-type: none"> - Increased impact on home due to turbines moved closer and higher. 	<p>B20 is an associated residence. Five turbines are sited within 2km of property B20, with the relocation distances ranging from 1.0m to a maximum of 48.6m. As indicated in the image above, the locations of the turbines within 2km of the residence are generally consistent with the approval, BAN 26 has moved further away from B20. Elevation changes range from 1.2m to a maximum of 4.5m. GRWFPL considers such changes in turbine level to be minor, with negligible visual impact and this conclusion is consistent with reviews by ERM GRWFPL does not agree the most prominent turbines, those within 2km of B20, have been relocated closer to property B20 and the changes in elevation of the turbines are not considered significant.</p>
<ul style="list-style-type: none"> - Turbine to south has moved considerable, and is afforded some existing screening. 	<p>Turbine POM_01 is the closest to property B20, at a distance of approximately 2.9km. It has been moved 115.2m in a NE direction and not directly toward B20. The direction of movement results in no significant change in distance to B20, therefore GRWFPL does not agree the turbine has moved 'considerably' in relation to property B20. There appears to be existing screening on southern side of B20.</p>

Submitter's Issue/Comment	Proponent's Response
	Existing screening will be inspected as part of the landscaping requirements and reasonable and feasible options for improved screening will be discussed with the landowner.
<ul style="list-style-type: none"> - Relocation of turbines closer to home reduces visual enjoyment of property. 	As above, the five closest turbines that are within 2km of B20 have not been relocated significantly closer to residence B20 and turbine locations are generally in accordance with the approval. BAN 26 has moved marginally further away. As such the visual impact for residence B20 is considered unlikely to have been significantly increased by the minor relocations of the five turbines within 2km of B20. The property is also associated
Noise	
<ul style="list-style-type: none"> - Noise tests applied to home and relied upon by applicant are not accurate. 	<p>The noise assessment satisfies the requirements of the Approval Conditions. The revised noise assessment addressed the amended locations of the turbines and has demonstrated compliance. The Revised Noise Assessment was submitted to DPE with the OEMP and has been approved as part of the OEMP. It is not clear what aspect of the noise assessment is considered inaccurate as details have not been provided. Predicted noise levels at Residence B20 demonstrate compliance.</p> <p>Compliance testing will be undertaken as per the Noise Compliance Plan once the wind farm is fully operational and, if necessary, including at Residence B20. The Noise Compliance Plan involves testing at 17 locations around the wind farm where background noise measurements were previously taken and so are the locations by which noise from the wind farm can be evaluated against the background levels. These 17 locations are distributed around the wind farm and will be used to verify the modelling and represent compliance for all nearby receivers. All residences are considered and were evaluated by the modelling performed by Marshall Day, so if the measurements verify the modelled compliance levels, then it is considered that the modelled compliance levels have been met at all receiver locations. If non-compliance is observed during the testing, then this must be rectified and further testing performed to demonstrate compliance. This is the normal practice for operational noise compliance of wind farms. The closest residence to B20 that is designated for undergoing operational noise monitoring is B11, which is 740m East of the Post's house. If compliance is verified around the wind farm via the Noise Compliance Plan, but the B20 landowners believe that the noise levels are still not compliant at their residence, GRWFPL would need to investigate this and may then perform noise monitoring at the residence. B20 is an associated residence and Marshall Day modelling this residence is compliant and therefore a noise agreement was not deemed necessary.</p>
-	
<ul style="list-style-type: none"> - Request Director General conducts independent noise tests and monitoring relevant to home prior to relocation of turbines. 	<p>The noise assessment satisfies the requirements of the Approval Conditions. The revised noise assessment addressed the amended locations of the turbines and has demonstrated compliance.</p> <p>Noise compliance monitoring is conducted by an independent acoustic consultant that must conduct testing and reporting according to the relevant standards, guidelines and the approval conditions.</p>
Consultation	
<ul style="list-style-type: none"> - No direct, verbal 	The relocation of turbines was not reviewed with the submitter for the

Submitter's Issue/Comment	Proponent's Response
consultation in relation to relocation of turbines, except visit from Chris Houghton.	<p>following reasons:</p> <ul style="list-style-type: none"> • The modification of the locations of the 5 turbines within two kilometres of the B20 residence are considered minor. • One of the 5 turbines BAN 26 has moved 46.6m, but that movement is further away from B20 • The next largest movement is 20.6 metres for BAN 27 but that was in an easterly direction and not toward B20. • The closest turbine, BAN 30 only moved 1metre. • Two turbines BAN 28 and 29 moved to the west and NW and not closer to B20. • B20 is an associated residence
- Aware DPI has visited other properties, invite DPI to visit properties within 1.5km of a turbine.	No comment, a matter for DPE to address.

6.3 John and Ingrid Benjamin, Residence PW34 (97031)

The submission was made prior to the property and residence being sold. The new owner has entered into agreement with GRWFPL such that the property is no longer non-associated. As an Associated property, the following matters raised by the submitter are now of less relevance to the determination of the Modification Application. Nevertheless the proponent has provided responses to the submission as indicated below.

Submitter's Issue/Comment	Proponent's Response
Of the 73 turbines in the Gullen Range Development a staggering 69 have been built in a location different to that approved by the Land and Environment Court. In percentage terms 95% of the turbines have been incorrectly sited.	<p>The approval documents anticipated adjustments for turbine locations. DPE has also acknowledged that minor relocations are allowed under the provisions of the EP&A Act.</p> <p>The EA, March 2014 explained the process followed for siting turbines and adjustments undertaken.</p> <p>The Modification Application seeks approval of the locations and the outcome of the Application will identify if any are unsuitably located.</p>
The reasons given by Gullen Range Wind Farm Pty Ltd (GRWF) are either irrelevant or wrong. The Land and Environment Court accessed this application on the detailed information it was provided. Shadow Flicker, Projected Noise Disturbances, Environmental Impact on Flora and Fauna and the Visual Impact on Landscape were all assessed on the information provided. The Court did not approve the Gullen Range Wind Farm as it now stands.	<p>The reasons given by GRWFPL are relevant to this Modification Application.</p> <p>The Project Approval condition 1.5 referred to by the submitter allows for assessment and approval. The EA, March 2014 contains details of the assessments undertaken and the determination of the Modification Application will either approve or reject the various adjustments to turbine locations.</p> <p>Additional assessments were provided in EA, March 2014.</p>
Gullen Range Wind Farm Pty Ltd maintains it has done no wrong, as all is made good by having the P & I approved Erwin Budd wave his wand and magically the micrositing of 69 turbines is acceptable with no impact on the	The Environmental Representative is regarded as a representative of NSW Department of Planning and Environment. The ER had assessed the turbine locations as consistent and advised the GRWF to proceed with the adjusted turbine locations. The ER was given access to reviews the proponent's reasons for changes and

Submitter's Issue/Comment	Proponent's Response
surrounding neighbours.	anticipated changes to impacts. The ER assessed the changes in turbine locations as consistent with the project approval. The ER, March 2014 provides assessments by independent specialists that indicate that the impacts of the modifications are not significant.
The Land and Environment Court stipulated that the Environmental Representative was to be INDEPENDENT. Erwin Budd is a director of ngh Environmental, the very company responsible for the initial environmental report. Erwin Budd is NOT INDEPENDENT. Erwin Budd should never have been appointed.	<p>The appointment of the ER was approved by NSW Department of Planning and Environment. As a result of community concerns about the independence of the approved ER, a replacement ER has now been approved by DPE.</p> <p>From GRWFPL perspective it would have been preferable to have resolved the matter of turbine locations at an earlier stage and the advice it received at the earlier stage has not advantaged GRWFPL, to the contrary it has resulted in project delays, commercial risk and additional costs and management issues.</p>
<p>Consistency Review Dec 2013. ER statement When referring to POM1 he states the reason for change as follows:</p> <p>Moved to be further away from nearest receivers (PW7 and PW36- wake loss) Relocated to increase distances from nearest houses (PW 36 and PW 7) to minimise noise and visual impacts.</p> <p>This is wrong. POM1 has been moved 115 metres closer to our house, PW 34, which is not even mentioned. It is also wrong to say it has been moved further away from PW 36 it is closer to PW 36.</p>	<p>The consistency review in respect of POM 01 did not accurately reflect the reasons for change to POM_01 location and the information on adjustment of POM_01 was updated in the EA, March 2014, as follows:</p> <p><i>"POM_01 was relocated to the north-east to increase distances to non-associated residences to the west. However, it did move closer to a non-associated residence PW34. POM_01 was also relocated to the north east in consideration of reduced wake effect for POM 02 that is to the SE of POM01. The noise impact for PW34 is assessed as compliant and visual impact for PW34 is expected to be substantially mitigated by thick vegetation screening at the PW34 residence location."</i></p> <p>The residence PW34 and the property have now been sold and the new landowner is associated. PW34 is an associated residence.</p>
<p>The Gullen Range Wind Farm Pty Ltd current newsletter, "Community Update 3" states:</p> <p>Turbine locations referred to by the approval documents prepared in 2008 and 2009 were always intended as 'indicative' locations only...</p> <p>This is clearly in contradiction to Project Approval Condition 1.5.</p> <p>After hundreds and hundreds of pages of reports and expert advice are we really supposed to believe that it is okay for the GRWF to make such drastic changes and then have a director of a contractually related company approve such changes?</p>	<p>The submitter is correct that not all of the adjustments to turbine locations have been deemed acceptable to DPE without assessment and approval. As a result GRWFPL has been required to submit the Modification Application incorporating relevant assessments to enable an authorised determining authority to determine the approval status.</p> <p>The EA, March 2014 provides the assessments for the modification application. The determination of the application will either give approval for the modifications or reject the application. GRWFPL believes that the assessments confirm that impacts are consistent with the Project Approval.</p>
Our house is in the unenviable position of being so badly affected by this	GRWFPL acknowledges that Residence PW34 is close (<1km) from the closest turbine. Views to the wind farm are

Submitter's Issue/Comment	Proponent's Response
<p>development that when people want to show others the negative impact of wind turbines on rural properties they bring them to our farm.</p> <p>A list of the closest turbines is below. The distances were provided by the GRWF. We have requested independent verification and although this has been organised by the NSW Planning Department we have not been notified of the exact distances.</p> <p>POM 1 – 847m POM 2 – 943m POM 3 – 1,224m POM 4 – 1,024m POM 5 – 855m POM 6 – 1,610m POM 7 – 1,864m</p> <p>The above turbines are by no means the limit of the visual impact but dominate and overpower our immediate landscape. No amount of landscaping can remedy our situation.</p>	<p>partly screened from the residence by vegetation surrounding the residence, particularly in relation to POM 01.</p> <p>A noise assessment has shown that the predicted noise level complies with applicable criteria for the residence location.</p> <p>Independent verification of the turbine locations has shown that the proponent's details of the locations are accurate. The review of residence locations has shown a slight variation in the residence location with the residence being 9m closer to the POM 01 turbine than was indicated in the EA March 2014.</p> <p>Further comment is not provided as the property has been sold and is now associated with the project.</p>
<p>In early 2012 the Project Manager of the GRWF, Benjamin Bateman, visited our farm and spoke to me about obtaining a Noise Easement over our property. An exact amount was not mentioned but he told me there would be an annual payment of thousands of dollars if I were prepared to sign such an agreement. I told Mr Bateman that I was not interested in such a proposal.</p> <p>On the 13 March 2012, Mr Bateman wrote to me requesting the possibility of a negotiated noise easement. He expressed his desire to use a 48m blade instead of a 43m blade. Again, I refused. All the turbines near us have 48m blades. It appears that when GRWF do not get what they want they do as they please. The approval for this development allowed the proponent to choose where it placed different size turbines.</p>	<p>GRWFPL implemented the GW100-2.5 turbine for the bulk of the sites, 56 out of 73. It was the preferred turbine for the site. The turbine has only been selected provided that noise compliance could be achieved.</p> <p>The Marshall Day assessment showed that the predicted noise levels at the Residence PW34 are compliant and that there has been no significant increase in predicted noise levels as a result of the adjustments to turbine locations.</p> <p>As a non-associated property, compliance monitoring would have been required but as it is now associated, there is a lesser requirement for this to be undertaken for PW34.</p> <p>The approval sets limits on the maximum size of the turbines to be installed and in relation to the impacts of the project</p>

Submitter's Issue/Comment	Proponent's Response
Even though the GRWF is not completely operational the noise is repeatedly intolerable. There have been numerous occasions when the noise disturbance is so great my family and I have been unable to sleep. Once all turbines are operational we cannot envisage how we will live with the noise intrusion. The developer will insist that noise is not an issue but if this is the case then why offer people payment for noise agreements.	The submitter reports the noise as 'intolerable' and indicates instances of sleep disturbance. Such claims would warrant further review by the proponent but the property has been sold and the property and residence are now associated.
The submitter also advises that they have engaged a noise consultant (S. Cooper) to do noise testing.	The results of the submitter's noise assessment were not provided with the submission and GRWFPL is unable to comment on the assessment by S. Cooper. GRWFPL had offered noise monitoring but was refused access. GRWFPL was also refused access to gain images for preparation of photomontages.
The submitter has suggested that DPE require the proponent to acquire the property.	The property has been sold and this aspect is no compulsory acquisition is no longer relevant.
The submitter criticises information relied on by the Courts and Government for determination of the Project Application.	The Project Application was subject to lengthy review by DPE, the Minister and finally the LEC. The individual aspects of the assessments were scrutinised and public submissions considered as part of the processes followed. The determination involved substantial consideration of the relevant matters and use of relevant assessment procedures.
<p>Other Matters</p> <p>A range of other matters have been raised by the submitter</p>	<p>These matters are largely unrelated to the Modification Application.</p> <p>As the residence is being sold, and will be associated, no further comment is made on these aspects.</p>
<p>Public Inquiry</p> <p>The role of the NSW Planning Department in overseeing this process, and its inability to ensure basic compliance with conditions of approval call for a public inquiry.</p>	The Modification Application is a significant planning review that includes input by the public and review. The determination of the modification application is likely to be undertaken by the Planning Assessment Commission.

7. Review of submissions by Landscape Guardians

Submissions were also received from representatives of the following Landscape Guardians Groups:

- Crookwell District Landscape Guardians
- Parkesbourne/Mummel Landscape Guardians Inc.
- Boorowa District Landscape Guardians

These submissions provide considerable material that objects to, wind farm developments generally, the Gullen Range Wind Farm and some aspects specifically directed to the modification application. The extent of the material goes beyond the scope of the Modification Application

7.1 Crookwell District Landscape Guardians (97091)

A submission was received from Humphrey Price-Jones on behalf of the Crookwell District Landscape Guardians Inc. A review of the submission is provided below. A separate review of a submission by Humphrey Price Jones is provided in respect of his property in a previous section.

Submitter's Issue/Comment	Proponent's Response
Gullen Range Wind Farm is the most inappropriately sited industrial wind turbine development yet approved in NSW. There are between 60 and 70 non related residences within 2kms of turbines, a significant number of residences have multiple turbines within 2kms. There are 118 non related residences within 3kms. This number may be greater because the original plans of the development are open to question.	The GRWF project spans about 25 km along elevated ridges of the Great Dividing Range. Table 3.1 of this SR identifies 44 non-associated residences within 2km of the closest wind turbine and all beyond 1km from the closest turbine.
The original EA for the Gullen Range development was a fundamentally flawed document.	The EA, 2008 was subject to scrutiny by DPE and the LEC. The LEC Condition 1.1 of Project Approval has referred to the 'approval documents' and this includes the EA, 2008.
This EA contained an enormous amount of information, much of which was unsound, misleading, vague and demonstrably incorrect. The methodology used to arrive at "conclusions" was sometimes not explained and sections of this document were largely irrelevant.	If referring to the EA, 2008, that was subject to considerable review as part of the determination of the project which occurred over 2008, 2009 and part of 2010. In relation to the EA, March 2014. The EA provided a range of relevant information to the consideration of the modification application. In terms of the detail of the modifications relevant to neighbouring residences, Appendix 11 provides detailed information that assists the community and DPE to assess their circumstances in respect of turbine location adjustments. More information was supplied in the EA 2014 than directly applicable to the modification application but this was done to provide a more comprehensive record of the project and its management.
This EA was apparently assessed by DoPI officers who knew little about such developments or their ramifications but were overwhelmingly enthusiastic supporters of such.	It is assumed that this statement applies to the EA, 2008. The DPE has officers that are familiar with wind farm projects and that have been involved with review of many NSW sites and who have access to assessments for wind farms in other states and international literature.

Submitter's Issue/Comment	Proponent's Response
	The DPE assessment of the EA, 2014 occurs after the public exhibition and in conjunction with review of submissions. The Determination is likely to be undertaken separately by PAC.
Martin Poole, Epuron's Director publicly stated that Epuron would buy anyone's property who did not want to live near turbines. I was informed by Neville Osborne that Mr Poole then asked him how he (Poole) could renege on this offer. Mr Osborne apparently advised him and the offer was withdrawn in the local press.	The approval condition 2.25 includes provision whereby the proponent delete specific turbines or make an offer to acquire specific properties.
I submit that DoPI officers involved in the approval of this development be prevented from involvement in the assessment of this retrospective Modification Application. If these officers had shown due diligence in assessing the Development Application, it would not have been approved - evidenced by the fact that the NSW Land and Environment Court recognised that the adverse effects on some residences would be so great that these properties would need to be acquired by the proponent or have offending turbines removed.	The DPE planning officers include members that are well experienced in planning issues for wind farms. It is probably better to have experienced planners involved than to replace them with others that may have less experience of the project, potential impacts and their management.
Predictions myself and others made in submissions opposing this development have now come to fruition.	The statement lack details of the predictions made.
A small number of property owners, some of whom don't live on their properties, have caused their neighbours and people in this district to suffer the detrimental effects of property devaluation, their landscape destroyed, their rural amenity destroyed and this development will in time pose serious health problems for some living in the vicinity of this development.	<p>This is a divisive statement implying that the host landowners are to blame for detrimental effects on property values of neighbouring properties, destruction of landscape, amenity destroyed and future health problems.</p> <p>The statement assumes outcomes that are not indicated by assessments of the modifications and employs language that implies extremely adverse effects. The LEC gave consideration to all these matters and has given approval for the project.</p>
Because of the population distribution in the vicinity of this development, it is almost impossible to relocate any turbine without moving it closer to a non-related residence.	That statement has an element of truth but many of the turbine movements were away from the closer residences but toward more distant residences. Most importantly, the impacts of the respective adjustments to turbine locations have not significantly increased impacts for the project.
Therefore, this relocation of 94.5% of turbines will impact on the local population. The Modification Application does not address this issue – movement of turbines other than those closest to a residence are not indicated.	The submitter is clearly not prepared to accept the fact that the assessments demonstrate that there has not been a significant increase in impact. The EA, March 2014 explained the reasons for deciding whether to assess non-associated residences beyond 2km. Assessments would only extend beyond 2km where those at closer distance indicated that it was warranted.

Submitter's Issue/Comment	Proponent's Response
<p>This modification application does not take into account the cumulative impacts of turbine relocations in regard to additional noise, additional visual pollution, additional environmental impacts, greater loss of rural amenity. This is indicative of the lack of rigour which has plagued this development process.</p>	<p>The submitter has misunderstood the assessment processes. For instance, noise modelling considers the contributions of all turbines to derive predicted noise levels for residences. This is fundamental to noise assessments for wind farms.</p> <p>The comment on lack of rigour is poorly founded.</p>
<p>The DoPI should demand that the developer provide this information BEFORE any DoPI recommendations are determined.</p>	<p>The relevant information has been provided</p>
<p>Due to my experience with the DoPI over more than a decade I have no faith in its ability to make recommendations concerning this modification application. The fact that this development was approved initially and that there was no enforcement of compliance and still no enforcement of compliance is evidence of this.</p>	<p>The DPE has not been solely responsible for the initial approval. That was made by the LEC that utilises well qualified and experienced judges to hear the proceedings.</p>
<p>No recommendation of this application should be made before an inquiry is held into this entire process which has resulted in what can only be described as a planning disaster of monumental proportions – one which was foreshadowed in submissions lodged before consent was granted.</p>	<p>The application relates only to modification of an approved project. The application is enabled by provisions of Section 75W of the EP&A Act and is subject to DPE review and determination by the Minister or the Planning Assessment Commission.</p>
<p>The community deserves to know: 1. Why this developer is allowed to earn money from illegally sited turbines? 2. Who has signed off on the turbines now in operation?</p>	<p>GRWFPL has implemented the project in accordance with the conditions of the Project Approval and generally in accordance with the project approval documents. The wind farm has not formally commenced operations and is still in the advanced stages of construction and turbine commissioning that is normal for a project of this type. The turbine commissioning and testing cannot be completed without operating the turbines.</p>

7.2 Parkesbourne/Mummel Landscape Guardians (97830)

The Parkesbourne/Mummel Landscape Guardians (PMLG) submission was lodged by David Brooks a neighbour to the Gullen Range Wind Farm and also the Chairman of the PMLG. The submission is dated 14 May 2014 and was submitted well after the close of the public exhibition period.

His submission indicates that he resides at Residence G43, a distance of 1,656 metres from the nearest turbine. David Brooks states that he expects that he and his neighbours will suffer:

- Adverse noise impacts
- In some cases adverse health effects

- Probably stress-related symptoms and sleep disturbance

Much of the submission is directed to setting out the need for a public inquiry by reviewing a range of matters not directly relevant to the modification application. The submission states that there should be no modification application but appears to want resolution of the issue of the final turbine locations. The submission is critical of:

- The proponent
- The Department of Planning including the Director-General
- The Environmental Representative
- The NSW assessment regime for wind energy projects
- South Australian Noise Guidelines (2003)
- NSW draft Wind Farm Planning Guidelines (2011)
- Noise limits for the project
- The processes followed for the reaching the Project Approval (this would appear to include the substantial review process by the Land and Environment Court).
- The Department of Health and provision of incorrect advice
- National Health and Medical Research Council (NHMRC)
- Public health authorities
- Government agencies including 'pro-wind' government departments

The PMLG submission proposes drawing in previous politicians and officials to an inquiry including:

- The former Director General, Planning, Sam Haddad
- Former Minister for Planning, Kristina Keneally
- Former Minister for Planning, Brad Hazzard

The approach outlined by the submission is to seek an alternate process to the Modification Application which would take in a much wider scope of issues potentially beyond GRWF and addressing the whole wind energy industry, draw in previous decision makers in the NSW planning process, review the whole planning process for GRWF from 2008 to the present and revisit many of the specific issues and criteria that have been developed for determining wind energy projects. The submission goes well beyond addressing the matters relevant to adjustments of the turbine locations and in large part is not relevant to the Modification Application.

The objective of the PMLG submission appears to be:

- Moratorium on all wind farm development in NSW
- Prohibit existing wind farms from operating
- Inquiry into the entire history of the Gullen Range Wind Farm project.

The submission also attaches:

- A previous PMLG submission in respect of the NSW Wind Farm Guidelines (March 2012)
- Submission by PMLG in respect of the EA, Epuron 2008, (Sept 2008)

While providing a significant response that has presumably required significant effort to prepare, there is little reference to the Modification Application and the March 2014, EA. As such the submission appears to have limited relevance to the matters to be considered in determination of the Application. Matters included in the PMLG submission that are regarded as having relevance and warranting comment by the proponent in the context of the Modification Application are discussed below.

In amongst a lengthy deliberation seeking a public inquiry, the PMLG submission includes a short section noting observations on noise at specific residences in relation to initial operation of the wind farm. These are matters that need to be considered in respect of the noise compliance for the wind farm and where a process has been clearly defined in the project approval and the approved OEMP to undertake compliance monitoring. Seven residence locations mentioned in the PMLG submission are referred to by the Residence Codes; K2, K14, B7, B12, B17, B29 and PW34. It is noted that PW34 has been sold and is now associated. Also residences B7 and B17 are now associated. Details of the information provided in the PMLG submission together with the residence location details are provided below:

Table 7-1– Extracted observations from PMLG submission and proponent data

Residence	Distance from nearest turbine	Turbines within 2km	Noise audible based on PMLG submission		PMLG indication of noise impact based on indicated discussion with landowner
			Outside	Inside	
K2	1,001m	2	K2 submission is not clear on impact inside and outside		Refers to K2 submission. Impact indicated as day and night and when trying to sleep.
K14	1,575m	2	Yes	Yes	Very disturbing, sleep disturbed
B12	1,609m	5	Yes	No	Very disturbing
B29	1,147m	9	Yes	No	Audible
Residences referred to by PMLG that are now associated					
B7 *	1,404m	10	Yes	Yes	Sleep disturbance
B17 *	1,486m	9	Yes	Yes	Very disturbing, sleep disturbed
PW34 *	865m	7	Yes	Yes	Very, sleep disturbed

Note: * Residence is now associated.

In relation to the statements regarding noise impacts at residences contained in the PMLG submission and the extracted information that we have compiled in the table above, GRWFPL also notes that:

- three of the residences referred to are now associated, B7, B17 and PW34
- The predicted noise levels for residence K2 indicate a buffer of 2 to 5 dB below criteria for wind speeds from 3 to 8 m/s but less than 2 dB from 9 to 12 m/s. The closest turbine KIA

01 has moved away from the residence. Predicted noise levels are consistent with the approval.

- The predicted noise levels K14 indicate a buffer of 3 to 7 dB below the compliance criteria. Predicted noise levels are consistent with the approval.
- The submission by B29 indicated audibility outside the residence but not inside. Predicted noise levels have increased by only 0.3dB which is not a significant change. Predicted noise levels for B29 are well below criteria.
- It is expected that the wind farm will be audible at B12 at times but the predicted noise levels for the wind farm are below the applicable criteria and have not changed significantly as a result of the modification. Some statements by the landowners at B12 appear exaggerated

While GRWFPL have made comments on the information provided by PMLG in relation to neighbours' comments on noise, GRWFPL acknowledges that it has an obligation to consult with the respective landowners for the referenced residences in the context of the indicated noise impacts and noise compliance assessment requirements. This will be undertaken in the near future as turbines are progressively commissioned and the full impact of the wind farm can be assessed.

The issue of curtailment of four turbines has been raised in the PMLG and addresses the Revised Noise assessment (RNA). The RNA is required by the Project Approval conditions and is included as part of the approved OEMP. The curtailment of four turbines is the proponent's self-imposed restriction on the operation of four turbines to achieve compliance at a specific integer wind speed for specific residences. This is based on results of the noise assessment process to develop the Revised Noise Assessment.

PMLG also makes the following submissions in relation to noise:

- The assumptions and methodologies of the South Australian Noise Guidelines (2003) and NSW draft guidelines are inadequate to predict actual noise impacts
- The SA Guidelines do not accurately measure low-frequency noise or infrasound
- The Noise limit of 35dBA or background + 5 dBA is inadequate
- Separate measurements of wind turbine noise should be split into 3 time periods
- The SA Guidelines do not provision for the Van den Berg effect
- Indoor noise measurements should be taken as well as outdoor measurements

In the Land and Environment Court hearing of the GRWF merit appeal, PMLG had the opportunity to raise its concerns in relation to noise assessment with the Court (through its meteorological and acoustic expert) and to have those concerns assessed by the Commissioners. The Court heard evidence from 2 meteorologists and 2 acoustic experts and concluded:

- The 2003 SA Guidelines has been and remains the proper assessment framework to apply in the assessment of this proposal (after also considering the 2009 SA Guidelines and WHO recommendations)
- It accepts the uncontradicted expert evidence that the Van den Berg effect is unlikely to occur and thus it cannot be the basis for any modifications to the proposal. Dr Tonin

(PMLG's expert) agreed that Van den Berg modulation is unlikely to occur at any relevant location, or if it does, it would occur infrequently.

- It does not consider that it should require separation of the noise levels into day and night periods.
- Wind speeds should be referenced at hub height

This Modification Application is not an opportunity for PMLG to re-visit the scope of the noise assessment conducted by 2 Commissioners of the LEC during the merit appeal of the Minister's approval of the project.

The proponent is not seeking to increase the output of the individual turbines to more than 3.3MW (as permitted by the Project Approval) nor does the proponent seek to install turbines of a greater tip height than what was approved (130m).

The nature of the modifications sought, that is, changes in turbine locations of distances from 1-187m, are not such that they affect the method and scope of noise assessment contained in the Project Approval, that the LEC concluded was appropriate for this project.

In light of the findings of Marshall Day Acoustics in the Revised Noise Assessment, the assessment results provided in the EA, March 2014 and, the nature of the modifications sought, there is no basis for the noise conditions and the Guidelines applicable in the Project Approval, to be amended.

7.3 Boorowa District Landscape Guardians (96720)

A submission was lodged by Charlie Arnott, Chair of the Boorowa District Landscape Guardians Inc. Boorowa is 85km by road west of Crookwell. As such the submission is regarded as a submission in support of local objectors but not where the submitter or its members are likely to be directly impacted by the modifications. The study has the same form as grouped response described in Section 5.37. The proponent's response is not repeated here and reference should be made to Section 5.37.

8. Review of public submissions supporting the modification

GRWFPL appreciates the submissions received in support of the project. This Submissions Report acknowledges that some of these submitters are direct beneficiaries of the project and that their circumstances differ to those of submitters that are objecting to the modification application. Nevertheless it is considered that these submitters provide useful insights to the conduct of construction works on their properties and management of the works in respect of adjustments of turbine locations. Some of the submitters also demonstrate an interest in timely completion of the construction works on their properties. Several host landowners have positive comment on the conduct of works on their properties and attention to managing impacts.

8.1 Carl H Banfield of Grabben Gullen, Residence B1 (95853)

The submitter offers total support for the project, the Gullen Range Wind Farm and associated management of it. He and his family are a host to the project and have twelve turbines on the farm with three quarters of their farm impacted by the construction.

Submitter's Issue/Comment	Proponent's Response
I am most concerned with the current delays that are impacting the Gullen Range Wind Farm as it is affecting the ongoing operation of not only my farm and my family, but also the other host farmers and families.	GRWFPL is similarly concerned by the delays as they have significant additional financial and management requirements. GRWFPL expects that all stakeholders will benefit by the completion of the temporary construction works in a timely manner.
I have carefully examined the information made available about the movement of the turbines and I believe any turbines which have been moved were reasonably and justifiably done so. Any movement of the turbines was still within the project boundaries with cautious consideration given to the condition of the countryside and the environmental impact.	The host landowners recognise that attention has been given to the siting of the turbines and access tracks. Due to the impacts of adjustments to layouts occurring on host landowners' properties and potentially directly affecting their activities, these changes and the reasons for the changes were discussed with the host landowners.
Further relocation of turbines at this late stage could be considered as environmental vandalism.	Relocation of one or more turbines as a result of the application would require additional site disturbance and should not be undertaken unless mitigating a significant environmental or social impact that resulted from a modification of the turbine location.
All we have heard is nothing but negativity, false information and scaremongering about this project from those who are very much anti-wind farm.	GRWFPL also believes that there has been greater reporting of negativity than the positive attributes of the project. This has also occurred for other wind farm projects and can be fuelled by misinformation spread about impacts.
There are a lot of benefits related to the construction of this project; the environmental benefit being the production of clean energy, the employment and its related bonuses for the Goulburn and Crookwell community and the annual community	GRWFPL does believe that the project in addition to being a State Significant Development also has benefits for the local region, host landowners and the associated communities. The availability of additional funds to rural communities is considered beneficial in offsetting downturns in other parts of the rural economies and assists the diversification and strengthening of the regional

Submitter's Issue/Comment	Proponent's Response
fund which will inject much needed funds to local projects.	economy.
This project was originally given Department of Planning approval and is very close to being completed. Therefore I respectfully request that the Gullen Range Wind Farm be allowed to be completed as soon as possible, so that all associated host farmers can move forward with the operation of their farms.	The project is being installed generally in accordance with the Project Approval and relies on funding arrangements established in respect of the approved project. GRWFPL expects to be able to complete the project without further extended delays to construction.

8.2 Name Withheld of Bannister, NSW (96180)

The submitter indicates that they live within 2km of the turbines and supports the Modification Application.

Submitter's Issue/Comment	Proponent's Response
I have viewed the photos and maps of the modifications to the turbine locations at the Crookwell library. I am convinced that the modifications will not significantly increase the impact on the surrounding properties. I live within 2 km of turbines and it appears that some turbines will be somewhat closer to my property, however I do not think the degree to which they are closer to us will significantly increase any impact of the turbines on this property, and hence have no objection to the modifications.	<p>The submitter has reviewed the Modification application and concluded that the modifications will not significantly increase the impact on the surrounding properties.</p> <p>The submitter does not think that some turbines being closer will significantly increase any impact of the turbines to their property.</p> <p>The submitter has no objection to the modifications.</p>
I do however strongly feel that from the outset of the project there should have been far greater consultation of the community with genuine potential for people to object to specific turbines.	GRWFPL acknowledges that the consultation for the project could have been better managed and aims to improve its efforts in this regard. To that end, GRWFPL has reviewed and is strengthening its consultation processes to ensure that consultation receives the attention that is required and expected for a project of this nature.
Compensation of neighbours of the turbines should also be significantly increased, from the proposed provision of landscaping and solar systems, to promote community acceptance of the project.	GRWFPL is not opposed to reasonable compensation of neighbours to the wind farm but needs to work within reasonable budget framework to ensure commercial viability of the project. The provision of landscaping is offered in respect of mitigation of visual impact and is subject to the neighbour's preference for screening or to retain existing vistas albeit including turbines in the landscape. The Clean Energy package is consistent with the reasons for developing wind farms and also provides a financial benefit to neighbours. The Community Enhancement Fund will also provide benefits to the locality once it is implemented.

8.3 Wayne Leonard of Bannister, Residence B53 (96921)

The submitter's property hosts six turbines of the Gullen Range Wind Farm.

Submitter's Issue/Comment	Proponent's Response
The minor relocation of turbine sites have resulted in a greatly improved environmental outcome. No trees were removed during construction and five of six sites were located on flat ground which lead to a big reduction in soil disturbance.	Considerable effort was directed to the assessment of site conditions and environmental constraints, aspects which host landowners are in the best position to have seen. Claims by some objectors have included statements to the contrary despite being uninformed in this regard.
The new location of turbine sites closely shadow the original plan making it visually the same after construction.	GRWFPL agrees with this view and considers that any objective analysis of the wind farm layouts for the indicative approved layout and final design layout must recognise that the layouts are of consistent form and that the differences are valid adjustments for the reasons outlined in the EA March 2014 and based on the outcomes of the assessments in the EA, March 2014.
I support the Modification Application because of the pleasing environmental result I have had on my property during construction.	It is notable that the submitter recognises a pleasing result for the property despite having experienced significant disruption during the construction period.

8.4 Elizabeth & Kenneth Ikin, Residence PW7 (96570)

The submitter provides comment on the application. They are associated and have turbines at distances of 841 metres. Four turbines are at distances of less than 1km and the substation is at approximately 800 metres.

Submitter's Issue/Comment	Proponent's Response
As Stud Stock cattle breeders, my husband live all the time on our farm, and have been in the thick of construction since the beginning. Yes it has caused some stress mainly by contractors not being aware that this is our lively hood. On the most part the team from Goldwind have always been a pleasure to deal with & very understanding of our needs.	GRWFPL appreciate the patience and understanding of local landowners and residents throughout the construction phase.
Now the towers are up & functioning & traffic movements are less I honestly don't even notice them, yes we can hear them from our bedroom with the window open & also when outside, but this also depends on the direction of the wind.	Consistent with the Modification Application Assessments, the submission acknowledges the turbines are audible but they do not appear to cause a significant impact. The associated landowner has four turbines at less than 1km distance and the substation at approximately 800 metres. These turbines are at distances of 841 metres to 948.5 metres which represents a greater impact than for non-associated residences surrounding the wind farm.
My perspective on this is there are worse thing than a wind tower, my view move on & live your life stop focussing on negative points.	The submitter indicates support of the renewable energy and provides a perspective of the circumstances relative to other developments that may have more significant impact.

8.5 Terry Bush of Pomeroy, Residence G37 (96111)

The submitter is a host landowner for the wind farm whose residence is located less than 1km from the closest turbine. He supports the modification application and indicates that he has been happy with all aspects of the project so far.

Submitter's Issue/Comment	Proponent's Response
He notes that the EA 2008 contemplated adjustment of turbine locations	This has been discussed in the EA, March 2014. The LEC proceedings also addressed this matter.
He notes that adjustments to turbine locations were made to address engineering, environmental and social impacts.	The details of matters considered for the final design were explained in the EA, March 2014.
He also notes oversight of the Environmental Representative	The ER was involved in a broad range of compliance reviews and appears to have demonstrated commitment to achieving environmental objectives.
He notes approvals have been given for modifications of other wind farms, noting Taralga wind farm and Justice Preston's acceptance of 250 metres as not unreasonable	While modifications are ideally avoided, the fine tuning of the layout to provide an efficient, practical and compliant wind farm does require a degree of flexibility to provide a viable and compliant project. Nevertheless, such flexibility is still expected to ensure compliance with Approval Conditions and objectives.
The project continues to support the local community with job training and employment	The indirect benefits of the project can often be overlooked but are considered an important contribution that wind farm development provides for rural communities.
When completed the project will contribute to renewable energy targets for the State.	The project will also result in emissions savings and will be associated with funding for community enhancements.

8.6 Ray Riches of Pomeroy (96916)

The submitter is a farmer and landowner that is hosting 11 turbines.

Submitter's Issue/Comment	Proponent's Response
Provides his view on why turbines were moved as follows: <ul style="list-style-type: none"> One was my neighbour's land One was on the side of a hill One was near a fence and lots of trees 	This host landowner has 11 turbines on the property. The turbines have been adjusted between 0 and 60 metres. The comments indicate some of the practical reasons for adjusting turbine locations once the turbine model has been selected.
He states that he would like the construction completed as soon as it can be done.	GRWFPL believes that completion of the construction asap is beneficial for the following reasons: <ul style="list-style-type: none"> reduces work activity to the lower levels associated with pastoral activities less disruptive for host landowners less vehicle movements on local roads site restoration can be effected noise compliance assessment can be undertaken Community enhancement program will commence Landscaping program can be fully implemented

Submitter's Issue/Comment	Proponent's Response
	<ul style="list-style-type: none"> • The wind farm can supply its full complement of renewable energy • Greenhouse gas emissions savings will result from the wind farm operation

8.7 Neville Maberly of Biala (96919)

The submitter states that they are a farmer / landowner who is involved with Gullen Range Wind Farm. They host two wind turbines and have written to offer support to this project and the management of it.

Submitter's Issue/Comment	Proponent's Response
At a recent get-together of farmers / landowners who are involved with the wind farm, we jointly agreed that we would all submit a letter of support. It also allows us the opportunity to voice our concern regarding any further delays to this project. As it would appear nobody has taken into consideration the impact on our lives and business which we have to operate seven days a week.	GRWFPL strongly endorses a plea for resolution of extended delays to this State Significant project. While there is a concerted effort by some individuals to disrupt the completion of the construction works based on erroneous speculation about 'inaccurate survey of turbines' and misrepresentation of movements of turbines and separation distances to non-associated residences these claims have been shown to lack credibility. The assessments of impacts have also demonstrated that the adjustments to turbine locations do not result any significant increase in impacts. Surely all stakeholders will benefit by the completion of the temporary construction works and site restoration.
Having considered the information that is available we feel that that any turbines that has been moved, is justified given the nature of the ground conditions and environmental impact.	The submitter recognises the attention that has been directed to accommodating site features and environmental constraints.
However all we seem to hear is a few individual voices constantly complaining and delay in this project, without any thought to the impact that it is having on our family 's and the way we manage our farms.	While neighbours often state that host landowners are getting considerable benefit they often overlook the fact the host landowner's property is impacted with the turbine and ancillary infrastructure and the disruption that occurs during construction. It is unreasonable to extend the construction period without reasonable cause such as significant increased impact. This is not the case for this modification application.
We request that this project is allowed to complete rather sooner than later, so that we can get on with what we do best which is managing the countryside.	The host landowners that have the greatest impact of the project indicate a keenness to get on with working their property (in the presence of installed turbines). In contrast, some neighbours that are set back from the turbines make claims as to difficulties working their properties due to visual distractions and noise which relative to the host properties will be a much lesser impact.

8.8 Charlie Prell of Crookwell (96498)

The submitter has made a brief submission in favour of the modification to the project application for the Gullen Range wind farm.

Submitter's Issue/Comment	Proponent's Response
After reading the relevant documents lodged with the department I can't see anything in the process that Goldwind has followed to disallow the modification.	The submitter's view is consistent with GRWFPL assessment of the impacts of the modifications which do not indicate any significant increase in impact from that permitted by the Project Approval.
All of the turbine relocations except for one are either very, very minor or are moving the turbines away from the perimeter of the wind farm site.	The submitter's view differs considerably from claims of objectors that adjustments of turbines are gross changes to the project. The submitter demonstrates a degree of practicality.
The documentation states that Goldwind has followed all directions from the department through the relocation process and I have no reason to disbelieve their statements to the department.	To clarify this aspect, GRWFPL has complied with directions and requirements of NSW Department of Planning and Environment and has also complied with directions of the Environmental Representative who has been approved by DPE and is required provide the role defined in Project Approval Condition 7.1

8.9 Name Withheld of Crookwell, NSW (96017)

Submitter's Issue/Comment	Proponent's Response
Has reviewed the map of the movement of the turbine and is aware of the countryside having lived in the countryside before moving to Crookwell. To me it appears that the movement of the turbines were probably done so because of the lay of the land and possible impact on the environment, having to cut down trees to accommodate the turbines and surrounds	It appears that the submitter has reviewed the map of the project showing the adjustments of turbine locations and has taken a view that the changes are reasonable and not wholesale relocations of turbines (as has been claimed) that have resulted in a changed project. This presents as a less reactive submission and more objective review of circumstances.
Perplexed that project has from all appearances been nearly finished and at this late stage they have to undertake a DA	Again the submitter appears to have given consideration to practical aspects of project development
All that is reported in the local paper is nothing but negativity about this project and a lot of misinformation from the local anti-wind farm group and even our local Council.	The proponent agrees that local media does appear to give significant coverage of the negative aspects of the project and is aware that a proportion of the community has been very active in campaigning against the project.
I see the local community has benefitted and will continue to benefit from this project with a large amount of employment provided, funds being made available for local projects and developments and the provision of a source of clean energy.	This submitter has recognised benefits to the local area and notes the provision of clean energy as a benefit. These aspects appear to often become subverted to an active negativity campaign. GRWFPL believes that it is important to have a balanced view of the project impacts including recognition of its benefits. These benefits accrue from a project that based on objective assessment of the modifications has no greater impacts.
I think the project should be allowed to be finished with no further delays.	The proponent obviously agrees with this statement. The consequences of extended delay are significant for this development and for major project development generally and can eventually be significant to the broader economy where stagnation of development results in loss of income,

Submitter's Issue/Comment	Proponent's Response
	wasteful expenditure and extended administrative or judicial reviews.

8.10 Name Withheld of Crookwell, NSW (96506)

The submitter offers their support for the project. Their comments are set out below.

Submitter's Issue/Comment	Proponent's Response
The Gullen Range Wind Farm has offered a great number of advantages for the local community of Crookwell and Goulburn with a great number of people being employed to construct the wind farm, with the contractors and sub-contractors. The subsequent benefits for the local communities, the rental of dwellings, local business houses being used by the employees and so on.	<p>The benefits to local and regional communities are both direct and indirect.</p> <p>These benefits are not directly related to the modification application but are valuable to keep in mind relative to a concerted degree of negativity from sectors of the community.</p>
With the completion of the Gullen Range Wind Farm more benefits will be gained by the local community for example, the provision of a source of clean, green energy, the ongoing employment of permanent staff to manage the wind farm and the provision of an annual Community Benefit Fund offered by Goldwind to fund local community projects.	The positive benefits are often overlooked but can be substantive.
Any movement of the turbines was, I believe, done so with the greatest respect to the project, its boundaries, the surrounding land and environment.	The submitter appears to be aware of some of the processes applied to the design development.
I am annoyed about the amount of negative publicity, misinformation and irresponsible scaremongering this project has received, when there is a lot of positivity which could be reported to the community	GRWFPL believes that reporting of the project could have been more balanced and has focused on negative statements less attention to the positive aspects.
I cannot believe this project is so close to being completed, so I think it should proceed ahead as planned with no further delays so the wind farm can do what it was built to do and that is to produce a clean form of energy.	A practical comment in the light of assessments that show no greater impact for the modified layout.

8.11 Adam Bush of Scone, NSW (96596)

This submission in support is made by a submitter located away from the project area but presumably related to wind farm host landowner. Matters described in support are listed below.

Submitter's Issue/Comment	Proponent's Response
<p>Visual assessment</p> <p>The submitter accepts that on the basis of the ERM assessment, the visual impact of the final design layout is consistent with the assessment of the approved indicative layout.</p>	<p>The photomontages provided in the ERM assessment for the available viewpoints demonstrate that the visibility of the turbines is similar to that for the approved indicative layout. The assessment concludes that the adjustment of turbines locations has not significantly changed the visual impact of the project.</p>
<p>Noise assessment impacts</p> <p>The submitter notes that the final design layout is compliant. The submitter states that there will be no impacts on noise levels.</p>	<p>The layout and selected turbines for the defined operational modes have been shown to be compliant for all relevant receivers based on the predicted noise levels in the Revised Noise Assessment.</p> <p>To further clarify the submitter's understanding, the Marshall Day assessment presented in the EA, March 2014, describes the differences in noise levels from the approved indicative layout to the final design layout. Marshall Day have shown the maximum difference to be only 0.4dB for any integer wind speed across the relevant receivers which is an insignificant change.</p>
<p>Aviation impacts</p> <p>The submitter has noted that Aviation Projects has assessed the modification of turbine locations and advised that changes do not increase risk of aviation impacts.</p>	<p>The outcome was expected as the nominated Kialla turbines have been deleted and the changes in turbine locations for Kialla turbines and the northern Bannister turbines that are closest to the locations of the deleted Kialla turbines have only been moved small distances.</p>
<p>Minor relocation</p>	<p>The submitter is of the opinion that for the scale of the project, the changes to the final location of the 69 turbines can be considered as being minor or insignificant.</p>
<p>Impacts comparable to original layout design</p>	<p>GRWFPL believes this is the most important measure of the acceptability of the modifications.</p>
<p>All assessment requirements addressed</p>	<p>The submitter considers that GRWFPL has comprehensively addressed all of the assessment requirements including environmental and social impacts that may be relevant to the Modification Application.</p>
<p>Recognition of commitment to implementation</p>	<p>The submitter's experience is that the proponent has made significant commitment to the wind farm implementation.</p>
<p>Substantial financial and social input into local community</p>	<p>It is pleasing to note the recognition of the substantial financial input into the local community.</p>

9. Additional Assessments for the Modification Application

9.1 Introduction

The following additional assessments have been undertaken for the Modification Application and included in this Submissions Report. The assessments are provided to address:

- additional detail that has become available since the EA, March 2014 was completed
- to address matters raised by submissions
- to address updates to the project status

Additional assessments relate to:

- Aboriginal heritage assessment and management
- Biodiversity issues management
- Noise assessment
- Visual assessment
- Shadow Flicker assessment
- Road condition assessments
- Provision of new figures to update status of particular project details
- Consultation in association with modification application

These matters are described below and in relevant sections of the SR.

9.2 Aboriginal Heritage assessment

GRWFPL engaged EMGA Mitchell McLennan (EMM) to review the submission by the Office of Environment and Heritage (OEH) and provide advice on the matters raised by OEH. A response was provided by EMM and sent directly to OEH on 14 May 2014. A copy of this initial response and subsequent responses to GRWFPL of 2 June 2014 and 13 June 2014 are provided in Appendix A5. This aspect has also been addressed in Section 4.5.2 in respect of the OEH submission.

EMM provided the following:

- Details of sites that were salvaged and the status of sites subsequently impacted by project turbines and infrastructure.
- EMM undertook to provide Aboriginal Site Impact Recording (ASIR) Forms for each impacted Aboriginal site within two weeks of its letter response to OEH.
- EMM notified the AIHMS Registrar on 8 May 2014 of errors in the database and the correct data. The AIHMS registrar advised on 13 May 2014 that all AIHMS results for the project have been corrected and are now up to date.
- EMM provided explanation of the sites salvage in relation to the project footprint.
- EMM also provided explanation on the status of Aboriginal objects that were salvaged/collected. EMM is consulting with Onerwal and Pejar LALCs regarding reburial locations.
- EMM provided further advice on 50 sites designated for collection and their current management status.

- Two sets of maps were provided to OEH in respect of the indicative approved and final design layouts relative to identified and collected sites, to assist their review of the management of Aboriginal heritage issues.
- The Aboriginal Heritage Management Plan (AHMP) has been updated to address comments by OEH and the current status of issues. It has also been circulated to the Aboriginal representatives for review and approval.

OEH responded to the initial EMM letter and sought further clarification on a number of matters. A second response to OEH was provided in letter of 2 June 2014. A third response by EMM, 13 June 2014 provided additional mapping of the layout in respect of salvage and status of response to the various OEH matters. All ASIR Forms have now been lodged and the updated AHMP has now been distributed to the Onerwal and Pejar Local Aboriginal Land Councils.

It is proposed that any outstanding aspects relating to management of Aboriginal Heritage issues be addressed directly with OEH and the LALC representatives in accordance with the Project Approval and the relevant legislation. Given the nature of the issues involved it is expected that they can be resolved independent of the Modification Application process.

9.3 Biodiversity issues

NGH were engaged to review the matters raised by OEH and provide a response to the various matters raised. NGH provided additional information to OEH on 13 May, 2014 and a response from OEH has been received on 22 May 2014. Further information has been prepared to address OEH questions including the mapping provided in Appendix A4. It is expected that there will need to be further consultation between OEH and the biodiversity specialists. The aspects also relate to the Compensatory Habitat Package (CHP) that is required by Condition 2.35. OEH and the Catchment Management Authority (CMA) have previously been consulted and a Conservation Property Vegetation Plan (PVP) has been defined by CMA but not finalised.

It is expected that a review of the Compensatory Habitat Package and adequacy of the PVP will be needed to confirm adequacy of the offset requirements. This is likely to involve on site review and if necessary, further mapping. It is proposed that the requirements of 2.35 and establishment of the PVP including the management action plan can be undertaken independently of the Modification Application and in consultation with OEH, CMA and DPE.

9.4 Noise assessment

Marshall Day provided the Revised Noise Assessment required by Project Approval Condition 2.16. That assessment formed part of the OEMP that has been approved by DPE. An assessment by Marshall Day was included in the EA, March 2014 and provided details of the change in noise level arising from adjustment to turbine locations. As indicated in the assessment, the adjustments to turbine locations has had only a very small and insignificant impact on noise levels at non-associated receivers within 2km of the wind farm.

For this SR, Marshall Day also provided predicted noise levels for three additional residences that had not been identified in the EA 2014, namely, B31a, G52 and G37a. This information is provided in the Marshall Day Report, 6 June 2014 (Appendix A3) and is shown in Table 9-1.

Table 9-1 – Predicted noise level (L_{Aeq}) in dB referenced to hub height wind speeds

Res.	Predicted wind farm noise levels (dB L_{Aeq}) Hub height wind speeds (m/s)										
	3	4	5	6	7	8	9	10	11	12	
G37a *	31.8	31.8	31.9	32.7	33.8	34.5	35.2	35.7	36.0	35.9	Complies
B31a	32.6	32.6	32.7	33.5	34.6	35.4	36.2	36.9	37.3	37.2	Complies
G52	32.0	32.0	32.1	32.9	34.0	34.6	35.2	35.8	36.1	36.0	Complies
Note * G37a is an associated residence Source: Marshall Day, 6 June 2014.											

Marshall Day has indicated that the background monitoring for G37 and the criteria developed from that data is applied to residences G37a and G52 due to the close proximity of these residences and similar acoustic environment for the three residence locations. Background noise monitoring for Residence B18 has also been used for the assessment for B31a due to the proximity of the two residences and as they have a similar setback from Range Road.

Marshall Day, reported that the maximum difference in noise levels for the non-associated residences <2km, at any of the integer wind speeds from 3 to 12 m/s is only 0.4dB which is considered insignificant (EA, March 2014). Differences in predicted noise levels between the two layouts ranged from -0.2 to 0.4 dB for the assessed non-associated residences within 2km of the wind farm.

Additional assessment of differences in predicted noise levels was also undertaken for the three residences identified since the Modification Application was lodged. The results are provided in the Marshall Day Report (Appendix A3-2) and summarised in Table 9-2. Based on the results, Marshall Day states that the conclusions reached in its March 2014 report are still valid.

Table 9-2 – Change in predicted noise level (L_{Aeq}) (B31a, G52 and G37a)

Res.	Difference in predicted wind farm noise levels (dB L_{Aeq}) For Hub height wind speeds (m/s)									
	3	4	5	6	7	8	9	10	11	12
G37a *	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
B31a	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
G52	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Note: * G37a is an associated residence Source: Marshall Day, 6 June 2014. Difference is between predicted noise levels for final design layout and the approved layout.										

Noise results for a subset of residences (where residence location changed based on DPE survey and in particular, is closer to the wind farm) were reviewed by Marshall Day and updated predicted noise levels provided in Appendix A3-3. Marshall Day concluded that the revised predicted noise levels are below the minimum level of 35dB L_{Aeq} for 8 of 11 sites assessed. At the remaining 3 of the 11 assessed locations, the predicted noise levels remain below the applicable noise limits defined in the approved RNA required under the Project Approval.

9.5 Shadow Flicker assessment

Epuron provided an assessment of Shadow Flicker effect that was provided as part of the EA, March 2014. In June 2014, Epuron provided an addendum (Appendix A10) on the shadow flicker assessment provided in the EA, 2014, to address changes listed below:

- four residences having locations 12 to 34 metres closer to the wind farm (K18, K19, G28 and G43)
- additional non-associated residences, B31a and G52
- additional associated residence G37a

The conclusions of that assessment are as follows:

- K18 and K19 are outside the zone that is subject to shadow flicker effects
- G28, there is no change to the duration of shadow flicker effect.
- G43, there is an increase (conservative estimate) of one hour of shadow flicker effect, from 17 hours to 18 hours. This is still well below the Project Approval requirement to be less than 30 hours per year.
- G52, assessed as subject to 2 hours per year which is very low and well below the criteria in the Project Approval Condition 2.7. There are also large trees to the west of G52 which will have a mitigating effect on shadow flicker effect at the residence.
- G37a, assessed as subject to 3 hours per year which is very low and complies.
- B31a, assessed as subject to 3 hours per year which is very low and complies.

9.6 Road condition assessments

A number of submissions have raised the issue of road conditions and the following describes assessments undertaken by GRWFPL in respect of road conditions and process for addressing any deterioration attributed to the project.

Gullen Range Wind Farm Pty Ltd (GRWFPL) has fully taken on their responsibilities towards the public road network. It has worked closely with officers of both the Upper Lachlan Shire and Goulburn Mulwaree Councils to agree the requirements to maintain the roads in a good condition.

As per the Project Approval requirements, GRWFPL commissioned a pre-construction dilapidation assessment and report by independent experts that has included:

- both photographs and a road Network Survey Vehicle which is able to map the road profile in detail using laser instrumentation.
- a detailed mobile laser scanner survey with a 6 lens panoramic camera that provides high resolution detail of the road condition.

Following the completion of the final oversized deliveries to site, GRWFPL commissioned a post construction dilapidation report by the same independent organisation. This included running the road Network Survey Vehicle back over the heavy vehicle transport route to determine any change in profile or condition. GRWFPL then commissioned the same independent road expert to provide a further report on recommended works.

Based on the assessments undertaken, GRWFPL has now commenced discussions with the Councils with regards to the appropriate work necessary to return the road to the condition it would have been expected to be in, if the project had not taken place.

Separate to the assessment of road conditions, GRWFPL has contributed to road works that have cost in excess of \$4.5M. In places, the work undertaken has been over and above that necessary for the project implementation. Some stretches of road have been improved as a result. GRWFPL has also committed to some other enhancements to the local road network which are still to be implemented, such as the replacement of floodways with culverts.

During the construction period, GRWFPL has worked closely with both councils to agree works necessary prior to the project commencing and works necessary throughout the project to keep the road in a good condition. This program of works has been both proactive to protect the road, such as additional road shoulder work and, reactive as issues have arisen such as patch and pot hole repairs.

GRWFPL acknowledges that further work is necessary on some stretches of road to give a long term solution and that is the subject of the current discussions between GRWFPL and the respective Councils. In accordance with the project approval requirements, GRWFPL has committed to carry out appropriate remedial work to be determined through discussion between GRWFPL and the respective Councils. GRWFPL expects that the Councils and local road users have already benefited from some of the works carried out to date.

9.7 Telecommunications

A report on clearances for point to point telecommunications links has been provided by Lawrence Derrick and Associates (LDA April 2014). The LDA assessment is provided in Appendix A6. Results have been forwarded to relevant stakeholders and comments sought. The relevant stakeholders have included:

- Rural Fire Service (RFS)
- NSW Government Telecommunications Authority (NSW Telco)
- Telstra

Initial contact has been made with the stakeholders and at this stage no issues have been raised with GRWFPL but the consultation is ongoing to clarify the matters. NSW Telco has indicated that it has not identified any issues but encourages further consultation with RFS which GRWFPL will follow up.

GRWFPL has also commenced review of television reception issues and consulted with ULSC in regard to upgrading services in the Crookwell locality through funding support for a new antennae on Council's existing communications mast.

9.8 Consultation

GRWFPL has maintained an active role in consulting with the local community and other stakeholders throughout the project implementation. As outlined in the EA (March 2014), a number of different formats and methods have been used to consult with the local community, including face to face meetings, newsletters, websites and media releases. As per the conditions of approval, GRWFPL operates and maintains a communication portal and complaints system.

In June 2013, at request of DPE, an independent audit was conducted by KMH of the consultation for GRWF. The review of consultation was provided to DPE (then Department of Planning & Infrastructure DPI) and various community stakeholders. No written feedback was provided by DPE; however conversations with the Compliance Department confirmed that the project was fully compliant. The KMH report concluded that GRWFPL had achieved compliance with the conditions pertaining to the communication of project activities.

In association with the Modification Application process, GRWFPL engaged AECOM to conduct community and stakeholder engagement activities during the public exhibition period. A report of the consultation activities, issues raised and proposed future activities is provided in Appendix A7 and a summary given below. A community update brochure, No. 3, April 2014, is also provided in Appendix A7. It was provided in two formats as a newsletter and as a poster display.

Consultation undertaken by AECOM during the public exhibition process (Appendix A7) was predominately information dissemination and notification of the Modification Application. Most landowners contacted did not raise specific issues, but rather queries about the Modification process and potential impacts on individual properties. Two landowners conveyed strong objections to the GRWF. Comments raised were noted. Where information was requested, AECOM and/or GRWFPL provided the information requested.

A substantial portion of the comments received during the public exhibition were unrelated to the Modification Application.

GRWFPL acknowledges the submissions to the Modification Application in regard to consultation have indicated that consultation was not considered satisfactory. Individual comments are responded to in the relevant sections of this SR. A key aim for GRWFPL is to improve its relationship with the community and to that effect GRWFPL is reviewing its project management and consultation processes. GRWFPL will strive to strengthen its relationship with the local community throughout the later stages of construction and operation.

Frameworks for community engagement are already in place. Under Condition 5.3 of the Project Approval, and prior to commencement of construction, GRWFPL prepared a Community Information Plan (CIP) and received DPE approval for the CIP. The CIP sets out the community communications and consultation processes and identifies fundamental principles. GRWFPL will continue implementation of the CIP in a manner which improves its community engagement efforts for current and future stages of the development.

The updated Statement of Commitments (Appendix 11) provided with this SR also contains a number of items relevant to community consultation. As for the CIP, GRWFPL will implement the commitments at the appropriate project stage.

In addition to addressing requirements of the Community Information Plan and Statement of Commitments, GRWFPL will also conduct the 'future consultation activities' as identified by AECOM in the Section 4 of their report (Appendix A7). Many of these activities build on the principles identified in the CIP.

Throughout the later stages of construction and operation of the project a key issue is ensuring any negative impacts of the development are raised, discussed, monitored and resolved.

Noise and TV and radio reception are two potential impacts already identified by GRWFPL that require attention. These will be addressed in accordance with requirements of the Project Approval and a desire to operate as a 'good neighbour'. Additional negative impacts will be identified through proactive engagement with the local community and monitoring of enquiries/complaints raised through the 1800 number, email address and website.

GRWFPL appreciate that up to date communication of project milestones is crucial to provide relevant and timely information. The Project Team will continue to ensure information is communicated to the local community through website updates, newsletters and local media. Key milestones have been identified as:

- Modification Application process, including public exhibition, Submissions Report, D-G assessment report and determination of the application;
- Completion of construction, commissioning and commencement of operation;
- Community Enhancement Program stages, including issuing of criteria and call for applications.

GRWFL is committed to the programs defined in the Project Approval that will provide positive benefit in association with the project, including the following:

- Community Enhancement Program involving:
 - Community Fund
 - Clean Energy Program
- Landscaping measures to screen the visible parts of the wind farm from neighbours

Implementation of these programs requires a high level of community consultation, focusing on one to one meetings and in many cases involving property specific solutions. GRWFPL is currently implementing the landscaping requirements and to date has undertaken 28 property inspections with the appointed Landscape Architect. GRWFPL is also preparing documentation for the Clean Energy Program that forms part of the Community Enhancement Program. Initial discussions have occurred with ULSC to establish the arrangements for the community fund provided by GRWFPL that will provide a direct benefit to the community.

GRWF is large project, with corresponding construction and corporate teams, and there are a significant number of residents in the surrounding area. Throughout implementation of the above measures, GRWFPL recognises potential for confused messages, fragmented information dissemination and miscommunication of key messages to the local community. The Community Information Plan and associated implementation documents are key references for the Project Team to manage such issues. To support implementation of the community engagement, and in line with GRWFPL aim to strengthen the relationships with the community, the project team capability and consultation program have been strengthened.

In summary, GRWFPL acknowledges the community comments made throughout the Modification Application process regarding community consultation. Existing plans and frameworks will continue to be implemented and upgraded as necessary to facilitate improved engagement and participation in the life of the community. The Project Team has identified a number of improvements and will continue to review and monitor its project management and consultation processes.

9.9 Visual Impact

The EA, March 2014 provided an assessment by ERM in respect of additional visual impact arising from the modification of turbine locations. The assessment also included a significant number of additional photomontages, 18 in total, with 12 taken from residence locations and 6 taken from roadside viewpoints. While it was not possible to visit all non-associated residence locations, it was able to be determined that the modification of turbine locations has not significantly changed the assessment of the project's visual impact. The ERM report, 31 March 2014, concluded that the visual impact of the final design layout is consistent with the level of visual impact of the approved indicative layout.

This SR includes an additional photomontage for Viewpoint B31 that was previously indicated in Figure 6-1 as being an additional photomontage provided in the EA, March 2014. However, the photomontage for B31 was not included in the EA, 2014 and to correct that omission, is provided in this SR (Appendix A9).

The residence in the foreground of the B31 photomontage had not previously been shown on mapping or previously assessed. The newly identified residence has been referred to as B31a in this SR (Figure 3.1). As a consequence of the assessment not previously being available, details of the B31a residence are provided in Section 5.8 in response to a submission from the landowner. The viewpoint for the B31 photomontage is 170 metres west of residence B31a and shows the B31a residence in the foreground and the wind farm in the background.

A number of submitters provided photographs of the wind farm in there submissions. While these are helpful, they sometimes exaggerate the visual impact. Where a telephoto zoom lens is used this can make the wind turbines appear larger and closer than is actually the case. ERM avoid this by using appropriate focal length for their photography. In the case of residence K17, the view field angle is only about 12 degrees which indicates a significant zoom.

In respect of B29, the submitter indicated a view point 10 metres from the residence but analysis of the image provided indicates that the photo could have been taken from as far as 80 metres from the residence.

The Project Approval includes conditions for landscaping to address mitigation of the visual impact of the wind farm. Conditions for landscaping address:

- public road reserves (Condition 2.1)
- neighbouring properties (Condition 2.2 and 2.3)
- on the wind farm site (Condition 7.5b)

A Landscape Management Plan has been prepared that addresses requirements for landscaping at the above locations and is being implemented.

GRWFPL has commenced a program of work to address the landscaping requirements in respect of neighbouring properties. As an initial stage, inspections of 28 neighbouring properties have been completed and individual property landscape plans are being prepared for those properties. Further inspections are being scheduled and landscaping plans will be provided to landowners to seek their agreement for the plan relating to their property. This measure has the objective of establishing agreed screening to mitigate visual impact of the wind farm.

10. Conclusions and Mitigation measures

This section provides the proponent's conclusions in respect of the reviews and assessments that inform the determination of the modification application, which seeks to confirm the final design turbine locations. The conclusions are drawn from review of the following:

- the EA, March 2014 and the assessments in the EA,
- the submissions received and matters raised by the submissions
- the proponent's review and comments on the submissions (Sections 4-8 of this SR)
- the additional assessments provided in Section 9 of this SR.

To be clear, the focus of the conclusions in respect of the application for modification of Project Approval is directed to the acceptability of impacts arising from the changes in the turbine locations assessed in the context of the existing Project Approval. Where the project has been implemented generally in accordance with the approval documents and, the outcome of the assessments of changes in social and environmental impacts arising from the changes in locations of the turbines is not significant, then GRWFPL considers that there is no basis for refusing approval of the Modification Application.

Many of the submissions challenged the Project Approval that was made in 2010 and appeared to want to reopen those proceedings. However, the scope of the Modification Application is very specific and addresses the changes in impacts due to adjustment of turbine locations from approved indicative locations to the final design locations.

10.1 Review of submissions and matters raised

A total of 82 submissions have been received from the public exhibition of the modification application and the referral of the modification to government agencies. Some members of the public have submitted more than one submission and the total number of submitters is 75. Approximately half of the public submissions come from locations that are distant from the project locality and do not have potential to be directly impacted by the modifications to turbine locations.

The six government agency submissions primarily relate to the project impacts at the site and address matters arising partly from the adjustments to turbine locations and also other matters that relate more generally to aspects of the project approval. A number of matters require further consultation and potentially investigation to address the concerns raised by agencies but not all matters raised relate to the modifications of turbine locations. It appears that the matters relating to more general aspects of the approval can be dealt with through existing processes to address specific conditions of approval.

The community submissions received in response to the public exhibition provide a range of views on the modification application from strong objection to support for the project. The submissions also are drawn from a wide geography including the immediate wind farm surrounds to the broader region and the State and one from interstate.

Objections represent the majority of the public submissions with approximately half from immediate surrounds and half from more distant locations. The objections have been considered and responses provided in respect of the statements made and their validity to the application or the detail of the issues raised. A significant proportion of the submissions objecting to the project

have focussed on matters that are not material to the modification application and its determination.

Some of the objections raise matters that suggest that impacts are greater than predicted from the available assessments. GRWFPL would like to review these matters with submitters and, if warranted, investigate the claims in the context of the project management and maintenance of compliance. However, others clearly include misinformation and exaggerated claims. By way of example, many claims by objectors state that the proponent's survey data could not be trusted. This view appears to have been spread in the community and influenced a wide range of the objectors but has now been discredited by the DPE arranged survey and was clearly unfounded. Other objections have continued the spread of misinformation and inaccurate criticisms of the project to other matters raised, often without reference to the assessments provided in the EA, March 2014.

There was also a view that appeared to be propagated amongst objectors to call for a comprehensive inquiry to the project approval and wind farm planning processes generally. There have been a range of inquiries into wind farm impacts and there is considerable information available from the reviews and national and state planning guidelines that can inform the determination of wind farm planning applications. The project was only approved after a comprehensive review process involving, DPE, the Minister and eventual proceedings and determination by the Land and Environment Court. GRWFPL believes that the adjustments to turbine locations have resulted in a project that is generally in accordance with the project approval documents and where impacts have been assessed as consistent with those for the project approval. It is notable that the public submissions objecting to the modifications have not identified any significant authoritative deficiencies in the assessments provided in the EA, March 2014.

While GRWFPL does not agree with many of the assertions made by some of the objectors it does acknowledge a significant level of objection to the project and regards this as a message to GRWFPL to improve its consultation and to take a more active role in explaining the project status, development options, potential impacts and their management. Where objectors included concerns warranting further review, then GRWFPL proposes to meet with the submitter to discuss their views and observations with the objective of determining whether further action is needed to investigate or address the concerns.

Matters where GRWFPL identified a need for improvements in consultation include:

- Improving consultation with neighbouring community by more frequent interfaces
- Recognition of neighbours observations of noise impacts and arrangement to meet and discuss and as necessary, further investigate observations of noise impacts
- Continuation of landscaping program that has recently commenced
- Initiation of Community Enhancement Fund and Clean Energy Program
- Resolution of GRWFPL obligations in respect of road repairs
- Attention to television reception issues including financial support for upgrade of services in Crookwell locality
- Review the integrity of point to point telecommunications services with RFS

The following summarises the assessment of impacts after review of submissions and the additional assessments in this SR.

10.2 Summary of Impacts of the Changes to turbine locations

The EA, March 2014 has reviewed the range of decision factors considered for the relocation of turbines from the approved indicative locations to the final design locations and has provided assessments of changes in project impacts related to the adjustments to turbine locations. Where necessary, the assessments have been updated in this SR.

Section 6 of the EA, March 2014 provided the assessment of environmental and social impacts that addressed the potentially relevant issues for the changes to turbine locations. Additional assessments are provided in Section 9 of this SR.

The proponent's updated conclusions based on the assessments in the EA, March 2014, submissions received and additional assessments provided in this SR are compiled in this SR. The conclusions in the EA, March 2014 have been revisited and as necessary updated here.

Overall, GRWFPL has concluded that:

- A systematic process has been applied for review of turbine locations to achieve a Final Design layout that is compliant with the Project Approval and does not result in any significant increase in environmental or social impacts. The locations of the turbines and physical changes in distance to residences have been confirmed by independent survey arranged by DPE and ensure that the basis for assessments was reliable.

The individual conclusions in terms of the respective environmental and social impacts are listed below.

In terms of social impacts for non-associated residences within 2km of the closest turbine, the following conclusions apply;

- The approved noise impacts at relevant receivers (non-associated residences) have been reported in the Revised Noise Assessment that is included in the approved OEMP.
- There is no significant increase in the predicted wind farm noise levels at non-associated residences with 2km of the closest turbine. Predicted noise levels may very marginally increase or decrease but the maximum increase in predicted noise levels as a result of adjustments to the layout is only 0.4dB, which is an insignificant change.
- Additional noise assessment for Residence B31a, G52 and G37a is provided in this SR and conclusions are consistent with compliance and insignificant change in predicted noise due to turbine location adjustments.
- While the final design layout has been assessed as compliant, compliance assessments are nevertheless required once the wind farm is operational. The Compliance Monitoring Plan has been approved.
- Options are also available to vary turbine performance and mitigate any exceedance of noise limits, were that to occur. A Noise Management Plan has been approved.

- An Environment protection Licence (EPL) is required for the wind farm and sets out the limits for operational noise levels based on the criteria described in the Project Approval documents. EPA is the appropriate regulatory authority for the EPL.
- Changes to visual impacts have been assessed by ERM using additional photographic imagery and 19 photomontages to assess changes between the approved layout and final design layout. An additional photomontage for Residence B31 is supplied in Appendix 9 for this SR. ERM has concluded that the changes in the layout and turbine dimensions are insignificant in respect of the previous assessment of visual impact at neighbouring residences that informed the determination of the project approval.
- A number of submissions from neighbours to the wind farm describe the visual impact as unacceptable. These submissions are often related to the visual impact of the approved project rather than the changes due to the modifications of turbine locations that have been assessed as insignificant. Some of the submissions include photos of views to the wind farm which provide additional context but not all are produced with regard to the scaling factors considered by ERM and can show turbines at larger scale that is normal to the eye.
- A program of landscaping has been commenced with initial inspections undertaken for 28 properties to develop suitable landscape plans.
- There is no significant increase in shadow flicker effect for non-associated residences as a result of the changes to turbine locations. Non-associated Residences G52 and B31a were assessed as having 2 hours per year and 3 hours per year which is well below the limit of 30 hours per year. The project is compliant with the Project Approval condition 2.7 for all non-associated residence locations.
- Adjustments to turbine locations have taken account of proximity of turbine sites to radio communications link paths an assessment of clearances is provided with this SR. Further consultation with RFS will be undertaken to confirm that services are unaffected.
- There are no increased impacts on local traffic as a result of the adjustments to turbine locations. There are provisions in conditions of the project approval for addressing any damage to local roads as a result of the project construction. As part of the process to assess damage to local roads, GRWFPL has provided to Councils, a detailed assessment of road condition, before and after the transport of the large equipment items. Responsibility for restoration of any damage to the roads attributable to the project is still subject to agreement with Councils on the scope of damage and funding of repairs attributed to GRWFPL. The timing of the repairs will subject to Council preference.

In terms of environmental impacts in the vicinity of the turbine locations, the following conclusions apply;

- Flora and Fauna impacts at turbine sites have been addressed for the construction phase by pre-clearing surveys by specialists and location adjustments as necessary to avoid Environmentally Sensitive Areas and minimise impacts. These changes have been subject to review by the ER and to implementation in accordance with the approved CEMP. Overall this process has been effective in minimising impacts on native vegetation but several deficiencies in implementation have resulted in minor impacts that could have been avoided.
- A Compensatory Habitat Package (CHP) has been prepared and approved by DPE. The CHP was indicated to have been developed in consultation with OEH. Subsequently, a

Conservation Property Vegetation Plan (PVP) has been prepared in consultation with OEH and the Catchment Management Authority (CMA). The PVP offsets the projects' impacts on flora and fauna values and will be created in perpetuity. OEH has raised questions on the adequacy of the CHP and consultation is occurring to address this matter.

- It is proposed that a quantitative review of the projects impacts on flora and fauna is undertaken on completion of construction and, in consultation with OEH, the adequacy of the offset package in respect of the Project Approval Condition 2.35, will be confirmed. It is expected that this assessment and consultation will occur independently of the modification application. The updated Statement of Commitments includes an item 16a in respect of this matter.
- The landscaping measures will contribute additional vegetation for the wind farm and surrounding areas.
- There are no significant changes to impacts on soil erosion or management of surface flows as a result of the adjustment to turbine locations. The changes to turbine locations have been subject to implementation in accordance with the approved CEMP in the same way as if the turbine locations had not been adjusted and works have been subject to pre-clearing reviews and review by the ER. Site restoration including permanent controls is still to be completed but works are at a stage where this is now able to be addressed.
- Rehabilitation of areas disturbed during construction will be undertaken progressively and completed as soon as possible after completion of construction. Site drainage for access tracks will be designed to ensure stable structures that prevent erosion of the drains, tracks and any batters.
- There has been no significant increase in impact for Aboriginal heritage values as a result of the relocation of turbine sites. Several additional sites have been salvaged that are marginally beyond the area disturbed for the final design but were salvaged at an early stage and at request of Aboriginal stakeholders. The timing of the salvage was to ensure clearance prior to construction impacts.
- Consultation with OEH in respect of Aboriginal heritage is continuing. Consultation with the Aboriginal stakeholders is also occurring in respect of the updated AHMP and re-burial of artefacts that have been collected from the site. It is expected that these matters will be addressed independently of the modification application.

On the basis of the assessments in the EA, March 2014 and after review of the submissions and comments on the matters raised in the submissions as well as additional assessments, provided in this SR, GRWFPL believes that:

- the adjustments to turbine locations are justified as being generally in accordance with the Project Approval
- the adjustments to the turbine locations have been comprehensively assessed,
- the changes in impact do not represent any significant increase in social or environmental impacts
- the submissions include a range of matters that require further consultation but do not introduce matters that are not already subject to the existing conditions and management processes.
- after reviewing the relevant matters, there is no basis for refusing the application

- the final design turbine locations warrant approval of the Modification Application by the Minister or, as applicable, the Planning Assessment Commission (PAC).

A range of matters are still to be addressed for the project implementation in accordance with the construction, commissioning and operations stages and in respect of the requirements of the Project Approval Conditions. Where processes for management of these matters are well defined then it is considered that they can be addressed independent of the Modification Application and in the context of the Conditions of Project Approval.

10.3 Updated Statement of Commitments

Based on the reviews undertaken in conjunction with the modification application and in the context of the progression of issues at this advanced stage of construction, the revised Statement of Commitments that was included in the March 2014 EA has been updated and is provided with this SR.

A full copy of the updated Statement of Commitments is attached in Appendix A10.

The numbering of the respective commitments has been kept consistent with that for the Project Approval and none of the commitments from the document for the Project Approval have been deleted. Additional commitments that have been added are included with the relevant grouping of commitments and a suffix added to the new commitment to allow easy reference.

The additional commitments are outlined below:

16a – Post construction review of impacts on biodiversity to ensure offset in Compensatory Habitat Package is adequate

28a GRWFPL to seek approval for updated AHMP and complete and submit all ASIR Forms.

35a – GRWFPL to provide funding to ULSC to support installation of new radio/television receiving antennae on an existing Council communications mast in the vicinity of Crookwell to improve reception in the surrounding area and counter any effects of the wind farm

38a – Further consultation with RFS to discuss REF review of the LDA assessment report and determine any requirements to confirm that services are unaffected by the wind farm installation.

65a – GRWFL to investigate potential to provide a site for an RFS hall within the project area

92a - GRWFPL to implement a sustainable procurement strategy

92b – GRWFPL to source services from the local area where feasible

95a – GRWFPL to investigate potential for provision of a community hall at Bannister

95b – GRWPL to assist community education for renewable energy through schools

95c – GRWFPL will hold an annual open day at the wind farm

95d – GRWFPL The proponent will strengthen its relationship with the community by improving its consultation efforts and undertaking regular interface with neighbours within 2km of the wind farm.

95e – GRWFPL will provide an annual public report on environmental and social performance of the wind farm and the consultation activities undertaken for the year

10.4 Consequence of refusal of the application

If this modification application is not approved, then GRWFPL will be left to rely on the Project Approval and an interpretation of “minor relocations”.

Any requirement to move the wind turbines, given the advanced stage of construction, would involve:

- Construction of additional footings in relatively close proximity to an existing footing.
- Construction of additional hardstand areas
- Construction of additional sections of access track
- Installation of additional cable trenches and 33kV underground cables
- Restoration of disturbed areas at previously developed sites that are not approved by the modification application and restoration of sections of access tracks no longer required
- Extension of time to complete the wind farm and commence operation, potentially adding 4 to 8 months or longer, to the construction phase
- Substantial additional expenditure to effect the adjustments needed without the modification approval.
- In some cases a return to the locations specified in the approval could mean moving turbines closer to residences.

The alternative activities that would be required to reconstruct any parts of the project that are not approved by the modification application involve significant time, work and expenditure. A requirement to move wind turbines would seriously impact the commercial viability of the project without having any significant benefit for reducing environmental or social impacts.

A significant delay in completion of construction of the wind farm also defers the benefit of greenhouse gas emissions savings that would have otherwise been achieved for the project. Greenhouse gas emissions savings have been calculated as 3.1 million tonnes by 2020. This can be quantified as approximately 563,000 tonnes per year. At that rate, each month the project is delayed, NSW and Australia generally forgoes emissions savings of approximately 47,000 tonnes / month.

GRWFPL therefore seeks that serious consideration be given to the findings of the assessments in the EA, March 2014 and additional assessments and comments on submissions that are provided in this SR and, that approval for the modification be granted, involving confirmation of the 73 Final Design turbine locations under the modified approval.

11. Justification for Modification and Approval Sought

This Submissions Report (SR) provides the proponent's review and comments on the submissions received in relation to the public exhibition of the Gullen Range Wind Farm modification application and the referrals to NSW government agencies. The SR also provides additional information, by way of updates, clarifications and additional assessments that are considered relevant to the determination of the Modification Application.

The SR also confirms the Revised Statement of Commitments that incorporates mitigation measures for the project implementation and operations and that relate to management of the project compliance requirements.

Based on the modifications outlined and details provided in the EA, March 2014 and this SR document it is considered that the modification of the Project Approval is justified for the following reasons:

- The project has been implemented generally in accordance with the approval documents listed in Condition 1.1. The approval documents anticipated minor relocations and the DPE has acknowledged that minor relocations are allowable.
- The modification of turbine locations described in the EA, March 2014 and this SR give *no significant increase* in the level of environmental or social impact. Relevant independent specialists have reviewed information according to their specialist area and have provided authoritative statements confirming the changes in impacts.
- the submissions received include a range of matters that require further consultation and management but do not introduce matters that are not already subject to the existing conditions and management processes.
- While some aspects require further monitoring, investigation together with reporting and consultation, these matters can be independently progressed without affecting the determination of the modification application.
- An updated Statement of Commitments is submitted in conjunction with the Modification Application (Appendix A11 of this SR).

As a consequence of the above conclusions and supported by the assessments outlined in the EA, March 2014 and this SR, GRWFPL seeks approval for the modifications, described in the application that was lodged under Section 75W of the EP&A Act, as follows:

GRWF Pty Ltd seeks a modification of the Project Approval to confirm the updated locations of the 73 approved Wind Turbine Generators (Turbines) from the 'Indicative' locations listed in the Environmental Assessment (2008) to the 'Final Design' locations listed in the EA document (GRWFPL, March 2014). The Final Design Coordinates are provided in Table 2.2.

GRWFPL has made a substantive commitment to implementing this project in an environmentally and socially responsible manner and in compliance with the Project Approval. GRWFPL believes that the project as modified provides a beneficial project development that:

- has given appropriate consideration to the management of its environmental and social impacts,
- has been implemented generally in accordance with the approval documents
- has environmental and social impacts that are consistent with the Project Approval
- is justified to receive a modified project approval that confirms the 'Final Design' turbine locations.

12. References

The following references apply for this Submissions Report. These exclude the appendices provided in Section 13 of this Submission Report and the submissions that are available on the DPE website.

Approval documents (refer Approval Condition 1.1)

<https://majorprojects.affinitylive.com/public/81dbf9b5c81b65995aaa1d84860847fd/Land%20and%20Environment%20Court%20Determination%20-%20Conditions%20of%20Approval%20-Annexure%20A%20to%20Court%20Orders.pdf>

GRWFPL, Gullen Range Wind Farm, Modification Application, Environmental Assessment, March 2014.

Submissions on DPE website (April/May 2014) (Submitters are listed in Tables 1.2 to 1.4 of this SR).

13. Appendices

A1 - DPE Letter 3 May 2014 Invitation to supply comments on submissions

A2 – DPE Independent Survey results (modified from Michael Shannon and Associates Pty Ltd),
30th April 2014

A2-1 – Cover Letter from Registered Surveyor including methodology

A2-2 – Turbine locations and differences to EA, 2008 (Incl. EA, 2014 items, 2 RH columns)

A2-3 – Residence locations and differences between survey and proponent data

A2-4 – Distance Turbine to Residence (includes proponent comment)

A3 – Marshall Day Supplementary Noise Assessments

A3-1 – Marshall Day - Comments on noise aspects 1st Grouped submission, 08 May 2014

A3-2 – Marshall Day - Noise assessment G52, G37a and B31a – 06 June 2014

A3-3 – Marshall Day - Noise assessment – Updated receiver locations post DPE Survey
23 May 2014

A4 – NGH response to OEH in respect of Biodiversity aspects of OEH submission

A4-1 – NGH Initial letter response to OEH, 22 May 2014

A4-2 – Map, Kialla and Bannister Groups – Compiled ecological constraints, 2 June 2014

A4-3 – Map, Pomeroy Group – Compiled ecological constraints, 2 June 2014

A4-4 Map, Gurrundah Group – Compiled ecological constraints, 2 June 2014

A5. - EMM Response to OEH in respect of Aboriginal heritage aspects of OEH submission

A5-1 – EMM initial Letter Response to OEH with 3 Maps, 14 May 2014

A5-2 – EMM second response to OEH with additional details, 02 June 2014

A5-3 – EMM third response to OEH with additional mapping, 13 June 2014

A6 – Telecommunications assessment

A6-1 – Lawrence Derrick and Associates – Investigation of Radio Links Clearances 16 April 2014

A6-2 – Email response from NSW Telco, 22 May 2014

A7 – Consultation items

A7-1 - AECOM 75W Modification Exhibition – Consultation

Includes Goldwind Community Update 3 – April 2014

A8 – TriAusMin - Letter re exploration activities – Notice of Airborne Geophysical Survey 16 April 2014

A9 – ERM Photomontage for roadside viewpoint near Residence B31, (ERM, May, 2014)

A10 – Epuron - Shadow Flicker Addendum, 3 June 2014 (includes updated maps)

A11 – Updated GRWFPL Statement of Commitments at 3 June 2014