

Meeting Record

Project Name	Mid North Wind Farms	Meeting Date	7 November 2013
Meeting / Subject	Community Liaison Group	Recorded By	AP
	Meeting 12	Total Pages	10

Facilitator:	Georgina House (GH)	Aurecon
Members:	Abby Walker-Schwartz (AWS)	Waterloo Resident
	Greg Schwartz (GS)	Waterloo Resident
	Andrew Allchurch (AA)	Gilbert Group CFS and Waterloo Landowner
	Jo Allchurch (JA)	Waterloo Landowner
	Garry Fieldhouse (GF)	Gally's
	Sally Fieldhouse (SF)	Gally's
	Glenn Christie (GC)	Seed collector and revegetation
	Kelly-Anne Saffin (KAS)	Regional Development Australia Yorke and Mid North
	Lis Jones Ingham (LJI)	Burra
	Peter Edson (PE)	Burra Regional Tourism and Business Association
	Pip Edson (PE1)	Burra Regional Art Gallery
Guests and Observers	Cr Sue Wurst (SW)	Councillor, Clare and Gilbert Valleys Council
	Kerry Ward (KW)	Member NRM Group
	Trevor White (TW)	Wind Farm Liaison Officer
	Sue Ryan (SR)	Burra Community School
	Paula Jones (PJ)	Burra Visitor Information Centre
	Anna Friebe (AF)	Burra Visitor Information Centre
	Dave Wilson (DW)	Clare Valley Tours
	Jon Cooper (JC)	Resonate Acoustics
EnergyAustralia	Mike Clee (MC)	SA Operations Manager
	Mike de Vink (MV)	Senior Project Manager
	Clint Purkiss (CP)	Project Development Manager, EA
	Sarah Stent (SS)	Corporate Affairs Manager
	Agata Millington (AM)	Community Relations Communications Adviser
Apologies	Hon Dan van Holst Pellekaan	Honourable Member for Stuart
	Hon Geoff Brock	Honourable Member for Frome
	Hon Rowan Ramsey	Honourable Member for Grey
	Roy Blight (RB)	CEO, Clare and Gilbert Valleys Council
	Mayor Allan Aughey (AA)	Mayor, Clare and Gilbert Valleys Council
	Colin Endean (CE)	ACF Climate Project, Transition Action Group

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	David Clarke (DC)	Crystal Brook
	Heidi Hodge (HH)	Black Springs Resident
	David Busch (DB)	Waterloo Landowner (attended in Lisa's place)
	Lisa Busch (LB)	Waterloo Landowner
	Steve Symons (SSy)	Pallisade and Northleaf Representative
	Donna Kelly (DK)	Burra
Minute Taker	Adam Pfitzner (AP)	Aurecon

Item	Topic	Action By
1.	Welcome and Apologies – Georgina House	
1.1.	Welcome <ul style="list-style-type: none"> ● GH welcomed members and guests to the 12th Mid North Wind Farm Community Liaison Group (CLG) Meeting. ● GH gave a special welcome to first time attendees and guests of this evening's meeting, including: <ul style="list-style-type: none"> ○ Jo Allchurch, Waterloo Landowner ○ Greg Schwartz, Waterloo Resident ○ Paula Jones, Burra Visitor Information Centre ○ Anna Friebel, Burra Visitor Information Centre ○ Sue Ryan, Burra Community School ○ Dave Wilson, Clare Valley Tours ○ Jon Cooper, Resonate Acoustics 	
1.2.	Apologies <ul style="list-style-type: none"> ● Apologies received from: <ul style="list-style-type: none"> ○ Honourable Member for Stuart ○ Honourable Member for Frome ○ Honourable Member for Grey ○ Roy Blight, CEO, Clare and Gilbert Valleys Council ○ Mayor Aughey, Clare and Gilbert Valleys Council ○ Colin Endean ○ David Clarke ○ Heidi Hodge ○ David Busch ○ Lisa Busch ○ Steve Symons ○ Donna Kelly ● Apologies were noted. 	
1.3.	Agenda and Housekeeping <ul style="list-style-type: none"> ● GH outlined today's agenda, which includes: <ul style="list-style-type: none"> ○ Review of Minutes ○ Overview of Wind Farm Projects ○ Initiatives for 2014 and Significant Environmental Benefit (SEB) Grant ○ Feedback on the CLG and focus for 2014 ○ Noise Studies Update – special guest Jon Cooper ○ Other Business – CSIRO, Topics and Calendar for 2014, ○ Supper ● Georgina sought agreement to bring Item 7 ahead of Item 3 on the agenda. 	

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2.	<ul style="list-style-type: none"> ● Review Minutes of Previous Meeting – Georgina House ● Actions arising from the minutes: <ul style="list-style-type: none"> ○ Page 6 – Regarding SEB Grant Opportunity <ul style="list-style-type: none"> ▪ GH to type up and circulate ideas generated at meeting ▪ KAS to form SEB working group ▪ CLG Members to contact KAS or GH if interested in SEB Grant (Heidi, Sally and Kerry) ● GH asked if there are any comments or questions regarding the minutes. Kerry requested that the reference against his name read “NRM Group” rather than “NRM Board” ● Members accepted the 5 September 2013 Minutes as a true representation of the meeting. 	
3.	<p>Overview of EnergyAustralia Mid North Wind Farm Projects – Mike Clee and Clint Purkiss</p>	
3.1	<p>Waterloo Wind Farm Update</p> <ul style="list-style-type: none"> ● MC provided an update on Waterloo Wind Farm. <ul style="list-style-type: none"> ○ WLWF achieved a record generation for the month of Aug 13 of 42.58 GWh. ○ This is 4 GWh more than the previous record – also achieved in an Aug). ○ A circuit (7 Turbines) was unavailable for 1 week resulting in a loss of 2.6GWh. Total generation for August could have been 45.2GWh ○ EnergyAustralia undergo stringent External Compliance Audits for our: <ul style="list-style-type: none"> ▪ Quality Management System (Developed In-house) ▪ Australian Standards 14001 (Environment Management) and ▪ 18001 (Safety Management) ○ These Audits have been conducted at six monthly intervals. On receiving favourable reports since 2012, approval has now been granted to extend the frequency to annual. ○ Hosted a site tour for the Manoora Junior Primary School. ○ EPA monitoring of noise including infrasound in the vicinity of Waterloo wind farm commenced 8th April and concluded on the 17th June. <ul style="list-style-type: none"> ▪ EnergyAustralia as requested by the EPA agreed to and cooperated with the program by shutting down the wind farm as determined by the EPA. ▪ All recorded statistics and production data has been passed onto the EPA for analysis and correlation with their shutdown program. ▪ The official report is expected to be issued by the EPA in October 2013 ○ The Waterloo Township Wind Farm Information Shelter is currently under construction. ○ The Shelter is being erected on the west side of the Playground next to the Town Hall. Est. cost approx. \$26K. ○ AM stated that the construction may be completed by the end of November. 	
3.2	<p>Proposed Waterloo 2 Wind Farm Update</p> <ul style="list-style-type: none"> ● CP provided an update on the Waterloo 2 Wind Farm Development Application for the six (6) turbine extension to Waterloo. Current activity includes: <ul style="list-style-type: none"> ○ Discussions with turbine manufacturers have commenced. ○ Discussions with ElectraNet, AEMO and ESCOSA have all commenced, awaiting a final turbine choice to undertake modelling. ○ Internal Approvals processes. ○ Fencing Initiative with Brooke Kerin of DEWNR. ● CP outlined the broad project timeline for the Waterloo 2 Development Application <ul style="list-style-type: none"> ○ <u>November / December:</u> Internal Approvals, Negotiating contracts with suppliers (turbines, civil and electrical), Grid Connection process with ElectraNet/AEMO/ESCOSA, liaising with involved landowners initially on 	

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	<p>construction plans followed by wider community consultation on all aspects of the projects timing.</p> <ul style="list-style-type: none"> ○ <u>January / February</u>: Finalising construction contracts, liaising with regulators and stakeholders (Council, EPA, SEWPaC et al), Grid Connection ongoing. Detailed engineering design (to be discussed at the next CLG). Community consultation on the shop locally options and inclusion of sub-contractors in discussion. ○ <u>March/April/May</u>: Management plans and addressing Reserve Matters with Council and regulators. Progressing Permitting activity – Building Works Consent. ○ <u>June/July</u>: Site preparation and commencement of construction. 	
3.3	<p>Proposed Stony Gap Wind Farm Update</p> <ul style="list-style-type: none"> ● CP provided an update on the Stony Gap Wind Farm Development Application. <ul style="list-style-type: none"> ○ Process of mediation with Joinders has not been successful to date; therefore hearing process has been instigated in ERD Court. ○ EA have received nature of objections details and have progressed to appointing experts in relevant fields to provide opinions to the court: ○ Noise (acoustics), Landscape, Ecology, Health, Planning, Aviation ○ Next ERD Court date 13th of December where draft expert reports are to be exchanged. ○ Followed by a direction hearing on the 19th of December that will schedule the hearing. ○ Explain / Outline Court process leading to March/April hearing. ● PE queried the meaning of the term 'Joinders' <ul style="list-style-type: none"> ○ CP responded by explaining that 'Joinders' is the term given to parties who are not the original parties to an appeal, but who have since been permitted to join the appeal. 	
4.	<p>EA Initiatives for 2014 – Agata Millington outlined a series of initiatives that EA is working on.</p>	
4.1	<p>EA Retail Offer to Postcode 5413</p> <ul style="list-style-type: none"> ● EA is developing a retail offer that will apply to Postcode 5413 ● Postcode 5413 includes Apoinga, Black Springs, Marrabel, Saddleworth, Steelton, Tarnma, Tothill Belt, Tothill Creek and Waterloo ● AM stated that there are approximately 200 households within this postcode. ● The retail offer would entail: <ul style="list-style-type: none"> ○ \$50 rebate for agreeing to EA becoming their retail energy provider ○ 14% discount off power bills ● Question: Is there any expectation that people signing up to this retail offer need to like wind farms? ● Answer: No – everyone is welcome to retain their view on Wind Farms ● Question: Are there any other similar offers in South Australia? ● Answer: Not sure, will take this question on notice. <ul style="list-style-type: none"> ○ SS added that 14% is a significant discount. A discount that is not offered to anyone that would normally be looking at switching retailers. 	<p>AM to update CLG</p> <p>AM to take question on notice</p>
4.2	<p>Waterloo Wind Farm Bus Tours</p> <ul style="list-style-type: none"> ● EA is looking at formalising tours of the Waterloo Wind Farm ● EA have been in discussions with Clare Valley Tours and the Burra Visitor Information Centre to prepare arrangements ● This initiative will provide greater access for community and tourists to tour the wind farm ● This initiative will provide opportunity for a local tour operator to receive training in 	

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	<p>tourism around Wind Farms. Anna Friebel is being considered for this possibility.</p> <ul style="list-style-type: none"> o AF stated that the Burra Visitor Centre currently offer tours in the region that range between 1 and 3 hours in length. Anna also stated that they hold tours from Burra to Clare for events such as the 'Day on the Green'. • Question: Would the tours be available to school groups? • Answer: Yes the tours would be open to school groups. Schools currently do tour the Waterloo Wind Farm, so this would be a formalisation of the current ad-hoc arrangements. The tours would be created in order to encourage and develop education and tourism industries within the region. • Members agreed that local community groups might be interested (Lions, Probus, etc.) • EA indicated that their intention is to pilot the program initially; then hand over to the community after approximately 1 to 2 years or when the program is running smoothly. 	<p>AM to update CLG</p>
<p>4.3</p>	<p>Waterloo Community Participation Fund</p> <ul style="list-style-type: none"> • EA is going to commence a fund known as the "Waterloo Community Participation Fund" in 2014 to support community projects and programs. • The approved budget is \$20,000 by EnergyAustralia (2 rounds of \$10,000 for 2014). • EA is currently seeking the views of Clare and Gilbert Valleys Council on the set up and running of the Fund. • EA is also interested in the thoughts of the CLG Members on the set up of the Fund. <p>Area of Interest</p> <ul style="list-style-type: none"> • Discussion occurred as to whether the area of interest should be Postcode 5413 or greater. • SS added that the Fund would be initially put in place to support the community surrounding Waterloo. In later years, the Fund could be expanded in monetary and scope as future Wind Farm projects were commenced (i.e. Stony Gap). <p>Process</p> <ul style="list-style-type: none"> • EA would receive submissions and identify submissions that meet the criteria for the Fund. • EA would then provide qualifying submissions to a Panel (potentially a small group of CLG / Council representatives) and would assist EA in the short-listing of submissions. AA suggested that the CLG is too large to form the Panel and he recommended a smaller group of approximately four (4) people would be more appropriate. • Members suggested that a Panel (small group of CLG representatives) could meet for 30 minutes prior to CLG Meetings to discuss submissions and assist EA with the short-listing process. <p>Criteria</p> <ul style="list-style-type: none"> • EA is developing criteria at present, some criteria discussed by Members included: <ul style="list-style-type: none"> o "Bang for Buck" – number of people who will benefit? Is there an appropriate return value? o Local project, although potential to accept projects with a wider regional interest o Wide selection of categories will be acceptable (e.g. recreation, tourism, sport, community, environmental, economic, etc) o CLG Members preferred that there be no expectation for \$1 for \$1 contribution (this would differentiate this fund from other funds and provide greater opportunity for the local community to access funds). AA added that some communities have less volunteers and businesses and therefore less money to access, expecting \$1 for \$1 contribution would disadvantage some communities. <p>Timing</p> <ul style="list-style-type: none"> • The CLG discussed potential timing: <ul style="list-style-type: none"> o SW stated that it would be good to open the call for submissions after the Clare and Gilbert Valley Council Community Grants have been called (they open around February), assessed and awarded; then unsuccessful applicants could look at the 	

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	<p>EA Fund (possibly April 2014?)</p> <p>Awareness Raising and Communication</p> <ul style="list-style-type: none"> ○ Members agreed that awareness raising would be important before the call for submissions process commences. ○ Members considered the best ways to communicate with community would be: <ul style="list-style-type: none"> ▪ Council Websites ▪ Local Newspapers ▪ Email by Lol at Clare and Gilbert Valleys Council – to Community Groups <p>Next Steps</p> <ul style="list-style-type: none"> ● AM stated that she would consider the CLG's comments in the development of the Fund's Terms of Reference and would communicate further with CLG Members (further information on grant development will be communicated between now and the next CLG meeting). 	<p>AM to further develop Terms of Reference for the Fund and seek CLG comment</p>
4.4	<p>Waterloo Wind Farm Open Day</p> <ul style="list-style-type: none"> ● EA is proposing to hold an Open Day at Waterloo Wind Farm in 2014 to promote the wind farm and renewable energy locally and beyond. ● EA would like to co-host with a town/other community (i.e. Snowtown recently had an event to celebrate their 135th anniversary of the Lions Club). ● AM invited suggestions from Members about the Open Day idea: <ul style="list-style-type: none"> ○ Opportunity for local community groups to raise funds ○ Kite flying, including demonstrations ○ Triathlon ○ Food and wine stalls (wind and wine theme) ● Could become a signature event for the region ● Members thought might be best to hold in early April (before Easter) ● SS questioned how many people would be likely to attend the event? And AM added that the intention is to attract a broad audience to the Wind Farm. ● AA stated that the last Waterloo Open Day attracted approximately 300 people. 	<p>AM to update and test ideas with CLG</p>
5.	<p>Waterloo Christmas Party</p> <ul style="list-style-type: none"> ● Agata Millington and Abby Walker-Schwartz raised another initiative which is the Waterloo Christmas Party. ● The new Information Shelter and Playground will be launched at the Christmas Party. ● The best date for the Party was discussed and agreed to be Wednesday 11 December – 4pm to 7pm at Waterloo. ● AM will send invites to CLG and community. 	<p>AM to issue invitations to CLG Members and community</p>
6.	<p>Update on CLG Initiative – SEB Grant – Georgina House and Kelly-Anne Saffin</p> <ul style="list-style-type: none"> ● GH and KAS reminded CLG Members of the SEB Grant initiative. ● Opportunity to submit a SEB Grant relating to the Burra Gorge and Tothill Ranges <ul style="list-style-type: none"> ○ SEB Grants available through the Native Vegetation Fund ○ Grants are for biodiversity projects that assist in landscape scale conservation, restoration and management of native vegetation across NRM Regions ○ Next round of funding expected February 2014 ○ Burra Gorge and Tothill Ranges offer a potential area of focus. ● Projects must address Native Vegetation Council priorities and be consistent with NRM plan strategies and priorities. <p>Next Steps</p> <ul style="list-style-type: none"> ● Form a Working Group coordinated by KAS. ● Hold discussions with key people and organisations and develop ideas and opportunities. ● Confirm 2014 SEB funding criteria and timing. ● Formulate concept and scope up concept. 	

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	<ul style="list-style-type: none"> ● Seek feedback from CLG Members (via email and or at CLG Meetings). ● Working Group Meeting and finalise scope. ● Report back to the CLG Meeting with final draft (February 2014). ● Finalise and submit SEB Grant Application (anticipate March 2014). <p>Working Group</p> <ul style="list-style-type: none"> ● Heidi & Sally have joined the Working Group. ● GH suggested that a landowner should ideally be a part of the group. ● AA, JA and KW also agreed to join the Working Group. <p>Development of the Submission</p> <ul style="list-style-type: none"> ● AM stated that the Government website has not yet been updated with details of the Grant. ● AM asked whether we could access previous successful submission ● AM also specified that the group need to spend a lot of time on the planning of the proposal/submission. AM added that EnergyAustralia are happy to assist once a concept has been scoped up. ● KAS emphasised that the criteria needs to be met. ● KAS is researching previous and current submissions and investigating matters of priority in the study area. ● It was suggested that the concept and scope up of the project needs to occur in Nov / Dec and follow-up work and writing of the submission needs to occur in the New Year. ● SS thanked KAS for her assistance and co-operation with this initiative. 	<p>KAS to call and conduct a Working Group, develop a concept and scope up concept in November / December 2013</p>
7.	<p>CLG Feedback on 2013 and Focus for 2014 – Georgina House and All</p> <ul style="list-style-type: none"> ● GH requested feedback from the CLG (Feedback Sheet to be handed back at end of today's meeting). ● Constructive feedback forms an important part of the CLG continuous improvement program. ● GH keen to hear how people are feeling, what knowledge they are keen to find out, things to focus on in 2014, and what action should be taken. ● GH also keen to grow membership of the CLG, we have some new people who have joined us today who we welcome to continue attending, and also to ensure we have a good cross-section of interests and knowledge. ● LJI indicated that a nurse from Burra Hospital will be joining the group. ● GH encouraged members to consider other individuals or organisations that might be interested in joining. ● GH will request CLG members not present to provide their feedback on 2013 and describe their preferred focus for 2014. 	<p>CLG Members not present to forward feedback to Georgina by Friday 29 November 2013 (refer Feedback Form attached)</p> <p>GH to summarise key themes and circulate to EA and members for consideration at February 2014 Meeting</p>
8.	<p>Noise Studies Update – Jon Cooper (Resonate Acoustics)</p> <ul style="list-style-type: none"> ● GH introduced Jon Cooper (JC) of Resonate Acoustics to provide a presentation on noise studies and on development approval consent requirements associated with Waterloo Stage 2. <p>Jon Cooper's Presentation</p> <ul style="list-style-type: none"> ● JC's presentation is attached to the Minutes, and key points are outlined below: ● What is sound? <ul style="list-style-type: none"> ○ Sound is a pressure wave in air travelling at approximately 340 m/s. ○ Frequency refers to 'how often' the air particles vibrate ○ Often said that humans can hear at frequencies of 20 Hz – 20,000 Hz (the "audible range"). ○ Hertz (Hz) = 1 cycle per second ● What is infrasound? <ul style="list-style-type: none"> ○ Infrasound is the frequencies below the "audible range" (sound at 1 Hz – 20 Hz). ○ We can hear this sound if loud enough ○ Infrasound is all around us. Sources include; vehicles, air conditioners, wind, 	

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	<p>waves, industry and people</p> <ul style="list-style-type: none"> ○ One of the best examples of perceptible (audible) infrasound is driving along in your car with the rear window down ○ Infrasound is just very low frequency sound. <ul style="list-style-type: none"> ● Effects of infrasound <ul style="list-style-type: none"> ○ How do we perceive infrasound? – We hear it first. If it's really loud we will then also feel it ○ Lundstrong experiment (1983) shows tiredness just above threshold of perception. No effect on deaf people at same noise level ○ Health effects – yes, but only at very high levels (audible sound is unbearable, whole room shaking). ● What level of infrasound is ok? <ul style="list-style-type: none"> ○ Criteria can be based on perception – historically worked well for other industrial noise (85 dB(G)) ○ Criteria could be based on the wind farm not being measurable – but everything else around us is a measureable source ○ We could consider what is the normal level of infrasound in the environment. This is the approach taken in the joint study by the SA EPA and Resonate acoustics earlier this year. ● Study Background <ul style="list-style-type: none"> ○ 11 sites (some have multiple measurement locations) ○ Urban offices, urban houses ○ Rural houses near both The Bluff, and Clements Gap wind farms ○ Rural houses away from wind farms (near Jamestown, and Myponga). ● Study Results <ul style="list-style-type: none"> ○ Easy to see the infrasound from of people, air conditioners, wind speed and wind direction ○ Contribution of infrasound to the measurement results was minimal – other sources were greater ○ Since measured similar results at other sites. ● Waterloo Stage 2 <ul style="list-style-type: none"> ○ Noise modelling was submitted as part of the DA. ○ Development approval consent given – with 3 conditions relating to noise: <ul style="list-style-type: none"> - Must meet EPA Wind Farms Environmental Noise Guidelines, July 2009 - Turbines must be no louder than warranted by manufacturer - There must be no audible 'tones' ○ Following construction, compliance measurements must be undertaken against EPA Wind Farms Environmental Noise Guidelines - 40 dB(A) or background + 5 dB(A) in a primary industry zone. <p>Questions</p> <ul style="list-style-type: none"> ● Question: AWS asked, in relation to the Lundstrong experiment, were there any exemptions to the test/study? ● Answer: No, clear cut results. ● Question: AM asked what the noise levels would be in regard to the rear windows being down in a car? ● Answer: JC stated that it would produce a noise of approximately 90 dB at 20 Hz. ● Question: SS questioned as to whether the methodology of the study was the same as the EPA study at Waterloo? ● Answer: JC was not sure, however, JC commented that similar tools were used; therefore the methodology may be similar. 	
9.	Other Business	

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9.1	<p>CSIRO Study Update – Sarah Stent</p> <ul style="list-style-type: none"> ● CSIRO has postponed the Social Licence to Operate study due to a lack of confirmed wind farm case studies (minimum required was 4). EnergyAustralia was 1 of the 2 investment partners along with AGL. ● EnergyAustralia will look to participate in a new study next year with CSIRO when/if they revise the study aim. ● Preliminary results were provided to EA by CSIRO – these were based on initial interviews with a cross section of the community. Results were to form the basis of community engagement and social licence to operate ‘themes’ which CSIRO then planned to test in wider community forums. ● Some findings: <ul style="list-style-type: none"> ○ Community considers CLG as critical to ongoing success of community engagement. EA being available/responsive also listed as important. ○ Issues identified by community as ‘high concern’ were (in descending order of concern): <ul style="list-style-type: none"> ▪ Health ▪ Community Divisions ▪ Financial Equity ▪ Noise ○ Health was listed as a concern not because individuals were worried about it, but because they believe it causes high concerns amongst others. ○ The community recommends EA: <ul style="list-style-type: none"> ▪ Seek a greater number of views from Local Interest Groups and ‘Ambivalent’ Locals ▪ More ongoing consultation with CLG members. ● Based on this CSIRO feedback, EA will integrate findings into ongoing engagement plans and will look to consult with the CLG on these findings early on in the New Year. ● EA will also continue with initiatives such as community advertisements in local papers on topics of high interest. This month, we ran an ad on ‘bushfires’. 	<p>GH to consult the CLG further on CSIRO findings in February 2014</p>
9.2	<p>Topics and Meeting Dates for 2014</p> <ul style="list-style-type: none"> ● GH mentioned that four (4) meetings are planned for 2014. ● GH will prepare a Meeting Calendar, but likely months that meetings will be held include: <ul style="list-style-type: none"> ○ February ○ May ○ August ○ November ● GH invited members to list topics of interest to the CLG in 2014, these included: <ul style="list-style-type: none"> ○ SEB Update ○ EPA Noise Study Findings ○ Waterloo Community Participation Fund ○ Waterloo 2 – Construction Update ○ Stony Gap Update ○ Further consideration of key themes and recommendations of the CSIRO Study (refer Item 9.1 above) 	<p>GH to prepare and circulate CLG Meeting Calendar for 2014</p> <p>GH to integrate suggested topics into CLG Meetings</p>
10.	<p>Next Meeting and Close –Georgina House</p> <ul style="list-style-type: none"> ● GH thanked all for their attendance. ● Minutes of this meeting will be distributed to all for review. ● 1 week will be provided for members to review draft minutes and provide any feedback to Georgina House. ● The minutes will be placed on the EnergyAustralia Website and circulated to other key stakeholders. ● Next CLG Meeting – Thursday 13th February 2014 – 4.30pm to 6.30pm at Gally’s. 	

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	Meeting Closed.	
SUPPER		

Attachments include:

- Agenda for CLG Meeting #13 (Thursday 13th February 2014)
- Infrasound and Noise Presentation by Jon Cooper, Resonate Acoustics
- CLG Member Feedback Form
- CLG Meeting Calendar for 2014

Georgina House Contact Details:

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EnergyAustralia Mid North Wind Farm Community Liaison Group Meeting 13



AGENDA

Details: Thursday 13 February 2014

Location: Gally's Meeting Place, 4 Patterson Terrace, Farrell Flat

Meeting Time: 4.30pm – 6.30pm

Facilitator: Georgina House

Meeting Purpose:
To encourage and support constructive dialogue between the local community and EnergyAustralia.

Item	Details	Presenter
1	Welcome and Apologies	Georgina House
2	Review Minutes of Previous Meeting	Georgina House
3	Overview of EnergyAustralia Mid North Wind Farm Projects <ul style="list-style-type: none"> • Waterloo • Waterloo 2 (including construction planning) • Stony Gap 	Mike Clee Clint Purkiss
4	Group Discussion on Themes raised in CSIRO Research <ul style="list-style-type: none"> • Member views on themes the CLG should focus on during 2014 	All
5	Proposed Waterloo Wind Farm Open Day <ul style="list-style-type: none"> • Ideas and inputs for the proposed Open Day (how to get community involved, promotion, potential fundraising, potential activities, logistics, etc) 	All
Supper		
6	EPA Noise Study Findings	Mike Clee
7	Initiatives Update <ul style="list-style-type: none"> • Postcode 5413 Retail Offer • Waterloo Community Participation Fund • Wind Farm Tourism • Significant Environmental Benefit (SEB) Grant 	Mike Clee Agata Millington Kelly-Anne Saffin
8	Other Business	Georgina House
9	Next Meeting and Close	Georgina House



Waterloo Wind Farm CLG Infrasound and noise discussion

7 November 2013

Jon Cooper
Resonate Acoustics

Outline

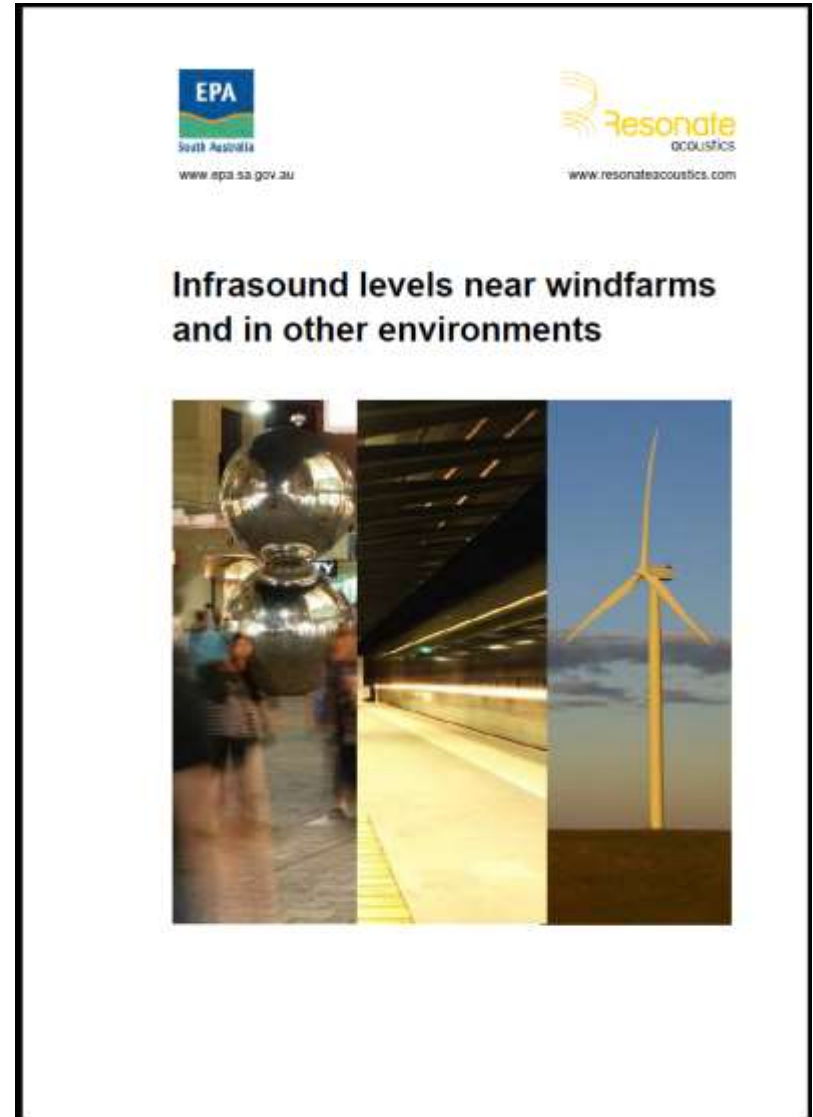
Introduction to sound and infrasound

How do we perceive infrasound and its effects

Discuss the SA EPA / Resonate Acoustics infrasound study, and results

Discuss noise requirements for Waterloo Stage 2

www.epa.sa.gov.au/xstd_files/Noise/Report/infrasound.pdf



What is sound?

Sound is a pressure wave in air travelling at approximately 340 m/s.

Frequency refers to 'how often' the air particles vibrate

Often said that humans can hear at frequencies of 20 Hz – 20,000 Hz (the “audible range”)

Hertz (Hz) = 1 cycle per second



100 Hz



1,000 Hz

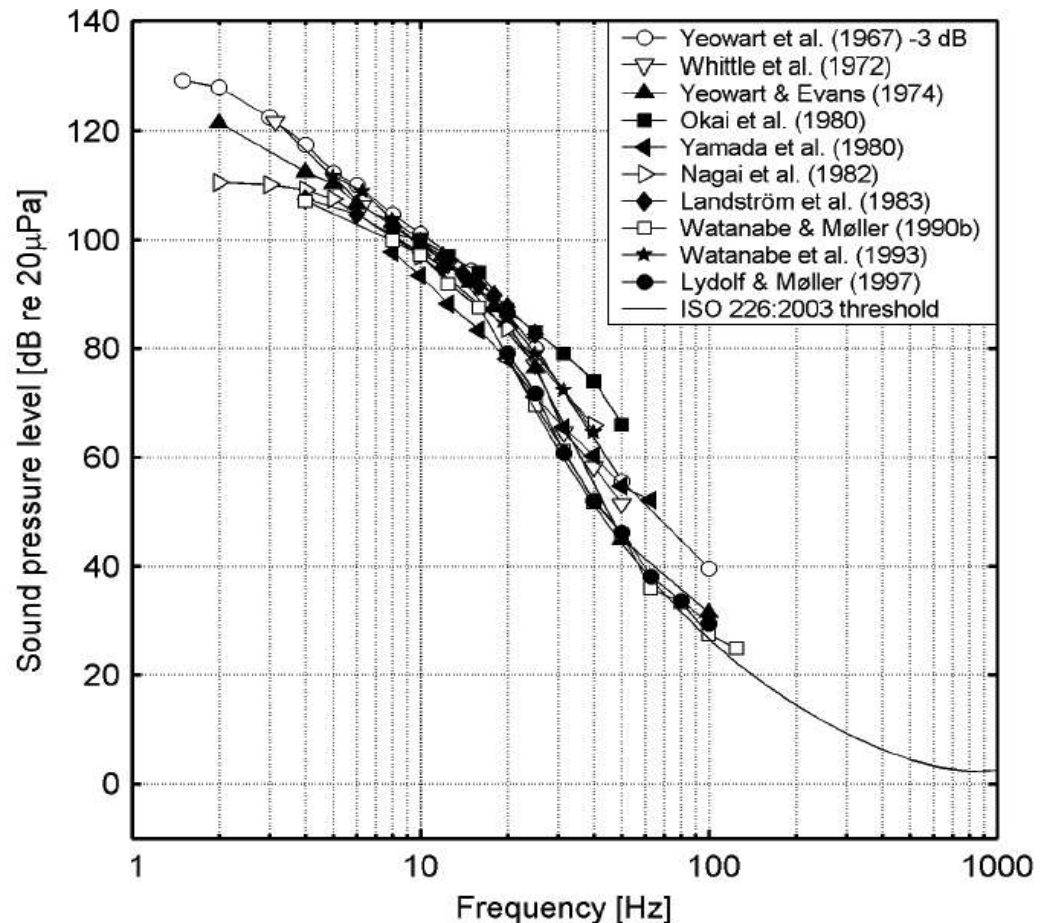


10,000 Hz

What is infrasound?

Infrasound is the frequencies below the “audible range” (sound at 1 Hz – 20 Hz).

We can hear this sound if loud enough.



What is infrasound?

Infrasound is all around us. Sources include; vehicles, Air conditioners, wind, waves, industry, people.....

One of the best examples of perceptible (audible) infrasound is driving along in your car with the rear window down.

Infrasound is just very low frequency sound

Effects of infrasound

How do we perceive infrasound? – we hear it first. If it's really loud we will then also feel it.

Lundstrong experiment (1983) shows tiredness just above threshold of perception. No effect on deaf people at same noise level.

Health effects – yes, but only at very high levels (audible sound is unbearable, whole room shaking)

Below threshold of perception? - people feel sick after viewing material available on the internet, whether there is infrasound or not (Fiona Crichton study, 2013)

What level of infrasound is ok?

Criteria can be based on perception – historically worked well for other industrial noise (85 dB(G))

Criteria could be based on the wind farm not being measurable – but everything else around us is a measureable source.....

We could consider what is the normal level of infrasound in the environment.

This is the approach taken in the joint study by the SA EPA and Resonate acoustics earlier this year.

Study Background

11 sites (some have multiple measurement locations)

Urban offices, urban houses

Rural houses near both The Bluff, and Clements Gap wind farms

Rural houses away from wind farms (near Jamestown, and Myponga)

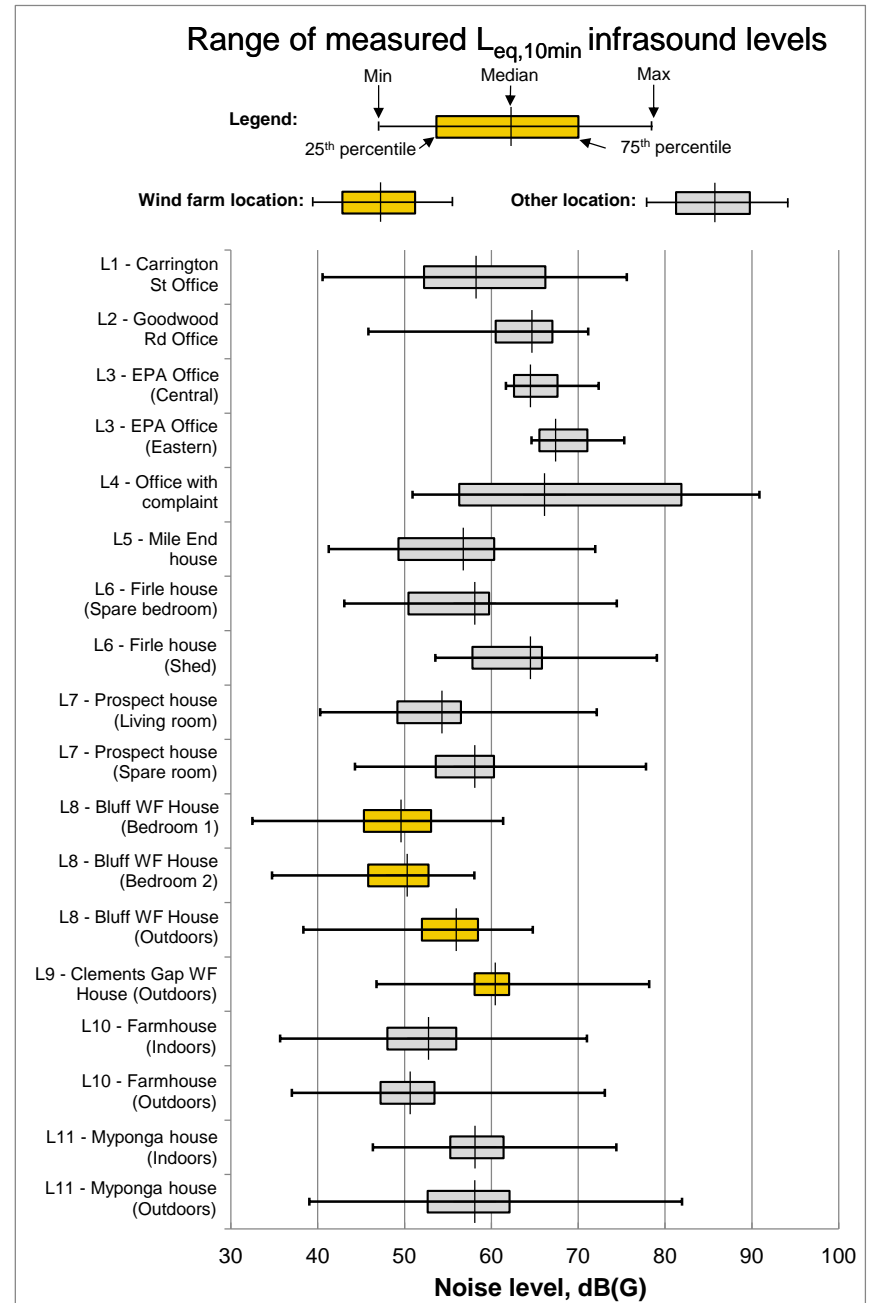


Study results

Easy to see the infrasound from of people, air conditioners, wind speed and wind direction.

Contribution of infrasound to the measurement results was minimal – other sources were greater.

Since measured similar results at other sites.



Waterloo Stage 2



Waterloo Stage 2

Noise modelling was submitted as part of the DA.

Development approval consent given – with 3 conditions relating to noise:

- Must meet EPA Wind Farms Environmental Noise Guidelines, July 2009.
- Turbines must be no louder than warranted by manufacturer
- There must be no audible 'tones'

Following construction compliance measurements must be undertaken against EPA Wind Farms Environmental Noise Guidelines - 40 dB(A) or background + 5 dB(A) in a primary industry zone.

Questions

jon.cooper@resonateacoustics.com



EA Mid North Community Liaison Group Feedback

Thank you for your participation in the EnergyAustralia Mid North Wind Farm Community Liaison Group (CLG). As independent facilitator, I would appreciate your views on how the CLG is going and the focus for 2014.

I will review feedback, and present common themes (not individual responses) back to EA and CLG Members. At times, EnergyAustralia may also use the common themes to report on the progress of the CLG to other stakeholders.

Your feedback is valuable and will help shape the planning of CLG Meetings in 2014. Please spend a few minutes considering the following questions.

 <p>Feelings What do you want to get out of future meetings? What do you want to achieve?</p>	 <p>Knowledge What would you like to know more about?</p>
 <p>Ideas What should we keep doing? What should we start doing? What should we stop doing?</p>	 <p>Take Action What action should be taken? (by myself, EA, Georgina or CLG members)</p>

Can you suggest organisations/individuals who may be interested in becoming a member or observer of the CLG?

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.....

Any other comments or feedback?

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.....

Thank you for your feedback which forms an important part of the CLG continuous improvement program.

EnergyAustralia Mid North Wind Farm Community Liaison Group Meeting 13



AGENDA

Details: Thursday 13 February 2014

Location: Gally's Meeting Place, 4 Patterson Terrace, Farrell Flat

Meeting Time: 4.30pm – 6.30pm

Facilitator: Georgina House

Meeting Purpose:
To encourage and support constructive dialogue between the local community and EnergyAustralia.

Item	Details	Presenter
1	Welcome and Apologies	Georgina House
2	Review Minutes of Previous Meeting	Georgina House
3	Overview of EnergyAustralia Mid North Wind Farm Projects <ul style="list-style-type: none"> • Waterloo • Waterloo 2 (including construction planning) • Stony Gap 	Mike Clee Clint Purkiss
4	Group Discussion on Themes raised in CSIRO Research <ul style="list-style-type: none"> • Member views on themes the CLG should focus on during 2014 	All
5	Proposed Waterloo Wind Farm Open Day <ul style="list-style-type: none"> • Ideas and inputs for the proposed Open Day (how to get community involved, promotion, potential fundraising, potential activities, logistics, etc) 	All
Supper		
6	EPA Noise Study Findings	Mike Clee
7	Initiatives Update <ul style="list-style-type: none"> • Postcode 5413 Retail Offer • Waterloo Community Participation Fund • Wind Farm Tourism • Significant Environmental Benefit (SEB) Grant 	Mike Clee Agata Millington Kelly-Anne Saffin
8	Other Business	Georgina House
9	Next Meeting and Close	Georgina House