

Meeting Record

Project Name	Waterloo Wind Farm	Meeting Date	22 August 2017
Meeting / Subject	Community Liaison Group	Recorded By	MO
	Meeting 26	Total Pages	6

Facilitator:	Georgina House (GH)	GH Planning
Members:	Garry Fieldhouse (GF)	Gally's, Farrell Flat
	Sally Fieldhouse (SF)	Gally's, Farrell Flat
	David Clarke (DC)	Armagh Resident
	Sue Wurst (SW)	Clare Resident
	John Browne (JB)	Marrabel Committee District Association and Marrabel Rodeo Club
	Heidi Hodge (HH)	Farrell Flat Resident
	Terry McKeough (TMc)	Marrabel Community Group
	Liz McKeough (LMc)	Marrabel Community Group
	Pat Williams (PW)	Auburn Resident
	Lynn Wallace (LW)	Economic Development Officer, Mid North Region, Regional Development Australia Yorke and Mid North
	Margaret Wayman (MW)	Saddleworth Resident
	Peter Wayman (PW)	Saddleworth Resident
	Glenn Christie (GC)	Seed Collector and Revegetation
	Geoff Rowett (GR)	Marrabel Committee District Association and Marrabel Rodeo Club
Guests:	David Stevenson (DS)	CEO, Goyder Council
EnergyAustralia/ Palisade:	Steve Brown (SB)	GM, Renewables, Palisade
	Hannah Willson (HW)	Operations Manager – SA, Palisade
	Gyorgyi Danka (GD)	Asset Engineer, Renewables, Palisade Asset Management
Apologies:	Hon Dan van Holst Pellekaan	Honourable Member for Stuart
	Hon Geoff Brock	Honourable Member for Frome
	Clint Purkiss (CP)	Development Manager, Palisade Asset Management
	Andrew Allchurch (AA)	Gilbert Group CFS and Waterloo Landowner
	Colin Endean (CE)	ACF Climate Project, Transition Action Group
	Chris Mosey (CM)	Waterloo Landowner
	Kerry Ward (KW)	Member NRM Board
	Kelly-Anne Saffin (KAS)	CE, Regional Development Australia Yorke and Mid North
	Simon Millcock (SM)	CEO, Legatus Group
	Allison Millcock (AM)	Mid North Resident
	Angela Ruddenklau (ARU)	Project Officer, Yorke and Mid North, Primary Industries and Regions SA
	Trevor White (TW)	Planning Consultant and PhD Student
	Abby Walker-Schwartz (AWS)	Waterloo Resident

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	Lis Jones Ingman (LJI)	Burra Resident
Minute Taker:	Marie Oatway (MO)	GH Planning

Item	Topic	Action By
1.	Welcome and Introductions– Georgina House	
1.1.	<p>Welcome</p> <ul style="list-style-type: none"> ● GH welcomed members and guests to the August 2017 CLG Meeting. ● GH gave a special welcome to three new members: <ul style="list-style-type: none"> ○ Terry and Liz McKeough, Marrabel Community Group ○ Liz Wallace, Economic Development Officer, Mid North Region, Regional Development Australia Yorke and Mid North. ● GH welcomed David Stevenson who was formerly representing Legatas Group but is now CEO of Goyder Council. 	
1.2.	<p>Apologies</p> <ul style="list-style-type: none"> ● Apologies were noted. 	
1.3.	<p>Agenda and Housekeeping</p> <ul style="list-style-type: none"> ● GH outlined today's agenda, which included: <ul style="list-style-type: none"> ○ Introduction to Palisade and Palisade in SA ○ An overview of the Mid North Wind Farm Projects (Waterloo and Stony Gap) ○ Recommendations arising from the bushfire near Waterloo Wind Farm ○ A presentation by Steve Brown on the Generation and Dispatch of Power in South Australia. 	
2.	Review of Minutes of the Previous Meeting – Georgina House	
	<ul style="list-style-type: none"> ● GH reported that all action items from the previous meeting have been attended to, including: <ul style="list-style-type: none"> ○ Circulation of Windfarm Commissioner's presentation ○ Continuing to plan future meetings topics. ● Minutes of the 9 May 2017 CLG Meeting were accepted as a true representation of the meeting. 	
3.	Introduction to Palisade and Palisade in SA – Steve Brown	
	<p>SB provided an overview of Palisade and their interests in SA.</p> <p>Palisade Investment Partners</p> <ul style="list-style-type: none"> ● An independent, specialist infrastructure manager ● Australian "mid-market" focus ● Unique risk management discipline ● Investors benefit from flexible access. <p>Palisade Investment Partners – Ownership Structure</p> <ul style="list-style-type: none"> ● Palisade is majority owned by management and staff which creates a strong alignment with investor interests. 	

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	<p>Palisade Investment Partners – Investment Overview</p> <div style="text-align: center;"> <p>Direct Investment Mandate <i>Individually Managed Accounts</i></p> <p>▼</p> <div style="border: 1px dashed black; padding: 10px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Social</th> <th colspan="4">Economic</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"> PPPs Defence Justice Schools Health Transport Palisade's Australian Social Infrastructure Fund </td> <td style="text-align: center;"> Other Car parks </td> <td style="text-align: center;"> Transport Airports Seaports Toll roads Rail </td> <td style="text-align: center;"> Energy Transmission Generation <div style="border: 1px dashed black; padding: 2px; display: inline-block;"> Renewable Palisade's Renewable Energy Fund </div> </td> <td style="text-align: center;"> Utilities Water Telecomms Waste </td> <td style="text-align: center;"> Agri Grains RLX </td> </tr> </tbody> </table> <p>Palisade's Diversified Infrastructure Fund</p> </div> </div> <p>Palisade in South Australia</p> <ul style="list-style-type: none"> • Hallett 1 Wind Farm - 100% ownership, plant upgrades • Waterloo Wind Farm - 74% ownership, plant upgrades, battery energy storage solution (Northleaf Capital own 26%) • Stony Gap Wind Farm - 100% ownership • Opportunities - Strategic MOU with Energy Australia for development and investment in renewable energy. <p>GC – Tidal power has been used overseas is that relevant? SB – The movement of devices generates the power. The issue with salt water is the maintenance.</p>	Social	Economic				PPPs Defence Justice Schools Health Transport Palisade's Australian Social Infrastructure Fund	Other Car parks	Transport Airports Seaports Toll roads Rail	Energy Transmission Generation <div style="border: 1px dashed black; padding: 2px; display: inline-block;"> Renewable Palisade's Renewable Energy Fund </div>	Utilities Water Telecomms Waste	Agri Grains RLX																									
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4.	Overview of Mid North Wind Farm Projects																																				
	<p>Waterloo Wind Farm Update – Gyorgyi Danka and Hannah Willson</p> <p>GD provided the operational report.</p> <p>Waterloo Wind Farm Transition</p> <ul style="list-style-type: none"> • From 1 September 2017 the asset management of Waterloo Wind Farm will transfer from EnergyAustralia to Palisade Asset Management • Finance, dispatch & energy settlements – 30 June cut over successful • Control room & balance of plant maintenance – 1 September • Control room operator training completed – site visit 23rd August • EnergyAustralia completing outstanding maintenance routines and defects (ongoing). <p>Energy Production Figures July 2016/June 2017</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Quarter 16/17</th> <th>Production (GWh)</th> <th>Production Target (GWh)</th> <th>Wind Speed (m/s)</th> <th>Wind Speed Target (m/s)</th> <th>Capacity Factor (%)</th> <th>Capacity Factor Target (%)</th> </tr> </thead> <tbody> <tr> <td>July/Aug/Sept</td> <td>90.5</td> <td>103.3</td> <td>9.6</td> <td>9.7</td> <td>36.8</td> <td>39.4</td> </tr> <tr> <td>Oct/Nov/Dec</td> <td>83.7</td> <td>96.9</td> <td>8.9</td> <td>8.8</td> <td>30.5</td> <td>32.9</td> </tr> <tr> <td>Jan/Feb/Mar</td> <td>70.0</td> <td>80.3</td> <td>7.7</td> <td>8.0</td> <td>24.8</td> <td>27.8</td> </tr> <tr> <td>Apr/May/June</td> <td>65.0</td> <td>85.7</td> <td>6.8</td> <td>8.3</td> <td>22.7</td> <td>30.0</td> </tr> </tbody> </table>	Quarter 16/17	Production (GWh)	Production Target (GWh)	Wind Speed (m/s)	Wind Speed Target (m/s)	Capacity Factor (%)	Capacity Factor Target (%)	July/Aug/Sept	90.5	103.3	9.6	9.7	36.8	39.4	Oct/Nov/Dec	83.7	96.9	8.9	8.8	30.5	32.9	Jan/Feb/Mar	70.0	80.3	7.7	8.0	24.8	27.8	Apr/May/June	65.0	85.7	6.8	8.3	22.7	30.0	
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June 2017

- June results were largely driven by a climate driver known as the Southern Annular Mode (SAM).

<http://www.wattclarity.com.au/2017/07/the-southern-annular-mode-sam-contributes-to-recent-wind-drought/>

SW – Did that affect other windfarms in South Australia?

GD – Yes it affected all wind farms in South Australia.

- What did this mean for Waterloo Wind Farm?*

Production:	Actual: 10,616 MWh	Target: 29,626 MWh
Wind Speed:	Actual: 5.16 m/s	Target: 8.48 m/s
Capacity Factor:	Actual: 11.27 %	Target: 31.46 %

July and August 2017

- FY18 is going very well so far – good winds have seen good production.
- This means we are 28% above so far on our YTD target.

	July 2017	August 2017 (to 20 th Aug)
Production (MWh)	47,962	35,543
Wind Speed (m/s)	10.2	12.5
Capacity Factor (%)	49.26	58.38

Operations

- May and June were quiet operationally
 - On 3rd June a DVAR unit termination failed.
- July:
 - On 3rd July WWF tripped 3 times in one day – ElectraNet Runback Scheme
 - New AEMO constraint has been applied to wind generation in SA
 - WTG FF hydraulic hose leak
 - WTG AG slip ring arc flash
 - WTG CA fire suppression system.
- August
 - Planned HV maintenance undertaken – each circuit taken offline for a work day each.

DC – When the turbines have been tripped, how long are you off the grid?

GD – We were offline for 2 hours but it can depend and is up to ElectraNet when we come back on.

SB – Windfarms can't provide frequency response or inertia, we follow frequency but wind farms can't maintain frequency. We need the gas online to provide the security for the system.

SB – Hornsdale 2 have an experiment at the moment to provide frequency control. If that is successful it is likely that all windfarms would need to do the same but right now we need large spinning masses.

JB – What brings it to the point that gas is fired up?

SB – AEMO has a rule that at least 3 gas fired generators are running at the same time in SA.

Waterloo Battery

- Waterloo Wind Farm took part in the SA Government battery tender – Waterloo was not successful, Hornsdale was.

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	<ul style="list-style-type: none"> Waterloo is looking into the possibility of 50MW/50MWh battery – a joint venture with EnergyAustralia. Initial thinking is that the battery will be located on the laydown area. <p>GH – Do you think the Hornsdale battery will go ahead? SB – It will certainly go ahead, the timeframe is tight. They guarantee it will be up and running in 3 months once the contracts are signed. GH - How long will it last? SB – Approximately 2 hours but that is all that is needed to give it time to get the gas generators started.</p> <p>Stony Gap</p> <ul style="list-style-type: none"> Palisade Investment Partners have completed the purchase of the Stony Gap development project from EnergyAustralia. Palisade are looking at contracting options for the energy and LGC's to progress the project to the next stage. <p>Community Engagement – Hannah Wilson</p> <ul style="list-style-type: none"> HW gave an update on the money that went to the Saddleworth Bowling Club for the purchase of a Defibrillator machine as well as training on how to use it. PW shared with the group an update on the Gleeson Wetlands and mentioned that school groups are visiting the wetlands. He showed the quality of the signs that will be going up soon. <p>GR – Where are the Gleeson Wetlands? PW – Behind Knappsteins Winery.</p> <ul style="list-style-type: none"> HW reported that Waterloo Wind Farm had supported various community events in the area in recent months. <ul style="list-style-type: none"> “Battle of the Birds” – held on Saturday 30th July, 2017 the inaugural Waterloo Windfarm Cup. The Waterloo Wind Farm has committed \$21,000 towards the Gilbert Valley clubs for courts repairs and resurfacing this year and has pledged ongoing commitment for netball development into the future. Employee Mark Hendry Apex Outback Postie Bike Ride raised \$104,000 travelling 1000km in 4 days. Rally of the Heartland – Waterloo Wind Farm hosted a community breakfast as part of the “Rally of the Heartland” and 180 people attended. Details of the Community Fund for 2018 will be announced at the next meeting with time line and application information. 	
5.	Recommendations arising from bushfire near Waterloo Wind Farm – Hannah Wilson	
	<ul style="list-style-type: none"> HW shared the report by the CFS on recommendations arising from the bushfire near the Waterloo Wind Farm in January 2017. The report will be circulated with the minutes of the meeting. The review specifically examined the application of aerial firefighting in and around an operating windfarm. Following an analysis of the fire, and particularly the use of aircraft operating near wind turbines, several observations were made to further improve the operating knowledge of windfarm operators and fire agencies on the application and utility of aerial firefighting in and around windfarms in bushfire operations. While ground and aircraft firefighting resources operated successfully around and within the Waterloo Windfarm several lessons were learnt that can further improve the safe and effective operation of aircraft and wind turbines during bushfires. Six observations were made that can be implemented to enable safe interaction between firefighting aircraft and wind turbines. 	GH to circulate CFS report with minutes

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6.	Generation and Dispatch in South Australia – Steve Brown	
	<ul style="list-style-type: none"> Steve Brown presented to the group on power generation and dispatch in South Australia. Steve used a live energy website to illustrate his points. <p>SW – With the political uncertainty and the energy price and the rules and regulations do you feel hopeful about windfarms?</p> <p>SB – I feel hopeful of the Australian energy situation, AEMO are now managing the industry and the industry is working hard to ensure stability. I think prices will come down, and an interconnector between NSW and SA would further assist. In another 5 years we will be in a much better position.</p> <p>DC – You mentioned a new interconnector?</p> <p>SB – There is one planned coming from NSW into Robertstown.</p> <p>GC – Does solar show up in the live feed?</p> <p>SB – There is a whole swag of solar that we generate that doesn't appear on the live feed.</p>	
7.	Other Business and Next Meeting – Georgina House	
	<ul style="list-style-type: none"> HH was going to talk about her recent trip to Sweden and their wind farm management but she was happy to defer her talk until next meeting. GH informed the CLG of research being led by Flinders University about wind farm noise and sleep study. Waterloo Wind Farm was contacted in regards to the research. SB advised that the Waterloo Wind Farm had declined to participate in the Flinders University study given their previous participation in a targeted, 2 month study conducted by SA EPA. The results from the EPA study found that where detectable, sound emissions from the wind farm were well below EPA Wind Farm Noise Guidelines. Waterloo Wind Farm believe that sufficient independent evidence has been provided that sound emissions from Waterloo Wind Farm pose no health concerns." <p>SW – Has another windfarm taken up the challenge?</p> <p>SB – I don't know, I hope so.</p> <ul style="list-style-type: none"> Other suggested topics for our future meeting are: <ul style="list-style-type: none"> Waterloo Wind Farm Wind Diary Noise and TV reception Indigenous Culture. The date of the next CLG Meeting was planned to be Thursday 2nd November 2017 but due to availability of several people IT HAS BEEN DECIDED TO CHANGE THE DATE OF THE NEXT CLG MEETING TO THURSDAY 16TH NOVEMBER 2017. Also the meeting will be held at the Waterloo Wind Farm. <p style="text-align: center;">CLG Meeting Thursday, 16th November 2017 4.15pm, for a 4.30pm START and running through to 6.30pm Waterloo Wind Farm</p> <ul style="list-style-type: none"> GH thanked all for their attendance. Minutes of this meeting will be distributed to all for review. One week will be provided for members to review draft minutes and provide any feedback to Georgina House. Once finalised, the minutes will be placed on the Waterloo Wind Farm Website and circulated to other key stakeholders. <p style="text-align: center;">Meeting Closed</p>	HH talk deferred to next meeting

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Postal Address: Georgina House, GH Planning Pty Ltd, PO Box 264, Findon SA 5023.

Attachment:

Review of a 2017 South Australian Bushfire that impacted the Waterloo Windfarm and the application of Aerial Firefighting, CFS, June 2017.

Final Minutes 22 August 2017 CLG Meeting