

Silverton Wind Farm

Community Consultative Committee
Meeting No.CCC-035

Wednesday 24 February 2021



Powering Australian
Renewables



Agenda

1

Welcome

2

Previous minutes

3

Project update

- Overview
- Wind Farm Works
- Operations

4

Community relations update

5

Topics of interest

- Generation Performance
- WTG Performance GE 3.43-130
- Bushfire and Emergency Preparedness

6

Other business



1. Welcome

1. Welcome

Silverton Wind Farm



Introduction

- COVID-19 pandemic
 - Essential service → restricted travel
 - First face to face meeting for over 12 months
 - Practice good hygiene and physical distancing
- Welcome back to Marina Draper, AGL Community Relations Manager for Renewables in NSW
- AGL's Major Projects Team (construction) has practically transitioned to Renewables Team (operations)
 - Richard Armstrong, Asset Leader
 - Samantha Mar, Asset Performance Analyst



A decorative graphic element at the bottom of the slide, consisting of a blue gradient shape that rises from the left and curves to the right, resembling a stylized wave or a hill. The color transitions from a dark blue on the left to a lighter cyan on the right.

2. Previous minutes

2. Previous minutes

Action items



Item	Action	Status	Who
3.34.04	Operational noise monitoring assessment to be undertaken in accordance with Project Approval and EPL.	Closed	AGL – 12/20
4.25.07	AGL progressed the 20m monopole with Telstra and Crown as part of the mobile reception program.	Closed	AGL – 2/20
4.28.08	AGL noted advice from our local landscaper that the best time for planning was in Aug/Sept to avoid frost shock. AGL worked with the supplier in relation to timing to ensure the best success for the screening.	Closed	AGL – 9/20
4.28.04	AGL to provide a roadmap / timeline for the Mobile Reception Program	Closed	AGL – 9/20
6.32.01	AGL provided further explanation on the additional wind turbine locations in the project approval that were not constructed.	Closed	AGL – 6/20

- Overview
- Wind Farm Works
- Connection Works

3. Project update

3. Project update

Silverton Wind Farm



Silverton Wind Farm

- Located in the Barrier Ranges approximately 5km north of the Silverton township
- Owned by Powering Australian Renewable (PAR)
- Generation capacity of 200 MW
- Wind turbines: 58 x GE 3.43-130
- Annual Energy Production (AEP)
 - ~780,000 MWh (capacity factor of 44.5%)
 - Powering more than 137,000 average Australian homes
- Connects into TransGrid's existing 220 kV substation at Broken Hill
- Design life of 25 years



3. Project update

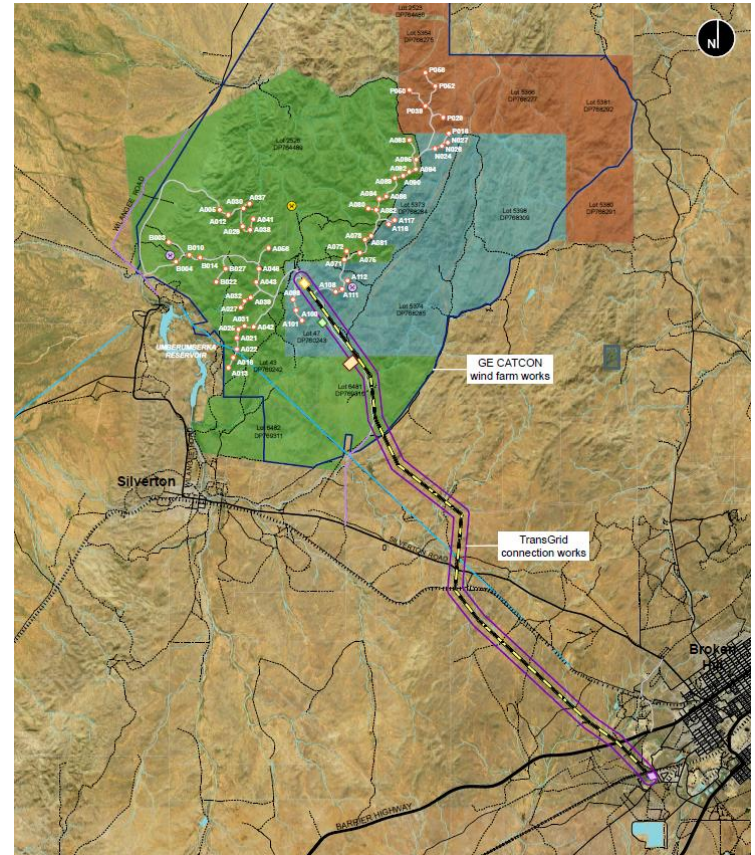
Silverton Wind Farm



Scope of works

- Silverton Wind Farm consists of two main scope of work:
 - Wind Farm Works (GE-CATCON)
 - Connection Works (TransGrid)
- AGL has prepared an Overview Environmental Management Strategy (OEMS) in accordance with the project approval
- Overview activities include
 - Community enhancement
 - Community consultative committee
 - Project website

<https://www.agl.com.au/about-agl/how-we-source-energy/renewable-energy/silverton-wind-farm>



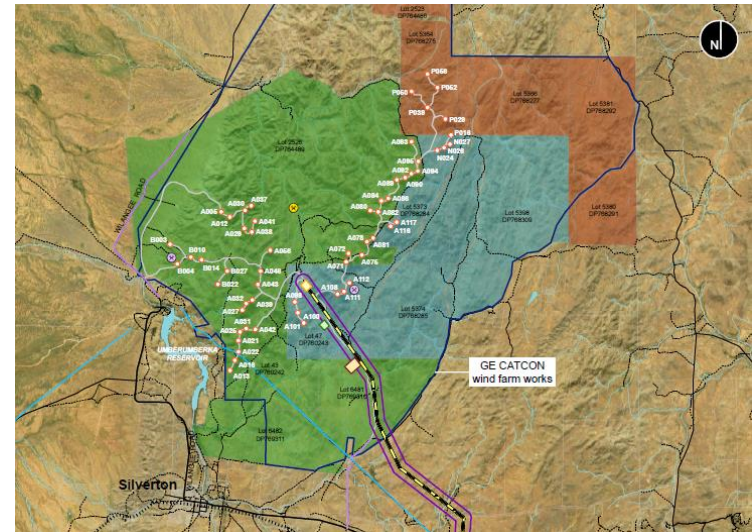
3. Project update

Silverton Wind Farm



Wind Farm Works

- GE-CATCON (joint venture) has been engaged to deliver the wind farm works
 - Engineer, Procure, Construct (EPC) Contract
- Scope of works, includes
 - 58 x GE 3.43-130 wind turbines
 - 33kV electrical reticulation (underground and overhead) and 33kV switchyard
 - Site access roads and O&M buildings
- Key project milestones (following previous CCC)
 - Day-time generation increased to maximum output on 21 May 2020
 - AEMO commissioning complete
 - Operational noise monitoring complete
- West Murray constraint
 - AEMO and TransGrid successfully resolved the West Murray constraint in late April 2020 which enabled the final commissioning of the wind farm.



3. Project update

Silverton Wind Farm



Connection Works

- TransGrid has achieved Practical Completion on 20 February 2018
 - Existing Broken Hill 220kV substation (connection point)
 - 220kV transmission line
 - Wind farm 220kV substation
- Connection works were successfully energised on 23 Feb 2018.
- TransGrid's Project Director summed up the milestone well:
 - **“It has been a challenging job but a great effort by a lot of people”**



3. Project update

Wind Farm Works



Construction works

- Following the previous CCC meeting, GE-CATCON has focused on the following activities:
 - Minor defect rectification
 - Site rehabilitation



3. Project update

Wind Farm



Operations

- Following the previous CCC meeting, GE Service Team has focused on the following activities:
 - WTG troubleshooting to maintain availability
 - WTG annual maintenance activities
 - Planning for GEPC generator replacement program in April – May 2020



3. Project update

Wind Farm



Operational Noise Monitoring

- Following the increase to full generation on 21 May 2021, operational noise monitoring was undertaken in accordance with the project approval and our environmental protection licence (EPL 20882).
 - Conducted between 12 June to 28 July 2020
- Results demonstrate compliance with the operational noise criteria specified in the project approval and EPL.
- Report has been shared with the Silverton CCC and submitted to the Department of Planning, Industry and Environment, the NSW EPA.
- Additional community operational noise monitoring has been conducted between July to October 2020 and the final report will be issued later this week.

Silverton Wind Farm

Noise Compliance Testing

November 2020

S4361C8

sonus.

Chris Turnbull
Principal
Phone: +61 (0) 417 845 720
Email: ct@sonus.com.au
www.sonus.com.au



4. Community Relations Update

4. Community relations update

Community enhancement program



Community Enhancement Program

The Community Enhancement Program for the Silverton Wind Farm is progressing, in accordance with condition 18 (schedule 2) of the project approval. We are implementing the program to give effect to the commitments in Appendix 3, including:

- **Silverton Community Fund**
 - \$15,000 per year + CPI (life of project): In 2020, funding went to refurbishing the Silverton Gaol Museum and install 6.6kW solar PV system for the Silverton Youth Camp
- **Solar Silverton Program**
 - 5kW solar PV for leaseholder and residences within 10 km of project. All suitable residences have had units installed and have had smart meters fitted.
- **Water tank program**
 - Domestic sized water tank to all inhabited residences. All residences have had water tanks installed.
- **Mobile reception program**
 - Contribution of \$50,000 has been paid to Telstra.



4. Community relations update

Community enhancement program



Silverton Community Fund 2020

- **Silverton Gaol Museum Renovations**
 - Bathroom renovations
 - Plumbing work
 - Paint and repair of picket fences
- **Silverton War Memorial Youth Camp**
 - 6.6kW solar PV installation



4. Community relations update

Community enhancement program



Silverton Solar Program

- AGL has provided solar panels to property owners these properties have received their smart meters and are “operational”
- Some property owners received panels only from AGL as their properties were undergoing renovations or were not suitable for installation
- If any residents experience issues with their solar PV system they should contact their energy provider or call Marina Draper



4. Community relations update

Community enhancement program



Water Tank Program

- AGL has completed the supply, installation and connection of domestic sized water tanks (10,000L)
 - Water tank supply → Landmark
 - Installation and connection → Broken Hill Plumbi



Capacity: 10000 L

Inlet Height: 1.49 m

Diameter: 3.08 m

Total Height: 1.7

State Available: ACT, NSW, NT, SA, VIC

Available Colours



4. Community relations update

Community enhancement program



Mobile Reception Program – Black Spot Funding

- On 18 March 2019, the Minister for Regional Services, Senator the Hon Bridget McKenzie, announced the results of the Round 4 competitive assessment process, including the Silverton small cell.
- AGL executed a funding agreement with Telstra to enhance the blackspot solution through the contribution of the \$50,000 allocated for mobile reception improvements works.
- This enhanced blackspot solution became operational in February 2020.

<https://www.communications.gov.au/what-we-do/phone/mobile-services-and-coverage/mobile-black-spot-program>



A typical 20m monopole with an omni antenna configuration

4. Community relations update

Visual impact mitigation



Visual Impact Mitigation

AGL issued notification to the Silverton residents in accordance with condition 2 (schedule 3) of the project approval in relation to the visual impact mitigation measures outlined in condition 1 (schedule 3).

- Owners within 6km of any wind turbine forming the Silverton Wind Farm may request additional visual mitigation measures (such as landscaping and vegetation screening) at their residence to reduce visual impact of the wind turbines.
- Owners have the right to request the implementation of these additional visual mitigation measures at their residence at any time within 3 years of the commencement of construction.
- Pots'n'Plants has completed landscaping works at the requested properties to minimise visual impact.

The identification of appropriate visual impact mitigation measures will be easier following the construction of the wind turbines.



4. Community relations update

Local Community Investment Program – next round



Timing for LCIP Program 2021/22

- Opens – Monday 1 March 2021
- Closes – Monday 29 March 2021

Key areas of focus

- Education
- Youth
- Environment
- Health, safety and wellbeing
- Community infrastructure
- Arts and culture
- Social welfare



4. Community relations update

Community engagement



Community information

AGL contact details for community and project information are shown below:

- P: 1800-039-600
- E: community@agl.com.au
- W: agl.com.au/silverton



- Generation Performance
- WTG Performance GE 3.43-130
- Bushfire and Emergency Preparedness

5. Topics of interest

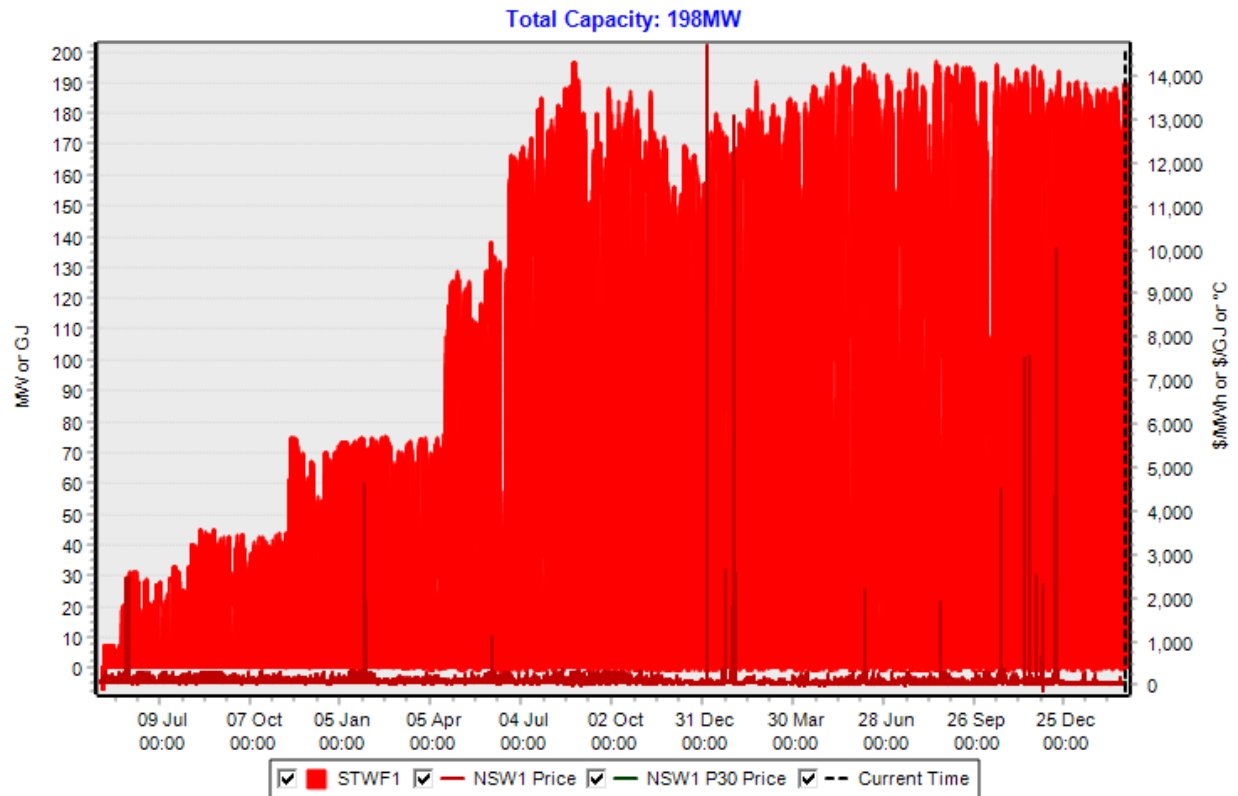
5. Topics of interest

Generation Performance



Generation Profile

- First generation occurred from the Silverton Wind Farm (STWF) on Saturday, 12 May 2018 at 23:30 hrs
- Full generation occurred from the STWF on Thursday, 21 May 2020 at 15:30 hrs
- Availability since 31 March 2020 has averaged ~96%
 - This includes both scheduled and unscheduled maintenance



NemSight® © 2021 Creative Analytics Pty Ltd

creative
analytics
part of the energygroup

5. Topics of interest

Generation Performance

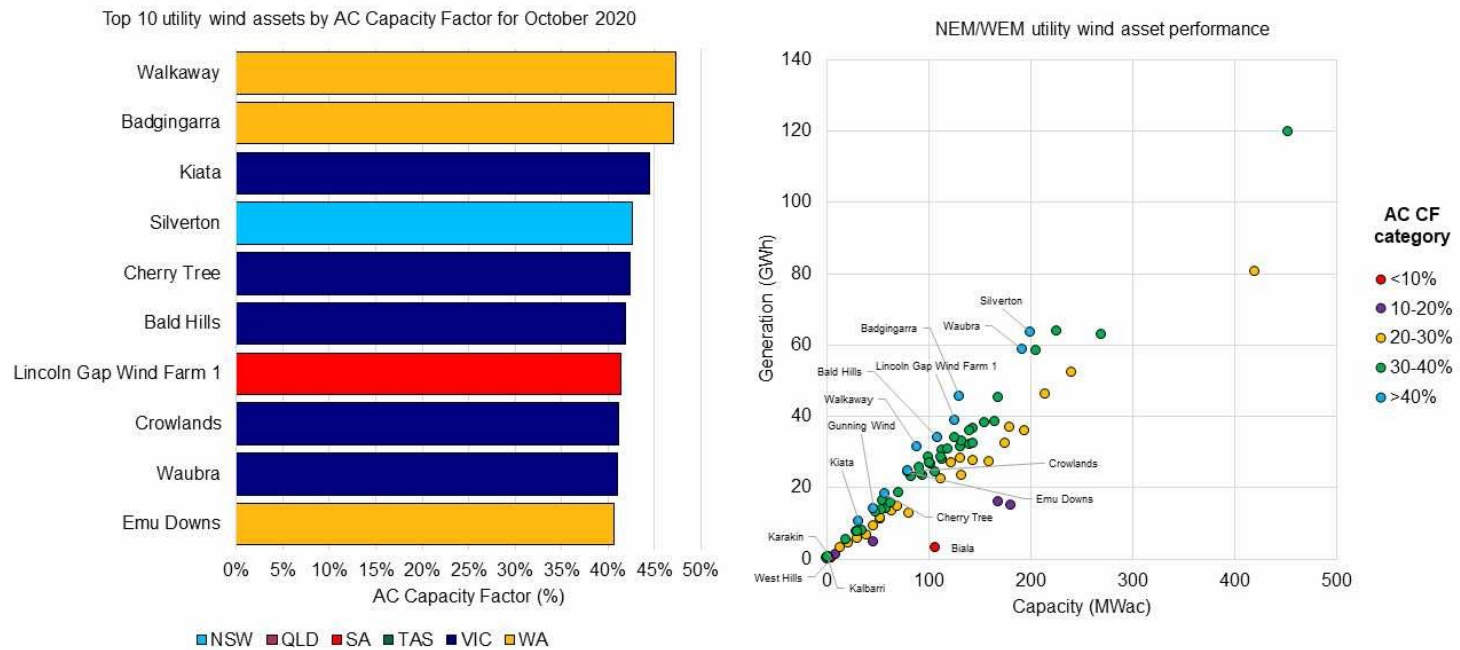


Best performing wind farms in October 2020

- Best performing wind farm in Australia >150 MW

- <https://reneweconomy.com.au/graph-of-the-day-best-performing-wind-farms-in-october-45030/>

October utility wind asset performance in the NEM/WEM



Source: Rystad Energy research and analysis



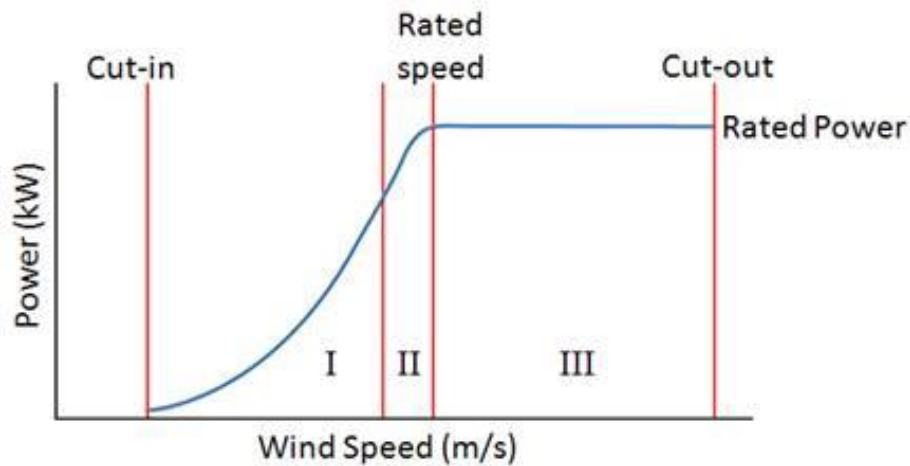
5. Topics of interest

Wind Farm Works



Wind Turbine GE 3.43-130

- GE 3.43-130 Power Curve
 - Cut in wind speed – 3 m/s
 - Rated wind speed – 13 m/s
 - Cut out wind speed – 25 m/s

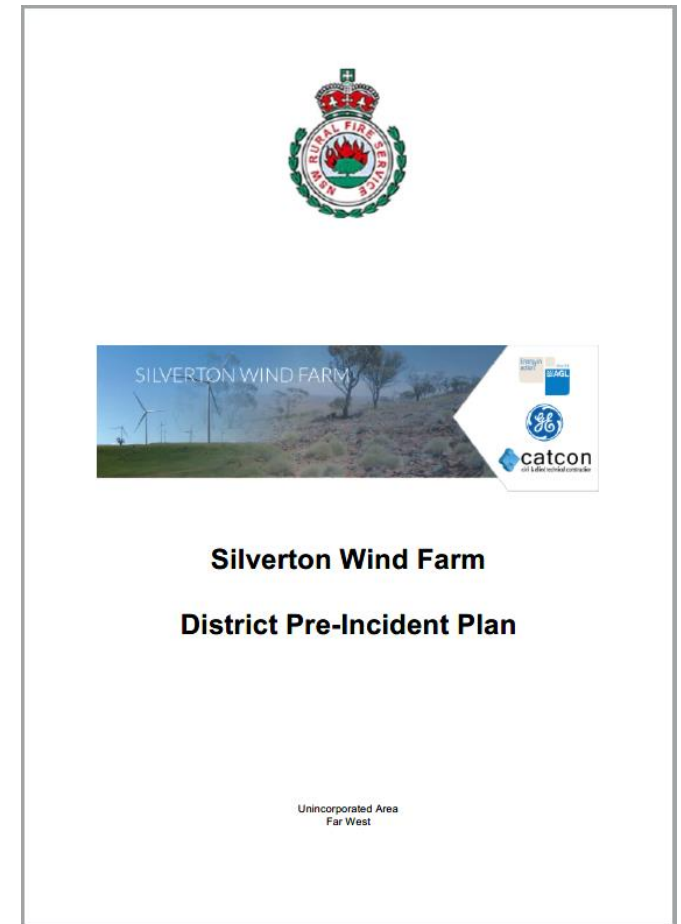


5. Topics of interest

Bushfire and emergency preparedness



- Preparation activities may include (where appropriate)
 - Fire mitigation plans
 - Appropriate permit applications
 - Fuel reduction measures and vegetation clearance at sites
 - Inspections of overhead lines and substations, where relevant
 - Access to sites for emergency vehicles
 - Ongoing monitoring of site and regular contract service provider meetings
- When working on or near wind turbines:
 - Please call 000 in the event of fire or other emergency
 - Maintain safe distance from turbines
 - Use 'Dial Before You Dig'





6. Other business

Silverton Wind Farm

Community Consultative Committee (CCC)

- Next meeting (TBC)
 - Thursday, 25 August 2021
 - Time: 5:00 pm
 - Silverton Municipal Chambers, Silverton



Next meeting

Contact

AGL Energy
Silverton Wind Farm
1800-039-600

AGLcommunity@agl.com.au

Marina Draper
Silverton Wind Farm
0498 020 244
mdraper@agl.com.au