# SILVERTON WINDFARM SUMBISSION MADE IN RESPONSE TO EXHIBITION DOCUMENTS 2016

Incomplete Impact Assessments, no assessments of communications interruptions and possible setback solution

#### Summary

This submission is in response to the incomplete assessments included as the basis for the EIS report needed to consider modification three as submitted by AGL under section Part3AMod for the Silverton Wind Farm (SWF). Modification three application included the following requests to:

- Decrease number of turbines from 282 to a maximum of 172.
- Increase the dimensions and capacity of the remaining turbines up to 5MW.
- Provide additional potential water source for construction; potential staging of construction.
- Change the conservation status of specific entities known to occur on site.
- Include new definition of pre-construction minor works. Conditions for which consideration is requested for deletion or amendment are: 1.12, 2.2A, 2.6, 2.17, 2.21, 2.53.

Listed below are the incomplete Impact Assessments that have formed the basis for the EIS are:

- The Aerial Assessment
- The Visual Impact Assessment
- The Noise Impact Assessment

### The Aerial Assessment did not include the following:

- Six known airfields with one being immediately adjacent at only .72 kilometres from the western boundary of the Silverton Wind Farm.
- The breach of the wind farm into the lowest safe altitude (LSALT).
- The breach of the turbines into the mandatory flying circuit for all airfields of 3 nm and the outer boundary of 5nm on Eldee Station.
- That there are at least six types of light and medium powered aircraft using the airspace over and around the Silverton Wind Farm.
- That aircraft are used for at least ten different activities in this same air space.

#### The Visual Impact Assessment

The Visual Impact Assessment did not include the following:

- The nationally renowned filming and tourism destination hot spot of Sunset Hill Lookout located on the western edge of the Barrier Ranges and located inside the Silverton Wind Farm boundary.
- This same site has proposed turbines located less than 1 kilometre to the east and north and AGL want to retain.
- The tour activities being conducted at sunrise, day and sunset/moon rise 4WD tours are conducted on top of this ridge all year round.
- The activities of stills photographers, film makers and artists utilising this location at sunrise, during the day, sunset and night time. Eldee Station has featured in many TV programs, commercials, websites, catalogues and brochures.

#### The Noise Impact Assessment

The Noise Impact Assessment did not include the following:

- Any noise assessment above 3.6 MW WTG's even though AGL are asking to increase dimension and capacity up to 5MW for the remaining turbines.
- Any data for onshore 5MW WTG's which have been developed and sold in Europe by reputable manufacturers and suppliers since 2014.

 Sunset Hill Lookout as a receptor for analysis due to location within the wind farm boundary. Noise contour maps show this site falls within the 44db and 41db contours but only for 3.6MW and not 5MW turbines. This could make speaking etc., very difficult according to the WHO. This would destroy the outback ambience and usability that Sunset Lookout Hill is nationally known for.

#### Recommendations

- That the EIS and VIS be recalibrated to refer to the Preferred Project and Submission Report where the stages are changed from 1 to 5 to the now Stage 1 and Stage 2. This would change the outcomes stated for the visual impacts on many receivers surrounding the wind farm.
- That the Report on Aviation Issues be restarted to include all of the points raised on the previous page in consultation with local stakeholders to provide a full overview of airspace above and around the Silverton Wind Farm for CASA and Air Services to review in regards to the obstacle lighting especially for aircraft land and departing near dawn and dusk.
- That the report for the Noise Impact Assessment be restarted to include the noise receptor Sunset Hill Lookout location and tourist destination which pre-existed the original project and concept approval by at least 40 years to assess the impact of 3.6MW and 5MW WTG's.
- That the Visual Impact Assessment be restarted to include the nationally renowned visual
  receiver Sunset Hill Lookout and all of the economically important activities that help sustain our
  regional economy. Sunset Hill Lookout location has been operating for over 45 years as favoured
  location for stills photographers, film makers and crews of up to 200 people and artists. Also for
  the past 19 years Sunset Hill Lookout location has become tourism destination for tours and
  photography workshops utilising this location at sunrise, during the day, sunset and night time as
  do stills photographers, film makers and artists. This location should also be assessed for the
  flicker and shadow affect as well because both of these exceed the boundary by 2 kilometres.
- That the Department of Planning remove the remaining turbine locations identified by AGL on Eldee Station and Purnamoota Station (Refer to Appendices 1 – Area 1 & 2) to facilitate the proper operations of the Eldee Airfield so that there can never be any breaches in the airspace which denotes the 3nm flying circuit and the 5nm boundary "Eldee Multicom" and to maintain the economically important Sunset Hill Lookout location to facilitate continued sustainable operations location for tourists, tours, stills photographers, film makers and artists.
- To offer a compromise on the location of the Turbines to facilitate better relations between the residents of Silverton and the involved lessees. It will also ensure that the Eldee Station communications systems are maintained. Basically setback and cluster the turbines locations on Nine Mile, Purnamoota, Eldee and Belmont Stations (Refer to Appendices 1 Area 3). The setback from all receptors of and approximately 8 kilometres from Silverton will improve AGL's relations with residents and allow the natural Barrier Ranges topography to provide an environmentally friendly and sustainable buffer for noise and lessen the Visual Impact Zone.
- To urge AGL to compromise and include turbines on Eldee and Purnamoota Station that are part of the concept approval only needing the Biodiversity and Archaeological reporting to be

completed (refer to Appendices 1). These have similar wind values to those selected by AGL.

# Section One - Summary Related to Incomplete Aviation Assessment

This submission has been made necessary as the methodology and the findings presented as part of the aviation assessment underpinning the EIS for the third modification is incomplete. The Assessment did not identify the following:

- The closest airfield being only 0.72 nautical miles away from the Silverton Wind Farm Boundary on Eldee Station at least 6 others (Refer to table 1). Failed to identify the multitude of aircraft operating in the Airspace over Silver Wind Farm.
- The airfields immediately adjacent to the wind farm boundary and up to 16 nautical miles of the Silverton Wind farm boundary. The closest airfield identified in the SGS report is 20 nautical mile away or 38kms.
- The interference of the Silverton Wind Farm at the existing height nor the new height of up to 180 metres with circling altitude, approach and departure altitudes and the lowest safe altitude (LSALT) and Obstacle Limitation Surface (OLS) particularly for airfield adjacent to boundary.
- That "Eldee Multicom" has legal boundaries, as do all Multicoms. These are: 3nm radius from the physical centre of our runway is called the "Circuit Area" (Area where a/craft organise themselves in a Circuit pattern in preparation to land). The Silverton Wind Farm breaches the 3nm circuit. Eldee Station is a national Award Winning Tourism destination with many aircraft landings.
- That the outside of the Circuit area is the Multicom Boundary. This boundary is a 5nm radius around the same physical centres of your runway, starting at Ground Level, extending upwards to 3000" Above Ground Level. The Silverton Wind Farm breaches the 5nm circuit (Refer to Map 1).
- The effects of turbulence on light planes in particular when located within the aviation circuit of airfield at Eldee Station or helipad at Daydream Mine given such close proximity.
- That turbulence can occur up to 2.2 kilometres down wind of a turbine. The studies carried overseas only include up to 3.6MW with far less height than this modification being asked by AGL.
- That there are at least six types of light and medium powered aircraft using the airspace over and around the Silverton Wind Farm.
- That aircraft are used for at least ten different activities in this air space.

# Airfields adjacent to wind farm boundaries

Totally excluded by the author for consideration are 6 unlicensed, active airfields and helipads clearly not identified in the "Report on Aviation Related Issues" on behalf of SGS Hart Aviation. These

airfields are as close as .72 nautical miles to 15.62 Nautical Miles from the Silverton Wind Farm Project.

In the summary, the author of the report states that there little evidence of aviation related activity and fails to identify any of the airfields included in this submission. Listed below in the table are the airfields and measured positions from wind farm boundaries and the Broken Hill Airport.

Table of Local Airfields not included in Aviation Assessment below:

	Latitude	Longitude	Measured from boundary of Wind Farm		Measured from Broken Hill Airport	
Airfield Station Name & position			Nautical Miles	Kilometres	Nautical Miles	Gilometres
Wilangee Airfield North West	31°28'6.43"S	141°19'11.12"E	8.14	15.8	32.44	60.08
Eldee Airfield West	31°40'1.54"S	141°15'36.09"E	.72	1.33	22.08	41.27
Mundi Mundi Airfield South West	31°40'1.54"S	141°15'36.09"E	9.34	17.3	21.54	39.88
Thackeringa Airfield South West	32° 4'3.47"S	141° 6'11.33"E	15.62	28.62	35.01	35.01
Nine Mile Station Airfield East	31°50'50.04"S	141°29'48.69"E	8.89	16.46	10.08	16.28
Daydream Mine (Rotor) South East	31°48'54.06"S	141°20'56.71"E	1.25	2.32	12.50	23.15
Silverton to Daydream Mine (Rotor)	31°53'9.07"S	141°13'23.03"E			7.74	14.34

**Table 1** - Please note these are approximate measurement taken from Google Maps. Note that thetwo listings in green are approximate locations and measurements where the helicopter lands atthe Daydream Mine and in Silverton for tourists so again the location and distances will vary.

On the next page is a Google Map with the airstrips not included clearly marked with the yellow circles and the approximate position of the wind farm project are shown in light grey. This is considerably larger than the map representation of the wind farm area in Appendices 7.4., of the Aviation Assessment.

The knock on effect of underestimating the size of the wind farm by approximately 30 kilometres has meant that Mount Robe at the height of 473 metres hasn't been identified in the aviation report either. This is the highest peak in the range. Close by is an 80 metres high wind monitoring tower.



**Map 1** - This map has been copied from Google Earth Maps (2016) as this is the most accessible, accurate and affordable application to use in this instance.

# Types of aircraft using the six airfields identified

Types of aircraft using our airfield and others included in the submission are:

- Power Parachute.
- Gyrocopter.
- Ultralights.
- Light aircraft.
- Helicopters (Eldee Station, Daydream Mine and Silverton).
- Gliders.

# The aviation activity occurring in the air space above and adjacent to the Silverton Wind Farm

Fixed wing and rotor aircraft are criss-crossing the windfarm development area every day of the week and used in the following ways for:

- Aerial Mustering of sheep, goats and cattle.
- Joy flights from Broken Hill by helicopter and fixed winged aircraft.
- To travel to Eldee Station to experience an outback farm stay (Station).
- To fly to mine sites in SA from Broken Hill.
- Flight Training.
- To fly to and from Broken Hill to stations in SA and to the north along the NSW.
- Checking power lines.
- National Parks and Wildlife Services for aerial Kangaroo surveys roo tag quota.
- Ariel Gravity Surveys.
- Mining Surveys.

# Specific uses of our Airfield at Eldee Station

Why people use our Airfield:

- To land and stay for a holiday on Eldee Station.
- To rest on round Australia trips by aircraft enthusiasts.
- For aero sports club members to fly in groups of 4 or 5 planes for social activities away from their base.
- To rest on the way to or the way back from the Birdsville races held annual in September.
- To provide a base for search aircraft coordinates by the NSW Police Department.
- Landing gliders.
- To provide a base for aircraft involved in mustering stock.
- For tour operators from major cities bringing clients to the outback by air.
- For an emergency landing strip if problems are encountered during flight.
- For medical emergencies evacuations if necessary.

# Interference with circling altitude, approach and departure altitudes and the lowest safe altitude (LSALT) and Obstacle Limitation Surface (OLS).

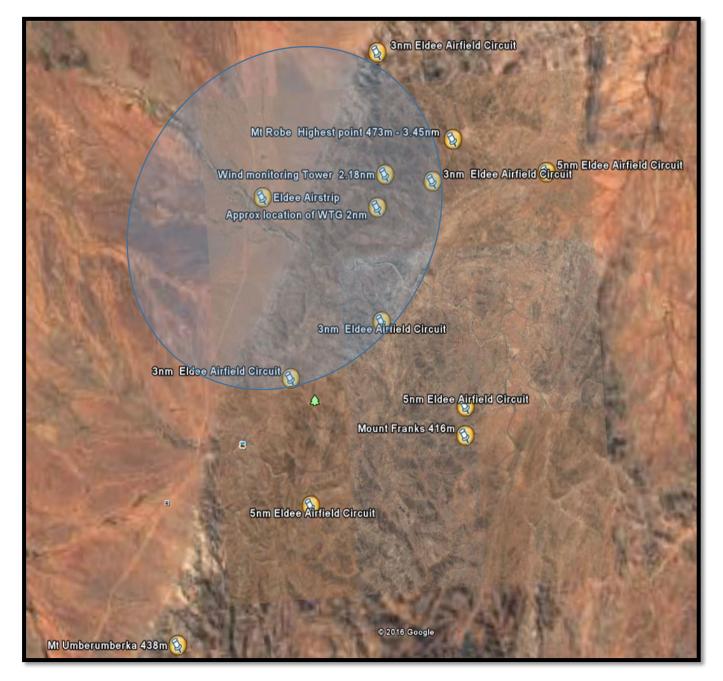
The wind turbines will also penetrate the circling altitude, approach, departure altitudes and the lowest safe altitude (LSALT). Keeping in mind there is usually a 20 kilometre buffer with no obstacles around aerodromes and airfields.

The best way to explain is that our Airfield is known as a "Multicom" – (multiple communications). "Eldee Multicom" has legal boundaries, as do all Multicoms. These are: 3nm radius from the physical centre of our runway – is call the "Circuit Area" (Area where a/craft organise themselves in a Circuit pattern in preparation to land).

Outside of the Circuit area is the Multicom Boundary. This boundary is a 5nm radius around the same physical centres of your runway, starting at Ground Level, extending upwards to "3000" Above Ground Level. (Before incoming aircraft enter this airspace they must notify all other possible aircraft in your vicinity of their intention to join a specific leg of your circuit pattern – in order to avoid a possible "close encounter").

Below is a copy of Google Earth Satellite Map showing the circuit area of 3nm and 5nm for the Eldee Station Airfield. (Please note I do not have the exact coordinates for the boundary of the wind farm nor the turbine locations so the WTG location is an approximate location guided by the location pinpointed in the report).

This map clearly shows that there are turbine locations just 2nm from the Eldee Airfield and will penetrate into LSALT remembering the mandatory circuits for all airfields are 3 nautical miles and 5 nautical miles as shown below. The blue area below indicates approximately the 3nm mark for circuit which is approximately two thirds of the way across the wind farm. The 5nm markers clearly show western boarder of the wind farm again indicating the breach of the wind farm into Eldee airfield boundary.



Map 2 - Pinpointing 3nm circuit and 5nm Eldee Airfield Boundary.

- The Topographic features in the north of the ranges and south of the ranges includes the following:

Feature	AHD	Feature	AHD
Mount Robe	473m	Mt Umberumberka	438m
Mount Eltie	311m	Mt Franks	416m
Sunset Lookout	340m	Mount Lookout	339m
Mt Mount Mundi Mundi	413m	Lakes Knob	417m

## Turbulence created across Airfields' by Turbines

Turbulence is a real issues where WTG's constructed too close to or within the landing circuit of 3nm and 5nm. Extensive studies have been carried out overseas and all have identified that the turbulence from WTG's increase the turbulence across the airfields and can create vortices just as large aircraft can. In both instances small and light aircraft plus gliders are at greater risk of being involved in accidents or sustaining damage.

Turbulence can occur up to 2.2 kilometres down wind of a turbine. The studies carried overseas only covered 3MW with far less height than this

modification being asked by AGL.

# Desktop study for airfields

Although the airfield on Eldee Station is a private strip and there are no landing fees the airfield has been advertised widely. A quick desktop search on Google would have immediately identified Eldee Station Airfield in second place as it has been listed on the <u>www.eldeestation.com</u> website for many years. This same airfield is included in the Pilots

Touring Guide Book, on HEMA Maps and many other maps. It has also been advertised in AOPA as many guest fly in to stay. Eldee is accessible by road and air.

This exclusion of all of these airfields means that basic safety operating procedures for pilots have been overlooked by SGS and is going to compromise air safety in the airspace over and surrounding the Silverton Wind Farm.

It is not a secret that there are airfields located on many stations and have been operational since the late 1950's and early 1960's.

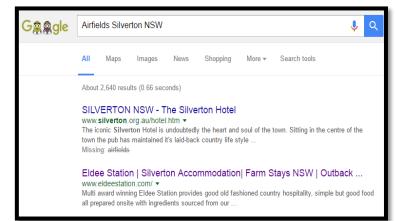


Figure 1 Google Search

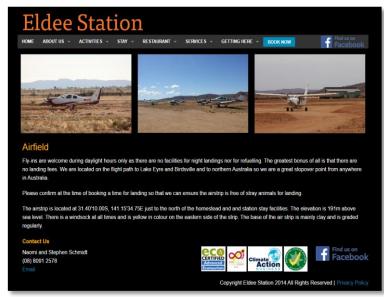


Figure 2 Eldee Station Airfield Webpage for guiding Pilots

# **Section Two Visual Impacts**

## Flicker, Glint and Shadowing

The Barrier Ranges trend from the south west the north east so it follows that the sun rises in the east and travels over the top until sunset in the west. The suns shadow also varies with the movement of the sun according to our seasons. Typically when the sun rises every morning a long shadow is cast by the Barrier Ranges to the west over the Mundi Mundi Plains.

The vegetation on these ridge lines of the Barrier Ranges is often represented by low growing Mulga Trees standing two to three metres in height. This means that the turbines standing at up to 180 metres higher again on the Barrier Ranges will also cast an additional height over the Mundi Mundi Plains, over VL1 and VL2 (excerpt left from figure 9 – VIA).



Figure 3 Photograph of highly visible wind tower at 80 metres only to the left on ridge approximately 2.18 nm from Airfield with Mount Eltie to the right at 311 metres. This view is also seen from Homestead and accommodation facilities and restaurant. Note primitive camera shot really doesn't reflect how obvious this tower is to the naked eye.

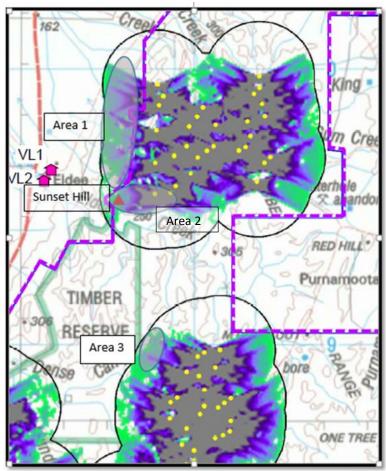
Sunset Hill Lookout area is represented by the red triangle.

Using the weather reported at the Broken Hill Aerodrome is not applicable to the weather over the wind farm area as many systems and weather fronts often only reach as high as Broken Hill from the south. Vice Versa, weather systems that travel in from the north don't reach down as far as Broken Hill located over 20 kilometres to the south east of the wind farm.

# **Turbine Flicker Shadow**

# Area 1 – Flicker exceeds boundary by 2 kilometres

The **Self Drive 4WD tracks are** immediately adjacent to the Barrier Ranges on the slopes and plains to the west on the western boundary of the windfarm. The theoretical shadow from flicker exceeds the wind farm boundary by at least 2 kilometres (denoted by light grey oval). The measurements supplied appear to be very conservative and unrealistic as to impact hours that will be received in this location.



Excerpt from figure 9 - VIA

The 4wd tracks have been used by guests for over 19 years and still used today. This means the tracks will definitely be affected not only by the flicker shadow but the shadow of the turbines when not generating wind.

# Area 2 - Sunset Hill Lookout Location – National renowned tourist destination and film location

Sunset Hill Lookout Location should have been assessed for Flicker shadow and shadow and visual impact. No assessment of this location has been included in the VIA in regards to flicker and shadow from engaged and disengaged turbines nor the visual effects of the nearest turbine being located less than a kilometre away and even closer in the car parking area at the same location.

The Flicker and shadow impact will be as follows:

- Long shadows at sunrise.
- Long shadows on day tours.
- Long shadows for sunset/moonrise tours.
- Long shadows beyond the boundary of 2 kilometres on the western boundary over the slopes and onto the Mundi Mundi Plain

It has been a favoured location and destination for over 45 years by:

- Stills photographers.
- Film makers and crews of up to 200 people.
- Artists.
- Tour operators.
- Eldee guides.
- 4WD adventure enthusiasts.
- Guests on Eldee.

The nationally renowned - visual receiver - Sunset Hill Lookout location and all of the economically important activities that help sustain our regional economy are listed below:

- For sunrise, day, sunset and moonrise tours.
- Photography workshops.
- Location for stills photography for fashion, homewares, 4Wheel drives, 4WD after sales accessories.
- Location for artists to produce artistic works including acrylic, water colour, oil paintings.
- Tour packages including champagne, Hor d'oevres and comfortable seat to watch the sunset over the iconic Mundi Mundi Plains.

Negative effect of flicker, shadow and the presence of the WTG's on the ridges are:

- The timelessness of the landscape destroyed for future filming and photography.
- The real outback ambience will be dominated by 180 metres tall turbines.
- That sense of escaping that fast paced urban and industrialised lifestyle won't happen. because of the new industrial landscape that will exist once the turbines have been constructed and are operational.
- The substantial loss of income for tourism operations and all the suppliers of goods and services in the economy of Far Western NSW.

# Area 3

This is the south eastern corner of the Eldee Leasehold area where there are more self-drive 4WD tracks which clearly will be overshadowed by the turbines early in the day when most 4WD enthusiasts staying with us will be out on site.

### Previous discussion and identification of the economic importance of Sunset Hill Lookout Location

This receptor location not included in VIA or NIA. Sunset Hill Lookout location was never included as receptor or receiver even though representatives from Epuron, AGL and NGH and have all be informed on this location through many discussions and provided with maps as well prior to the wind farm project approval and concept approval and again in the last meeting held on Eldee.

# **Section Three - Noise levels**

The receptor of Sunset Hill Lookout location was not assessed even though it is a nationally renowned location for film, stills and tours. It has been continually discussed with all parties involved but clearly marginalised as an important location and should have been included in the NIA for the following reasons:

- There are preferred WTG's sites of 3.6MW 5MW locations less than a kilometre from the location and even closer to the car park area.
- According to the Noise contour Map Sunset Hill receptor is located between 44db and 41db. Anything over 30db according to WHO is unacceptable because of the adverse effects of noise emanating from WTG's.
- GBD Landscape Architects representative also failed to ask if there were additional receptor sites that should be included when placing the only noise recorder and weather station at the homestead.
- Negative effects of the noise include not being able to talk to others, inability to use sound because turbine noise will be in the background.

# Absent data

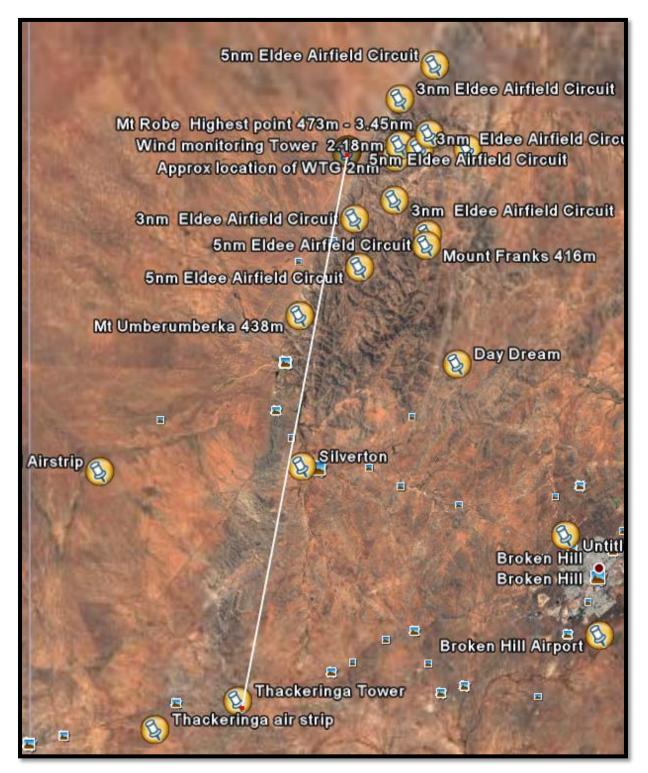
The most outstanding omission in the NIA and the EIS report is the total absence of any data related to Turbines with a generation capacity of 3.6 MW. How can the Department of planning consider increasing the size of the turbines if there is not data presented for consideration and at best guesses as to what might happen with turbines over 3.6MW?

5MW WTG's for onshore use have been manufactured and supplied in Europe since 2014 by reputable companies. This meant that there is data available but has not been included

There also isn't a wind monitoring tower on Eldee as identified in the noise impact assessment and hasn't been for over 4 years. So how has the data been calibrated to produce the assessment graphs?

# Section Four – Turbine Interference with Radio signal for phone lines

In the Google Map below is a white line to represent the line of sight from the Eldee Homestead to the Thackeringa Phone Tower by Next G wireless local loop which services all of our phone lines, data lines and our mobile phone lines. If the wind turbines are constructed to the south west and western side of the wind farm all of our communications will be totally interrupted as this line illustrates.



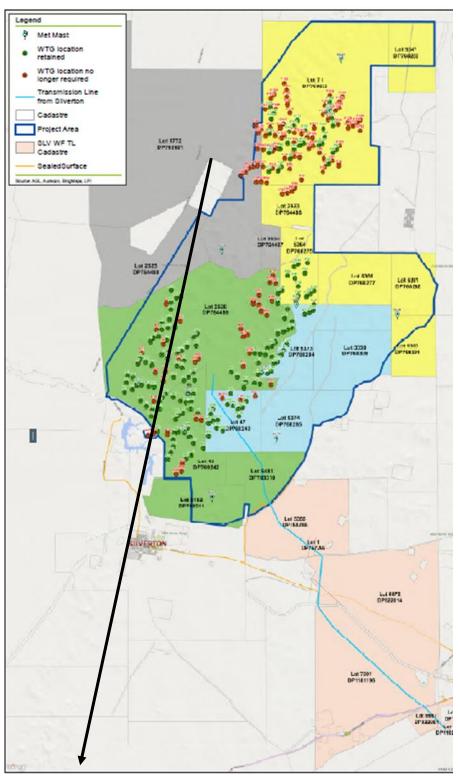
On this page there is a black line showing approximately the line of site again to the Thackeringa. Now that the elemental components of the Silverton Wind Farm Project Approval it is time to consider the negative effects that constructing any towers on the along the south wester and western edge of the Barrier Ranges not only our business and data lines but also our mobile phone connection.

AGL are now asking that the current height be increased by another 25 metres taking it to a total of 180metres. As a tourism destination it is imperative to have all of our existing communications channels in place to manage the operational risks including WHS. Our tourism booking systems operate in the "Cloud" even with "Check in" and "Check Out", by guests are processed this way. Components will also stop mobile phones, IPads and computer connections for the following:

- For guests.
- Pilots plotting flight plans.
- Contractors who service and repair plant and equipment.
- Shearing Contractors.
- People attending workshops, meetings and weddings.
- Search and rescue coordinators.
- Firefighting coordination.

The current successful signal is line of sight and transmitted at only 45 metres above the earth surface. At the moment there is no comparable technology available for our operations. Satellite does not work through heavy dense clouds when it rains but our current system does.

Although there is an agreement in place which can't be discussed fully it won't overcome this major problem as it stands with added height and interference of our communications systems for phone and data. Again another reason why the turbines should be clustered as per appendix 1.



# Section Five – The Compromise and the Solution

Essentially the solution to the breaches to the Eldee Airfield mandatory circuit of 3nm and the same Airfield boundary, ISALT, and the possible redundancy of the world renowned Sunset Hill Lookout Location could be solved by removing all of the turbine locations in Areas 1 and 2, from the project and retain the concept approval sites and preferred sites identified in Area 3. It would provide a setback from Silverton of 8 Kilometres. The Barrier Ranges topography would also create natural buffers for visual and noise impacts.

It is an ideal time to make these changes to the approval because AGL are asking to reduce turbine numbers from 282 to a maximum of 172.

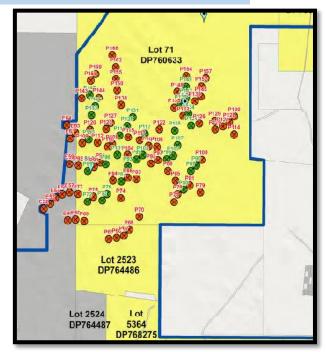
AGL would then be required to consider Area 3 which includes Stage 1 approved turbine locations and about ¼ of the turbine locations have concept approval on Eldee

and Purnamoota in the top section of Area 3. Concept Approval sites only need the completion of the biodiversity and archaeological surveys to gain project approval. Note that these locations all have similar wind values as well.

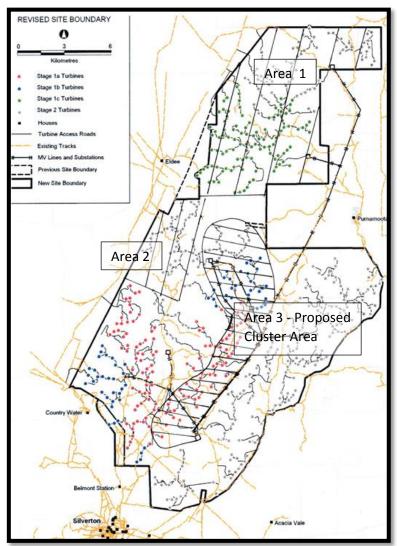
Area 3 also includes turbine locations on all four stations of Belmont, Nine Mile, Purnamoota and Eldee Stations. The present submission does not include any turbines on Eldee Station.

The suggested setback and clustering gesture if offered by AGL would facilitate better relations with the residents of Silverton due to the setback of approximately 8 kilometres.

The map above is the north section of the Appendix A Maps. Eldee Station lease areas are shown as grey and Purnamoota as yellow. This is the north end of the wind farm project approval and concept approval. The map to left indicates the three areas of concern (included as appendices 1 an enlarged map of map to the right).



Excerpt from Appendix A maps 2016



Stages and Turbine location from the preferred project Submission report 2008

# Section Six – General Comments and Questions

## **Raptors and Bats**

There are numerous Eagles nests and many habitat areas located on the ridges in the Barrier Ranges. Although it is identified that there are eagles nesting in and around Mt Robe in the Bird and Bat Risk Assessment there are no solution given to protect these native Eagles and Bats.

**The Setback solution presented in section Four** would reduce the number of bird strikes and deaths in the northern part of the Barrier Ranges wind farm. Another plus as a result of the proposed setback.

### Net reduction of disturbance and environmental Footprint

The wind farm calculation of the net reduction disturbance footprint identified on page 12 based on the figures supplied is only 1.77 ha or 1.1% not 10 Hectares as stated. This means there is very little minimisation of the environmental footprint of the windfarm it is about the same.

#### Water

Water is a major issue for everyone living in the desert and the supplies that are harvested are very precious and limited. We also rely on rock fault aquifers that recharge at the top of the ridges and flow down through the ranges into the creek beds to provide springs and soaks.

Given that the windfarm disturbance is now 48.3 hectares (previously on 31.2 hectares per turbine site) which is an increase of 55% per turbine why haven't there been any extensive water studies carried out to establish what the affect will be on the ground water for the springs and wells?

We are downstream of this development and we need to manage our water risk which is impossible to do if the appropriate impact assessment haven't been carried out. Will we be notified when this will be happening?

What impact assessments have been carried out in regards to the water still flowing freely in the creek beds through the ranges and out onto the plains? The water from the creek flows provide months of pasture for livestock and native fauna and refresh native flora.

What impact will the extensive quarrying have on the water flow and aquifers of the Barrier Ranges? Why has there been an assessment of these impacts either?

#### Quarries

There are no onsite quarries identified in any of the submissions to date. Why hasn't this happened yet? Testing has been carried out over the past four years but there are not results included in the documents submitted for the modification 3 for the Silverton Wind Farm.

What impact will the extensive quarrying have on the water flow and aquifers of the Barrier Ranges? Why hasn't there been an assessment to date?

#### **Community and Stakeholder Engagement**

We strongly dispute that any of the following listed in the table on page have occurred.

Stakeholder Group	Representatives	Area of interest
Silverton community	•	
Turbine Hosts/leaseholders		<ul> <li>Access to private property</li> <li>Environmental management</li> <li>Health and safety of local residents</li> <li>Local impacts – sound, visual amenity, property values, construction disruption</li> <li>Sourcing supplies locally</li> <li>Economic benefits</li> </ul>

None of the above matters have been discussed with us this year and there has only be one private meeting back in late February or early March 2016 the first meeting for many months.

However, discussions have been held many times before about the possibility of AGL staff rethinking the turbine locations with **the set back from Silverton of 8 kilometres** and clustering the turbines over the 4 stations involved. Instead it was another "we will get back to you" moment that of course never happened. It should be noted that **the setback area** has the same and similar wind values with three quarters of the Mt Franks site being developed and one quarter on the North East side not being developed.

The setback idea was sent on March, 10, 2016 to the Minster for Planning, Mr Rob Stokes and a response was issued by Mr Mike Young from the Department of Planning. This stated as modification 2 was only about extending the date and that there wasn't any changes being asked for with the components that I would need to resubmit when that happened. We were also informed that this letter would be forwarded on AGL but that hasn't been acknowledged in the EIS. Hopefully with this submission **the setback solution** will now be given the attention it deserves to facilitate better outcomes for all involved.

To date the lessees of Eldee Station have only been offered 2 turbines out of a possible 70 turbines from the project approval and the concept approval. One to be located in the middle of the nationally renowned Sunset Hill Lookout Location and the second to be constructed in the car parking area. The very low amount of income earnt from just 2 turbines could never replace the income earnt from tourism, photographers, film makers and artists. Prior knowledge by AGL should have dictated that this was not an acceptable option which could have easily been rectified by offer turbines in other locations which hasn't happened to date.

We were not told of the new plans nor the new turbine layout prior to the SCC meeting and found out like everyone else sitting in the hall that night that was held to essentially explain the application made for modification 3 to the Department of Planning.

The meetings times of the SCC were agreed to very early on that they would alternate between night and mid-afternoon times so that everyone would have a chance to attend meeting however that hasn't happened at all this year. Some committee members have to travel more than 40 kilometres to attend the meeting plus others have to prepare and serve meals at night so 6.00pm is extremely difficult to attend.

# **Traffic Committee**

There haven't been any meetings for Traffic Committee for several years. If there have been meetings then the agenda hasn't been sent to everyone involved for their participation.

# Section 7 Appendices

# Appendix 1

Stages and Turbine location from the preferred project Submission report 2008

