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Mr Mike Young Director Resource Assessments Department of Planning and Environment 23-33 Bridge Street, Sydney NSW 2000 14 April 2016

Dear Mr Young,

#### Silverton Wind Farm (08\_0022 MOD 2) (MOD 2) - Response to Submissions

The Silverton Wind Farm (the **Approved Project**) was approved under Part 3A of the *Environmental Planning and Assessment Act 1979* (**Project Approval**) on 24 May 2009. The Project Approval lapse date was extended on 11 April 2014 for a two year period. MOD 2 to the Project Approval seeks to extend the lapse date for a further five years, for the reasons set out in the MOD 2 application (attached as **Appendix One**).

The Department of Planning and Environment (**DPE**) publicly exhibited MOD 2 between 4-18 March 2016, however accepted submissions beyond that date.

The DPE received one submission in support and five objections, one neutral.

AGL Energy Limited (**AGL**), owner of Silverton Wind Farm Developments Pty Ltd, also directly received two letters in support, being:

- 1. Letter of support from Kevin Humphries MP, Member for Barwon; and
- 2. Letter of support from Mark Coulton MP, Federal member for Parkes (attached as **Appendix Two**).

AGL has reviewed the public submissions following the exhibition of the MOD 2 application, and provides the following response (**Response**).

AGL is committed to working with stakeholders and communities in transparent and meaningful ways to understand positive and negative impacts of our projects, and to ensure that concerns and topics of interest are addressed. We aim to support and nurture meaningful community participation. Community Consultative Committees are a critical component of AGL's engagement with the local community and we welcome and value community input to our projects.

AGL is proud to be a member of each community it operates in and aims to be a good neighbour in these communities.

A number of the issues raised related to the Approved Project, and were addressed in the original Environmental Assessment (**EA**) and Project Approval. These issues are not specific to MOD 2, nonetheless AGL has sought to address each topic (or refer to where the issue was addressed in the original Environmental Assessment) in this Response.

#### **General Response – Project Delay**

An issue raised in several of the submissions was the uncertainty created for the local community as a result of ongoing delay to the Approved Project.

AGL acknowledges that there has been uncertainty for the local community and renewables industry regarding the RET affecting the ability of the Approved Project to proceed. The ongoing delay has implications for the local community, including economic implications for landholders, and we sympathise. AGL aims to provide as much certainty as possible to the local community about progress and status of the Silverton Wind Farm.

A further extension to the lapse date has been sought to enable AGL to further define the Approved Project taking into account changes to wind turbine technology, including the size and scale of the Approved Project (proposed MOD 3). The MOD 3 environmental assessment will be prepared in consultation with the local community.

The potential impacts of the modified project will be fully assessed, including any impacts from changes to the wind turbine technologies. It is proposed that this will occur during 2016.

An extension to the lapse date will also enable AGL to develop and utilise the Powering Australian Renewable Fund.

By way of a further Project update, AGL released its invitation to tender for the design, construction and commissioning of the Silverton Wind Farm on 5 April 2016. This has been communicated to the local community via the Community Consultative Committee (**CCC**) and the Silverton community via letter drop.

Whilst AGL acknowledges that there are uncertainties associated with delay to the Approved Project, the economic benefits of the project can only be realised if the project is able to proceed.

Submission 145470 (objection)	
Issue raised in Submission	Response
Community consultation in relation to MOD 2 Impacts on community from	Comments acknowledged, and we refer to our response above in relation to AGL's commitment to community consultation, and acknowledgement of the uncertainty caused by ongoing project delay.
delay (p1-3, 8)	On acquisition of the development proposal from Epuron in 2012, AGL established a Community Consultation Committee (CCC) based at Silverton. For any project workshops required and for each CCC meeting, the schedule, timing and agenda is determined in consultation with the CCC group via majority vote or general consensus.
	The CCC meetings are also open to the wider community.
	MOD 2 was discussed with the CCC group and meeting observers from the wider community on the day MOD 2 was submitted by AGL. Following this discussion, the group was sent further information about MOD 2, including information on where to make submissions.
	Further information was sent to the community advising them of the DPE continuing to accept submissions after the two week exhibition period. Relevant correspondence, and the minutes of the CCC meeting, are attached as <b>Appendix Three</b> .
Public notification and hard copies of MOD 2	Comments noted. AGL sent hard copies of the MOD 2 to the submitter, whose role as a Community Consultative Committee member also includes disseminating fair, accurate and impartial project



(p2-3)	information to the wider community, and we understand that the DPE will continued to accept submissions after the two week exhibition period. The community was informed of this. Please note, there are no locations in Silverton which are suitable to display public information, and AGL in addition to emails, with the assistance of members of the CCC group has where practicable, traditionally distributed letters where required to Silverton residents.
Investment in renewable energy generation AGL's support for Government commitment towards global agreement to limit global warming Why does AGL own power stations? (p3)	<ul> <li>In response, AGL is Australia's leading renewable energy company with the largest privately owned and operated renewable energy portfolio in the country.</li> <li>Since the project was approved in 2009, AGL has made public commitments to: <ul> <li>Decommission its power stations by 2050 under its Greenhouse Gas Policy; and</li> <li>Encourage investment in renewables under its Powering Australian Renewable Fund.</li> </ul> </li> </ul>
Justification for MOD 2, Importance of Project, Improvements in Technology and No Change to Scope Lack of certainty (p3&5)	Comments acknowledged. A further extension to the lapse date has been sought to enable time for AGL to further define the Approved Project, including its size and scale (proposed MOD 3). The MOD 3 environmental assessment will be prepared in consultation with the local community, and will assess potential impacts of the modified project, including any impacts from changes to the wind turbine technologies. It is currently proposed that this will occur during April-July 2016. A further extension to the lapse date will also enable AGL to develop and utilise the Powering Australian Renewable Fund. AGL acknowledges that an extension to the lapse date will result in a level of ongoing uncertainty for some local residents, and we sympathise. AGL will consult with the local Silverton community through the MOD 3 process to provide as much certainty as possible.
Economic benefits (p4) and Community investment Use of the words "could be" (p4-5)	Potential economic benefits and predicted employment opportunities were assessed in the original EA sections 4.4 and 4.5, and Appendix 7. These were predictions based on available information, and will not change as a result of MOD 2. In relation to community investment, AGL is committed to being a responsible member of each community it operates in, which will include the provision of community funding to assist in the delivery of community wide benefits, to support the work of existing and future community



	organisations, and to encourage community innovation and support projects which are important to the community.
	The amount of community funding (\$15,000) was established by the previous owners Epuron.
	In relation to community funding, AGL's approach is to consult closely with the local community to determine the specific needs and desires of the community. Based on this consultation, AGL will review the funding amount.
	The Silverton CCC and the Silverton Village Committee are involved in the community fund process and a set of draft community fund guidelines have been developed.
	AGL will be guided by the Silverton community in implementating and allocating the community funding.
Savings in water consumption and construction water	AGL is aware of the current water restrictions in the Broken Hill region, and acknowledges this is an issue of concern for local residents and authorities.
Project "may jeopardise the water security of the entire area"	The Approved Project has different options for
p6)	sourcing construction water, and AGL will ensure that its construction water supply does not jeopardise local domestic and stock water supplies.
Improvements to local infrastructure	Comments acknowledged. The Approved Project includes some road upgrades and improvements
Clarification required	(such as sealing) for access to the project site, road maintenance and construction/upgrade of
(P6)	transmission lines. There is no change to these aspects of the Approved Project as a result of MOD 2.
	AGL will not propose or require changes to any of the local infrastructure within the Silverton village, without consultation with the Silverton CCC group and the Silverton Village Committee. AGL acknowledges and supports the historic nature of the Silverton village, and understands its importance to local community members. Silverton's history and historic sites have, and will continue to be taken into account through the planning process. AGL will continue to consult with the local community and Silverton Village Committee in relation to any proposed infrastructure improvements.
	Note, the Silverton Village Committee is represented on the CCC, in addition to AGL consulting with Silverton Village Committee representatives throughout the project application and approval process.
Protection and management of biodiversity	Comments acknowledged. While there is no change to biodiversity impacts as a result of MOD 2, AGL responds as follows:

Discovery of Barrier Range Dragon	Extensive surveys were undertaken by NGH
Wrong name listed in MOD 2 (p7)	Environmental for Silverton Wind Farm Developments of the wind farm site. During these surveys the Barrier Range Dragon (formerly identified as <i>Ctenophorus decressi</i> ) was identified at the site.
	In 2013, taxonomic assessment (McLean et al 2013) <sup>1</sup> identified that the species recorded in the Barrier Range, while being a member of the <i>C. decressi</i> species complex, is a new species and has since been identified as <i>Ctenophorus mirrityana</i> . This new species, which was formerly recognized as an outlying population of <i>C. decresii</i> is now known from four locations, including Mutawintji National Park, Broken Hill, Koonenberry Mountain and the Barrier Range (McLean et al 2013 <sup>1</sup> ).
	The biodiversity assessment prepared by NGH Environmental recognises the significance of the species. At the time of the assessment it was assessed that the only known population of this dragon, in NSW, was a population of at least 50 animals in Mutawintji National Park and a single museum specimen from Koonenberry Mountain.
	At the time of the assessment, <i>C. decressi</i> was listed as Endangered under the NSW <i>Threatened</i> <i>Species Conservation Act</i> (TSC Act). The new species, <i>C. mirrityana</i> has an equivalent listing (Endangered) under the TSC Act.
	NGH Environmental (2008a) <sup>2</sup> assessed that the population of the study area was the NSW stronghold for this species. Therefore, the very high significance of this species has been recognised in the environmental assessment completed for Silverton Wind Farm.
	A number of existing threats to this species were identified at the wind farm site. Some of these include;
	<ul> <li>habitat degradation by goats through browsing on vegetation and disturbance to rock habitat, including pollution of key crevice habitat by scats (inversely correlated to the dragon's distribution at the wind farm site)</li> </ul>

McLean, C.A., Mousalli, A. Sass & Stuart-Fox, D (2013) Taxanomic Assessment of the *Centophorus decresii* Complex (Reptilia: Agamidae) Reveals a New Species of Dragon Lizard from Western NSW. Records of the Australian Museum 65(3): 51– 63.

<sup>&</sup>lt;sup>2</sup> NGH Environmental (2008a), Proposed development of Stage 1b and 1c, Silverton Wind Farm, far western New South Wales, Status and distribution of the Tawny Rock Dragon and their habitat, report prepared for Silverton Wind Farm Developments.

<ul> <li>Inappropriate land management practices and/or change in land use on leasehold properties due to economic incentives.</li> <li>The existing Project Approval and Statement of Commitments for Silverton Wind Farm will achieve the objective of minimising impact to the Barrier Range Dragon by minimising disturbance to key areas of dragon habitat ('hot spots') and reducing risks associated with habitat degradation, and inappropriate land management practices occurring on-site. This would be achieved via;</li> </ul>
<ul> <li>i Design of layout of roads and turbine to minimise risk of impact to these threatened entities</li> <li>ii Management of impacts (eg. from deposition of spoil, sediment and traffic movement) in Dragon hotspots</li> <li>iii Application of a buffer to identified Dragon habitat</li> <li>iv Preparation and implementation of a goat management plan across vegetation in the stage one area</li> </ul>
AGL is committed to the implementation of these safeguards during construction, operation and decommissioning.

### Submission 143288 (support)

Issue raised in Submission	Response
Submission supportive	Acknowledged.

## Submission 145476 (objection)

Issue raised in Submission	Response
Benefits of project – reduction in emissions	There is no change to this issue as a result of MOD 2, however in response:
AGL does not point out that wind generated electricity will not replace fossil fuels (p1-3)	Comments noted.
	Figures provided in relation to reduction of emissions over the life of the project are a direct comparison between emissions from wind farms v emissions from coal fired power stations. The emissions required to develop and construct either of these power generation sources are not taken into account.
	Based on a 200 MW wind farm, the expected annual electricity of 700 GWh is the correct figure. If the turbines operated at maximum output for a year the production would be 1,750 GWh.

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Economic benefits/impacts Negative economic impacts of a "wind industrial complex" at Silverton No budgeted work plan submitted (p3-4) High prospectively for mineral deposits Sterilisation of land from future mineral exploration and liaison with mining interests Geochemical contamination Precautionary principle (p4-8)	No changes to economic benefits/impacts as a result of MOD 2. Please see response to submission 145470 in relation to "Justification for MOD 2" on page 3 above. No budgeted work plan is required to be submitted. Comments acknowledged. While there are no changes to impacts in relation to land use from MOD 2, in response: Section 7.12 of the EA considered the mineral exploration impacts and section 8.10 of the Preferred Project and Submissions Report responds to the mineral exploration impacts noting that the "greater part of the wind farm will not be sterilised for mineral exploration". Additionally, Statements of Commitment 109 and 110 relate to mineral exploration which are intended to minimise conflict with mineral exploration, as well as conditions 2.50 to 2.53 of the Project Approval, which require consultation with title holders and the Department of Trade and Investment to minimise impacts on exploration and mining activities and any sterilisation of resources. AGL is not aware of any new ore deposits found in the project area in the last 100 years. Geochemical considerations were addressed in the Preferred Project and Submissions Report (see page 79). The precautionary principle (as part of ESD) was adopted in the impact assessment of the Approved Project (see 5.1.11 of the EA).
Decommissioning Future liability of landholders (p9-10)	The Decommissioning phase was assessed in the original EA and environmental controls are set out in a number of the Approved Project Statements of Commitment, as well as conditions 1.11-1.17 of the Project Approval (MOD 1). The proponent is legally obligated to comply with conditions of the Project Approval, including the decommissioning conditions. There are significant penalties under the EP&A Act for breach of approval conditions.
Focus on renewables Unreliable supply from wind "no underground mine in Broken Hill could operate using wind power" (p11-15)	Comments noted.

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No noise baseline assessment from submitter's property (p15)	Baseline noise monitoring was undertaken in the original EA in accordance with relevant guidelines. Section 8.2 of the Preferred Project and Submission Report noted the noise assessment identified that there are no receivers that would be impacted by noise levels above the appropriate criteria.
	Further noise assessment will be undertaken for MOD 3, in accordance with all relevant guidelines.
Employment generated (p16)	No change as a result of MOD 2. Please see response to submission on "Justification for MOD 2" on page 3 above.
AGL runs coal fired power stations and annual savings in pollution (p16 and p18)	No change as a result of MOD 2, however in response, AGL operates coal fired power stations and has recently released a new Greenhouse Gas Policy which provides a pathway to decarbonisation of our electricity generation. Please refer to the following release – <u>https://www.agl.com.au/about-agl/media-centre/article-list/2015/april/agl-policy-to-provide-pathway-to-decarbonisation-of-electricity-generation</u> .
Construction Water Depletion of local reservoirs	AGL is aware of the current water restrictions in the Broken Hill region, and acknowledges this is an issue of concern for local residents and authorities.
(p17)	The Approved Project has different options for sourcing construction water, and AGL will ensure that its construction water supply does not jeopardise local domestic and stock water supplies.
Erosion and siltation concerns (p17)	Concerns are acknowledged. Erosion and sediment control measures were proposed as part of the Environmental Assessment for the Approved Project and form requirements under the conditions of the Project Approval (EA section 7.5.2; Statement of Commitments 49; conditions 2.59-2.63 of the Project Approval).
	An Erosion and Sedimentation Control Plan will be developed as part of the Construction Environmental Management Plan (CEMP) which requires approval by the Secretary before the commencement of any construction works associated with the Approved Project.
Landholder payments and Community investment (p18)	While there is no change as a result of MOD 2, AGL responds as follows:
	In relation to leaseholder payments, Silverton leaseholders are paid to have wind turbines on their land.
	In relation to community investment, AGL is committed to being a responsible member of each community it operates in, which will include the provision of community funding to assist in the delivery of community wide benefits, to support



	the work of existing and future community organisations, and to encourage community innovation and support projects which are important to the community.
	The amount of community funding has been previously established as \$15,000.
	In relation to community funding, AGL's approach is to consult closely with the local community to determine the specific needs and desires of the community.
	The Silverton CCC and the Silverton Village Committee are involved in the community fund process and a set of draft community fund guidelines have been developed.
	AGL will be guided by the Silverton community in relation to the implementation and allocation of the community funding.
Indigenous Employment Plan (p18)	Comments noted. AGL aims to provide avenues for local community members to enhance skills, training and employment opportunities. Indigenous groups and agencies consistently request employment opportunities through AGL projects. Targeted indigenous employment and training plans and evaluation are effective in achieving these objectives.
Inadequacy of Ecological Assessment Barrier Range Dragon Spinifex ecological community (p18-24)	The Silverton Wind Farm site was subject to an extensive, high quality and comprehensive ecological assessment. This is reflected in results of this assessment, including the identification and description of a previously undescribed vegetation community, that with the support of Silverton Wind Farm Developments was nominated for, and listed as a Endangered Ecological Community under the NSW <i>Threatened Species Conservation Act</i> , combined with a significant extension of the range of the recently described species <i>Ctenophorus mirrityana</i> (formerly identified as <i>Ctenophorus decressi</i> ).
	For the biodiversity assessment, please see the EA for the Approved Project (section 7.4), and also addressed in Appendices 3 and 4, Sections 5.1 and 8.1 of the Preferred Project Report. A number of the Approved Project Statements of Commitment address protection of biodiversity.
	Specifically in relation to the Barrier Range Dragon, please see response to submission on "Barrier Range Dragon" submission, pages 4-5 above.
	In relation to the Spinifex ecological community:
	Comments noted. While there is no change as a result of MOD 2, AGL responds as follows:
	A new vegetation community was identified during the biodiversity assessment carried out for Approved Silverton Wind Farm. This has

subsequently been determined as a Critically Endangered Ecological Community under the NSW Threatened Species Conservation Act, and listed as the Porcupine Grass - Red Mallee - Gum Coolabah hummock grassland / low sparse woodland in the Broken Hill Complex Bioregion - critically endangered ecological community listing (Porcupine Grass EEC)
The biodiversity assessment undertaken by NGH Environmental (2008b) <sup>3</sup> identified that this community was undescribed and as such had not been identified elsewhere in NSW. It assessed that the study area provides the only known occurrence of this vegetation community in NSW and was therefore highly significant.
While it was not listed as an EEC at the time of the assessment, the occurrence of this vegetation community was considered to be significant and was treated as a constraint in the layout proposed.
Additionally a number safeguards were proposed with an objective of improving the condition of this vegetation community on-site.
Threats to the community include (source: http://www.environment.nsw.gov.au/ ThreatenedSpeciesApp/profile.aspx?id=20152);
<ul> <li>Grazing by goats may reduce regeneration of woody species, while trampling and scat accumulation may reduce habitat for reptile and other fauna species.</li> <li>Invasion by exotic weed species.</li> <li>Mining or quarrying.</li> <li>Harvesting or collecting of key species (e.g. for fire wood or fence posts).</li> <li>Grazing and trampling by stock.</li> <li>Inappropriate fire regimes leading to a reduction in Porcupine grass cover.</li> <li>Climate change.</li> </ul>
The existing Project Approval and Statement of Commitments for Silverton Wind Farm will achieve the objective of minimising impact of development of the wind farm, and reducing risks associated with habitat degradation, and inappropriate land management practices occurring on-site. This would be achieved via;
<ul> <li>Proposed layout of roads and turbine hardstands will be designed to minimise risk and extent of impact to Porcupine Grass EEC</li> </ul>

<sup>3</sup> 

NGH Environmental (2008b), Proposed development of Stage 1, Silverton Wind Farm, far western New South Wales Biodiversity Assessment, report prepared for Silverton Wind Farm Developments.

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	<ul> <li>Preparation and implementation of a recovery plan for the Porcupine Grass         <ul> <li>Red Mallee - Gum Coolibah hummock grassland vegetation community which occurs onsite and the threatened reptile fauna which rely on it. This plan would aim to achieve a net gain within this ecological community.</li> <li>Preparation and implementation of a goat management plan across vegetation in the stage one area with a particular focus on porcupine grass/red mallee/gum coolibah/hummock grassland.</li> </ul> </li> <li>AGL have and are committed to the implementation of these safeguards during construction, operation and decommissioning.</li> </ul>
Bird and Bat Deaths (21)	No change as a result of MOD 2, however 7.4 of the EA and Section 5.1 and 8.1 of the Preferred Project and Submission Report covers the biodiversity assessment that has been previously undertaken, and proposed mitigation measures. Statement of Commitment 46 requires the development and implementation of an adaptive management monitoring program. This is a requirement of condition 3.1 of the Project Approval, along with the development and implementation of a Flora and Fauna Management Plan.
Community consultation (p25)	Comments noted. Silver City Minerals representatives are part of the Silverton Wind Farm CCC group and have attended meetings. The submitter has been invited to participate in the CCC and can put themselves forward as a committee member or attend as an observer. The submitter's emails have been responded to. The project extension request was discussed with the CCC group and meeting observers from the wider community on the day MOD 2 was submitted by AGL. Following this discussion, the group was sent further information about MOD 2, including information on where to make submissions. Further information was sent to the community advising them of the DPE continuing to accept submissions after the two week exhibition period. Relevant correspondence, and the minutes of the CCC meeting, are <b>attached</b> as Annexure 2. AGL has undertaken title searches of landholders within the project area.

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Submission 145938 (objection)		
Issue raised in Submission	Response	
Concern about possible health issues (p1 and 2)	The health and wellbeing of staff and of the communities in which AGL operates is a priority for AGL. To date, the National Health and Medical Research Committee (NHMRC) has found that there is no direct evidence that exposure to wind farm noise affects physical or mental health, and there is no consistent evidence which shows that wind turbines impact the health of wind farm neighbours. However, the NHMRC will carry out further research into wind turbines and infrasound. AGL supports this research, and will keep the local community updated.	
	AGL will continue to consult with the Silverton community to address their concerns and topics of interest relating to wind farms and health impacts.	
Blasting – noise impacts (p1)	There is no change to any potential impacts on the Barrier Ranges as a result of MOD 2. The Approved Project EA assessed blasting and provided that should blasting be required for any footings, it will be undertaken in accordance with all relevant legal requirements, including Project Approval conditions 2.11-2.19 and Statement of Commitment 14 (any blasting shall be undertaken in accordance with ANZECC Guidelines).	
	AGL will commit to minimise any need for blasting during construction.	
Turbine locations and visual amenity Request for turbines to be out of sight (p1)	AGL acknowledges the importance of the visual amenity of the Silverton area and the Barrier Ranges, and understands the community's relationship with this amenity. Currently, the closest turbine location to the Silverton village (the junction of Layard Street and Silverton Road) is 4.8 km.	
	There is no change to the location of proposed turbines as a result of MOD 2. Visual amenity was assessed in the original EA Section 7.2 and Landscape and Visual Impact Assessment (URS & Green Bean Design, 2008), addressed in Statement of Commitments 1-10 and conditions 2.1-2.6 of the Project Approval.	
	The size and scale of the Approved Project turbines will be the subject of proposed MOD 3. The Environmental Assessment for MOD 3 will be undertaken in 2016, and AGL will continue to consult with the local community.	
	The community's visual amenity will be taken into account in designing the turbine layouts.	
Community consultation	AGL is committed to working with stakeholders and communities in transparent and meaningful ways	

CCC meetings	to understand positive and negative impacts of our
(p1)	projects, and to ensure that concerns and topics of interest are addressed. Community Consultative Committees are a critical component of AGL's engagement with the local community.
	We welcome and value the submitter's views as a regular observer at the CCC meetings.
Construction Water	AGL is aware of the current water restrictions in
Water situation in Silverton critical	the Broken Hill region, and acknowledges this is an issue of concern for local residents and authorities.
	The Approved Project has different options for sourcing construction water, and AGL will ensure that its construction water supply does not jeopardise local domestic and stock water supplies.

Submission 145780 (objection)		
Issue raised in Submission	Response	
Impact of continued delay (p1)	Comments are acknowledged. Please refer to our response on page 1 above.	
Community consultation "No one has spoken to me about this" (p1)	Comments noted. AGL sent hard copies of the MOD 2 to a CCC member, whose role as a Community Consultative Committee member is to disseminate fair and impartial project information to the wider community, and we understand that the DPE continued to accept submissions after the two week exhibition period. The community was informed of this.	
	Please note, there are no locations in Silverton which are suitable to display public information. However, AGL in addition to emails, with the assistance of members of the CCC group has traditionally distributed letters where required to Silverton residents.	
	AGL has also distributed hard copy surveys to all Silverton residents regarding the project and to get their feedback about the delay to the project's progress.	
Concern about possible health issues (p1)	The health and wellbeing of staff and of the communities in which AGL operates is a priority for AGL. To date, the National Health and Medical Research Committee (NHMRC) has found that there is no direct evidence that exposure to wind farm noise affects physical or mental health, and there is no consistent evidence which shows that wind turbines impact the health of wind farm neighbours. However, the NHMRC will carry out further research into wind turbines and infrasound. AGL supports this research, and will keep the local community updated.	

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Concern blasting will destroy the Barrier Ranges Barri (p1) prov footi all re Appr	erns acknowledged. e is no change to any potential impacts on the er Ranges as a result of MOD 2. The oved Project EA assessed blasting and ded that should blasting be required for any ngs, it will be undertaken in accordance with levant legal requirements, including Project oval conditions 2.11-2.19 and Statement of mitment 14 (any blasting shall be undertaken
Siltation and erosion Potential impact on local water storages (p1) Cond Cont Envi Proje cond 7.5.2 2.59 Sedi part Mana by th	nunity to address their concerns and topics of est relating to wind farms and health impacts. erns are acknowledged. Erosion and sediment fol measures were proposed as part of the commental Assessment for the Approved ect and form requirements under the itions of the Project Approval (EA section 2; Statement of Commitments 49; conditions -2.63 of the Project Approval). An Erosion and mentation Control Plan will be developed as of the Construction Environmental agement Plan (CEMP) which requires approval the Secretary before the commencement of any cruction works associated with the Approved ect.

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"I was not notified by AGLit wasn't put on display in Silverton" (p1)	Consultative Committee member is to disseminate fair and impartial project information to the wider community, and we understand that the DPE will continued to accept submissions after the two week exhibition period. The community was informed of this. Please note, there are no locations in Silverton which are suitable to display public information, and AGL in addition to emails, with the assistance of members of the CCC group has traditionally distributed letters where required to Silverton residents, where practicable.
Traffic management Concern that construction traffic will block road and slow down traffic (p1)	Comments noted. Traffic and Transport impacts were assessed in the EA (Section 7.6 and Appendix 5) and are addressed in condition 2.46 and 5.3 of the Project Approval. In consultation with the Silverton CCC, key stakeholders and agencies and the Silverton Village Committee, AGL developed a draft construction traffic management strategy. In agreement with the community, the strategy allows for no construction traffic during certain peak tourist periods and special event weekends to ensure that construction traffic is not detrimental to Silverton tourism. A Traffic Management Protocol will be developed as part of the Construction Environmental Management Plan (CEMP) which requires approval by the Secretary before the commencement of any construction works associated with the Approved Project.
Turbine location and visual amenity Concern about placement of turbines and visual impact (p1)	AGL acknowledges the importance of the visual amenity of the Silverton area and the Barrier Ranges, and understands the community's relationship with this amenity. Currently, the closest turbine location to the Silverton village (the junction of Layard Street and Silverton Road) is 4.8 km. There is no change to the location of proposed turbines as a result of MOD 2. Visual amenity was assessed in the original EA Section 7.2 and Appendix 1 (Landscape and Visual Impact Assessment (URS & Green Bean Design, 2008)), addressed in Statement of Commitments 1-10 and conditions 2.1-2.6 and 5.3 of the Project Approval. The size and scale of the Approved Project turbines will be the subject of proposed MOD 3. The Environmental Assessment for MOD 3 will be undertaken in 2016, and AGL will continue to consult with the local community. The community's visual amenity will be taken into account in designing the turbine layouts.

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Construction Water Reservoirs are empty, water a major issue	AGL is aware of the current water restrictions in the Broken Hill region, and acknowledges this is an issue of concern for local residents and authorities.
(p1)	The Approved Project has different options for sourcing construction water, and AGL will ensure that its construction water supply does not jeopardise local domestic and stock water supplies.
Impact of delay on Silverton residents and consultation (p2)	Comments acknowledged. Please refer to general response on impact of project delay on page 1, above.
Land values Land values are affected in other wind farms, uncertainty	Land value impacts were assessed in the original EA (section 7.10), and there is no change as a result of MOD 2, however in response:
(p2)	There is no evidence to date supporting claims of land being devalued due to its proximity to a wind farm. The NSW Valuer General's 2009 <i>Preliminary</i> <i>Assessment of the Impact of Wind Farms on</i> <i>Surrounding Land Values in Australia</i> , found that rural property values were in keeping with real estate market trends regardless of location.

### Silverton Village Committee

Issue raised in Submission	Response
Community consultation Lack of local advice taken on board (p1)	On acquisition of the development proposal from Epuron in 2012, AGL established a Community Consultation Committee based at Silverton. The CCC meetings are also open to the wider community.
	AGL has also consulted with the Silverton Village Committee, in addition to key stakeholder agencies and authorities.
	AGL will continue to consult with the CCC group, the local community and the Silverton Village Committee to address concerns, issues and topics of interest, taking into account the view of local stakeholders.
Erosion and siltation No defined wet season, silt deposits in Umberumberka and Stephen Creek reservoirs (p1)	Concerns are acknowledged. Erosion and sediment control measures were proposed as part of the Environmental Assessment for the Approved Project and form requirements under the conditions of the Project Approval (EA section 7.5.2; Statement of Commitments 49; conditions 2.59-2.63 of the Project Approval). An Erosion and Sedimentation Control Plan will be developed as part of the Construction Environmental Management Plan (CEMP) which requires approval by the Secretary before the commencement of any construction works associated with the Approved Project.

Concern about possible health issues of residents in close proximity (p1)	The health and wellbeing of staff and of the communities in which AGL operates is a priority for AGL. To date, the National Health and Medical Research Committee (NHMRC) has found that there is no direct evidence that exposure to wind farm noise affects physical or mental health, and there is no consistent evidence which shows that wind turbines impact the health of wind farm neighbours. However, the NHMRC will carry out further research into wind turbines and infrasound. AGL supports this research, and will keep the local community updated. AGL will continue to consult with the Silverton community to address their concerns and topics of
Turbine location and visual amenity Iconic status of Silverton "pristine drives of the Outback" Development "insensitive" (p2)	interest relating to wind farms and health impacts. AGL acknowledges the importance of the visual amenity of the Silverton area and the Barrier Ranges, and understands the community's relationship with this amenity. Currently, the closest turbine location to the Silverton village (the junction of Layard Street and Silverton Road) is 4.8 km.
	There is no change to the location of proposed turbines as a result of MOD 2. Visual amenity was assessed in the original EA Section 7.2 and Appendix 1 (Landscape and Visual Impact Assessment (URS & Green Bean Design, 2008)), addressed in Statement of Commitments 1-10 and conditions 2.1-2.6 of the Project Approval.
	The size and scale of the Approved Project turbines will be the subject of proposed MOD 3. The Environmental Assessment for MOD 3 will be undertaken in 2016, and AGL will continue to consult with the local community.
	The community's visual amenity will be taken into account in designing the turbine layouts.

We would be happy to discuss any of these responses further.

Yours sincerely, 2~

Suzanne Westgate

Head of Workplace Innovation, Employee & Property Services AGL Energy SILVERTON WIND FARM (08\_0022 MOD 2)

RESPONSE TO SUBMISSIONS

## **APPENDIX 1**

## SILVERTON WIND FARM MOD 2 APPLICATION

Locked Bag 1837 St Leonards NSW 2065 T: 02 9921 2999 F: 02 9921 2552 agl.com.au



Mr Mike Young Director Resource Assessments Department of Planning and Environment 23-33 Bridge Street, Sydney NSW 2000 25 February 2016

Dear Mr Young,

#### Re: Silverton Wind Farm - Request for Extension to Lapse Date

AGL supports the Commonwealth Government's commitment to work towards a global agreement to limit global warming to less than 2 degrees, and has publicly committed to actions to achieve this, including continuing to invest in new renewable energy technologies and projects.

AGL is focusing on its pipeline of approved renewable energy projects, and in particular the Silverton Wind Farm Project (the Project).

The current lapse date for the Project Approval is **24 May 2016**. AGL seeks to modify the Silverton Wind Farm Project Approval (Mod 2) to extend the lapse date by a further 5 years, to allow adequate time for AGL to:

- review and update the project in line with current technology and energy market circumstances including allowing time for the Powering Australian Renewables Fund (see below) to be established;
- consult with the Department of Planning and Environment (DPE) and the local community/landholders on potential modifications to the Project; and
- if required, lodge a more substantive project approval modification taking into account the above.

#### **Project Description**

Project Approval for the Silverton Wind Farm was granted to Silverton Wind Farm Developments Proprietary Limited (SWDPL) on 24 May 2009 under Part 3A of the *NSW Environmental Planning and Assessment Act 1979* (EP&A Act). The Project Approval included construction and operation of up to 282 wind turbines, and associated infrastructure including a 24km transmission line from the site to Broken Hill.

A modification (Mod 1) of the Project Approval was granted by the then Department of Planning and Infrastructure (DP&I) under s75W of the EP&A Act on 11 April 2014. The effect of Mod 1 was to extend the lapse date of the 2009 Project Approval from 24 May 2014 to 24 May 2016.

#### Justification for the Modification

AGL considers that this modification is justified, for the following reasons:

a) **Importance of the Project**: AGL intends to initially install up to 200MW of renewable energy generation, which could produce in the order of 700,000 MWh per year. This amount of energy is sufficient for the average consumption of

approximately 120,000 homes, which equates to a reduction of approximately 588,000 tonnes of  $CO_2$  per annum for the life of the project.

- b) Economic Benefits: Based on figures estimated in Sinclair Knight Merz' Economic Impact Assessment of AGL's Hallett Wind Farms, dependent upon the size of the project, the cost of the project could be between \$300m and \$500m<sup>1</sup>. Extrapolating the expenditure from Hallett Wind Farms to the proposed Project, AGL estimates:
  - a. Regional Project Development and Construction Expenditure to be in the order of \$40m;
  - The Regional Project Operations expenditure could be up to \$6m per annum for the life of the project;
  - c. Employment during the construction of the project could reach approximately 150 people.
  - d. Community funds of approximately \$15,000 per year may be granted to local community projects.
- c) Improvements in Technology: Approval of Mod 2 would allow time for AGL to conduct a review of the project, taking into account new, more efficient wind turbine generator technologies, primarily the rotor diameter and the overall tip height.
- d) Focus on Renewables: Investor confidence in the renewable energy industry has increased since the previous modification (Mod 1), e.g. due to agreement of the revised Renewable Energy Target (RET) in June 2015, and signing of the Paris Climate Agreement in December 2015.
- e) **AGL's Greenhouse Gas Policy and Powering Australian Renewables Fund**: AGL's Greenhouse Gas Policy and the recently-announced Powering Australian Renewables Fund make commitments to investing in, and set out a clear strategy to delivering, renewable energy projects (see further detail below).
- f) No change to scope: There is no change to the scope of the Project. A further delay to the Project does result in a level of ongoing uncertainty for the local community, however the environmental impacts of a further delay would be minimal. The extended lapse date would enable a review of the project, and if required, a more substantive modification which would include a full environmental assessment of any modifications to the project scope.
- g) Project Benefits: that the benefits of the project would not diminished as a result of a 5-year delay in commencement, rather would ensure that the potential opportunities are retained.

#### Importance of the Project

In addition to the potential direct employment opportunities discussed above, the Silverton Wind Farm Project would generate manufacturing and support jobs in other parts of NSW, nationally and overseas, depending on the source of labour and materials. The Project also stands to deliver significant economic benefits to the region. For instance, a 200MW wind farm could provide an equivalent of 400 full time employees (FTE) job years, including the construction jobs identified above. In addition to direct employment, indirect employment in services industries could create an additional 3 indirect jobs for every direct job created.

Based on the Mod 1 Environmental Assessment, additional benefits of the project are anticipated to include:

– Generation of approximately 700,000 MWh per annum of renewable electricity, sufficient for the average consumption of up to 120,000 homes (based on an average Australian household electricity consumption of 5 MWh/year)

 Reduction in greenhouse gas emissions of approximately 588,000 tonnes of carbon dioxide (equivalent) per annum, the equivalent of taking up to 170,000 cars off our roads

– Savings in water consumption of approximately 730 million litres per annum of potable water (this is the amount of water required to produce the same amount of electricity from coal-fired power stations)

<sup>1</sup>https://www.agl.com.au/~/media/AGL/About%20AGL/Documents/How%20We%20Source%20Energy/Wind%20En vironment/Coopers%20Gap%20Wind%20Farm/Assessment%20and%20Reports/2011/Missing%20PDFs/South%20A ustralia%20Economic%20Impact%20Report%20Halletts.pdf



 Annual savings in pollution from coal-fired power stations of up to 3,000 tonnes of sulphur dioxide, 1,280 tonnes of nitrogen oxides and 800 tonnes of particulates

 Establishment of a community fund to assist in funding community and environmental projects that provide benefits to the Silverton community

- Establishment of an Indigenous Employment Management Plan for the Project
- Improvement in local infrastructure in the Silverton region

 Protection and improved management of sensitive local biodiversity including the tawny rock dragon and a previously unrecorded spinifex ecological community

- Improved security of electricity supply through diversification.

The Mod 1 EA assessed whether the extension of the lapse date would have a material impact on these economic benefits. The Mod 1 EA stated that the project benefits would remain unchanged. It is expected that an additional extension of the lapse date will not result in a change to the expected benefits of the project.

#### Increased Investor Confidence in Renewables

A major reason for the delayed commencement of the Silverton Wind Farm project was uncertainty around the 2020 Renewable Energy Target (RET). As the review of the RET was delayed from 2014 until 2015, AGL deferred the appointment of an Engineering, Procurement and Construction (EPC) contractor for the project. The revised RET was agreed upon in June 2015, providing much needed investor confidence in the renewable energy industry.

The Paris Climate Agreement, which aims to limit global warming to well below 2°C above pre-industrial levels, was agreed upon in December 2015 by almost 200 nations, including Australia. As renewable energy is a major player in reducing greenhouse gas emissions, the signing of the Paris Climate Agreement gives further certainty to the future of the renewable energy industry in Australia.

More recently still, the Federal Government has lifted its self-imposed ban on the Clean Energy Finance Corporation (CEFC) providing investment in wind farms. This has further increased investor confidence, specifically in wind power generation.

The NSW Government's Renewable Energy Action Plan identifies its first goal as being to: "attract renewable energy investment". Approval of this modification application would have the potential to directly attract renewable energy investment in NSW.

#### AGL's Greenhouse Gas Policy

AGL Energy Limited is Australia's largest private developer and operator of renewable energy. AGL has already invested \$3 billion dollars in renewable energy investments over the last decade. In 2015, AGL released a new Greenhouse Gas Policy. AGL's new policy acknowledges we are moving into a carbon constrained future, both nationally and internationally, and therefore the policy provides a pathway for the gradual decarbonisation of AGL's generation portfolio by 2050.

To support the Commonwealth Government's commitment to work towards the two degree goal, AGL recognises its role in taking the lead when it comes to reducing its greenhouse gas emissions. One of the key pillars of AGL'S new Greenhouse Gas Policy is to: "Continue to invest in new renewable and near-zero emission technologies". AGL believes that the Silverton Wind Farm site has a high quality wind resource and remains one of the most attractive wind development projects in Australia.

#### Powering Australian Renewables Fund

AGL has committed to decarbonise its electricity generation as part of Australia's transition to a carbon-constrained future. To support this commitment, on 4 February 2016, AGL announced the 'Powering Australian Renewables Fund' (the Renewables Fund)<sup>2</sup>. The Renewables Fund is an innovative funding vehicle designed to stimulate investment in renewable energy projects. Instead of financing single renewables assets, the Renewables Fund provides an opportunity for investors to finance a portfolio of renewable assets. The Renewables Fund aims to invest in around 1000MW of large-scale, renewable assets, with a value of up to \$3 billion.



<sup>&</sup>lt;sup>2</sup> <u>https://www.aql.com.au/about-aql/what-we-stand-for/sustainability/powering-australian-renewables-fund</u>

The Powering Australian Renewables Fund demonstrates AGL's commitment to investment in strategic renewable energy projects, such as the Silverton Wind Farm.

#### New Technologies

Since the original EA was prepared in 2008, wind turbine technology has evolved. Recent improvements in wind turbine design have allowed application of differentsized turbines to different conditions. For example, larger-span rotor blades have been found to be more efficient in areas of low-moderate wind speed and turbulence. In addition, there have been improved efficiencies in generation output per turbine. AGL requests that this modification be approved, to allow AGL adequate time to evaluate the most efficient and cost-effective solutions for the project, and lodge a more substantive modification application to allow for new, more efficient technologies to be adopted.

#### Impacts on Community/Acceptability of Delay

AGL has continued its engagement with the local community via Silverton Wind Farm Community Consultative Committee (CCC) meetings and regular meetings with the Lease Holders, the Land Owner, the Silverton community and the Broken Hill community. Community consultation has been undertaken to update community members, addresses issues of concern to the community and provides an opportunity to incorporate community feedback.

In preparing the EA for Mod 1, AGL carried out a survey of the lease holders and the Silverton community regarding the perceived impacts of project delay. Most respondents expected a low impact on tourism, local business and farming. The Mod 1 EA found that no mitigation measures, additional to those required by the project approval, were considered necessary to manage the impacts of the delay on the community.

In order to assess the potential impact of a further 5 year delay of the project on the community, AGL has planned to undertake community consultation in the Silverton community in February 2016. Initial consultation will be conducted with leaseholders of the Project area, followed by consultation with the broader Silverton community. More detailed community consultation will be undertaken as part of a more substantive modification application.

AGL is of the opinion that the impacts on the community as a result of the delay imposed by a 5 year extension would be minimal. Further, the community still stands to benefit from the Project.

#### Changes to the surrounding environment

The previous EA supporting Mod 1 assessed the changes in environment since the original EA was prepared in 2008. The Mod 1 EA proposed no changes to the mitigation measures identified in the original EA as regards environmental impacts of the project site. However, two recommendations necessitated by the delay were recommended, which related to updated/ground-truthing of existing spinifex mapping, and renewed consultation with Essential Water regarding water supply requirements for construction.

AGL notes that only two years have elapsed since the preparation of the Mod 1 EA, and hence considers that no material changes to the environment of the proposed project site are likely to have occurred during this time. However, as part of any substantive modification, AGL would undertake a detailed environmental assessment to assess the impact of any modified project against the existing environment, including an assessment of the adequacy of the environmental mitigation measures proposed in the original EA and in the Mod 1 EA.

#### Conclusion

AGL is committed to investment in renewable energy projects, and wishes to preserve the Silverton Wind Farm Project approval in order to progress this Project. AGL requires additional time to assess changes in wind turbine technology and changing market conditions, in order to develop the project in the most efficient and cost-effective manner possible. AGL is committed to ongoing, detailed consultation with the DPE if a more substantive modification process is required in the next 12 months.



Yours sincerely,

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Suzanne Westgate

Head of Workplace Innovation, Employee Services & Property

SILVERTON WIND FARM (08\_0022 MOD 2) RESPONSE TO SUBMISSIONS

## **APPENDIX 2**

# SILVERTON WIND FARM MOD 2 ADDITIONAL SUBMISSIONS IN SUPPORT

PLEASE RESPOND TO BROKEN HILL OFFICE PMcR

8 April 2016

Mr Mike Young **Director Resource Assessments** Department of Planning and Environment 23-33 Bridge Street SYDNEY, NSW 2000

Dear Mr. Young

I write to offer my support of the AGL Silverton Wind Farm development proposal near Broken Hill.

As Broken Hill and surrounds undergoes transition from mining (one of the mining companies having recently announced a further 100 retrenchments) the Silverton Wind Farm development would assist to ensure greater diversification for Broken Hill and surrounds.

The Silverton Wind Farm development proposal would certainly assist with regional development in the far west of NSW and would be a large employment prospect for the area.

I fully support AGL in the development of the Silverton Wind Farm Development proposal and would be happy to have further discussions regarding this proposal, should you desire.

Yours sincerely

herein Hum phries

**KEVIN HUMPHRIES, MP Member for Barwon** 



barwon@parliament.nsw.gov.au

Cobar NSW 2835

11 Barton Street (PO Box 99),

ph 02 6836 3722 fax 02 6836 3811

**Cobar Office** 

**Broken Hill Office** 1/142 Argent St, Broken Hill NSW 2880 ph 08 8087 3315 fax 08 8087 1796

**Moree Office** 161 Balo Street (PO Box 958), Moree NSW 2400 ph 02 6752 5002 fax 02 6752 6102



6<sup>th</sup> April 2016

### Silverton Wind Farm

As the Federal Member for Parkes, I have great pleasure in offering this letter of support for the Silverton Wind Farm development proposal near Broken Hill.

The Silverton Wind Farm development proposal is managed by AGL, a leading Australian energy company, which operates several renewable energy projects in the electorate of Parkes, such as the Nyngan Solar Plant.

There is significant potential to establish renewable energy industries in this electorate. I believe the development of this wind farm will not only lead to positive environmental outcomes, it will also increase economic activity in the community of Silverton and the nearby regional centre of Broken Hill.

The Silverton Wind Farm is proposed to have a capacity of up to 200 MW and will produce approximately 700,000 MWh of renewable energy, which is expected to power more than 120,000 average Australian homes.

I have no hesitation in offering my strong support for the AGL Silverton Wind Farm.

Kind Regards,

Mark Coulton MP Federal Member for Parkes



mark.coulton.mp@aph.gov.au

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