



Ceres Wind Farm – Yorke Peninsula

Review of the Assessment Report by the District Council of York Peninsula



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Prepared for Yorke Peninsula Windfarm Project Pty Ltd

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1.0 Introduction and Background

URPS has been engaged to undertake a review/appraisal of the planning report prepared for the District Council of Yorke Peninsula regarding the proposed Ceres Wind Farm on the Yorke Peninsula, which was attached to the agenda for the special meeting of the Council on 27 March 2013 ("the report to Council").

The review identified a number of methodologies of the report to Council that are procedurally in error or inappropriate, as well as a number of errors, shortcomings and incorrect interpretations relating to the relevant provisions of the Yorke Peninsula Development Plan.

This report of URPS' review examines issues identified by the review that include:

- Assessment Procedure – the Role of the Yorke Peninsula Regional Land Use Framework and the Question of "Seriously at Variance"
- Land Use
- Appearance of Development/Visual Impact
- Noise Impact and Infrasound
- Workers' Accommodation
- Bushfire Control and Aerial Spraying
- Crime Prevention
- Conditions of Consent

2.0 Assessment Procedure

2.1. The Role of the Yorke Peninsula Regional Land Use Framework

Section 33 of the Development Act 1993 relates to “Matters against which development must be assessed”. It states:

- (1) A development is an approved development if, and only if, a relevant authority has assessed the development against, and granted a consent in respect of, each of the following matters (insofar as they are relevant to the particular development):
 - (a) the provisions of the appropriate Development Plan (development plan consent);
 - (b) the provisions of the Building Rules (building rules consent);
 - (c) in relation to a proposed division of land (otherwise than under the Community Titles Act 1996 or the Strata Titles Act 1988)—the requirement that the following conditions be satisfied (or will be satisfied by the imposition of conditions under this Act):...
 - (d) in relation to a division of land under the Community Titles Act 1996 or the Strata Titles Act 1988—the requirement that the following conditions be satisfied (or will be satisfied by the imposition of conditions under this Act):...
 - (e) the requirement that any encroachment of a building over, under, across or on a public place (and not otherwise dealt with above) has been dealt with in a satisfactory manner;
 - (f) such other matters as may be prescribed. (my underlining added)

The report to Council acknowledges this on page 21 where it states that “whilst the Development Act (see Section 33) only requires the Development Authority (DAC) to assess the development against the relevant provisions of the ‘appropriate’ Development Plan (i.e. the Development Plan in force at the time of the application)...”.

Section 49 of the Development Act 1993 relates to “Crown development and public infrastructure”. It states:

- (2) Subject to this section, if—
 - (a) a State agency proposes to undertake development (other than in partnership or joint venture with a person or body that is not a State agency);
or
 - (b) a State agency proposes to undertake development for the purposes of the provision of public infrastructure (whether or not in partnership or joint venture with a person or body that is not a State agency); or
 - (c) a person proposes to undertake development initiated or supported by a State agency for the purposes of the provision of public infrastructure and specifically endorsed by the State agency for the purposes of this section,
the State agency must lodge an application for approval containing prescribed particulars with the Development Assessment Commission. (my underlining added)

- (4a) If an application relates to development within the area of a council, the Development Assessment Commission must give notice containing prescribed particulars of the development to the council in accordance with the regulations. (my underlining added)
- (5) A council may report to the Development Assessment Commission on any matters contained in a notice under subsection (4a). (my underlining added)
- (7e) The Development Assessment Commission will then prepare a report to the Minister on the matter. (my underlining added)
- (12) The Minister may, after receipt of the report of the Development Assessment Commission under this section (and after taking such action (if any) as the Minister thinks fit)—
- (a) approve the development; or
 - (b) refuse to approve the development. (my underlining added)

The Department of Planning, Transport and Infrastructure's "Guide to the Assessment of Crown Development and Public Infrastructure" states that:

Assessment of the development application

After receiving the notice as described above, the council has two months to comment to the DAC. Such comments should be based on the policies in the Development Plan. (my underlining added)

This confirms the direction provided by Section 33(1) of the Development Act 1993 as quoted previously.

DPTI's guideline document also highlights that:

Where DAC is of the view that an application is seriously at variance with the relevant Development Plan, or where the council opposes a development, the Minister must, if he or she approves the development, report to Parliament on the matter. This keeps the Parliament informed on adherence to Development Plans. This report is for noting by Parliament only, and does not delay the approval. (my underlining added)

The report to Council on this Development Application includes a section entitled "The Yorke Peninsula Regional Land Use Framework" (see pages 20 and 21). Within this section of the report to Council it states:

The Yorke Peninsula Regional Land Use Framework is part of the State Government's broad vision for sustainable land use and the built development of the state. The Yorke Peninsula Regional Land Use Framework provides guidance to Councils in reviewing their Development Plans, and establishes a guide for future land use and development in the Yorke Peninsula Region...

...Map 1 from the Yorke Peninsula Regional Land Use Framework (copy attached) identifies areas adjacent to Sheoak Flat and Port Vincent as sites considered suitable for development of Wind Farms, however the indicators on the map are both on the coast side of St Vincent Highway and there is no suggestion that the extent of wind farm development would encroach significantly into the agricultural area as does this proposal. (my underlining added)

The Yorke Peninsula Regional Land Use Framework also seeks to “retain and strengthen the economic potential of high quality agricultural land” (Objective 9) and identifies the retention of productive agricultural land found across the Yorke Peninsula Region as a priority. It states that “the Yorke Peninsula Region consistently produces a quarter of South Australia’s grain harvest, sustained by favourable soils and climatic conditions”. The expansion of grain and livestock production, driven by the State Food Plan targets, is important to the economic and social fabric of the region. The high grade barley for which the region is internationally renowned grows especially well along the spine of the Peninsula and on land proposed within this wind farm development site. Such activities need to be protected and the marginal cropping areas found along the coast (e.g. coastal side of St Vincent Highway) and west of Yorketown should be considered for activities which conflict with the agricultural use of the land such as wind farms. (my underlining added)

The Yorke Peninsula Regional Land Use Framework recognises that there needs to be a balanced approach to development and whilst wind farms are encouraged and supported, the Yorke Peninsula Regional Land Use Framework does not envisage wind farms of the size proposed here with such significant potential to encroachment and impact on prime agricultural land... (my underlining added)

Development within the Primary Production Zone needs to be sensitive to needs of the agricultural industry and carried out in such manner that it is not detrimental to the agricultural sustainability or productivity.

This section of the report to Council gives a false impression of the role of the “Yorke Peninsula Regional Land Use Framework” in the assessment of this Development Application. In short, the Land Use Framework has no role in this assessment process. The Land Use Framework clearly confirms this on page 5 where it states that:

Local Councils must seek to align their local area Development Plan with the Planning Strategy relevant to their region. Development Plans contain the zones, maps and explicit rules which guide what can and cannot be done on any piece of land within the Development Plan area...It is against the Development Plan policies that individual development applications are assessed.

The maps, policies and strategies contained in this Framework provide statutory direction for the four councils in the Yorke Peninsula region in preparing changes to their Development Plan and ‘Section 30’ Strategic Directions Reports....

...The Regional Land Use Framework provides a ‘bridge’ between broad state-wide planning and local council land use planning – reconciling broad aims with local needs to facilitate a consistent and integrated planning approach to land use and development across the Yorke Peninsula region to serve the community and industry. (my underlining added)

Therefore, any perceived inconsistency between the proposed wind farm development and the York Peninsula Regional Land Use Framework is not relevant to the assessment of this Development Application – and consideration of it is a procedural error.

2.2. The Question of “Seriously at Variance”

In order to discharge the task under Section 35(2) of the Development Act 1993, two steps must be performed by the planning authority (in this case, the Minister). Firstly, the planning authority must direct its mind to the question whether the proposed development is seriously at variance with the Development Plan. Secondly, the planning authority must determine whether grounds exist on which the development can be set aside as being seriously at variance with the Development Plan. The various individual provisions of a Development Plan are not intended to be treated as mandatory. It is only when a proposal (other than for complying development) is judged to be “seriously at variance” with the relevant Development Plan, that approval of the proposal is prohibited.

Section 1.2 of the report to Council states that:

“Whilst the proposed development is significantly at variance with the above objectives and principles of development control as set out in Council’s current Development Plan, consolidated 22 November 2012 the application should not be supported due to insufficient information being provided to make an informed assessment as per the following:...” (my underlining added)

This statement should not be confused with consideration of the proposed development being “seriously at variance” with the Development Plan for the purposes of Section 35(2) of the Development Act.

3.0 Planning Report Format

There is no statutory requirement to present planning assessment reports in any particular format. However, the format of planning report is often critical to its legibility and the assessment of a development proposal's performance against the relevant Development Plan.

Development assessment involves measuring the performance of a proposal against the many and varied provisions of the Development Plan. The Development Plan must be read as a whole when doing this and each of the relevant provisions must be read together in the context of one another. This is reinforced in the section entitled "Introduction to the Development Plan – How to Read the Development Plan" on page 6 of the Yorke Peninsula Development Plan, where it states that "**All sections and all relevant provisions within each section of the Development Plan must be considered in relation to a development proposal or application**".

The often complementary and sometimes competing nature of provisions throughout the Development Plan become apparent when applied to a particular form of development. Different weightings and interpretations of Development Plan provisions are often necessary when undertaking development assessment for varied forms of development.

The analysis in the report to Council on the Ceres Wind Farm is undertaken individually against each of the topic headings in the General Section of the Development Plan, as well as the Primary Production Zone. This assessment format is considered to be flawed in that it 'artificially' compartmentalises the consideration of key issues, making assessment against the many and varied provisions in the context of one another difficult.

For example, when examining the issues of visual appearance of the wind farm, the report to Council does not group the relevant provisions relating to "Design and Appearance" with the relevant provisions under "Renewable Energy Facilities", "Siting and Visibility" and the "Desired Character" statement for the Primary Production Zone that relate to visual appearance. This results in inappropriate weighting being given to some provisions that anticipate minimal visual impact of developments in general terms against more specific provisions that clearly state that the visual impact of wind farms is to be accepted in rural areas.

A more robust and transparent approach to development assessment is issues-based, similar to the structure of this report i.e. land use, appearance of development/visual impact, noise impact etc. Such a format allows for the more appropriate and holistic consideration of issues-based provisions within the various sections of the Development Plan. The Development Assessment Commission, for example, uses such a report format in assessing Development Applications where it is the relevant authority (such as this wind farm proposal).

4.0 Assessment of Key Planning Issues

4.1. Land Use

The proposed development is located within the following zones of the Yorke Peninsula (DC) Development Plan (Consolidated 29 November 2012):

- Primary Production Zone; and
- Coastal Conservation Zone.

Section 3.3 of the report to Council, under the heading “Primary Production Zone” quotes Objective 5 as follows:

Objective 5: *Accommodation of wind farms and ancillary development.*

The report to Council then goes on to state that:

“Objective 1 requires that development ensures the long term continuation of primary production. As wind farms are considered appropriate in the primary production zone (reference objective 5 & 6) the applicant has satisfied these requirements.”

This statement suggests that the author of the report accepts that wind farms are an appropriate land use in the Primary Production Zone.

It also appears to suggest that the author accepts that the wind farm will facilitate the “long term continuation of primary production” and that wind farms are a type of “development that contributes to the desired character of the zone”, as sought by Objectives 1 and 6 of the Primary Production Zone. However, the remainder of the report to Council appears to ignore these findings. This is examined in greater detail in the next section of this report.

4.2. Appearance of Development/Visual Impact

Section 3.2 of the report to Council quotes the following key Principle of Development Control from the Renewable Energy section of the Development Plan:

Wind Farms and Ancillary Development

- 2 The visual impacts of wind farms and ancillary development (such as substations, maintenance sheds, access roads and wind monitoring masts) should be managed through:
 - (a) wind turbine generators being:
 - (i) setback at least 1000 metres from non-associated (non-stakeholder) dwellings and tourist accommodation
 - (ii) setback at least 2000 metres from defined and zoned township, settlement or urban areas (including deferred urban areas)
 - (iii) regularly spaced

- (iv) uniform in colour, size and shape and blade rotation direction
- (v) mounted on tubular towers (as opposed to lattice towers)
- (b) provision of vegetated buffers around substations, maintenance sheds and other ancillary structures.

The discussion about the Renewable Energy provisions in the report to Council makes no mention of the fact that the proposed wind farm satisfies elements (a)(i)-(v) of this provision. Rather, the report simply states that "The application has failed to satisfy principles of development control 2 (b)... (which) requires that a vegetated buffer be placed around substations and maintenance shed ancillary to wind farms". Omissions such as this in the report to Council may skew the perception of a person reading it as to the extent that the development is consistent with the Development Plan. Further, the report to Council does not acknowledge that the vegetated buffer issue could be relatively simply resolved through amended plans, a condition of consent.

Section 3.2 of the report to Council identifies a single Objective 1 under the heading "Siting and Visibility" as being relevant to the consideration of the visual impact of the proposed development.

Objective 1: Protection of scenically attractive areas, particularly natural, rural and coastal landscapes.

The report to Council states that:

...The application does not satisfy this objective. Council has an obligation to consider the views from both land and surrounding coastal waters given the high number of local residents and tourists using the waterways. Quite clearly, the visual impact of the development is one of the critical aspects of the application.

In addition the proximity of wind turbines close to roads intensifies visual impact therefore creating an adverse visual impact on the natural, rural and coastal landscape. The Visual assessment does not consider the impact of the wind farm on views to the south down the St Vincent's Highway from the north (H1) in the assessment report.

It is further noted that all of the photomontages contained in the assessment of the Landscape and Visual Assessment Report are set against a heavily overcast sky, rather than a clear sky which would increase the turbines visual impact.

The wind farm specific provisions of the Development Plan have been written in such a way as to down play the visual impacts of wind farms and related infrastructure, similarly the visual analysis has been written in such a way as to present the development in the best light.

The Visual Assessment Report identifies the landscape broadly as being of low visual amenity (crops and pasture scenes) and is characterised by relatively flat terrain and open topography. It is however this character that makes it a landscape that is most sensitive to change as a consequence of the addition of a very significant number of high, vertical structures that by their very nature will be intrusive.

The St Vincent's Highway is the main tourist route along the east coast of the Peninsula and its flat rural, character will be significantly altered to one of an almost industrial quality as a consequence of the visibility and number of turbines, their proximity to the road and the length of the road over which they will be visible.

The report notes that the wind farm will change the character of the locality but without justification and further says that in some locations the turbines may be seen as a positive contribution to the landscape, but again does not explain in what sense this comment can be made.

Despite the assessment of the landscape having a low visual amenity based on its modified landscape character, the report does not address whether the area is scenically attractive as a typical rural landscape as sought by Objective 1. (my underlining added)

The Conclusion of the report to Council states that:

...a wind farm proposing 199 turbines of such a scale and over a relatively limited area will have an impact on the visual amenity and scenic quality of the rural landscapes of the Yorke Peninsula. As such, there is the potential for impacts not only on permanent residents but on tourism in the region and subsequently, on the smaller commercial operations that rely on the tourism trade... (my underlining added)

It is significant that the report to Council acknowledges that “the wind farm specific provisions of the Development Plan have been written in such a way as to down play the visual impacts of wind farms and related infrastructure”. In my view it is not so much a question of the Development Plan provisions ‘down playing’ the visual impact of wind farms, but rather indicating that wind farms are envisaged in many localities/zones (including the Primary Production Zone) and that their visibility is to be expected and managed.

I have previously established that wind farms are a desirable land use within the Primary Production Zone of the Yorke Peninsula Development Plan, and that the visual impact of the proposed wind farm has been “managed” via a number of design elements identified in PDC 2 of the General Section entitled “Wind Farms and Ancillary Development” (with the exception of 2(b) as discussed previously). In this context, it is my view that it is unreasonable to place such heavy emphasis on Objective 1 of “Siting and Visibility” (which relates to all forms of development), rather than the specific provisions of the Development Plan in relation to wind farm visibility, when assessing a wind farm proposal.

The Ministerial Statewide Windfarms DPA authorised on 18 October 2012 established many of the most relevant provisions within the Yorke Peninsula relating to the visual impact of wind farms. The Development Policy Advisory Committee is charged with the responsibility of advising the Minister for Planning on amendments proposed to Development Plans through the DPA process. The DPAC provides an independent check and balance in the amendment process, providing an alternative policy position to those of lobby groups, agencies and the Department of Planning, Transport and Infrastructure.

DPAC’s report on the Ministerial Statewide Windfarms DPA states the following with regard to visual impacts:

...DPAC understand that the policy regarding the visual impacts of wind farms contained in the draft Development Plan Amendment is a product of the extent to which wind energy is considered desirable. In other words, it is understood that the draft Development Plan Amendment attempts to implement clear and measurable means of managing visual impact in order to provide certainty regarding the visual impacts...

...DPAC recommend that policy that is supportive of wind farms not be applied to zones and areas that are known to be of scenic value (e.g. Rural Landscape Protection Zone where the preservation of the scenic value of certain areas is quite strongly sought). Implementation of this recommendation will, to a degree, address concerns regarding the broad visual impacts of wind turbines. It is considered that it will also preserve opportunity for the application of policy that provides that the visual impacts of wind turbines are to be managed and accepted rather than minimised – namely, to zones and areas not recognised to be of scenic value...

...DPAC considers that...policy that provides that the visual impacts of wind farms are to be accepted (subject to satisfaction of some management techniques), could be applied to zones and areas not recognised to be of scenic values. It should be noted that Dr Lothian's submission provides an indication of the scenic value of landscapes across the entirety of South Australia...

Dr Lothian is a Director of the consultancy "Scenic Solutions" based in South Australia. His submission in relation to the Statewide Ministerial Windfarms DPA includes a map of South Australia identifying the state wide distribution of landscape quality on a scale of 1-10 (10 being the highest landscape quality). Dr Lothian's submission states that "...as an overall assessment, the map indicates that much of South Australia, being predominantly flat and often with limited significant vegetation, rates moderates to low, in the 4-5 range for the non-coastal areas". The part of the Yorke Peninsula on which the proposed wind farm is located rates as a 4 (i.e. relatively low).

Significantly, the Primary Production Zone in the Yorke Peninsula Development Plan is not one of the zones known to be of scenic value where DPAC recommended that policy supportive of wind farms be excluded. This is unlike the Coastal Conservation Zone and the Coastal Open Space Zone in the Yorke Peninsula Development Plan.

This reinforces my earlier contention that the report to Council places too much weight on broad provisions of the Development Plan relating to the visual impact of development, compared to specific provisions that anticipate wind farm development in the zone and set out mechanisms for the management of their visual impact.

Within the conclusion of the report to Council (page 36) it is stated:

...When the Ministerial Statewide Wind Farms Development Plan Amendment was considered it does not appear that the sheer size and scale of the wind turbines could have been imagined...

This statement is entirely unfounded. Further, it should be noted that as set out in section 6.3 of the development application, the Ceres Wind Farm had been announced in August 2011 and numerous meetings with the public, stakeholder groups, government agencies and Ministers had been undertaken prior to the Ministerial Statewide Wind Farms Development Plan Amendment. In addition, the Ceres Wind Farm was specifically discussed in submissions made to DPAC in relation to the Ministerial Statewide Wind Farms DPA.

4.3. Noise Impact and Infrasound

The Yorke Peninsula Development Plan contains the following provisions that relate most directly to noise impact and the proposed development:

Interface Between Land Uses

OBJECTIVES

- 1 Development located and designed to prevent adverse impact and conflict between land uses. (my underlining added)
- 2 Protect community health and amenity and support the operation of all desired land uses. (my underlining added)
- 3 Protect desired land uses from the encroachment of incompatible development. (my underlining added)

PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:
 - (a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants
 - (b) noise
 - (c) vibration
 - (d) electrical interference
 - (e) light spill
 - (f) glare
 - (g) hours of operation
 - (h) traffic impacts. (my underlining added)
- 2 Development should be sited and designed to minimise negative impact on existing and potential future land uses considered appropriate in the locality. (my underlining added)

Noise Generating Activities

- 7 Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant Environment Protection (Noise) Policy criteria when assessed at the nearest existing noise sensitive premises. (my underlining added)

Renewable Energy Facilities

- 3 Wind farms and ancillary development should avoid or minimise the following impacts on nearby property owners / occupiers, road users and wildlife:
 - (a) shadowing, flickering, reflection or glint
 - (b) excessive noise
 - (c) interference with television and radio signals and geographic positioning systems
 - (d) interference with low altitude aircraft movements associated with agriculture
 - (e) modification of vegetation, soils and habitats
 - (f) striking of birds and bats. (my underlining added)

With regard to noise impact, the report to Council states the following:

Interface Between Land Uses

The application is at variance to the objectives and principles of interfaces between land uses. The objectives of this provision are provided to ensure that development is located and designed to prevent adverse impacts and conflict between land owners, to protect community health and amenity while protecting existing lawful land uses. The siting of wind turbines on property boundaries will impact on the use of land by adjoining property owners. The level of this impact is unknown. The developer states that all impacts on adjoining property owners will be investigated and mitigated as part of the final assessment and siting of wind turbines, but at the time of assessment this has not been completed.

Objectives 1 & 2 clearly intend to ensure development is designed to prevent adverse impact and conflict between land uses while protecting community health and amenity. While objective 3 seeks to protect desired land uses from encroachment by incompatible land uses.

When there are two land uses that are considered desirable, the actions of one use, in this case wind turbines should not impact on the other use, primary production, particularly when that impact involves non-involved property owners. This is further demonstrated in principle of development controls that states "sensitive uses likely to conflict with the continuation of lawful existing development and land use desired for the zone should be designed to minimise negative impacts"...

Renewable Energy Facilities

...Objective 1 requires that development is of benefit to the environment, community and state. Objective 3 requires location, siting, design and operation of renewable energy facilities to avoid or minimise adverse impacts on the natural environment and other land uses. It is clear that participant farmers have been provided with protection from adverse impact from the wind turbines by way of boundary siting however, and to the contrary, non-involved property owners will be impacted due the proximity of these turbines to boundaries.

Council should turn its attention to the overall impact of the project and at this point in time it is unclear how much impact will be placed on non-involved farm holdings. It therefore is reasonable to conclude this is at variance to the requirements of the Development Plan until a full and detailed analysis of the impact on non-involved farm holdings is completed...

Conclusion

...Statewide there has been a lot of debate in relation to the potential health impacts of infrasound and shadow flicker. The project has a self-imposed wind turbine set-back of 1.3 kilometres from the dwellings of non-involved landowners however, several involved landowners have waived their right to this set-back. The proposal indicates that there are five (5) receptor locations where shadow flicker will potentially exceed the allowable limit and that involved landowners have agreed that these dwellings will not be occupied. With the applicant suggesting that this matter can be addressed by way of Land Management Agreement complimenting the Lease Agreement held between the landowner and REpower, this is not an ideal situation for Council. The role of enforcement of the Land Management Agreement provisions would ultimately rest with Council.

At this time there is insufficient information available to make an informed decision on the potential long term health implications of the wind farm proposal.

Additionally, there are concerns that night time noise levels from activities at the operations compound could exceed Environment Protection Authority requirements, impacting on the residents of Port Julia.

Council must be satisfied that the proposed development is not to the detriment of any community or individual resident nor their rights to peace, health, asset values or income generation... (my underlining added)

This assessment approach appears to place considerable weight on the provisions that refer to the 'prevention or avoidance' of impacts on existing or proposed nearby land uses, without acknowledging other allied provisions that anticipate 'no unreasonable interference or minimisation' of impacts.

The Environment Protection Authority released a guideline document in 2009 entitled "Wind farms environmental noise guidelines". The aim of this document is to help developers, planning and enforcement authorities, government agencies, acoustic engineers and the broader community assess environmental noise impacts from wind farms. The core objective of the guidelines is to balance the advantage of developing wind energy projects in South Australia with protecting the amenity of the surrounding community from adverse noise impacts.

The guidelines state that the predicted equivalent noise level generated by the wind farm, adjusted for tonality, should not exceed:

- 35dB(A) at relevant receivers in localities which are primarily intended for rural living; or
- 40dB(A) at relevant receivers in localities in other zones; or
- the background noise by more than 5dB(A);

whichever is the greater, at all relevant receivers, for wind speed from cut-in to rated power of the WTG and each integer wind speed in between.

This noise criterion has been developed to minimise the impact on the amenity of premises that do not have an agreement with wind farm developers. The guidelines also acknowledge that wind farm developers commonly enter into agreements with the owners of private land suitable for a wind farm site. Notwithstanding this, the EPA cannot ignore noise impacts on the basis that an agreement has been made between the developer and the landowner. However, the existence of an agreement will affect the consideration of whether the interference is unreasonable in a given situation. The guidelines state that it is unlikely that there will be unreasonable interference if:

- a formal agreement is documented between the parties;
- the agreement clearly outlines to the landowner the expected impact of the noise from the wind farm and its effect upon the landowner's amenity; and
- the likely impact of exposure will not result in adverse health impacts (e.g. the level does not result in sleep disturbance).

In particular, the guidelines also indicate that "the Working Group on Noise from Wind Turbines (Final Report, ETSU for DTI, 1996) recommends the outdoor noise limit of 45dB(A) (after any adjustment for tonality) for landowners having financial involvement in the wind farm... is considered acceptable".

The proposed Ceres Wind Farm development satisfies these guidelines in terms of noise impact on all existing neighbouring (non-financial stakeholder) dwellings. The exception to this is 1 property near (some 900m away from) the proposed converter station at Port Julia, where the EPA guideline will be exceeded by up to 7dB(A) in the worst case scenario during the night (depending upon wind speed and direction). It is anticipated that further design work on the converter station can reduce this level of noise impact (i.e. component selection, construction materials selection and minor adjustments to site layout). This could be managed/further guaranteed via a condition of consent.

A total of 7 dwellings that are subject to signed agreements with the proponent will experience noise levels above 40dB(A) but noise levels at each of these dwellings will be less than the 45dB(A) limit considered to be acceptable for financial stakeholders in the EPA guidelines.

It is my view that, despite a relatively minor variation with the EPA guidelines (in respect of the Port Julia converter station), the proponent satisfies the EPA guidelines as quoted above.

In this context, I take the view that the inference in the report to Council that the level of noise impact is unknown and, therefore, the application should not be approved, is an inappropriate inference. The development application documents demonstrate that the level of noise impact is well understood and the proposal satisfies the intent of the relevant Development Plan provisions with regard to noise impact.

Section 1.2 of the report to Council states that:

1.2 Whilst the proposed development is significantly at variance with the above objectives and principles of development control as set out in Council's current Development Plan, consolidated 22 November 2012 the application should not be supported due to insufficient information being provided to make an informed assessment as per the following:

- *There is insufficient information available on the potential long term impact of infrasound on human health...*

The South Australian EPA has released a document in January 2013 entitled "Infrasound levels near wind farms and in other environments". This document presents the findings of a comparative study into the level of infrasound within typical environments in South Australia, with a particular focus on comparing wind farm environments to urban and rural environments away from wind farms. The following findings were made from the measurements conducted in rural areas:

Infrasound levels at houses adjacent to wind farms are no higher than those at houses located a considerable distance from wind farms (e.g. 1.5km compared to 30km).

Infrasound levels in the rural environment appear to be controlled by localised wind conditions. During low wind periods, levels as low as 40dB(G) were measured at locations both near to and away from wind turbines. At higher wind speeds, infrasound levels of 50 to 70dB(G) were common at both wind farm and non-wind farm sites.

Organised shutdowns of the wind farms indicate that there did not appear to be any noticeable contribution from the wind farm to the G-weighted infrasound level measured at either house. This suggests that wind turbines are not a significant source of infrasound at houses located approximately 1.5 kilometres away from wind farm sites.

From an overall perspective, measured G-weighted infrasound levels at rural locations both near to and away from wind farms were no higher than infrasound levels measured at the urban locations. Furthermore, both outdoor and indoor infrasound levels were typically below the perception threshold by a significant margin. The most apparent difference between the urban and rural locations was that human activity and traffic appeared to be the primary source of infrasound in urban locations, while localised wind conditions are the primary source of infrasound in rural locations.

In simple terms, EPA's findings, published in January 2013, are that the level of infrasound at houses near the wind turbines assessed is no greater than that experienced in other urban and rural environments, and the contribution of wind turbines to infrasound levels is insignificant in comparison with the background level of infrasound in the environment.

Therefore, the statement in the report to Council that "there is insufficient information available on the potential long term impact of infrasound on human health" is inappropriate as part of the assessment of the proposed wind farm.

4.4. Workers' Accommodation

The report to Council contains a section entitled "Short Term Workers Accommodation" on pages 30 and 31. It quotes a number of provisions from the Yorke Peninsula Development Plan relating to the design and construction of short term workers' accommodation and states that:

The application fails to identify how the requirements of short term worker accommodation are to be addressed. There has been a considerable amount of discussion in relation to worker accommodation but to date Council does not have any specific information that satisfies the requirements of the Development Plan.

The application states that three sites have been considered at for temporary worker accommodation, but these locations have not been identified. Discussions revealed that several private businesses have also registered interest in providing accommodation. Given the circumstances it would be appropriate to condition any approval to ensure that valuable tourist accommodation remains available during the construction phase of the project.

There are no provisions in the Yorke Peninsula Development Plan which state that development, including wind farms, should provide short term workers' accommodation. The Development Plan provisions quoted in the report to Council relate specifically to the assessment of proposals for short term workers' accommodation, and are not relevant to the assessment of the current Development Application for this wind farm. In this regard, the report to Council follows incorrect assessment procedure.

Any concern relating to the impact of demand for short term workers' accommodation in association with the proposed wind farm impacting on existing tourist accommodation should be addressed by the market - there are no provisions in the Yorke Peninsula Development Plan that seek the provision of workers' accommodation in association with wind farm development.

4.5. Bushfire Control and Aerial Spraying

Page 26 of the report to Council states that:

Many of the hazards associated with the construction of the wind farm have been addressed throughout the application. Although there is an intention to address all hazards associated with the development at this stage the applicant has not addressed issues such as bushfire management plans in any detail at the wind turbine sites and the administrations compound. Without these plans to assess, it is difficult to ensure compliance with this provision of the Development Plan. (my underlining added)

A fire risk assessment was included in the application documents which has provided recommendations to minimise potential fire risk. In addition, the Assessment of Agricultural Applications for Fixed Wing Aircraft provides discussion on the potential impacts on aerial fire fighting capabilities.

The proposed wind farm is located on land that is identified as being of "General Bushfire Risk" in the Yorke Peninsula Development Plan. This is the lowest level of bushfire risk (compared to "medium" or "high").

As quoted in the development application documents, the CFS has made the following comment with respect to their ability to fight bushfires in proximity to wind farms:

Response of any aircraft to any location is made after a request from the local fire fighting resources. Dynamic risk assessments are a continuous part of fire fighting Air Operations and wind turbines potentially present no more a problem for aviation than radio masts, power lines and similar obstacles. There is some discussion in relation to downwind turbulence, but in real terms this entire area (downwind) is likely to be subject to heavy smoke ahead of the fire and may not be able to be dealt with by aircraft regardless of obstacles. Each location has unique local conditions, and once again I stress that we continually use dynamic risk assessment process during all of our operations. (my underlining added)

Accordingly, the CFS do not consider the proposed wind farm to inhibit their ability to aerially fight a bushfire.

Under the title "Orderly and Sustainable Development" on page 29 of the report to Council, it is stated that:

The applicant has not satisfied the requirements of objective 3 and PDC 1. Objective 3 requires that development does not jeopardise the continuance of an authorised adjoining land use. PDC 1 requires that development does not prejudice the development of a zone for its intended use. With many wind turbines located on the property boundaries of non-involved property owners it is difficult to identify how the applicant can comply with this requirement. Aerial spraying is an integral part of farming practices and it is an activity that is implemented on the basic need rather than want. The applicant has acknowledged that there is a likelihood of some interruption to Aerial spraying and there may be a need to alter farming practices. Of note, the assessment report is limited only to the impacts on existing farming practices on adjoining land, not on the properties which are the subject of the development application, and nor does it consider the impact of the wind farm on future use of aerial spraying by affected land owners who may now only use ground based application methods. The Aerial Spraying report accompanying the application notes

that further investigation of this issue is required in relation to a number of adjoining properties, and raises the issue of compensation to affected land owners, but provided no assurance as to how compensation would be dealt with as part of the project development, or if this would come from the Community Development fund or be separately funded. (my underlining added)

This section of the report to Council fails to reference Principle of Development Control 3 of "Renewable Energy Facilities" which states:

- 3** *Wind farms and ancillary development should **avoid or minimise** the following impacts on nearby property owners / occupiers, road users and wildlife:*
- (a) shadowing, flickering, reflection or glint*
 - (b) excessive noise*
 - (c) interference with television and radio signals and geographic positioning systems*
 - (d) interference with low altitude aircraft movements associated with agriculture*
 - (e) modification of vegetation, soils and habitats*
 - (f) striking of birds and bats. (my underlining and bolding added)*

In simple terms, it is clear from the development application documents that only 1 in 5 allotments adjacent to the proposed wind farm will experience any impact in terms of reduced capacity for aerial spraying with light planes in a 'worst case' scenario with all turbines operating during aerial spraying. Even then, light planes can be used to spray all but 15% of the area of those allotments and helicopters will still be able to aerial spray the remaining land while adjacent turbines are in operation. In other words, only 3% of the surrounding land will require aerial spraying via helicopter rather than light planes if aerial spraying is used on those properties in future and adjacent turbines remain in operation during the spraying. Potential impacts on the future use of light planes are even less if adjacent turbines are turned off during spraying. Consequently, in my professional opinion, the development satisfies Principle of Development Control 3 in that it minimises interference with low altitude aircraft movement associated with agriculture.

4.6. Crime Prevention

Page 24 of the report to Council states that:

The application is silent in relation to crime prevention. The Development Plan calls for a safe, secure, crime resistant environment where land uses are integrated and designed to facilitate community surveillance. Without clearly defined plans for the operations compound and any workers accommodation Council cannot assess this requirement. (my underlining added)

While details regarding the operations compound will assist in ensuring that this element of the proposed development is sufficiently "safe, secure and crime resistant", it is not considered appropriate to apply a similar criticism to any workers accommodation given that the proposal does not involve workers accommodation (see section 6.0 of this report).

5.0 Conditions of Consent

Section 42 of the Development Act 1993 states that:

42—Conditions

- (3) A relevant authority may, for example, approve a development subject to a condition—
- (a) that regulates or restricts the use of any land or building subject to development; or
 - (b) that provides for the management, preservation or conservation of any land or building subject to development; or
 - (c) that regulates maintenance of any land or building subject to development; or
 - (d) where the applicant is seeking approval for a temporary development—that provides that, at a future time specified in the condition—
 - (i) the previous use of the land will revive, or a use of the land will cease; and
 - (ii) any person who has the benefit of the development will restore the land to the state in which it existed immediately before the development. (my underlining added)

It is common for Development Plan Consents for large-scale development proposals, such as wind farms, to incorporate a number of conditions of consent that address a wide range of detailed design issues.

For example, DA 764/V001/11 for 105 wind turbines on 7500ha over 77 allotments north of Jamestown in the Primary Production Zone of the Northern Areas Council was granted Development Plan Consent by the Development Assessment Commission on 24 May 2012, subject to the following conditions:

1. *That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and plans, including the amended plans as submitted in Development Application No. 764/V001/11:*
 - *Aurecon Report - Hornsdale Wind Farm Application Report (including appendices) - Investec Bank (Australia) Limited - 26 October 2011, unless amended by Aurecon Report - Hornsdale Wind Farm Development Application.*
 - *Consolidated Response to Agency, Council and Public Submissions - 27 March 2012.*
 - *Letter from Aurecon to DPTI dated 15 May 2012.*
2. *Prior to the commencement of construction the final layout plan (and associated reporting) of wind turbines and ancillary infrastructure shall be approved by the Minister for Planning.*
3. *That clearance of or damage to native vegetation on the site or public roads for access during construction shall be minimised.*
4. *A Traffic and Access Management Plan, prepared in consultation with the Transport Services Division DPTI and Northern Areas Council, shall be submitted for approval by the Minister for Planning. As part of the plan, the applicant shall*

engage an accredited road safety auditor to undertake a safety audit of the local road network to be used by vehicles servicing the development. The Plan shall include the following:

- a. definition of roads and routes to be used for vehicles during construction and for on-going maintenance purposes
 - b. load specifications of vehicles servicing the development
 - c. identification of upgrade of roads required to accommodate all vehicles servicing the development
 - d. identification of intersection treatment that is required to facilitate heavy traffic turning movements
 - e. specification of engineering standards for pavement and drainage design and construction
 - f. a management schedule during the construction stage of the development to minimize impact on road users
 - g. a maintenance program for roads utilised by the vehicles servicing the development
 - h. an agreement with Northern Areas Council that all road upgrading (including drainage and water runoff measures), intersection treatment and on-going maintenance costs are to be borne by the developer of the wind farm.
5. That the wind farm shall be designed and operated in a manner so as to not interfere with existing telecommunication facilities. The implementation of off-site mitigation measures for affected receivers shall be at the cost of the developer.
6. A Mining Management Plan, prepared in consultation with Flinders Mines Ltd, for the management of future access and exploration activities (in accordance with relevant state legislation) on the site shall be approved by the Minister for Planning prior to commencement of construction.
7. A Rehabilitation Plan for the site, including options for environmental offsets and a management program (to be undertaken during the operational life of the project) and end-of-project decommissioning works (to outline the extent of reinstatement and restoration activities upon the removal of the wind-farm and associated infrastructure), shall be submitted for approval by the Minister for Planning prior to commencement of construction.
8. An Environmental Management and Monitoring Plan (EMMP) for the construction and operational phases of the development shall be approved by the Minister for Planning prior to commencement of construction.
9. Noise generated by the wind farm must not exceed*:
- a. 40 dB(A) for noise sensitive receivers** in a primary production/general farming zone,
 - b. 35 dB(A) if receivers are situated in a rural living zone, or
 - c. the background noise (LA90,10) by more than 5 dB(A) at noise sensitive receivers.

(*The above measured noise levels should be adjusted in accordance with the EPA Wind Farms: Environmental Noise Guidelines 2009 by the inclusion of a 5dB(A) penalty at a receiver where a tone is audible ($\Delta L_{a,k} > 0$ as measured in accordance with international standard IEC61400-11, Ed.2.1: Wind turbine generator systems- Part 11: Acoustic noise measurements techniques) at that particular noise sensitive receiver. **A noise sensitive receiver is an occupied

dwelling where the owners do not have an agreement with the wind farm developer.)

10. An independent acoustical consultant (other than the company that prepared the predictive acoustical report) must be appointed to monitor noise levels at least five residences including: 5, 38, 39, 45 and 47 (as shown on the maps in the "Addendum to Environmental Noise Assessment, Rev 3, 25 October 2011" acoustic report by Aurecon, dated 15 March 2012). Note: monitoring must be performed in accordance with the EPA "Wind Farms: Environmental Noise Guidelines, 2009" when all of the noise sources associated with the wind farm are in operating mode. The results of the monitoring must be submitted to the satisfaction of the Environment Protection Authority within two months from the date of the wind farm commissioning.
11. In order to determine whether a 5dB(A) penalty would be applicable at a receiver (in accordance with the EPA Wind Farms: Environmental Noise Guidelines 2009), a tonality test must be conducted in accordance with the international standard IEC61400-11, Ed.2.1: Wind turbine generator systems- Part 11: Acoustic noise measurements techniques. The presence or absence of the audible tones must be confirmed by post construction tonality assessment at least residence 39 (as shown on the maps in the "Addendum to Environmental Noise Assessment, Rev 3, 25 October 2011" acoustic report by Aurecon, dated 15 March 2012). Results of the noise monitoring must be adjusted for tonality if necessary.
12. Prior to work commencing on site, a Construction Environment Management Plan (CEMP) must be submitted to the satisfaction of the EPA and the measures contained in the CEMP must be implemented during the construction and rehabilitation phases of the work. The CEMP must include, as a minimum:
 - a. Soil Erosion and Drainage Management Plan (SEDMP) prepared according to the EPA's Stormwater Pollution Prevention Code of Practice (for the Building and Construction Industry), March 1999; and
 - b. Measures to manage potential dust and noise emissions, solid and liquid wastes and concrete wastes from construction works.
13. The storage and use of hazardous materials must be managed so as to avoid the contamination of soil or receiving waters. Such materials must be stored in a bunded area with the capacity to contain 120% (or 133% in the case of flammable materials) of the volume of the largest container within the bund. Note: further guidance on bunding and spill management can be found in the EPA Guideline: Bunding and Spill Management. There shall be no on-site burial of waste materials.
14. Following the completion of construction works on-site, the tracks and disturbed areas (excluding those used for ongoing access and maintenance) must be rehabilitated and bare areas revegetated as soon as possible, taking advantage of natural rainfall, which is mostly between May and September. If bare areas are still present at the end of spring, they must be temporarily protected and stabilised by geotextile matting or other suitable methods, until they can be effectively revegetated.
15. That prior to the construction of the approved turbine layout (as required by Condition 2), a cultural heritage survey shall be undertaken to ensure that no sites of European or indigenous heritage are damaged through the installation of the wind farm and associated infrastructure (including associated earthworks and road construction).

The report to Council in relation to the Ceres Wind Farm concludes, in part, that there is “insufficient information being provided to make an informed assessment”. The table below lists the information the report to Council suggests is lacking in the left-hand column, while the right-hand column indicates whether or not the criticism in the report to Council is reasonable.

Information the report Council indicates is lacking from the Development Application	Response
There is insufficient information available on the potential long term impact of infrasound on human health.	Incorrect assumption – see section 6.0 of this report.
No plans on any of the buildings to be erected in the Operations Compound.	Incorrect – plans for a 'typical facility' have been provided as part of the application and more detailed design is anticipated following Development Plan Consent (as per example condition of consent No. 2 above).
No details of any formal agreements with the landowners that prevent the re-habitation of dwellings impacted by shadow flicker, including dwellings within a 1.3 kilometre set-back distance from any turbine.	Not required for the purposes of a planning assessment – cessation of use of the dwellings can be further addressed by explicitly describing the change of land use from “dwellings” to “farm buildings” as part of DA.
There is no crime prevention analysis to ensure that best practice crime prevention measures are implemented at all turbine sites and the operations compound.	Acknowledged. However, issues relating to landscaping, lighting, visibility etc at the operations compound can be appropriately managed via a condition of consent and are more commonly addressed in the detailed design process.
There is no analysis on the ability for non-involved landowners to implement best practice farming principles.	Incorrect – the Application includes analysis of impact on aerial spraying. Unclear as to how 'best practice' may otherwise be thought to be impacted.
There are three turbines located within 60 metres of the Conservation Zone that should be relocated to a distance of not less than 100 metres.	This information is not lacking with the Application – the application includes 3 turbines within 60m of a “conservation zone” identified by the proponent's ecologists, which has been justified within section 3.3.1.4 of the Application documentation.
Hazard analysis has not been provided in relation to bushfire risk at each turbine site and the operations compound.	Incorrect – bushfire risk analysis has been provided with the application.
The applicant has not completed an analysis for the impacts on water supply as a result of the quantity of water required to operate the batching plant, civil construction, fire fighting or potable supplies. The analysis must clearly demonstrate that the water use required for the batching plant will not impact on current potable water supplies to the Yorke Peninsula, in particular, during peak periods.	Incorrect - this issue was addressed in section 7.1.1.1 of the Application and in the response to Council Officers' list of questions during the assessment process.

Information the report Council indicates is lacking from the Development Application	Response
The applicant has not completed an analysis of the impacts of the short-term workers accommodation in relation to tourism and permanent rental availability.	Not required to complete a planning assessment for the wind farm (i.e. no relevant Development Plan provisions to assess this against).
No details have been provided demonstrating how Council shall be indemnified from litigation in relation to the wind farm and Council's infrastructure.	Not relevant to complete a planning assessment (i.e. no relevant Development Plan provisions to assess this against).
<p>The applicant has not provided details on a Traffic Management Plan to address the following:-</p> <ul style="list-style-type: none"> • Definition of roads and routes to be used for vehicles during construction • Load specifications of vehicles to be used during construction • Identification of upgrades of roads required to accommodate all vehicles associated with the construction • Identification of access places from public roads for vehicles during the construction phase of the works and those to be retained and maintained during the operation of the wind farm • A management schedule of monitoring conditions of roads utilised for wind farm vehicles, at the cost of the proponents • Agreement that road upgrading and maintenance associated with the wind farm is at the proponents cost • Details of hours of delivery • Details of proposed road closures and their management • Details of the permits required • Details of all required road signs and advisory signs • A Route Risk Assessment for roads intended for transportation of over-dimensional wind turbine components 	Incorrect – the majority of these issues have been addressed in the details of the Application. Any outstanding matters can be managed via a condition of consent (see example condition 4 above).

Information the report Council indicates is lacking from the Development Application	Response
Details of a landscape assessment report prepared by a qualified person to define areas of additional landscaping and screening around the operations compound have not been provided.	This can be reasonably managed (and more commonly is managed) via detailed design in response to a condition of consent.
An analysis of the impacts of post construction site works, including access roads, not required for ongoing maintenance that shall be rehabilitated including replanting with crops and or native species has not been provided.	Not required, but can be managed via a site works plan typically sought via a condition of consent.
The applicant has not provided an analysis of mitigation of interference with existing telecommunication facilities.	Incorrect – provided as part of application documentation. Also, see example condition 5 above.
No details have been provided in relation to a rehabilitation plan for the site, including options for environmental offsets and a management program (to be undertaken during the operation life of the project) and end-of-project decommissioning works (to outline the extent of reinstatement and restoration activities upon the removal of the wind farm and associated infrastructure).	Discussion of this included in Application documentation and can be managed via a condition of consent (see conditions 8 and 12 above).
No details have been provided on a Bushfire Management Plan.	Incorrect – fire risk analysis has been provided with the application.
No details have been provided to develop a cultural heritage management plan for both European and Aboriginal cultural heritage.	Incorrect – cultural heritage analysis has been provided with the application. This may also be managed via a condition of consent (see example condition 15 above).
No specific details have been provided for the establishment of a Community Development Fund, including details of how the fund is to be managed.	Some detail regarding this has been provided as part of the application documentation, but it is not required to complete a planning assessment of the wind farm (i.e. no relevant Development Plan provisions to assess this against).

6.0 Summary and Conclusion

The analysis in the assessment report to Council on the Ceres Wind Farm is undertaken individually against each of the topic headings in the General Section of the Development Plan, as well as the Primary Production Zone. This assessment format is considered to be flawed in that it 'artificially' compartmentalises the consideration of key issues, making assessment against the many and varied provisions of the Development Plan in the context of one another difficult, and is consequently somewhat misleading.

A more robust and transparent approach to development assessment is considered to be issues-based, similar to the structure of this report i.e. thematic consideration of provisions relating to land use, appearance of development/visual impact, noise impact etc. Such a format allows for the more appropriate and holistic consideration of issues-based provisions within the various sections of the Development Plan. The Development Assessment Commission, for example, uses this type of report format in assessing Development Applications.

The report to Council also contains a number of assessment errors and inaccurate interpretations of the relevant provisions of the Yorke Peninsula Development Plan that could give a misleading impression to a reader of the report as to the extent that the development is consistent with the relevant provisions of the Development Plan. Key issues to note are as follows:

- The report to Council gives a false impression of the role of the "The Yorke Peninsula Regional Land Use Framework" in the assessment of this Development Application. In short, the Land Use Framework has no role in this assessment process. Therefore, any perceived inconsistency between the proposed wind farm development and the Yorke Peninsula Regional Land Use Framework is not relevant to the assessment of this Development Application.
- The statement in the report to Council that "*the proposed development is significantly at variance with the... objectives and principles of development control as set out in Council's current Development Plan*", should not be confused with consideration of the proposed development being "seriously at variance" with the Development Plan.
- The report to Council states that "*The application has failed to satisfy principles of development control 2 (b)... (which) requires that a vegetated buffer be placed around substations and maintenance shed ancillary to wind farms*". The report fails to acknowledge that this issue could be relatively simply resolved through amended plans, a condition of consent.
- It is significant that the report to Council acknowledges that "*the wind farm specific provisions of the Development Plan have been written in such a way as to down play the visual impacts of wind farms and related infrastructure*". It is not so much a question of the Development Plan provisions 'down playing' the visual impact of wind farms, but rather indicating that wind farms are to be envisaged in many localities/zones (including the Primary Production Zone), and that their visibility is to be expected and managed. In this context, I contend

that when assessing a wind farm proposal it is unreasonable to place such heavy emphasis on general provisions relating to visual impact such as Objective 1 of "Siting and Visibility" (which relates to all forms of development), instead of specific provisions that deal with the circumstances in which the visual impact of wind farms is considered to be acceptable.

- The statement in the Conclusion of the report to Council that "...When the Ministerial Statewide Wind Farms Development Plan Amendment was considered it does not appear that the sheer size and scale of the wind turbines could have been imagined...", is entirely unfounded and inconsistent with evidence of submissions made in respect of the Amendment.
- The assessment approach in the report to Council regarding noise impact places considerable weight on the provisions that refer to the 'prevention or avoidance' of impacts on existing or proposed nearby land uses, without acknowledging other allied provisions that anticipate 'no unreasonable interference or minimisation' of impacts. The proposed wind farm satisfies the EPA guidelines in terms of noise impact on all existing neighbouring dwellings, with the exception of 1 property near the proposed converter station at Port Julia, where the EPA guideline will be exceeded by 7dB(A) in the worst case scenario during the night. It is anticipated that further design work on the converter station can reduce this level of noise impact (i.e. component selection, construction materials selection and minor adjustments to site layout). This could be managed/further guaranteed via a condition of consent. It is reasonable to conclude that despite such a relatively minor variation with the EPA guidelines, the proponent satisfies the EPA guidelines for wind farm noise.
- In terms of infrasound, the South Australian EPA has published findings that the level of infrasound at houses near the wind turbines assessed in the EPA's study is no greater than that experienced in other urban and rural environments, and the contribution of wind turbines to infrasound levels is insignificant in comparison with the background level of infrasound in the environment. Therefore, the statement in the report to Council that "there is insufficient information available on the potential long term impact of infrasound on human health" is inappropriate as part of the assessment of the proposed wind farm.
- There are no provisions in the Yorke Peninsula Development Plan which state that development, including wind farms, should provide short term workers' accommodation. The Development Plan provisions quoted in the report to Council relate specifically to the assessment of proposals for short term workers' accommodation and are not relevant to the assessment of the current Development Application for this wind farm. In this regard, the report to Council follows incorrect assessment procedure.
- The report to Council states that "*the applicant has not addressed issues such as bushfire management plans in any detail at the wind turbine sites and the administrations compound...without these plans to assess, it is difficult to ensure compliance with this provision of the Development Plan*". It is important to note that the CFS has stated that it does not consider wind farms to inhibit its ability to aerially fight a bushfire.

- The report to Council states that *“the [aerial spraying] assessment report is limited only to the impacts on existing farming practices on adjoining land, not on the properties which are the subject of the development application, and nor does it consider the impact of the wind farm on future use of aerial spraying by affected land owners who may now only use ground based application methods”*. The report to Council fails to acknowledge that, in simple terms, only 1 in 5 allotments adjacent to the proposed wind farm will experience any impact in terms of capacity for aerial spraying with light planes, and even then light planes can be used to spray all but 15% of the area of those allotments. Further, helicopters will still be able to aerial spray this remaining land while adjacent turbines are in operation. In other words, only 3% of the surrounding land will require aerial spraying via helicopter rather than light planes, if aerial spraying is to be used on those properties at all and adjacent turbines remain in operation during the spraying. Potential impact on future use of light planes are even less if adjacent turbines are turned off during spraying. Consequently, it is my professional opinion that the development satisfies Principle of Development Control 3 of “Renewable Energy Facilities” in that it “minimises” interference with low altitude aircraft movement associated with agriculture.

The assessment/procedural errors and inaccurate interpretations of the relevant provisions of the Development Plan are such that the report to the Council was misleading.

It is common for Development Plan Consents for large-scale development proposals, such as wind farms, to incorporate a number of conditions of consent that address a wide range of detailed design issues. The report to Council concludes, in part, that there is “insufficient information being provided to make an informed assessment”. However, all of the issues described as requiring additional information have already been addressed as part of the application or can be readily managed via practical conditions of consent.

It is recommended that the Council be made aware of these issues with its internal planning advice and that Council be given the opportunity to reconsider its position regarding the Development Application.