

BDP

NORTHERN AREAS COUNCIL
30 JUL 2010

PO Box 9
YACKA SA 5470

29 July 2010

Mr Keith Hope
Chief Executive Officer
Northern Areas Council
PO Box 120
JAMESTOWN SA 5491

FILE 155.1.21
ITEM NO ILT4275
MEETING
REFER TO GS.

Dear Mr Hope

Development Plan Amendment

Please find enclosed a submission relating to the proposed Northern Areas Council Development Plan Amendment.

As indicated in the attached submission, we advise that we wish to speak in support of this submission at the public meeting to be held at 5.00pm on Tuesday 10 August 2010 at the Northern Areas Council office in Jamestown.

Yours sincerely

Dennis Dale and Liz Traeger

**Submission
Development Plan Amendment July 2010
Northern Areas Council**

The proposed Development Plan Amendment (DPA) does not adequately protect the residents in the Council area from industrial development, namely wind turbine development. This submission focuses on ensuring that the DPA clearly guarantees the approval of industrial wind turbine development in appropriate areas only.

There is growing concern from community members in the Northern Areas Council about the proliferation of wind turbines in the Council area. This is evidenced by:

- The number of objections to the recently approved Carmodies Hill wind turbine development
- The concerns verbalised by many at the public meeting held at Laura on 18 July 2010 and far outweighing those who spoke for the proposed wind turbine development at Collaby Hill
- The numbers of concerns published in the local media

The Northern Areas Council already has a number of industrial wind turbine sites operating, being built or approved in the Council area. Any further development therefore needs to be considered very carefully otherwise our Council area will be littered with turbines and the rural landscape will be converted to an industrial one. This Council area has already shouldered an unequal burden of these developments and the DPA is the perfect opportunity to ensure that that this type of development does not go unchecked and the concerns of citizens do not go unheeded.

Industrial wind turbine sites are so enormous that they affect many people far and wide. They do not just affect those in close proximity. It is a huge responsibility to approve these developments and they need to be considered very carefully. The current DPA is very much open to interpretation in regard to wind turbine development. The DPA needs to be more specific so that planning decisions do not rely so much on the Development Assessment Panel's views and prejudices but on clear and precise objectives and principles that make it very clear whether a development complies with the DPA or not.

There are many concerns with this type of development and they are outlined below along with our recommendations that can be included in the DPA to address the issues:

Health Effects

There is an emerging body of evidence, both scientific and anecdotal to suggest that there are effects on the health of people living within close proximity of wind turbines. Each day there is more and more evidence of this. Here in Australia as well as overseas there are calls for governments to undertake epidemiological studies in this area.

The scientific and medical communities have enough evidence at hand to understand that there are health effects and that this requires further investigation and study. This is evident through the work of researchers and doctors such as:

Keith et al 2008
Hanning 2009
Pierpont 2006
Harry 2007
Nissenbaum 2009
Phillips 2010

While acousticians working with the wind energy industry conclude audible and low frequency noise from wind farms is unlikely to cause health effects, it is important to note the experts who approach this issue from a medical perspective have arrived at the opposite conclusion.

In addition to this, a number of cautions have also been issued by eminent medical authorities including:

The National Institute of Health in the US Dept of Health and Human Services 2008
French National Academy of Medicine 2006
Maine (US) Medical Association 2009
Minnesota (US) Dept Health 2009
UK National Health Service 2009

Here in Australia, there are currently calls from members of federal parliament for a senate inquiry into the health effects of living near wind farms. Furthermore, the Moorabool Council in Victoria have recently adopted a new wind Energy Facility Policy which takes into account the health effects of wind farms and includes set back limits.

The Japanese Government have also taken the concerns seriously enough to commission a study into the influence of wind turbines on health.

Until there is clear and conclusive evidence to show that wind turbines do not cause ill health, it would be prudent for Council, through the DPA to ensure that any wind turbines that receive development approval are set back an appropriate distance from residences and buildings where people are located. The NSW Parliament's General Purpose Standing Committee, 2009 have recommended a set back of at least 2 kms to avoid any health issues. In other jurisdictions, set back limits vary between 1.6 kms and 2.5 kms.

Recommendations

- That the DPA clearly state that any industrial wind turbines are situated no closer than 2.5 kms to any residences or public buildings
- That the DPA state that if there are any disputes over noise arising from wind turbines that noise levels must be measured by independent bodies, paid for by the proponent of the development and action taken immediately

Visual Pollution

In the Mid North, wind turbine developments have been situated on ridgelines causing visual pollution for many miles around. Unabated development of this type will undoubtedly affect the visual amenity of the Mid North and Southern Flinders further with the potential to affect tourism and the image of the Council area. These developments should be sited less obtrusively, preferably on flat ground below the ridge lines so that they don't have a detrimental affect on people and the scenery for many kilometres around.

The proposed DPA states that one of the principles of development be;

Renewable energy facilities, including wind farms and ancillary developments, should be located in areas that maximize efficient generation and supply of electricity.

The efficient generation of electricity is not as much Council's concern as is the visual amenity of the Council area and the well being of its ratepayers. The efficient generation of electricity should be a secondary consideration when assessing a development application with the primary concern being that wind farms be situated away from ridgelines. If a development application for the building of a shop was presented to Council, it would be assessed on other factors not where it will generate maximum profits for the developer. So it should be with wind turbine developments.

Recommendations

- That the principle of development control that: *Renewable energy facilities, including wind farms and ancillary developments, should be located in areas that maximize efficient generation and supply of electricity* be deleted
- That the DPA clearly state that any wind turbine development be situated below ridge lines

Damage to the environment and species habitat

It is quite clear that industrial wind turbine development requires massive disturbance to the environment, leading to the potential for erosion, pollution of waterways and destruction of wildlife habitats. This is evidenced by the excavation requirements of the Carmodies Hill Wind Farm, recently approved by the NAC Development Assessment Panel which are as follows:

The proposed wind turbine site covers 5,016 hectares, requires 46 km of tracks between 5 and 10 metres wide (between 230,000 and 460,000 square metres), 46 km of trenches, construction of up to 70 hardstands measuring 40 metres x 40 metres and construction of up to 70 mass concrete foundations. The Development Application states that the final development footprint will be 34.05 hectares which means that there is a requirement to excavate and clear, at the very least 34.05 hectares of land. In addition to this, it is required that vegetation 10 metres either side of tracks is slashed to 10 centimetres.

There is an urgent need to protect what native vegetation remains in the Mid North and we can ill afford to degrade the land further.

Recommendations

- That there be an increase in the number of areas designated as Rural Landscape Protection Zones and thus protected from industrial wind turbine development. An example of this is the Yackamoorundie Range east of Yacka which has considerable scenic value and remnant native vegetation. This one example only
- That included in the DPA be the statement that wildlife and vegetation surveys are completed in full prior to presentation to the DAP

Damage to wildlife

Due their gigantic spatial footprint, these huge industrial developments have the potential to impact on the wildlife. At 135 metres tall, with rotating blades 96 metres in diameter, a Boeing 747 Jumbo Jet could easily rotate on the tower well within the existing diameter of the turbine blades. Furthermore, these developments cover many kilometres.

It is well known and there is ample evidence to show that birds such as Wedge-tailed Eagles, Kestrels and other birds and bats are killed by wind turbine developments. The protection of wildlife needs to be more of a consideration when approving these developments. The authorities usually put some kind of conditions and call for further investigation of some sites but this should all be done prior to development approval and be written into the DPA to ensure it happens. The current wording of the proposed DPA states that;

Windfarms and ancillary development such as substations, maintenance sheds, access roads and connecting power- lines, should be sited, designed and operated in a manner that:

e) avoids or minimises nuisance or hazard to nearby property owners and/or occupiers, road users and wildlife by not:

- (i) causing shadowing, flickering, reflection or blade glint impacts*
- (ii) creating excessive noise*
- (iii) interfering with television and radio signals*
- (iv) modifying vegetation, soils and habitats*
- (v) striking birds or bats*

Recommendation:

- That the above principle be re-worded so that it is clear that none of the items (i) – (v) will be acceptable ie remove the word *avoids or minimizes...* and replace with *shall not cause...*

Fire

Wind turbine developments should not be sited in or in close proximity to high fire risk zones. Fires in wind turbines are not uncommon. The Country Fire Service has noted that there have already been two fires in wind turbines in South Australia. The most recent at Cathedral rocks on Eyre Peninsula in February 2009. When these turbines catch fire, the local brigades can't put them out, because the turbines are some 90 meters above the ground and so they are left to burn out. The one mentioned took 6-

7 hrs to burn out, and all that the firefighters could do was to put out the fires in the surrounding scrub. There has also been another fire started by workers at a wind turbine site in SA.

This is a huge risk to our community particularly if a fire starts in a wind turbine during days which are designated as extreme or catastrophic fire days.

Surrounding properties are also at risk because there is a problem with aerial bombing from small aircraft near the turbine sites.

There are serious potential problems with fire at industrial wind turbine sites.

Recommendation:

- That one of the principles of development needs to state that wind turbine developments cannot be built in or in close proximity to high fire risk zones

Dismantling

The responsibility for dismantling the wind turbines and the associated infrastructure once they have reached the end of their life is unclear. These developments seem to change hands with regularity. The Barn Hill wind farm site alone, although construction has not yet even started, has already had three different owners. Chinese companies are also purchasing Australian wind farms. The Carmodies Hill wind farm is already operating under two different names. Given this trend, it would be sensible for the DPA to include a statement which requires that dismantling obligations are clear and that there be a time limit set as to the length of time that wind turbines can be left standing and not operating.

Recommendation:

- That the DPA include a statement which requires that dismantling obligations are clear and that there be a time limit set as to the length of time that wind turbines can be left standing and not operating

Community consultation

Given that wind turbine developments are so huge and have the potential to seriously affect all members of the community, there needs to be proper, open and transparent consultation with the community and this process could be stipulated within the DPA. Currently developers hold what is termed consultations but they tend to be information sessions where members of the community have no opportunity to ask questions and make comment to a public forum where all concerned can hear the concerns, objections or otherwise. This type of consultation results in community members feeling disenfranchised and ignored in the process. Part of any public consultation should be transparent and open and should have to include a general public meeting so that all issues can be brought out into the open and discussed.

Recommendation

- That the DPA stipulate a robust community consultation process (ie the type and number of community consultations) that must occur in relation to the planning of industrial wind turbine sites

Summary

This submission has outlined a number of issues relating to renewable energy facilities, in particular wind turbine development. These issues can be addressed through the proposed DPA to ensure that the potential for this type of development to destroy the quality of life of NAC residents is minimised. Furthermore, the inclusion of our recommendations in the DPA will ensure that Council meets its obligations to protect its residents and the environment from the negative effects of wind turbine development.

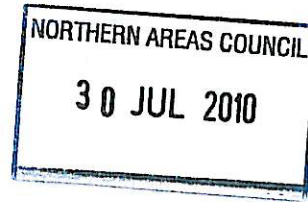
In addition to the above recommendations, we insist that the independent assessment of any development application must be independent of Council and, most importantly independent of any interest in the wind farm industry.

We request to appear at the public meeting to speak in support of this submission at 5.00pm on Tuesday 10 August 2010 at the Northern Areas Council office in Jamestown.

Liz Traeger and Dennis Dale
Yacka

ROSALIE JONES

From: Fran Birrell |
Posted At: Thursday, 29 July 2010 10:43 PM
Conversation: Submission for NAC Development Plan
Posted To: CEO Mail
Subject: Submission for NAC Development Plan



Dear Keith,
Please find attached our submission to be considered for the Northern Areas Council Development Plan upgrade.

Kind regards,
Fran & John Birrell

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| FILE | 155.1.21 |
| ITEM NO | ILT4276 |
| MEETING | |
| REFER TO | GS |

Mr. Keith Hope
Chief Executive Officer
Northern Areas Council
PO Box 1220
Jamestown. S.A. 5491

RE; NORTHERN AREAS COUNCIL DEVELOPMENT PLAN UPGRADE

Dear Mr. Hope,

We wish to submit the following for consideration by Council and request a time to speak to this at the meeting on Tuesday 10th August, 2010.

Introduction

We believe that this Development Plan upgrade is an ideal opportunity for the Northern Areas Council (NAC) to address health, environmental and social issues pertaining to industrial wind farms. Additional issues are:- landscape amenity, fire hazards and visual pollution.

Discussion

Given the abundance of recent local, national and international research into the effects of wind farms, it is timely for the NAC to give clear and concise guidelines for future developments.

- Dr. Nina Pierpont's research (2006, 2008 - 2010) records that people do suffer from sleep disturbance, fatigue, headaches, tinnitus, dizziness, nausea, tachycardia (rapid heart rate), internal pulsations, changes in mood and inability to concentrate (which she describes as 'wind turbine syndrome'). She calls for further research, particularly in children, and at least a 2.4 km setback distance on flat land and 3.2 km in hilly terrain.
- Dr. Christopher Hanning, (Honorary Consultant in Sleep Disorders Medicine to University Hospitals of Leicester UK) (June 2009) "The **only** mitigation for wind turbine noise is to place a sufficient distance between the turbines and places of human habitation" (p.20) and that "Calculations can not measure annoyance and sleep disturbance, only humans can do so. It makes more sense to rely on recommendations from observations of the effects on real people at established wind farms." (p. 21)
- George Kamperman (2008), a distinguished US noise engineer said, after looking into wind turbine noise impact problems in different countries, "it became clear the health impact on persons living within about 2 miles (3.2 kms) from wind farms all had similar complaints and health problems. I have never seen this type of phenomenon in over 50 years of consulting on industrial noise problems. The magnitude of the impact is far above anything I have seen before at such relatively low sound levels." (Hanning, p.16) Kamperman recommends between 2-3 kms setback.
- German marketer, RETEXO-RISP suggests "buildings, particularly housing, should not be nearer than 2 kms to the wind farm". (Kirby Mountain)

- The following table gives a quick overview of some of our readings of recent research and the recommendations (from a variety of specialists in their field) of distances between turbines and homes.

| Authority | Year | Notes | Minimum distance recommendations (in kilometres) |
|-------------------------------------|-----------|--|--|
| French National Academy of Medicine | 2006 | French physicians | 1.5 |
| The Noise Association | 2006 | UK scientists | 1.6 |
| Bowdler | 2007 | UK Noise engineer | 2 |
| Frey & Hadden | 2007 | Scientists. Turbines >2MW | >2 |
| Amanda Harry | 2007 | UK Physician | 2.4 |
| Adams | 2008 | US Lawyer | 2.5 |
| George Kamperman | 2008 | US noise engineer | 2 - 3 |
| Nina Pierpont | 2009 | US Physician, paediatrician | 2 on flat & 3.2 in hilly terrain |
| Richard Horonjeff | July 2010 | US Consultant in acoustics & noise control | 2.4 – 3.2 |

It must be noted that early recommendations are based on much smaller turbines than those currently installed and proposed in Mid Northern South Australia.

- “Stigwood (2009) has shown that large turbines (hub heights 50 – 100 m) are more likely than smaller turbines (hub height 30 m) to cause excessive amplitude modulation, increased likelihood of low frequency noise and greater disturbance inside buildings.” (Hanning, p20)

Our Recommendation

We request that the Development Plan is altered in the following ways: on page 61 under:

Renewable Energy Facilities

PRINCIPLES OF DEVELOPMENT CONTROL

- Wind farms and ancillary development such as substations, maintenance sheds, access roads and connecting power-lines, should be sited, designed and operated in a manner that:

(keep) (a) to (d)

Change wording here

from “avoids or minimises” to:

- shall not cause nuisance or hazard to nearby property owners and / or occupiers, road users and wildlife by **not**:

(keep) (i) – (v) inclusive

(then add) (vi) allowing any individual tower to be less than 3 kms from residences.
