Supplementary Submission No 38c

INQUIRY INTO RURAL WIND FARMS

Name: Mr Keith Thompson

Date received: 12/10/2009

Keith Thompson,

7th October 2009,

The Director,
General Purpose Standing Committee No. 5,
Parliament House,
Sydney. NSW. 2000.

Dear Director,

Reference; Inquiry into Rural Wind Farms.

I enclose a copy of a communiqué from Pamada Pty, Ltd,. I located it while going through papers that I was looking at for information to complete my paper for your inquiry.

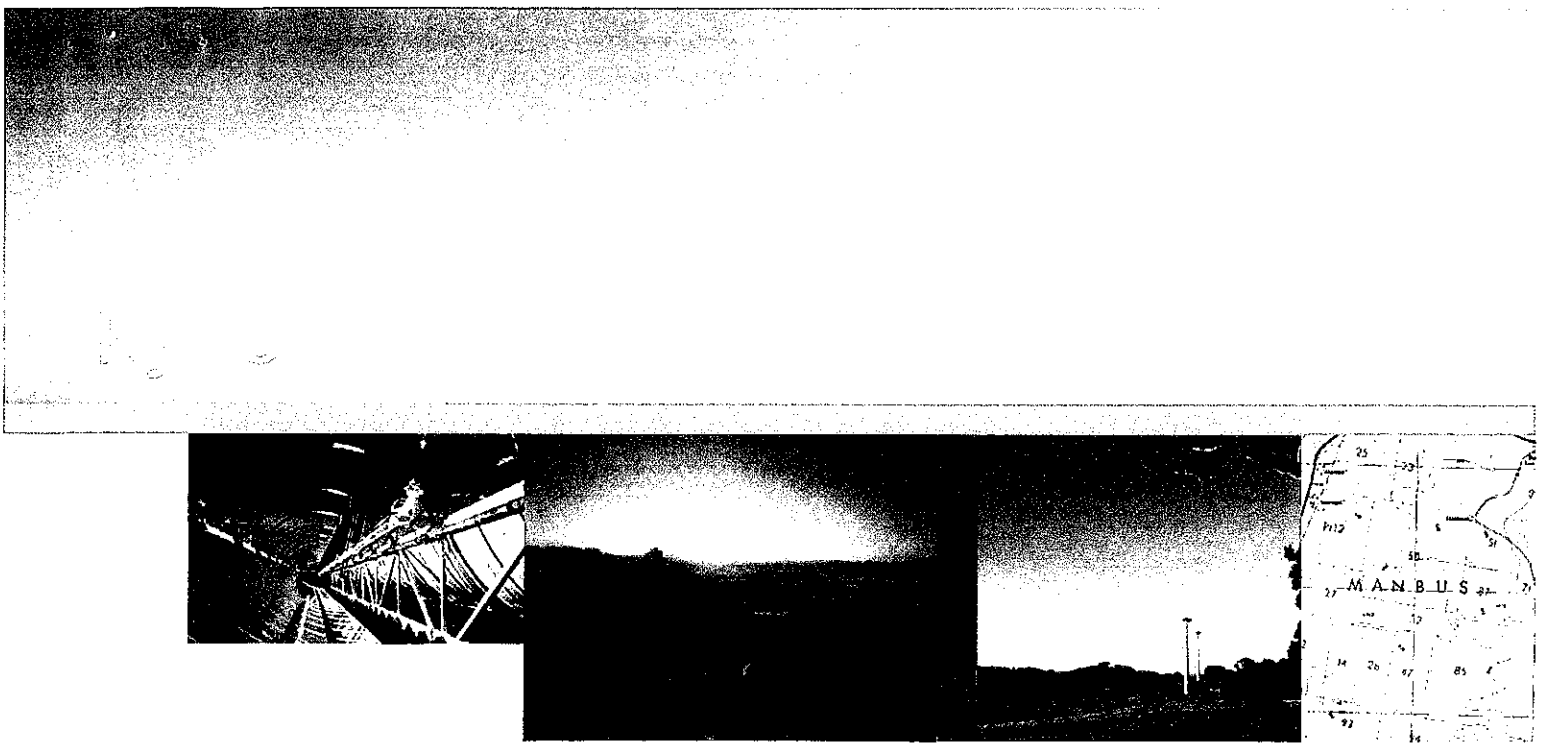
I am to appear before your Committee on the 16th October at Tamworth and thought you should have this information before I speak.

I draw your attention to the distances in Question and Answer 'One'. Pamada have told us all the incorrect measurements for both Turbine 30 and 31, they are out in measurement by 280 and 90 meters to the quoted distances of 1.2Km and 1.5Km from the NEAREST turbine to our home. I point all this out to you all so as you can see just how lose information can be if your rules etc are not strict and tight, small things like this can come out in the years to come as major discrepancies in proposals to the Dept of Planning, the DECC etc.

Thank you for accepting this before the inquiry day.

Yours Sincerely,

Keith Thompson. J.P. nsw



Kyoto Energy Park Scone

Response to Questions raised by Keith Thompson and Iris McPhee 'Peakhill' at Winters Rd, Scone.

19 December 2008

pamada pty limited
ABN 60 003 909 073

Level 16, 14-24
College Street
SYDNEY NSW 2010
AUSTRALIA

(612) 9969 3608 Tel
(612) 9383 8321 Fax

Response to Questions raised by Keith Thompson and Iris McPhee (Peakhill residence)

1) What distance are the 5 proposed wind turbines/towers from our property's boundaries (lot 69 DP 750950), also at what angle (to the boundary) are these measurements taken?

WTG	27	28	29	30	31
Distance to residence bdy (m)	1550	1421	1255	1063	956
Distance to residence (m)	1750	1600	1420	1220	1110
Height from turbine base to residence (m)	245	250	245	240	240
Height from turbine hub(generator) to residence (m)	350	355	350	345	345

2) The 'DbA' readings that were taken in 2007 & promised to be available to us before Xmas 2007. Note, we require hourly daytime as well as hourly night time readings. Also info about the wind speed each hour, was it raining at each hour ?

Background noise measurements were taken in May/June 2007 and Sept/Oct 2007. The Noise Assessment was completed in August 2008. We have supplied the background noise levels taken at your residence – see attached. As described in our meeting with you on the 15th December 2008 noise will be kept within criteria at your residence through sector management of the turbines along Moobi Plateau. 4 turbines were removed from the original layout to reduce noise levels to within acceptable.

As explained turbines closest to 'Peakhill' would be controlled under those wind speeds and directions which result in exceedances. All turbines have a remotely monitored met station installed on top of the nacelle for independent control. Control procedures including ramping down turbines during offending wind conditions would be incorporated into a Noise Management Plan for the site.

This identification of those conditions would be either by comprehensive testing over the first year to determine the range of wind speeds and directions likely to result in exceedances, such that these sets of conditions can be "programmed in". Alternatively real time noise monitoring at the most affected residences could provide continuous feedback which a SCADA or similar control package could manage the turbine settings in relation to power generation and noise.

3) The 'DbC' readings that were taken in 2007 and also promised before Xmas 2007. We also require hourly daytime as well as night time readings, then the wind speed at each hour and was it raining at each hour ?

(2a & 3a) What are the Australian Standards at the present time regarding..... (w) Acoustics (DR07153)...(x) Setbacks from rural properties boundaries...(y) Best practice wind energy projects (AWEA 2006).....(z) Best practice Human Survival near Wind Farms.

There are no specific guidelines relating to the noise assessment of wind farms prepared by the NSW Government. However, the guidelines for assessment of noise from industrial facilities are managed within the NSW Department of Environment & Climate Change (DECC) Industrial Noise Policy (INP). This policy provides useful information regarding the appropriate procedures for measurement and assessment of noise, particularly how to deal with meteorological conditions.

In addition, the DECC adopt the Government of South Australia (SA) approach which has guidelines specifically related to wind farm noise "Wind Farms Environmental Noise Guidelines" dated February 2003. Although there has been an update to the SA guidelines in December 2007, these have not been adopted by the DECC.

In addition, an Australian Standard (EV16) relating to wind farm noise is currently in its draft status and this document has also been considered in refining the noise assessment process.

Traffic generation during construction and operational phases of the project has been considered in relation to the NSW Department of Environment & Climate Change (DECC), Environmental Criteria for Road Traffic Noise (ECRTN).

Construction noise is also addressed in accordance with requirements of the DECC Environmental Noise Management Manual (ENMM).

4) In the NSW Dept of Planing, what set backs are required for the sighting of this industrial wind farm development, from our property's boundaries and Mountain Station ?

We are not aware of any codes at present relating to setbacks from wind turbines. Some local Councils have adopted setbacks from boundaries during the preparation of local planning controls and this has happened for some smaller projects, across the country. Generally larger projects (>30million capital investment) are required to undertake detailed environmental evaluation as required to determine the specific site conditions and likely impacts. This method is more accurate in determining site specific impacts and more effective in managing the environmental performance of the project, subject to approval.

5) When are the Sola Photovoltaic Plants being erected on Mountain Station & what are their size in Sq Meters and what is the exact output of them ?

The Kyoto Energy Park Scone is the developer for the project. Contractual arrangements for construction would be finalised subject to approval. The construction of all components will be completed within a single construction phase of approximately 20 months duration following the commencement of construction on site. This includes all proposed components of solar PV, wind and hydro.

Solar Photovoltaic (PV) Area	= Approximately 4-8 hectares (10-20 acres) of solar modules
Total land area utilization	= between 8-21 hectares.
Solar PV Rated Capacity (Output)	= 3 -10MW dependent on structure design

(Structure design fixed, single, dual and concentrated technologies under consideration)

6) As you have told us that the substation on Mountain Station is to be placed near to Bunnan Road, what is the exact route that the power cables take to take the power from Mountain Station ??

The proposed substation is to be located adjacent to the Mountain Station entrance, along Bunnan Road. Line routes have been explained to you in the meeting. There are two preferred options for connection to Scone (66kV) or Muswellbrook (132kV) as explained in the meeting with yourselves. Full assessment of these line routes were discussed with you and are provided in the EA report.

7) Have all the "Paper Roads" (Government Roads) around the west of Scone been cancelled yet, we have not been notified as yet ? Reference is to your meeting with us at our home in May 2007.

This is a matter for the landowner Allan Henderson to discuss. It's not part of the application and related to the project.

8) At what Max temperature will the Turbines stand before your computer controls turn them off ? In the 'EA' (EIS) what Fire precautions are being put into place, EG; Fire Trucks, Fire Officers on duty, how much water is on hand for them to fight a fire, where is it to be stored (each location), what width are the all weather roads to be ?

This was discussed verbally in our meeting and is addressed in detail in the Environmental Assessment report (EA). Bushfire Risk protection has been addressed and will be detailed in the EA. Risk of bushfire from turbines is low. Turbine design and controls are put in place to ensure protection, including those you mentioned, also hazard reduction with RFS, Emergency procedures, and water storage.

9) What guarantee do we get, after the construction of the wind towers, that the clean and non-polluted water that flows to our WELL (its over a 100 years old with still lots of good clean clear water) ?

There will be no intersection of the hardrock aquifer during construction and no impacts to groundwater from the proposal.

10) Noise from the many Wind Towers, how do we complain if we find that the noise is greater that the PRE-WIND TOWER DbA and DbC readings ? How is the complaint handled and what action is to be taken by the owners of the industrial development or is it the owner of the land that has to take the action of shutting down some of the wind turbines?

See Point 2) above.

11) Shadow flicker, your modelling of this problem. Exactly how many days of the year, when are those days, and for how long will the shadow flicker happen at our home from the towers on Mountain Station ?

Shadow flicker from wind turbines can occur when the sun is low in the sky and moving shadows are cast by the rotating blades on an area around them. When viewed from a stationary position this can appear as a flicker.

There are currently no guidelines for Shadow Flicker assessment in NSW. The occurrence of shadow flicker was modeled using guidelines most notably that of the Victorian wind farm guidelines, which is considered standard industry practice. Shadow flicker calculated in this manner overestimates the number of annual hours of shadow flicker experienced at a specified location.

The model uses a conservative approach and has used a limit to the length that a shadow can be cast of 1 km from a turbine (the South Australian Government uses 500m as the maximum distance) . Analysis of duration of shadow flicker has been conducted for the area around the proposed Kyoto Energy Park, with approximation of shadow diffusion with distance. The Peakhill residence is outside the area of diffusion and will experience no shadow flicker effect.

12) We are concerned about HUMAN sickness, with things like Heart troubles, Vibroacustics disease, Eye sight problems, Non sleeping, with general deterating of our health ?

Comments as discussed in the meeting.

13) What State and Federal Government subsidies have been obtained by Pamada for the construction of these 47 Wind Towers and the Solar Photovoltaic plant ? When is this money going to be paid to Pamada? Does the Land owner get some sort of subsidy for the use of his land ?

No subsidies have been obtained from any government to Pamada or to the landowner to date. The landowner receives an annual payment under a lease arrangement.

Renewable energy production attracts Renewable Energy Certificates (RECs) when producing renewable energy.

14) What is the increase in Upper Hunter Shire Council Rates for the Industrial Development on the Rural Zoned Land, and who pays this increase in rates ?

The land has been zoned to allow for consideration for these types of technology to occur in the right places i.e. subject to consent from the consent authority which in this case is the NSW Dept of Planning. The Upper hunter Council did however amend the Scone Local Environmental Plan (LEP) in

2005 to allow planning consideration of these technologies in the area. This applies to all zonings as amended not just the Henderson properties.

We are not aware of ay rate rises from Council.

15) Decommissioning of the Mountain Station wind Farm site in 20 to 25 years (or earlier), who is liable for the cost of the removal of the wind farm industrial complex on Mountain Station ? Where does all that concrete, fibreglass, steel, iron, cables, etc, go for disposal ?

The proposal includes an option to replace technology with newer technology (currently 25-30years) or decommission. Decommissioning would be undertaken by the proponent and materials are fully recyclable.

16) When is the next Community Information day ?

The Community Information Day was held to inform residents of the project progress and results to date and also to provide consultants with feedback.

There will be no formal Information Day prior to lodgement of the EA. Pamada are available to provide feedback and answer questions. Full contact details are provided on the website www.kyotoenergypark.com.au or by contacting the Head Office on (02) 9969 3608.

17) Who is going to manufacture the actual Turbines, the Towers, the blades etc, we would like to know exact details with their sizes, Max output, Min & Max running speeds, Min & Max wind speeds that they will work at ? From order date to instillation date, what is the delay time line ?

This will be provided in the EA and in the final design stages. Pamada are currently looking at 4 turbine combinations all leading manufacturers, Vestas (Dutch), Suzlon(Dutch/Indian), GE (US) and RePower (German). These turbines have been considered in the EA report.

18) The Blades, What are the exact details of them with particular emphases on the airfoil turbulence boundary layer, the trailing edge interaction (TBL-TE) ?

All turbine models have warranted noise levels data which are used by the consultants for noise compliance testing during design.

19) What vibration absorbers are the Mountain Station turbines going to have ? They need to absorb the drive train noise and vibrations, especially the gear box, the gearing mesh, and the structure borne noises, these tones need to be absorbed on site on each tower and not allowed to escape into the surrounding atmosphere ?

Prevention of vibration is a major factor in design of turbines at an engineering level. Noise from vibration is included with the warranted noise emissions data used in the noise analysis.

20) In the construction stage of the Wind Towers on Mountain Station, will ordinary cement be used, usually Portland Cement (into concrete) or will you be using the Low Calcium Fly Ash-based Geopolymer Cement in these construction. If one of these, how much in Tonnes will be used in each supporting structure.

Final design of footings has not been taken. Concrete design strength is based on foundation strength and load factors considered in the final design stages subject to approval.

I think these questions will answer a few of our questions at this stage, of course the other one will be, "When do we get a CD of the "EA" (EIS)", you can answer that on Monday.

Keith Thompson.

ATTACHMENT 1

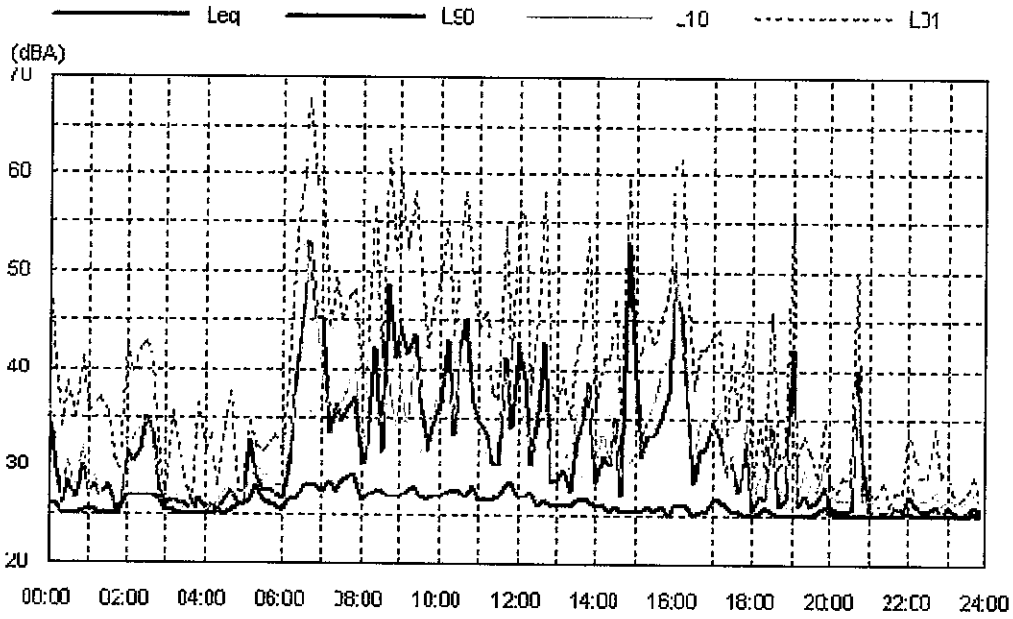
Background Measurements- Wilkinson Murray Pty Ltd (Peakhill 2007)

Supplied to Keith Thompson 23.12.2008

Location: Peakhill

Location: Peakhill

Fri 25 May 07



Sat 26 May 07