

INQUIRY INTO RURAL WIND FARMS

Name: Name suppressed
Date received: 20/08/2009

Partially Confidential

ATTN: GENERAL PURPOSE STANDING COMMITTEE NO. 5
Mr. Ian Cohen MLC, Committee Chair, Ms. Beverly Duffy, Director.

RE: INQUIRY INTO RURAL WIND FARMS -
Terms of Reference No. 6. ANY OTHER RELEVANT MATTER

I would like to make a submission to the above inquiry telling of our Communities nightmare experiences, lack of community consultation and our exposure to serious life threatening risks regarding the construction of a new 15 wind turbine development on the Cullerin Ranges, adjacent to the Hume Freeway (within 350 metres or less), within 200 metres of the 330 KV Transgrid Transmission Lines which pass over Hume Freeway, 300 metres or less from the Council Road, Lerida Road Nth., 200 metres or less from 132 KV Country Energy Transmission Lines that pass over Lerida Road. Nth., constructed on/adjacent to the Crown Roads on the Cullerin Ranges (Dept. of Lands investigating siting of wind turbines), 950 metres from the Cullerin Community and wind development directly adjacent/overhanging densely forested areas.

Our Community for the last three years have been unable to procure the name/s of the engineer/s that approved the Cullerin Development to establish structural integrity and that the Cullerin Site Assessment does not EXCEED the chosen wind turbine models (REPOWER/SUZLON MM82 and MM92) for the Cullerin Ranges and that the rotor separation distances between the wind turbines were approved (and included wake effects from neighbouring turbines) by a qualified engineer.

We have asked the Director General, Mr. Sam Haddad, NSW Dept. of Planning, Mr. Scott Jeffries, Mr. Neville Osborne AND HAVE NEVER RECEIVED THE NAME OF THE ENGINEER despite REPEATED REQUESTS.

We have asked assistance from the NSW Planning Minister, The Hon. Kristina Keneally MP and also from Ms. A. Geddes and Mr. Brad Walsh, the Minister's assistants, again without success.

We also asked Origin, Mr. Ian Purcell, Project Manager, Cullerin Development. Mr. Purcell said he would contact his legal team and get back to us. Of course Mr. Purcell has never contacted us with the information more than three months later.

THIS IS A MATTER OF PUBLIC SAFETY AND IN GERMANY WHERE THE WIND TURBINES ARE MANUFACTURED AND UTILISED THERE IS STRICT LEGISLATION REGARDING THE SEPARATION DISTANCES BETWEEN WIND TURBINES AND IT IS FORBIDDEN THAT WIND TURBINES BE PLACED UNDER 5 ROTOR DIAMETERS AND 8 ROTOR DIAMETERS OF EACH OTHER. THIS LEGISLATION WAS INTRODUCED FOR THE PUBLIC'S SAFETY AND THE STRUCTURAL INTEGRITY OF THE WIND TURBINES.

WIND TURBINES ARE PLACED 2.5 ROTOR DIAMETER OR LESS FROM EACH OTHER AT CULLERIN AND OUR COMMUNITY CANNOT MAKE CONTACT WITH THE PROPORTED CULLERIN ENGINEER (IF HE EXISTS) TO HAVE HIM VERIFY THE SAFETY OF THE SEPARATION DISTANCES.

*** WE WOULD VERY MUCH LIKE IF THE INQUIRY WOULD INVITE THE PROPORED CULLERIN ENGINEER TO ADDRESS THE ISSUES OF WHY THE PUBLIC SAFETY IS NOT BEING PLACED AT RISK AT CULLERIN YET IN GERMANY WIND TURBINE 2.5 ROTOR DIAMETER SEPARATION DISTANCES WOULD BE CONSIDERED ILLEGAL AND UNSAFE?

Cullerin at 3000 feet above sea level is subject to tornadoes and extreme wind conditions, and is subject to much more intense weather systems than Germany. The wind turbines are certified to only 90 km. winds yet the tornadic winds on Cullerin reached 150/180 kms.

Cullerin is situated on active earthquake faultlines (largest earthquake we experienced 3.6 on the Reichter scale)

Cullerin has derelict mine shafts (gold, copper and iron ore) and the Developer, Origin refuses to tell us the setback distances from the derelict mines. Our underground water supplies could be permanently interrupted or contaminated should the weight/operational vibrations from the wind turbines collapse the derelict mines.

WIND TURBINE FIRES: The Developer refuses to install specially designed and recommended automated wind turbine fire extinguishing systems even though the wind turbines overhang and are adjacent to densely forested areas. Instead our Community are to rely on hand held fire extinguishers and our small rural fire brigade 12 kms. away from the Cullerin Development. (The turbines are 127 metres high).

A wind turbine went on fire only a few months ago in Cathedral Rocks, Sth. Australia, and was noticed at 1.00 a.m. by a passing boat. Lucky for the Cathedral Rocks community they were 30 kms. away. Cullerin residents will be only 950 metres away.

Further we can no longer use an emergency airstrip during the bushfire season. Cullerin have suffered two very bad bushfires and we rely on our local voluntary pilots to notify us and give early warnings of bushfires starting. Our local pilots not only can no longer use the emergency airstrip which was adjacent to the Cullerin Turbine Development but can no longer fly within 2.5 kms or more due to wake effects from the wind turbines (all unaddressed at the Development's proposal stage).

Hail (Cullerin/Great Dividing Range most hail prone are in Australia, ref. Bureau of Meteorology), Lightning (even though wind turbines fitted with lightning conductors), microbursts (downbursts), squalls, icing (no ice measurements taken on the Cullerin Range) all seriously impact the structural integrity of wind turbines and our community have been unable to receive assurance that the Cullerin Wind Turbines will not fail/collapse.

OUR COMMUNITY FAILED TO ESTABLISH WHETHER THE NSW STATE GOVERNMENT CONDUCTED AN INDEPENDENT ASSESSMENT ON THE SUITABILITY OF WIND TURBINES FOR OUR AREA GIVEN THE EXTREME CLIMATIC CONDITIONS FOUND ON THE CULLERIN RANGES/NSW. IN AMERICA WIND TURBINES ARE NOT PERMITTED IN TORNADO PRONE AREAS AND CERTAINLY NOT ADJACENT TO PUBLIC ROADS.

The NSW Dept. of Planning was made aware that the wind measurements taken on the Cullerin ranges were LESS THAN BEST PRACTICE AND UPON WHICH THE ENTIRE PROJECT WAS BASED. Also NGH Environmental CERTIFIED that the information supplied to the Dept. of Planning was true and correct but this was proven FALSE. Garrad Hassan (Wind Consultants) claimed that the wind measurements covered 4 kms. This is not possible using only ONE wind monitor. In complex, forested terrain, two must be used for wind developments over 20 MW. Cullerin 30MW

The Developer, Origin IS NOT BEING HELD ACCOUNTABLE BY ANY RELEVANT AUTHORITY AND WHILE THE DEVELOPER IS BASED IN ADELAIDE WE, THE CULLERIN COMMUNITY, MUST LIVE WITH ALL THE ASSOCIATED LIFE THREATENING RISKS FROM WIND TURBINES AND THE CONTINUOUS NOISE.

HOW WILL OUR COMMUNITY BE ABLE TO SLEEP DURING THE BUSHFIRE SEASON FEARING A WIND TURBINE FIRE AT NIGHT. EVERY STORM THAT WE EXPERIENCE WE CAN NOT LONGER SAFELY USE THE PUBLIC ROADS AS THE WIND TURBINES MAY EXPLODE/COLLAPSE ONTO THE ROADS.

THE NSW STATE GOVERNMENT HAS NOT DONE DUE CARE AND DILIGENCE REGARDING PUBLIC SAFETY AND WIND TURBINES?

I have emailed correspondence covering all the above issues in greater technical detail that we had written to the relevant authorities (apparently to no avail) so that the GENERAL PURPOSE STANDING COMMITTEE NO. 5 CAN UNDERSTAND THE TECHNICAL ISSUES/RISKS OF UTILISING/DEPLOYING WIND TURBINES. This research has cost our small rural community thousands of dollars and was researched over three years. The original referenced documents were sent to the NSW Dept. of Planning, NSW Planning Minister and the Prime Minister and are available upon request to the General Purpose Standing Committee No. 5.

The referenced material includes:

- • European Wind Energy Technology Platform – State-of-the-art and current insufficiencies 2008 - 2030
- • A Technical Note on Micro-siting of Wind Turbines (Ministry of New and Renewable Energy)
- • IEC 61400-1 1998 - Wind Turbine Generator Systems Part 1 : Safety requirements
- • A New Analytical Model for Wind Turbine Wakes by M.J. Wetle, PhD June 2008
- • PLANNING REPORT URBIS JHD CULLERIN RANGES 2006
- • Best Practice for Accurate Wind Speed Measurements IEC, IEA, MEASNET.
- • Australian Bureau of Meteorology
- • Microscale meteorology and atmospheric hazards
- • European Wind Turbine Standards II
- • Case Study of Lightning Damage to Wind Turbine Blade, National Lightning Safety Institute JUNE 2008

- • Wind Turbine Blade/Ice/Debris Throw - Professor T. Matilsky, Dept. of Physics and Astronomy, Rutgers University, N.J. 08854
- • G.E. Wind Energy - Wind Turbine – Risk and Mitigation 2007
- • Factors Affecting Turbine Location - European Wind Energy Association
- • Cold Climate Wind Energy - IEA
- • The Institution of Engineers, Australia, CODE OF ETHICS
- • Failures of Wind Turbines - Dick Kleeman
- • A Methodology for Consistent Modelling of Natural Hazards - Geoscience Australia
- • Director General's Environmental Assessment Report – Cullerin Development
- • Germanischer Lloyd - Certification of Wind Turbines/Site Assessment
- • Determination of Fatigue Loading on a Wind Turbine – Germanischer Lloyd, Germany.

In conclusion I would like to quote from an article in the Herald Sun by Terry McCrann dated August 4, 2009.

“The Rudd Government’s ‘green power’ strategy has been utterly shredded by detailed analysis which shows the total uselessness of the one form of power on which it is almost entirely based – wind.

Further, this independent analysis is a damning indictment of not only the federal government and all state governments for their betrayal of their most fundamental duty to the public interest. But it also exposes the disgrace of the so-called ‘public service’ bureaucracies.

Where is the official analysis of what wind power generation does in practice – at either federal or state level? Which, if it had been done, would have embarrassingly exposed its uselessness. Why has it had to be done by ‘privateers’?

THE ANSWER IS OF COURSE THAT THE PUBLIC SERVICE AT BOTH STATE AND FEDERAL LEVEL HAS ABANDONED NOT JUST ITS BROAD GENERAL DUTY TO THE PUBLIC, BUT EVEN ITS NARROWER DUTY TO TELL POLITICAL GOVERNMENT THE TRUTH BY PROVIDING POLICY ADVICE AND ANALYSIS.

SIMPLY AND DAMNINGLY: IF YOU DON'T ASK THE QUESTION, IF YOU DON'T DO THE ANALYSIS, YOU WON'T COME UP WITH THE 'WRONG' ANSWER”

Yours sincerely,