

Friends of Collector Inc
1850 Collector/Gunning Road
COLLECTOR NSW 2581

SUBMISSION TO DEPARTMENT OF PLANNING & ENVIRONMENT
Re: Modification Application – Collector Wind Farm
Application 10-0156
RATCH –Australian Corporation

By:
Friends of Collector
1850 Collector/ Gunning Road
Collector NSW 2581

To:

Neville Osborne
Resource Assessments - Energy
Department of Planning and Environment
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Cc:

The Hon Rob Stokes MP
Minister for Planning NSW
Department of Planning
GPO Box 5341
SYDNEY NSW 2001
office@stokes.minister.nsw.gov.au

November 20, 2015

Note: Refer to email advice re date of submission

From: Neville.Osborne@planning.nsw.gov.au [<mailto:Neville.Osborne@planning.nsw.gov.au>]
Sent: Thursday, 12 November 2015 5:24 PM
To: Frank Ross
Cc: David.Kitto@planning.nsw.gov.au; Mike.Young@planning.nsw.gov.au
Subject: RE: Extending Deadline for public comments to Ratch Modification Proposal to department of Planning beyond this Friday 13th

Frank

I have discussed this issue with my Executive Director. The formal exhibition period will close tomorrow, as advertised. However, the Department is prepared to be flexible about the receipt of submissions, and will consider late submissions. Submissions should be lodged by Friday 20th November, 2015

Thanks

Neville Osborne
Resource Assessments - Energy
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On behalf of the Friends of Collector we formally lodge our organisation's objection to the modification application by RATCH Australia.

We see it as a blatant attempt by RATCH to significantly alter the scope and impact of the Collector Wind Farm well beyond the decision in December 2013 by the Planning Assessment Commission to approve a reduced scheme because of the extent of impacts on the local community. At the time, the RATCH high impact wind farm went against deep community opposition and concerns.

Yet now, two years later RATCH is endeavouring through 'modification stealth' to effectively increase the scope of its wind farm by installing the largest turbine blades ever proposed for use in Australia, adjust approval conditions relating to background noise and modify the site layout.

As we have earlier advised the Minister, the modification proposal by RATCH needs de novo consideration by the Department particularly on three matters:

1. The utter lack of trust by the local community – which we hope is shared by the Department and the wider NSW Government – in the latest noise assessment for Collector Wind Farm undertaken for RATCH by the widely discredited acoustic firm Marshall Day, now identified in evidence and conclusions by the Senate to have engaged in highly dubious and sham reports relating to noise monitoring data relating to compliance by the Cape Bridgewater Wind Farm and Waubra Wind Farm in Victoria
2. The lack of information given to the local community about the impact of the use of the larger turbine blades on noise, given the Marshall Day assessment carefully avoids the growing question of both audible and infrasound impacts such as that shown by the globally recognised Cape Bridgewater study by prominent Australian acoustician Steven Cooper who we believe should be commissioned by the NSW Government at the expense of RATCH to undertake a genuine and holistic study into the noise impacts of the RATCH proposal
3. The continued lack of effective community consultation by RATCH, including questions now being raised by the Upper Lachlan Council about governance around any community funds provided by RATCH

In particular:

- The change to the larger blades comes at a time when evidence, such as that provided to the recent Senate Inquiry into wind turbines regarding the impact of infrasound signature of wind turbines on nearby residents is mounting.
- No technical details of these new largest blades have been provided to the community, assessed or consulted upon.
- What are the 'flexibility characteristics of its noise signature and impact on inversion echoing (the Van den Berg effect)? What are the increased 'tip speed' impacts – on fauna (bats and birds), flicker and safety (including fire combined with flexibility characteristics)?

This proposed major change, if allowed to proceed without a full new application process would make a complete mockery of your Departments processes. It would simply say to all applicants get the approval on 'baseline' then over time amend it!

RATCH has been forced to reduce the height of the turbine towers so that it can stay within the visual impact limits demanded by the PAC in its December 2013 approval. They are now seeking to

overcome this change without doing the appropriate planning, consultation and assessment. It is a decision for its own commercial benefit yet has little regard for local residents who have no trust in RATCH or its assurances.

We formally ask that the Department and Minister do not approve this significant amendment and that you seek a full new application by RATCH. If it is required, we would suggest to RATCH and the NSW Government that a solar option is put forward that we know would have the overwhelming support of the local community. We are not opposed to renewable energy – just the high impacts of wind farms.

No technical information provided

Rather than properly engaging with our local community, RATCH has downplayed its intention to install the larger blades without releasing any relevant technical study or advice on their impact to the local community. Our lack of trust is well founded.

RATCH acoustic firm adversely named in Senate

As we indicated earlier, Marshall Day, the acoustic firm that RATCH is using at Collector, has been adversely named in the Senate for preparing sham compliance reports for two controversial Victorian wind farms – Cape Bridgewater and Waubra. (Hansard extract attached).

Emerging evidence of infrasound signatures of turbines

This application also comes after the release during the recent Senate Inquiry into wind farm issues of a leading edge study into wind turbine infrasound signatures undertaken by globally recognised Australian acoustician Steven Cooper at Cape Bridgewater.

This study has, for the first time, shown nearby residents who were well out of sight of turbines were able to detect when the turbines were operating and when not by experiencing vibration and sensation. This study is now being replicated in other countries to further validate the Cooper work (a report of which is attached).

RATCH claims that despite the larger blades, the noise performance of the wind farm remains compliant with your Department's guidelines and requirements, yet has provided the community with no detail beyond simplistic sketches and its own reassurances. That suggests to us that your Department's wind farm noise guidelines need to be updated and widened given the emerging evidence of infrasound signatures from turbines.

Do not rely on RATCH alone – seek an independent assessment

The question of what infrasound signature and human impact these new larger blades will produce at Collector needs to be independently determined rather than merely accepting the assurances of RATCH and we question whether your Department on its own has the necessary technical competence to properly assess or validate the inaudible and infrasound signature and potential impact on nearby residents. The community would appreciate hearing your views on this capability and how any gap is to be addressed.

RATCH has simply said through a newsletter that it would accept public feedback before it applied to your Department for approval– and that they expect to have this approval by the end of this year. We consider that this is highly presumptive and arrogant.

Fundamental change to project and impact

By any measure, although RATCH tries to downplay the move, using the largest blades in Australia fundamentally changes the potential impact of the Collector wind farm.

As construction of the wind farm has not commenced, there is a window for the Department and the Minister to formally require RATCH to re-apply for planning approval of the wind farm given the significance of the blade change, and even then only after detailed technical studies have been undertaken of the larger blades within Australian conditions.

Our concerns around the larger blades have been intensified by the potential noise impacts given the Collector wind farm's tight layout where in a substantial part of the proposed wind farm the turbines are three rows deep, four in places. (A map provided by RATCH has been attached for reference).

Tight layout would worsen issues

This is not a well spread layout. It will create additional confused air patterns and noise impacts than from other wind farms with widely dispersed turbines. We want those potential noise impacts assessed independently and overseen by a reference panel of the NSW EPA, Department of Planning and experts nominated by the community.

Poor community consultation & culture – RATCH named in Senate

The lack of information RATCH provides to the local community on potential impacts is typical of the poor community consultation culture within RATCH.

RATCH was also named negatively in the Senate Inquiry into wind farms with a litany of complaints about its poor community relations at its Mt Emerald Wind Farm, often involving poor or non-existent noise monitoring, refusal to acknowledge or deal with noise complaints.

Issues around Community Forum & Upper Lachlan Council

As well, in the case of Collector, RATCH has established and carefully stage-manages a Community Forum that includes a wind farm host and hand picked supporters - contrary to your own NSW Planning guidelines.

Upper Lachlan Council does attend Forum meetings but is currently in dispute with RATCH over the governance and responsibility for allocation of potential funds should they eventuate.

For all these reasons, we have no trust in RATCH but we hope that the Minister will intervene in this case to properly assess the impact of the "Modification Proposal" for the Collector wind farm.

By any measure, although RATCH tries to downplay the move, using the largest blades in Australia fundamentally changes the potential impact of the Collector wind farm.

Formal request for de novo application to be required

As a result of this and the other relevant matters outlined above, we formally request the Department and Minister determine that the Collector Wind Farm will require an entirely fresh planning application – and even then only after

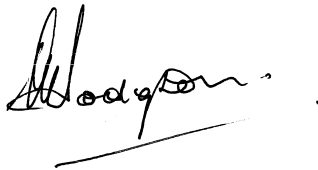
1. Detailed technical studies are undertaken into the noise (audible and inaudible and infrasound signature) and other environmental impacts of the new blades by Australian acoustician Steven Cooper at RATCH's expense
2. A truly independent review of the veracity of the most recent noise assessment data at Collector Wind Farm undertaken by now-disgraced firm Marshall Day which has been accused in the Senate of providing sham compliance reports for Victorian wind farms
3. Review by Department of Planning and the NSW Auditor General of the flawed process RATCH has used to establish and run the Community Forum which is now in dispute with Upper Lachlan Council on governance around the allocation of potential funds to the Collector community

The Collector community appeals to you the Department and the Planning Minister to uphold the long held precautionary principle regarding potential environmental impact on the quality of human life in this particular case - the proposed Collector Wind Farm.

The Collector area is in the Canberra-Sydney designated growth corridor and this development, should it proceed, will have lasting impacts over the next generation and beyond.

We make these points to assure you that any extra effort and resources required for a full new application are totally justified.

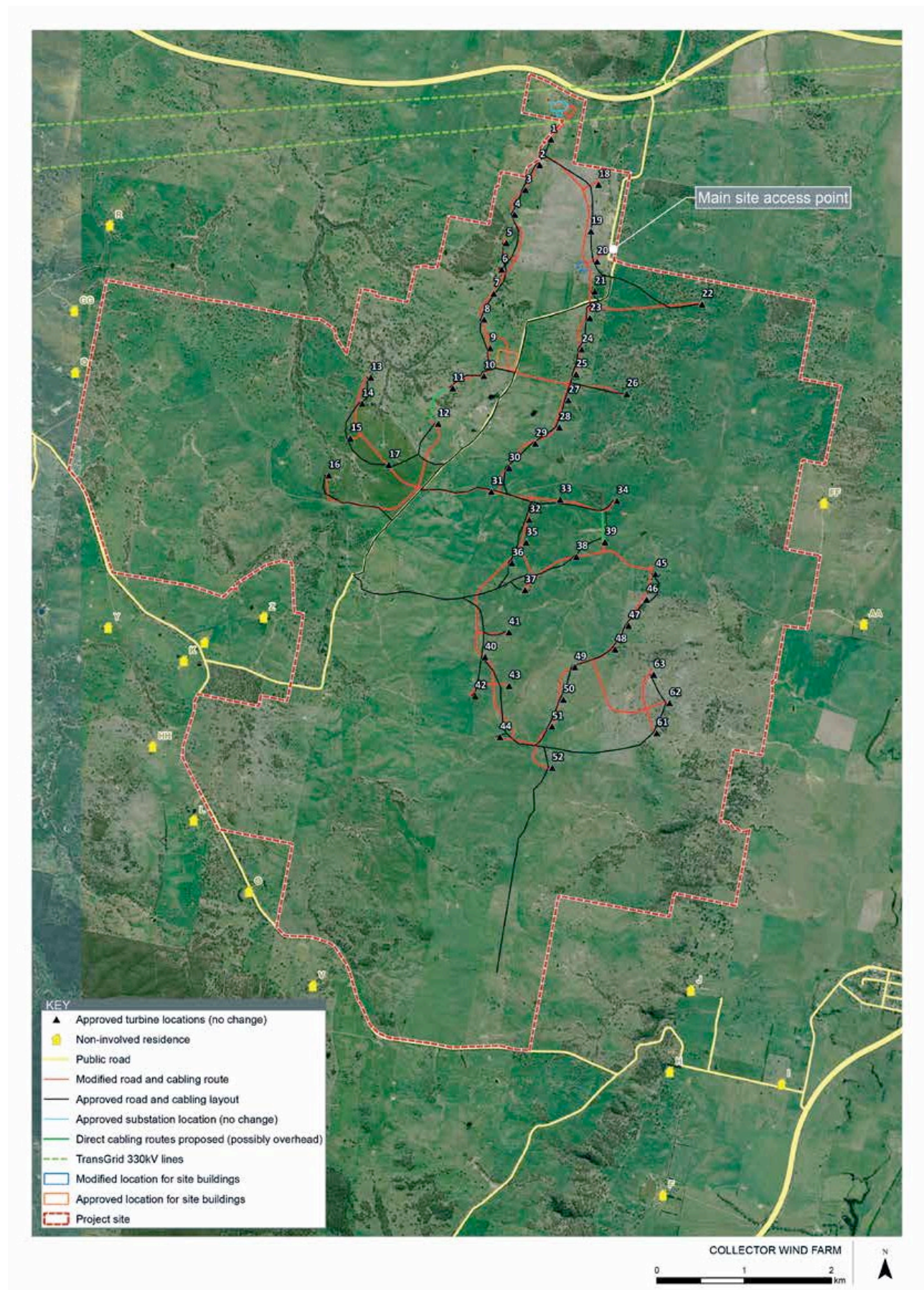
Yours sincerely

A handwritten signature in black ink, appearing to read 'Hodgson', with a long horizontal stroke extending to the right.

Tony Hodgson
President
Friends of Collector Inc

A handwritten signature in black ink, appearing to read 'R. Pahl', with a large, sweeping initial 'R'.

Rodd Pahl
Committee Member
Friends of Collector Inc



Speech to Senate re Marshall Day

<http://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;db=CHAMBER;id=chamber%2Fhansards%2F398c2cc8-a26c-4267-8f40-f3819972c93d%2F0205;query=Id%3A%22chamber%2Fhansards%2F398c2cc8-a26c-4267-8f40-f3819972c93d%2F0000%22>

Wind farm noise compliance reports faked, says senator John Madigan

The Australian

Graham Lloyd

18 September 2015

All levels of government have been duped by sham compliance reports which allowed major wind farms to breach noise limits and collect millions of dollars in subsidies, says independent senator John Madigan.

Senator Madigan used parliamentary privilege to blow the whistle on what he said was a corrupt system of wind farm noise assessments. He singled out international noise consultants Marshall Day (MDA) and its consultant Christophe Delaire, who has been involved in more than 50 wind farm projects.

Senator Madigan told the Senate MDA's commercial arrangements with wind farm operators Acciona and Pacific Hydro had "adversely affected the independence of its reports and the legitimacy of conclusions".

He was speaking in support of a Labor recommendation, in its dissenting report to the Senate inquiry into wind farms and health, that wind companies use independent consultants to assess post-construction noise compliance.

Senator Madigan said in the seven years of its operation the adjustments necessary to ensure the Cape Bridgewater wind farm in Victoria operated in compliance with its planning permit had never been applied. Instead, the wind farm operator had employed "experts".

After initially saying the company was considering a response to Senator Madigan's speech, MDA chief executive Peter Fearnside said "we have decided not to respond".

A spokesman for Pacific Hydro, the operator of the Cape Bridgewater facility, said "our only response is the wind farm is compliant and there was nothing irregular in the way the compliance reports were produced".

Senator Madigan told parliament the Cape Bridgewater wind farm had never been compliant with its noise requirements, "despite the falsified conclusions drawn by MDA and the claims of its master, Pacific Hydro".

He said MDA's website promoted its "proven record of successful wind farm approvals".

Senator Madigan outlined a system of using post-construction reports to overcome issues of noncompliance raised in the pre-construction analysis.

A 2006 analysis by MDA predicted that compliance could not be achieved at Cape Bridgewater without operating 13 of the 29 wind turbines in reduced operational noise modes. But a post-construction report by the company cleared the wind farm.

Senator Madigan detailed a system of “averaging” used by MDA, which he said was not permitted by the wind farm noise guidelines. “An ‘average’ noise level means nothing,” he said. “That’s why the permit requires that when the wind farm is operated it must comply with the NZ noise limits at all dwellings.”

The reports have been accepted by government bodies, resulting in millions of dollars worth of subsidy payments to the operators.

The Australian

CAPE BRIDGEWATER STUDY

Turbines may well blow an ill wind over locals, ‘first’ study shows

by: *GRAHAM LLOYD*

From: [*The Australian*](#)

January 21, 2015 12:00AM

PEOPLE living near wind farms face a greater risk of suffering health complaints caused by the low-frequency noise generated by turbines, a groundbreaking study has found.

The study by acoustics expert Steven Cooper is the first in the world in which a wind turbine -operator had fully co-operated and turned wind turbines off completely during the testing.

It opens the way for a full-scale medical trail that may resolve the contentious debate about the health impact of wind farms.

Funded by wind farm operator Pacific Hydro, the study was conducted at Cape Bridgewater in southwest Victoria where residents have long complained about headaches, chest pains and sleep loss but have been told it was all in their minds.

As part of the study, residents living between 650m and 1.6km of the wind turbines were asked to -diarise what they were experiencing, including headaches, pressure in the head, ears or chest, ringing in the ears, heart racing or a sensation of heaviness.

Their observations were separated into noise, vibration and sensation using a one to five severity scale.

“The resident observations and identification of sensation indicates that the major source of complaint from the operation of the turbines would appear to be related to sensation rather than noise or vibration,” the report says. “For some residents experiencing adverse sensation effects, the impact can be exacerbated by bending over rather than standing, with the effect in some cases being reported as extremely severe and lasting a few hours.”

Mr Cooper said it was the first time that sensation rather than audible noise had been used as an indicator of residents’ perception of nearby wind turbines.

The report found offending sound pressure was present at four distinct phases of turbine operation: starting, maximum power and changing load by more than 20 per cent either up or down.

Mr Cooper said the findings were consistent with research into health impacts from early model wind turbines conducted in the US more than 20 years ago.

The relationship between turbine operation and sensation demonstrated a “cause and effect”, something Pacific Hydro was not prepared to concede, he said.

Survey participant Sonja Crisp, 75, said the first time she experience discomfort from the wind turbines, “it was like a thump in the middle of the chest.

“It is an absolute relief, like an epiphany to have him (Mr Cooper) say I was not crazy (that) when I

am doing the dishes I feel nausea and have to get out of the house.”

David Brooks, from Gullen Range near Goulburn, NSW, said health concerns from wind farm developments were not confined to Cape Bridgewater.

The findings should be used as the basis for a thorough health study of the impacts from low frequency noise, he said. “Until this is done, there should be a moratorium on further wind farm developments,” he said.

Pacific Hydro and Mr Cooper agree that more widespread testing is needed. Andrew Richards, executive manager external affairs at Pacific Hydro, said: “While we acknowledge the preliminary findings of this report, what they mean at this time is largely unclear.

“In our view, the results presented in the report do not demonstrate a correlation that leads to the conclusion that there is a causal link between the existence of -infrasound frequencies and the ‘sensations’ experienced by the residents.” Mr Cooper said the findings had totally discounted the so-called “necebo” effect put forward by some public health -officials, who said symptoms were the result of concerns about the possibility of experiencing them.

The Cape Bridgewater study included six residents over eight weeks in three houses.

One hearing-impaired participant had been able to identify with 100 per cent accuracy the performance of wind turbines despite not being able to see them.

Another Cape Bridgewater resident Jo Kermond said the findings had been “both disturbing and confirmation of the level of severity we were and are enduring while being ridiculed by our own community and society.”

Mr Cooper said residents’ threshold of sensations were experienced at narrow band sound pressure levels of four to five hertz at above 50 decibels.

The nominal audible threshold for frequencies of four to five hertz is more than 100 decibels. Mr Cooper said an earlier investigation into health impacts of wind farms by the South Australian EPA had been flawed by limiting the study to only one-third octave bands and not looking at narrow band analysis.

“By looking at high sensation and narrow band I have developed a methodology to undertake assessments using narrow band infrasound,” he said.

“We now have a basis on how to start the medical studies,”

Mr Cooper was not engaged to establish whether there was a link between wind turbine operation and health impacts, “but the findings of my work show there is something there,” he said.

Mr Cooper said Pacific Hydro should be commended for allowing the work to proceed.

“It is the first time ever in the world that a wind farm has co--operated with a study including shutting down its operations completely,” he said.

Mr Cooper has coined the term Wind Turbine Signature as the basis of the narrow band infrasound components that are evident in other studies. He said the work at Cape Bridgewater had established a methodology that could be repeated very easily all over the world.

Pacific Hydro said it had conducted the study to see whether it could establish any link between certain wind conditions or sound levels at Cape Bridgewater and the concerns of the individuals involved in the study.

“Steven Cooper shows in his report, for the limited data set, that there is a trend line between discrete infrasound components of the blade pass frequency (and harmonics of the blade pass frequency) and the residents’ sensation observations, based on his narrow band analysis of the results,” Pacific Hydro said.

“However, we do not believe the data as it currently stands supports such a strong conclusion.”

The report has been sent to a range of stakeholders, including government departments, members of parliament, environmental organisations and health bodies