Project Manager - Australia

SYDNEY | CANBERRA | PERTH | PARIS (HQ) | LISBON | MEXICO | CAIRO | EL SALVADOR

Neoen Australia | Level 6 | 16 Marcus Clarke Street | Canberra ACT 2601 |

M: +61 474 774 622

clara.wilson@neoen.com www.neoen.com

From: Clara Wilson

Sent: Thursday, April 27, 2017 3:44 PM

@waubrafoundation.org.au' - @waubrafoundation.org.au>

Cc: Garth Heron < garth.heron@neoen.com>

Subject: Crystal Brook Energy Park - Background Noise Monitoring

Dear Ms Laurie.

My name is Clara Wilson and I am the Project Manager for the Crystal Brook Energy Park, a combined storage, solar and wind farm located north of Crystal Brook in South Australia. We held an initial Community Information Session about the project in February this year, at which time we presented a preliminary draft layout, posters, fact sheets and photomontages from three different viewpoints. I have attached these materials for your reference. We will hold a second Information Session in the next couple of months – once we have a firm date I will let you know.

Neoen are working towards submitting a Development Application in June. Prior to that, we will be conducting background noise monitoring at different locations in the vicinity of the project area. We have selected Sonus as our acoustic consultant. Sonus have recommended several locations at which to conduct background noise monitoring, and your property on Beetaloo Valley Road has been included in their list of monitoring sites.

I have attached a letter detailing the noise monitoring process. In summary, the noise logger is a weatherproof briefcase sized box that sits on the ground and has a microphone on a post. The noise equipment is established outside of the house on the property. The logger needs to collect 6 weeks of data. It is possible that data may need to be collected at the mid-way point, however other than this, the logger is fully automatic and does not need to be attended. Once the logger has collected 6 weeks of data, Sonus will remove the loggers from each property. Once the monitoring has been completed, Sonus will be able to conduct noise mapping of the project area and the areas surrounding it. Could you please let me know whether you are willing for Sonus to conduct background noise monitoring at your property.

In addition, if you have any questions about the project please feel free to contact me on the details below, or at contact@crystalbrookenergypark.com.au. Further information about the project is available on the project website at www.crystalbrookenergypark.com.au, and you can provide feedback via the Contact Us link, or by completing the Community Feedback Form.

Kind regards,

Clara Wilson

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Sarah Laurie BMBS (Bachelor Medicine, Bachelor Surgery Flinders University, 1995) CEO PO Box 7112 Banyule VIC 3084 AUSTRALIA

(61) 474 050 463 0474 050 463

Clara Wilson

From:

Clara Wilson

Sent:

Friday, May 5, 2017 10:37 AM

To: Cc:

Sarah Laurie Garth Heron

Subject:

RE: Crystal Brook Energy Park - Background Noise Monitoring

Dear Sarah,

Thank you for your email. I have sent the request regarding background noise monitoring to your husband via the email address you provided.

Kind regards,

Clara

From: Sarah Laurie [mailto

@waubrafoundation.org.au]

Sent: Thursday, May 4, 2017 11:07 AM

To: Clara Wilson < Clara. Wilson@neoen.com > Cc: Garth Heron < garth.heron@neoen.com >

Subject: Re: Crystal Brook Energy Park - Background Noise Monitoring

Dear Clara

As I indicated during our brief conversation yesterday, the property at 21 Beetaloo Valley Rd, Beetaloo Valley is owned by my husband, Dr Simon Wooley.

My husband is not available via a reliable or consistent phone number, either during the day or in the evening. He works as a remote area dentist, and services a number of different communities and homelands.

I discussed your email and phone call with him, and he has requested that you contact him in writing via his email address, which is Simon Wooley

As he does not always have reliable internet service, and does not always have a telephone, there may be a delay in him getting your messages and responding to them.

On May 3, 2017, at 10:01 AM, Clara Wilson < Clara. Wilson@neoen.com > wrote:

Dear Ms Laurie,

Thank you for speaking to me this morning. I understand that you would prefer us to contact your husband in relation to the property on Beetaloo Valley Road. If you could provide a contact number for your husband that would be much appreciated.

Kind regards,

Clara Wilson

Clara Wilson

From:

Clara Wilson

Sent:

Friday, May 5, 2017 10:26 AM

To:

Cc:

Garth Heron

Subject:

Crystal Brook Energy Park - Background Noise Monitoring

Attachments:

2017.04.24 Letter regarding Background Noise Monitoring.pdf; Community Information

Session materials.zip

Dear Simon,

My name is Clara Wilson and I am the Project Manager for the Crystal Brook Energy Park, a combined storage, solar and wind farm located north of Crystal Brook in South Australia. We held an initial Community Information Session about the project in February this year, at which time we presented a preliminary draft layout, posters, fact sheets and photomontages from three different viewpoints. I have attached these materials for your reference. We will hold a second Information Session in the next couple of months — once we have a firm date I will let you know.

Neoen are working towards submitting a Development Application in June. Prior to that, we will be conducting background noise monitoring at different locations in the vicinity of the project area. We have selected Sonus as our acoustic consultant. Sonus have recommended several locations at which to conduct background noise monitoring, and your property at 21 Beetaloo Valley Road has been included in their list of monitoring sites.

I have attached a letter detailing the noise monitoring process. In summary, the noise logger is a weatherproof briefcase sized box that sits on the ground and has a microphone on a post. The noise equipment is established outside of the house on the property. The logger needs to collect 6 weeks of data. It is possible that data may need to be collected at the mid-way point, however other than this, the logger is fully automatic and does not need to be attended. Once the logger has collected 6 weeks of data, Sonus will remove the loggers from each property. Once the monitoring has been completed, Sonus will be able to conduct noise mapping of the project area and the areas surrounding it.

Could you please let me know whether you are willing for Sonus to conduct background noise monitoring at your property.

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Kind regards,

Clara Wilson

Project Manager - Australia

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clara.wilson@neoen.com | www.neoen.com

Mr Xavier Barbaro, CEO NEOEN 4 rue Euler 75008 Paris France Sent via email:

Dr Simon Wooley Beetaloo Valley Road Beetaloo Valley SA 5523 Australia 11 May 2015

cc via email:

Mr Jacques VeyratMr Nicolas Dufourcq

- Mr Fabien Prevost

- Mr Garth Heron

(Chairman Impala-sas:

(Director General Bpifrance: (CEO Omnes Capital:

(Head of Wind Proj. Dev t Aust.

Dear Monsieur Barbaro,

Further to your company's offer on 5/5/17 via Clara Wilson to conduct noise monitoring at my property included in the list of noise monitoring sites surrounding the proposed Crystal Brook Industrial Wind Power Facility, I agree to that offer, providing the following conditions (in bold) at the end of the letter are met in full, and agreed to in writing by your company, before permission to access to my property is given. Without my express written permission, no access is granted.

In so agreeing, I note the following facts.

Your company representatives in Australia have acknowledged in their public comments to members of our community that your company will be responsible for emitting wind turbine noise from this proposed facility that could be harmful to neighbouring residents. In addition, your company's responses to the FAQ's on your website for the proposed project (http://crystalbrookenergypark.com.au/faqs/) indicate that NEOEN are clearly well aware that some people who are not "average" will find the noise intrusive. Intrusive noise, regardless of the noise source, can damage health via stress and sleep disturbance. (see the World Health Organisation's Night Noise Guidelines for Europe http://www.euro.who.int/ data/assets/pdf file/0017/43316/E92845.pdf) This is therefore an admission by Australian employees of your company, that your company and its

an admission by Australian employees of your company, that your company and its employees are well aware that the noise emitted by your proposed wind turbines will harm some residents.

As an Australian rural community, we find this particularly morally unacceptable that a French energy company would knowingly harm Australian rural residents in such a way – many of whose ancestors fought, and lost their lives, in battles in France to save the French from their invaders in successive World Wars.

Furthermore, we note that your company states on its website that "We also integrate the living conditions of the species on the sites of Neoen projects: their preservation is an important component of the design phase of the project."

(https://www.neoen.com/en/social-environmental-responsibility/). As human "species" living on the site of your proposed Industrial Wind Power Facility, your corporate social and environmental platitudes do not fit with the conduct of your employees and your company

with respect to knowingly harming our health, and our ability to live and sleep in our homes, with excessive wind turbine noise.

Simply put, your proposed project contains wind turbines that are too powerful, too big, and are too close to our homes, and you know it.

If intrusive noise occurs at night, which is when most wind power is generated, that intrusion will inevitably damage the health of many people in our community, when it leads to chronic sleep disturbance and repeated physiological stress. There is growing evidence that wind turbine noise induces sensitisation with ongoing exposure, and this leads to more and more people becoming adversely affected and perceiving the sound at lower and lower levels as exposure continues. They do not "get used to it".

Accordingly, I am sure you will understand that we wish to protect ourselves and our community from the harm you and your company clearly know you will cause to some of us, by ensuring that all members of our community who live within the immediate acoustic impact zone of this project (conservatively estimated at 10km on the basis of current very limited information about wind turbine tower and blade size, power generation capacity, siting, and separation distances) are given the chance to collect truly independent objective acoustic data by an acoustical consultant who has worked both for residents and for the wind industry. Your company's choice of Acoustical Consulting firm SONUS does not fit that criteria.

Your choice of SONUS as your preferred Acoustic Consultants is unacceptable to us for many reasons. They are clearly not financially independent of the wind industry, and documentation provided by the Association of Australian Acoustical Consultants (AAAC) in response to questions asked by the Senate Inquiry revealed that SONUS have conducted extensive work for the wind industry in Australia (submission 60, Answers to Questions on Notice, AAAC p 2 available from

http://www.aph.gov.au/Parliamentary Business/Committees/Senate/Wind Turbines/Wind Turbines/Additional Documents. Whilst no monetary figure was given to accompany the long list of wind power developments for whom SONUS has worked, subsequent court evidence has confirmed that the monetary value has been in the millions of dollars.

You may be unaware that there have now been three Federal Senate Inquiries in Australia where Australian residents have provided a lot of documentation as to the adverse effects they have suffered after wind power facilities started operating near their homes and farms. Some of those residents included wind turbine hosts who had earned \$1 million dollars in lease income (http://en.friends-against-wind.org/testimonies/gare-s-evidence). Other residents included people such as Trish Godfrey (Melbourne, 9 June, 2015 http://www.aph.gov.au/Parliamentary Business/Committees/Senate/Wind Turbines/Wind Turbines/Public Hearings) who had been bought out and silenced with gag agreements by the wind power developer, because of serious adverse health effects.

The residents' evidence in these Federal Senate inquiries has been supported by evidence given by Australian and international acoustic and health professionals – even including at times admissions made by experts who consult for the wind industry. One example of the latter is the admission by UK Acoustician Geoffrey Leventhall that it is amplitude

modulation of the sound that "upsets" people (Senate Inquiry hearing, Canberra 23 June, 2015

http://www.aph.gov.au/Parliamentary Business/Committees/Senate/Wind Turbines/Wind Turbines/Public Hearings).

Further to the subject of amplitude modulation, Swedish laboratory research presented in 2016 (http://waubrafoundation.org.au/resources/smith-m-g-et-al-physiological-effects-wind-turbine-noise-sleep/) found that even young fit healthy people (who are presumably included in your company's definition of "average") had disturbed sleep, when exposed to amplitude modulated low frequency noise from wind turbines for a short duration. As a result of this Swedish research alone, your company's website FAQ response is out of date, incorrect, and misleading – clearly "average" people can indeed find the noise intrusive. I also note that our exposures will be for much longer periods than a very short laboratory study.

Wind turbines with 3 MW generation capacity have been associated with consistent residents reports of sleep disturbance out to 10km at Waterloo (http://waubrafoundation.org.au/resources/waterloo-wind-farm-survey-2012/), which have been verified by independent acoustic measurements of excessive low frequency noise out to 8km by Professor Colin Hansen and his team from Adelaide University (http://waubrafoundation.org.au/resources/hansen-zajamsek-hansen-noise-monitoring-waterloo-wind-farm/). Your project's proposed wind turbines will be larger and more powerful than those at Waterloo, and may be up to 4 MW. Larger more powerful wind turbines have been found to emit a greater proportion of low frequency noise, and therefore increased disturbance for the neighbours is likely (https://www.wind-watch.org/documents/low-frequency-noise-from-large-wind-turbines-2/).

Increased disturbance due to additional turbulence is even more likely if inadequate inter turbine separation distances are used by wind power developers, as is the case with Australian industrial wind power developments such as Macarthur, Waterloo, and Cullerin Range in NSW where there have been many complaints about excessive intrusive noise and sleep deprivation from residents, and where numerous residents have been forced to permanently abandon their homes and farms, or to seek regular respite.

Additional turbulence has been known since the late 1980's to result in increased infrasound and low frequency noise emissions, even from so called "modern" upwind bladed wind turbines (http://waubrafoundation.org.au/resources/swinbanks-m-nasa-langley-wind-turbine-noise-research/).

Finally I bring to your attention the recent research from the prestigious Max Planck Institute in Germany

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0174420 which was reported in the national Australian Newspaper "The Australian" on 2nd May, 2017. That research demonstrated that even the primitive parts of the brains of young, fit, healthy people's will directly react to sound below their audibility thresholds with a range of responses including physiological stress, fear and anxiety. Furthermore, prolonged exposure (even for a very short duration) up regulates these pathways, which means increased responsiveness to the stimuli.

This research yet again exposes the lies being told to local residents adjacent to the Crystal Brook Industrial Wind Power Facility by your Australian employees working on this project, namely that the reported symptoms are all caused by scaremongering (nocebo effect), rather than wind turbine acoustic emissions.

This behaviour of knowingly planning to harm some of us with intrusive wind turbine noise, and admitting that some people will be harmed and find the noise intrusive, but concurrently blaming a nocebo effect for the sleep disturbance and stress symptoms is not only dishonest, it is inconsistent with your stated value of *Integrity*, one of the four stated values your company claims on its website to define you and "guide" your "action" *at every level*, including with public stakeholders, such as ourselves (https://www.neoen.com/en/management-2/).

The dictionary definition of "integrity" is the following:

"the quality of being honest and having strong moral principles; moral uprightness"

It is therefore clear, from your company employees' conduct already in their interactions with members of our community, that we cannot trust Neoen and its staff to behave with integrity, nor to act in a way that will protect our health.

Accordingly, I request the following:

- 1. The only acoustic consultant I give permission to be on my property is Mr Steven Cooper, from the Acoustic Group, in Sydney. He has indicated his willingness to conduct this monitoring, if approached. Mr Cooper is a court appointed independent expert acoustic witness to the NSW Land and Environment Court, and has worked for both residents and the wind industry to identify the source of noise complaints, and the acoustic triggers for the disturbances reported by residents. It is Mr Cooper's recent Australian field research, including as part of the internationally acclaimed Pacific Hydro funded Cape Bridgewater Acoustic Investigation that has identified Amplitude Modulation as the acoustic trigger for the disturbances including sleep disturbance, being reported by residents near wind turbines.
- 2. The acoustic monitoring must include full spectrum acoustic monitoring, both pre and post construction, inside and outside my home, with sound recording (WAVE files) in addition to the limited acoustic monitoring with a sound level meter currently required for planning and regulatory purposes. This is required to ensure that ALL sound frequencies are included, including specifically infrasound and low frequency noise, and that actual sound recordings are used so there can be no dispute about the source of the sound in those recordings, including particularly the misattribution of wind turbine noise to "wind in the trees".
- 3. NEOEN must agree to ensure that there is complete transparency of the data collection from my property ie that I will have full copies of all weather and acoustic data collected on my property.

- 4. In addition, NEOEN must also agree to provide all the SCADA (operational) data and all meteorological mast data relating to the operation of its turbines, post construction, for the life of the project, on request.
- 5. NEOEN must agree to conduct "on-off" testing and fully cooperate in any other way to help identify the source of the noise in the event that sleep disturbance and other adverse health effects are reported by any nearby residents living out to 20 km from the wind turbines, post construction.
- 6. I request that all other residents living within the immediate acoustic impact zone of 10km from the external boundary of the wind turbines are provided with the same opportunities for independent acoustic monitoring.
- 7. The monitoring period for the purposes of establishing the background noise environment pre-construction must be for at least three months, and must not take place during either seeding or harvest, as these periods of time do not reflect the usual acoustic soundscape and amenity of my property for 80% of the year; particularly at night.

I look forward to your company's acceptance of these conditions to ensure fairness and transparency, and to ensure that in the event of any local residents being harmed by your project that you cannot avoid your obligations to ensure that any noise nuisance from your industrial wind power project is properly investigated, and subsequently prevented.

Please advise me of your decision in	writing.	I can	be contacted	at the	following	email
address:					-one mg	oman

Yours sincerely

Simon Wooley

Encl.: Controlling Owners and Major Shareholders of Neoen

Controlling Owners and Major Shareholders of Neoen

1. Impala-sas

- 55.6% Shareholder in Neoen Controlling Role
- Neoen is a direct subsidiary
- Diversified Company in Energy and Manufacturing
- Chairman of the Board: Jacques Veyrat (Founder)
- CEO: Fabrice Dumonteil
- Member of Group Executive Committee: Xavier Barbaro (CEO of Neoen)
- Address: 4, rue Euler

75008 Paris France (same address as Neoen)

Phone:

+33 1 8169 2580

– Email:

- Web:

www.impala-sas.com

2. Bpifrance

- 14.1% Shareholder in Neoen
- French Government State Owned Investment Bank
- Supervised by the European Central Bank (www.ecb.europa.eu)
- Director General: Nicolas Dufourcq
- Address: 27-31, avenue du

General Leclerc

Cedex 50

Maisons-Alfort, 94710 France

- Phone:

+33 1 4179 800

- Email:

- Web:

www.bpifrance.fr

3. Omnes Capital

- 23.4% Shareholder in Neoen
- Private Equity Investor
- CEO: Fabien Prevost
- Senior Advisor: Jacques Veyrat (Chairman of Impala-sas)
- Address: 37-41 rue du Rocher

75008 Paris France

Phone:

+33 1 8048 7900

Email:

- Web:

www.omnescapital.com/en



Dr Simon Wooley Beetaloo Valley Road Beetaloo Valley, SA 5523 Email

22 May 2017

Dear Dr Wooley,

Crystal Brook Energy Park - Background Noise Monitoring

We refer to your letter of 11 May 2017 in response to Neoen's offer to undertake background noise monitoring on your property in relation to the Crystal Brook Energy Park (Energy Park).

Neoen regrets that you are not in a position to accept the offer as proposed to you by its acoustic consultants Sonus Pty Ltd. We have reviewed the conditions upon which you would be willing to allow noise monitoring on your property, and we advise that Neoen cannot agree to the conditions set out in your letter.

We also emphatically reject the implication you draw in your letter about an admission by Neoen that noise from its wind turbines will harm some residents. The information available on the Energy Park's website which you cite does not support any such admission. We similarly do not agree with your other statements about Neoen, the Energy Park and alleged health and noise impacts of wind farms contained in your letter.

Neoen is undertaking background noise monitoring as a part of the noise assessment it must carry out for the development application for the Energy Park. In order to satisfy these requirements, Neoen has engaged Sonus to undertake an assessment in accordance with the applicable legal requirements, guidelines and standards. The conditions you propose are, unfortunately, not in line with what is required to meet those requirements and as a result your property will not be included in the background monitoring assessments.

Thank you for taking the time to write to us. I would like to add that we are still in the public consultation phase of the project, and we welcome suggestions and participation from project neighbours and members of the community.

Please feel free to call me directly on the telephone number below if you would like to discuss any aspect of the project, or arrange a face-to-face meeting.

Yours Sincerely,

Garth Heron

Head of Wind Development

Mobile: 0408 998 425