

Minutes

Company	Pacific Hydro Pty Ltd ACN 057 279 508
Meeting	Cape Bridgewater Community Consultative Committee Meeting No 8
Date	Monday, 28 April 2014
Time	6.00 - 7.30pm
Location	Bridgewater Surf Lifesaving Club
Attendees	Lane Crockett, Executive General Manager, Pacific Hydro Rachel Watson, Head of Commercial, Pacific Hydro Dianne Thomson, Community Relations Coordinator, Pacific Hydro Cath Smith, Futureye Steven Cooper, The Acoustics Group Cape Bridgewater Residents

1. Welcome and Introductions

Futureye facilitator, Cath Smith, introduced the meeting.

Attendee moved a motion that the normal CCC business be taken care of after Steven Cooper addresses the meeting, this was accepted

Attendee also mentioned that there needs to be more formality in relation to the tabling and seconding of meeting minutes.

Minutes from the April 3rd meeting to be tabled at the completion of Steven Cooper's presentation.

Lane introduced and welcomed Steven Cooper. Lane also recognised that time had gone on and things are now happening in relation to the noise testing.

Much equipment has been brought to Portland for this testing.

Lane thanked everyone for their patience and also thanked the Pacific Hydro Team.

2. Presentation by Steven Cooper

Steven spoke about the parameters of the testing saying there will be fundamental systems and monitoring set up, firstly 6 weeks with 3 houses to be monitored inside and outside.

Thanked the residents for access to inside and outside of their premises for the purposes of the testing.

Steven has put some equipment out today (28/4/14). Loggers have been put out on the Wind Farm property.

Spot measurements over simultaneous distances will be carried out. Two loggers in the northern area, one logger is 500 metres from turbine number 3 the other is 1km from turbine number 3.

Steven will be testing inside and outside at 3 attendees' premises. The first testing will be 3 days & 3 nights with equipment continually running to measure noise and vibration, at both ground and elevated levels. This testing is subject to the weather.

This testing will be duplicated at 3 nominated residences, monitoring DBA, linear and 1/3 octaves for wind farm noise outside and in one room inside. Identified noise / vibration hotspots (as identified by the residents) inside the houses will also be measured during this 3 day period.

The hotspot testing will be simultaneous testing done at ground level and 1 ½ metres and 2 metres from ground level. Steven encouraged residents to let him know where the main hotspots are in their houses, and he will test in that area.

Steven would welcome the attendees to their homes if they wish to be there whilst he is testing.

During the 3 days while the monitoring is taking place Steven will also be monitoring the sub- station for noise and simultaneously testing noise and vibration at turbines 7 and 29 plus possibly turbine 18, which is in the middle of 4 turbines.

If the weather is bad Steven can be flexible with the testing.

After the 3 nominated houses have been tested with constant monitoring inside and outside, then testing will revert to inside and outside loggers

Steven hopes to have 2 weeks of data to take away and look out.

Steven asked that diaries be kept by residents using a numerical system of 1 to 7. With 0 being no problems, 1 being not too bad and 7 being "take me out of here". [Subsequently, Pacific Hydro was informed by Steven that the classification system was subsequently reduced to a 1 to 5 classification system.]

Steven stressed the importance of keeping the diaries as he wants to correlate the information in the diaries to the data he collects and also with the wind speed, direction of wind and power output data of the turbines. Steven will present the output of data, plotting the dB(A) over a 24 hour time frame and will include dB(G),dB(C) and dB(Lin) outputs.

Steven will be looking for patterns to emerge, which is the beauty of inside and outside testing.

Steven will be assisted if necessary by Peter Gram, the Cape Bridgewater Operations Manager.

Steven noted there will be a partial shut-down of turbines during the period he will be monitoring. This is an advantage as when a turbine is shut down he can compare date and interaction with when the turbine is operating with when it is not.

Steven spoke about his equipment saying it is a multi-channel system which allows cross correlation and finer resolution.

Steven is excited to be able to do this exercise with co-operation from all parties, it is the first time in the world that this type of testing has been done with co-operation, the transparency from all parties is good and Steven congratulated both the residents for allowing access and Pacific Hydro for enabling the testing.

In relation to infrasound testing, he will be measuring using microphones for infrasound and noise, and also testing for vibration using accelerometers. Pressure detectors have presented some problems with logging data and are still under development.

3. Questions from the floor

Q). What is the world standard for microphones for testing of infrasound?

A). There is no world standard; some microphones have no tolerance beyond 10 hertz. Steven will be using a range of microphones to address the infrasound.

On the multichannel system the external microphones are GRAS 40AZ prepolarised microphones

On the multichannel system the internal microphones are all 200v polarisation being a combination of Bruel & Kjaer 4193, 4147 and Gras 40AN microphones.

On the loggers the SVAN 979 meters all use GRAS 40AZ prepolarised microphones.

On the loggers using the SVAN 957 meters the microphones are SVANTEK or ACO Pacific microphones with the low frequency limitation addressed by individual frequency response by use of a GRAS low frequency microphone calibrator.

Q). Why are you testing only 10 minutes of noise data at a time, why not test all of the data?

A). The standard method of assessment is in 10 minute intervals. Wave files in longer time periods are too big to process. But the 10 minute samples keep repeating for days – just as the loggers do.

Q). Are Pacific Hydro agreeing to turn turbines off as requested?

A). From Lane; we will have turbines off as there is a need for this with a scheduled partial shut -down. This is an opportunity for us to take advantage of measuring with some of the turbines shut down.

We will make all of the SCADA data available and it will be handed over to Steven.

Q). What is the difference between low frequency and infrasound testing?

A). Low frequency is normally defined as less than 100Hz with some people nominating 200Hz. Infrasound is normally defined as frequencies below 20Hz.

Q). Will there be hub height readings?

A) From Steven, I have no clearance for high climbs.

Q). Are there cranes available that could be used?

A). from Lane: there is no crane on site at the moment. Discussion around this point, with Lane suggesting at this point that there are no plans for hub height testing and we should wait to see what the noise monitoring results show before hub height testing is considered.

Q). Can you work with Steven to facilitate turbines being turned on and off?

A). From Lane: we will wait to get the initial data first and discuss the testing with Steven. We are prepared to be flexible about this.

Discussion around turbine numbers 15 & 3, whether they would be turned off first or last to be isolated in some way.

Steven commented that he will be able to take some measurements of ambient noise even with a partial shut-down of turbines, if not with the specific turbines mentioned (15 & 3).

Lane comments that the shutdown is generally between the 9th to the 25th May, around the 2nd and third weeks of May (TBC) and the turbines will be on and off intermittently.

Q). What is Steven's time line for data?

A). Steven will present the first 10 days of monitoring when analysed, he will then be back each 2 weeks to show what is occurring. Steven again mentioned that he will be relying on diaries from residents. Stated if there is a failure with his equipment he will extend the testing for a further 2 weeks at his expense, he will

also extend the testing if there is weeks of terrible weather. Steven plans to have a more comprehensive report due around July.

4. Other items discussed

- From attendee: could we have some further results from the Marshall Day testing, in particular data from March 30th around 2:00AM – discussion around this point.
- From attendee, every word spoken at the meetings should be in the minutes or the meetings should be tape recorded and transcribed. Discussion around this point with reference to the terms of reference (TOR) which clearly state that the minutes will not be recorded verbatim. All attendees encouraged to become familiar with the terms of reference which can be located on the Pacific Hydro web site and will be attached to minutes for people's reference.
- Clarification that Pacific Hydro will not go to the press or release any information in relation to Steven Cooper's results without consultation with the Cape Bridgewater residents. Lane discussed that Pacific Hydro, the residents of Cape Bridgewater, and broader community should digest the results before any media release was made and that any media release should be made with consultation of the interested parties.
- Discussion around the possibility of a joint press release (Pacific Hydro & Cape Bridgewater residents /CCC) being made in relation to the testing that has begun by Steven Cooper. Attendee suggested Senator Madigan also be included in this process.
- Rachel initiated a discussion around the "terms of reference" in relation to the media attending meetings. The terms of reference clearly state that the media are not to be invited. There was discussion around this point. Rachel commented that Pacific Hydro would be comfortable with the media being present.
- After discussion it was agreed that residents wanted their identities protected as personal and sensitive information was being discussed at the meetings and that media should not attend the meetings.
- A side issue from the above discussion arose around an attendee who was previously employed as a journalist but is no longer working in that capacity. For transparency it was noted that this attendee is a member of the Victorian Wind Alliance group.
- Attendee asked why the radio interview involving Lane who had been the subject of discussion previously, had not been read out to the group at the last meeting. Discussion around this point, It was noted that Rachel had the transcript at the last meeting and offered to read it aloud to the group at the last meeting, however the residents did not wish for the transcript to be read out. It was noted that Pacific Hydro cannot photocopy the transcript and give it out at the CCC meeting due to copyright issues.
- Attendee asked whether Lane had received a message from Senator Madigan in relation to the testing to be done by Steven Cooper. (While the message had not been received at the start of the meeting, Lane was able to confirm after the meeting closed that that he had received this message congratulating everyone's efforts to get the testing underway.)
- Attendee made the point that he and his family cannot sleep, they are woken up and their health suffers. Attendee continued that they are severely impacted by the wind farm, and that attendee has been saying this for ages. Discussion around this and Lane acknowledging that it is a step by step process to understand why that is, we don't know a better way to work through this other than one step at a time. It was acknowledged that attendee has been heard that he and his family are not sleeping.
- Attendee mentioned that there was a position statement made by The World Council for Nature (WCFN) in relation to the "nocebo" effect on animals.
- Attendee raised a point that the Moyne Shire Council had been advised to meet with 20 residents from the Macarthur Wind Farm.
- Draft minutes from the 3rd April meeting not formally moved as the meeting ran out of time, these draft minutes along with draft minutes from the 28th April will be moved at the next meeting.
- Cath closed the meeting at 8:05 PM

5. Next Meeting

The next meeting will be held on Monday, the 2nd June 2014 at the Cape Bridgewater SLSC at 6:00 PM.