

Minutes

Company	Pacific Hydro Pty Ltd ACN 057 279 508
Meeting	Cape Bridgewater Community Committee meeting No. 9
Date	Monday, 2 June 2014
Time	6.00 - 7.30pm
Location	Cape Bridgewater Surf Life Saving Club
Attendees	Rachel Watson, Head of Commercial, Pacific Hydro Andrew Richards, Executive Manager External Affairs, Pacific Hydro Dianne Thomson, Community Relations Coordinator, Pacific Hydro Cath Smith, Futureye Cape Bridgewater residents and other community members

- 1. Welcome and introduction**

Cath Smith opened the meeting at 6pm and welcomed everyone.
- 2. Minutes of previous meetings**

The minutes of the meeting held on the 3rd April were tabled by Cath Smith, the minutes were moved by Di Thomson and accepted (by Cath Smith on behalf of everyone without a seconder for the motion).

The minutes of the meeting held on the 28th April were tabled by Cath Smith but not moved as attendees have not had enough time to read them Attendees would like minutes to be out for comment to them no later than a week following the meeting.

This was agreed.
- 3. Update / Presentation by Steven Cooper**

Steven Cooper acknowledged the support of both the residents involved with his testing and Pacific Hydro.

Some original targets set by Steven have not been met yet due to inclement weather, half of the testing has been conducted so far.

There has been a turbine shutdown enabling on-off testing over a 2-week period, while work was being carried out on the wind farm transmission line. This has been useful for Steven's

testing and he has been provided with all relevant generation and wind data from Pacific Hydro, although data provided recently has not yet been analysed.

Steven provided A3 colour charts and a detailed power point presentation on his preliminary findings so far. Steven stated that it is very early and that conclusions can't be drawn from information gathered so far.

Steven has taken the time to sit with residents to explain the importance of the diary keeping. An exciting breakthrough is a revised diary system involving a numerical 1-5 severity system with also a colour system to help the residents record their observations. Blue =noise, green =vibration, red=sensation.

Steven has also noted that most diary entries seemed to be associated with changes that people were perceiving rather than a continuous record of how they were feeling and what they were perceiving. He believes this is an important distinction and will ask residents to focus on the latter by modifying the diary procedure to provide regular reporting rather than just changes.

Steven acknowledges the commitment of the residents to the diary keeping as this will allow for more meaningful results but it is very time consuming for residents.

Steven is testing the #29 turbine to measure the noise and vibration at the tower. He is questioning if vibration is going into the ground and travelling underground and affecting houses. He has observed the same frequency (approx. 24Hz) from this turbine, whether the turbine is operating or shut down.

The ocean, surf and other surrounding environmental noises are significant to the testing process as they can significantly affect the measured levels and as such can overestimate the wind farm noise is not accounted.

Hotspot testing in houses has just begun and Steven requires a westerly wind to be able to test this accurately in one of the residences. The westerly wind also generates a lot more noise from the ocean.

Steven acknowledges that people have different levels of sensitivity and that he believes trust is being gained with the residents involved in the testing. Steven will continue to investigate outcomes.

Questions arose from the floor which Steven answered including:

Q Is the wind farm compliant?

A. Yes, in Steven's opinion the wind farm is compliant with current regulations and planning approvals.

Q. How often in the 10 minute sampling is the sampling happening?

A. Continuous for the 10 minute period, some loggers are set for 25 millisecond intervals and other at 100 milli-second

samples.

Q. What is the exact Standard for the sound level meter to be set to at different times weightings?

A. The NZ Standard for wind farms does not specify the background level time weighting parameter and refers to a different Standard. It appears the Leq level is one method and the L95 is another method. Steven is exploring what the exact standard is.

Q. Why are you excited about the diary format?

A. Steven explained that in the past it has been based on noise alone, whereas it is a world first to include noise, sensation and vibration as separate ratings. Secondly having identified the difference between reporting changes versus continuous operations makes the diaries more robust and meaningful.

Q. If the wind farm is found to be causing problems will you turn it off?

A. [from a participant] We have been told before by Pacific Hydro that the wind farm will not be turned off and that real time monitoring, as is used at airports, is not possible. Comment from another participant regarding the real time monitoring: that is rubbish.

Q. Are your results going to be public or private?

A. Steven explained that information that is private to residents will be kept private but that results will be made available to Pacific Hydro and the residents at the same time and then the report on the results will be made public after consultation between Pacific Hydro and the residents. Steven acknowledged that Pacific Hydro is adamant that the testing and report will be a transparent process.

Q. Has Pacific Hydro tried to restrict you in any way?

A. Steven stated that Pacific Hydro has not asked for that, nothing has been hidden and Pacific Hydro has insisted that everything is open and transparent.

Q. What will Pacific Hydro do about it all? / What about the very sick residents?

A. Steven stated that this has not been forgotten, the company and the residents are working together. Rachel Watson noted that Pacific Hydro doesn't yet know what the outcome of the study will be but is committed to the process.

Q. What specific frequencies are the problem ones? Can we isolate them and then stick to dealing with these frequencies? Can we engineer it so that we can steer low frequency?

A. Steven Cooper is doing a full spectrum of frequency testing. He can isolate any frequency he needs to. Temperature inversions can alter the propagation. Temperature inversion is to be addressed by Steven if the data is available.

Temperature inversion has also been addressed by Steven.

Q. Has the NHMRC taken an interest in your testing at all?

A. No.

**4. General
discussion, other
business**

The next meeting is on Monday, the 7th July at 6pm at the Cape Bridgewater Café as the Surf Club is unavailable on the 7th.

Steven Cooper will be in attendance to give an update on the research project.