

# Turitea wind farm Community Liaison Group



5 May 2021

MARGARET KOUVELIS, independent meeting Chair, welcomed everyone to the meeting, at this new meeting place, the Turitea School, especially people who were coming along for the first time. Holding these quarterly meetings in the Turitea heartland should mean that it is easier for people who live near the wind farm to attend these meetings.

She thanked the school for hosting us, and checked that everyone had signed in to the QR code for Covid tracing purposes. On request, a paper signing in register was provided by the school for some meeting attendees.

Margaret introduced those attending from the project tonight: from Mercury: Dennis Radich, John Campbell, Duncan Annandale, Mark Henry and Katy Scoullar; from Vestas: Duncan Wallbank and Willem Venter.

## WHAT WE'LL TALK ABOUT TODAY



### 2 TODAY'S DISCUSSION



DENNIS RADICH spoke to the meeting.

The pictures on this slide are (left) Turitea North substation, taken with a very long lens looking south from North Range Road. You can see the gantry is now installed and building works starting to take shape. The picture on the right shows the trenching and cabling machine that puts down the cables connecting the turbines to the sub station. This work is now complete for the North part of the project.

Tonight's discussion will be about:

- Progress in the project
- Key milestones, in particular that the hub and blades are now installed on the first of our turbines, meaning that for that turbine all the major turbine components are fully assembled.
- We'll also cover our standard agenda items following our consent: Noise, construction traffic, ecological monitoring

### **CONSENT POINT 16**

16. The function of the CLG shall be to:

16.1 Discuss the performance of the Consent Holder in terms of the following matters:

- a. Noise control including compliance with these consent conditions; and
- b. Construction traffic impact.

16.2 Consider the results of all ecological monitoring and research required in accordance with these consent conditions.

16.3 Make recommendations to and receive feedback from the Consent Holder, in respect of the above matters where considered necessary and appropriate.

16.4 Have input, as appropriate, via consultation with the Consent Holder with regard to the implementation of the:

- a. NMP; b. CEMP; and c. CTMP.



DENNIS reminded the meeting of the purpose of the Community Liaison Group (CLG).

Our consent tells us the minimum engagement expected from Mercury through this group, although we have been doing a lot more than that in order to build a relationship with the community.

Discussion at this meeting should be about matters of construction and how this might affect the community. There will be time at the end of the meeting for Q&A and discussion.

## PROJECT UPDATE



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These pictures show:

(left) the Environmental inspection team who go around the site each week are pictured on their lunch break, watching a turbine blade being readied for installation.

(right) the first set of blades to be installed was a very long day, with the first blade started at 9am and the final blade, pictured, bolted on after dark at the end of the day.

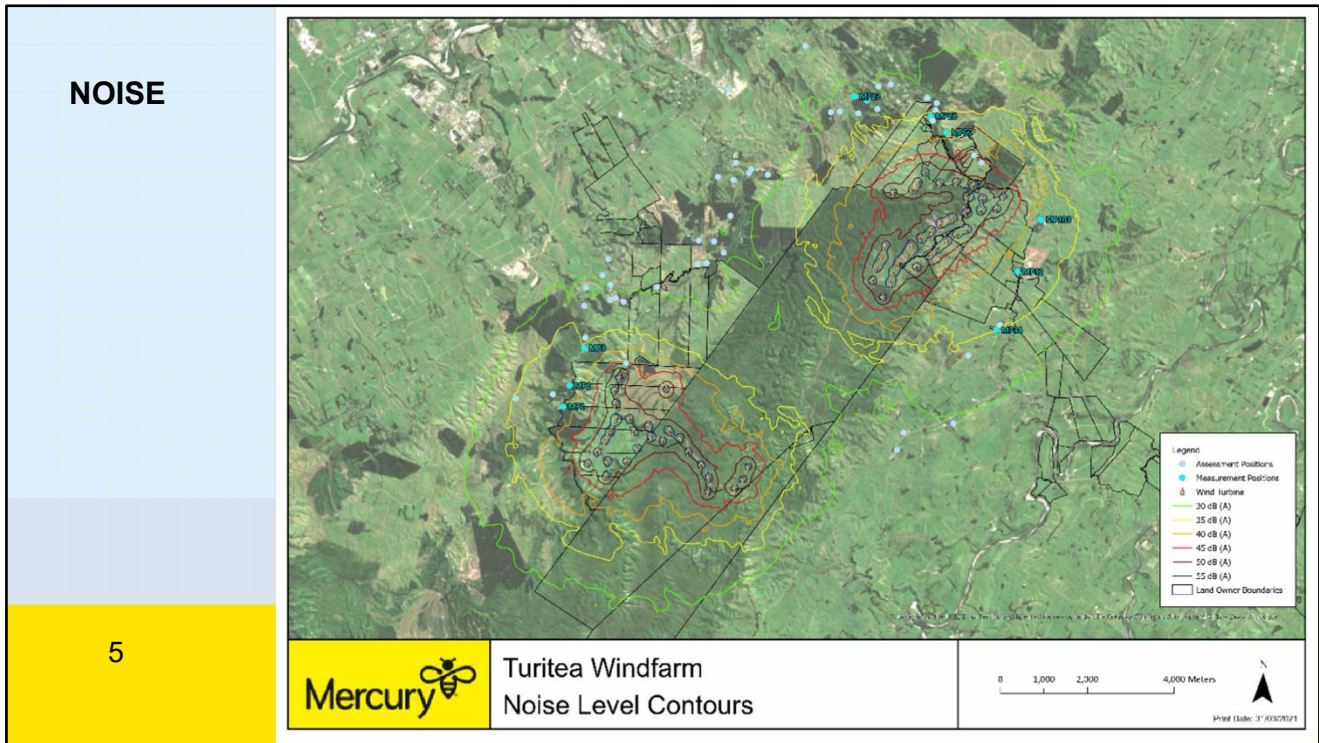
Dennis explained progress on construction of the wind farm:

In the Northern end of the site, where 33 wind turbines are being installed, all foundations are poured and the concrete plant on site has been dismantled. All cabling that will connect the turbines to the substation is now laid. Three meteorological masts (monitoring wind speed and direction) are now installed in the North and may be visible on the ridge line from the city. 19 wind turbines are installed apart from their hubs and blades, and as of 29 April one turbine was fully installed with all its major parts including blades. Blades are lifted by crane one at a time and installed on the turbine towers, and this is a highly weather dependent operation.

Construction of the Northern wind farm substation and the operations and maintenance (O&M) building are well underway. The O&M building will contain offices, warehouse and store room for the operation of the wind farm. The main concrete pours are completed at the new substation, a gantry has been erected and the main transformer installed.

The Southern end of the site was contracted six months after the north, and will have 27

wind turbines in total. Civil works (roads, hardstands) are well under way given weather conditions over the past month. Geotech investigation is completed for the South substation location. Temporary and permanent meteorological mast construction should commence shortly.



This is the noise level contours map showing modelled levels of noise around the wind farm once complete and operating. For context, traffic can reach up to 70dB. You can see a clearer image and download the map by copying this link into your browser: <https://www.turiteawindfarm.co.nz/news-and-updates/noise-contour-map/>.

We expect the windfarm to have limited noise impact on neighbours, and we are already in discussions with the few where modelling suggests there may be a possible issue. Receptors have been put in place on those properties to measure noise. Noise is dependent on the strength and direction of the wind, so it will take some time to build up a full picture of the situation. Please let us know if you are hearing noise from the wind farm so we can take action to ensure any issues are addressed.

However, we are not expecting noise to be an issue. Developments in turbine technology means that the larger V112 turbines being installed are expected to be quieter than the V90 turbines that were originally consented and the wind farm is not expected to have a big noise 'footprint'. A met mast for the purposes of noise monitoring is being installed and will be up before the first turbine is running. Wind data from this mast will be correlated with noise monitoring to help understand the nature and cause of any noise.

We are aware of noise arising from the transmission line in the South under certain wind conditions. Noise receptors have been installed, and we will continue to discuss this with landowners who are impacted in this way, and involve Electrix, who designed and built the transmission lines in these discussions.

## CONSTRUCTION TRAFFIC



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The left picture shows a blade being moved within the site from the wind turbine 7 offload area to wind turbine 12 (where it is now installed).

On the right is a pothole that the Council has mended on Kahuterawa Road. It was a big pothole, and hazardous to traffic, and getting it fixed was largely down to the efforts of a member of this Group with additional support from Steph Kirk on our team who also pursued a solution. Repairs to the road are outside of Mercury's remit, and there are other trucks using the road that are not connected with the wind farm, but we are happy to support the community in making the road safer for all.

We received feedback from the project update email last month that people had been unaware of the blade manipulator option to deliver blades to site. At the time of the last meeting this option was being pursued in parallel with another option, developing a route via North Range Road, but the North Range Road route seemed at that time to be much more likely to proceed in time to provide the solution to blade access. There was a considerable amount of technical engineering going on with the blade adapter option requiring design, approvals and procurement and it wasn't sufficiently progressed at that time to be clear whether it would be complete ahead of the North Range Road option.

The blade manipulator solution is a first for New Zealand and (we believe) Australia. The trailer can hydraulically lift the blade up to effectively shorten its length for transport and allow it to negotiate bends in the road and other obstacles, and it's a spectacular sight to see if you are in town. The North Range Road route is still being worked on as a solution.

Restrictions in our Consents to traffic on Kahuterawa Road and Greens Road are creating a pinchpoint for construction, and we are considering ways to provide access to the Southern site in a way that is more efficient than driving around and through the Northern entry. This may include a temporary off-road haul road being built to allow some additional access without major impacts on Kahuterawa Road, possibly in addition to using some part/s of Greens Road.

This investigation is under way primarily to find an alternative way to move aggregate from the quarry on Kendalls Line to site, as the current route is not practical. This may require a new or amended Consent and, if so, we will follow the right process to move towards that. Ideas considered include building an off-road pathway to the bottom of Greens Road, and a further section parallel to Greens Road, or to use Greens Road itself for a shorter time but with more truck movements during that time. While we wait for this investigation to be concluded and, if appropriate, followed up, only on-road movements within the current consent limits are happening.

A question was asked around why the truck counts from the Consent are only now being found to be inadequate. Dennis said that sensitivity to traffic volumes, bringing the majority of trucks into the site at the Northern end, and having a hard limit on use of Kahuterawa and Greens Road had been heavily litigated during the Consent process. Now, while building the wind farm within a constrained time period, a better way was being sought, not just for Mercury but also for the community, and this would be kept as an open conversation. **It was requested for truck movement numbers to be reported at these quarterly meetings, and this was AGREED.**

Just over 4,000 truck movements to the southern site entry were still available from the original stated quota for Kahuterawa Road.



## ENVIRONMENTAL MONITORING



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The left picture shows environmental works to prepare for a large fill at Track 12 in the south. A new sediment retention pond, clean water diversions and silt fences are being installed.

On the right, works are underway to make the clean water diversions at Track 9 (also in the south) extra robust for the winter months.

A highlight for our environmental team and the on-site team was the successful return and release of 'at risk' native geckos to site last month, the result of our partnership with Rangitāne, Wildlands and DOC, with great support from Vestas and Downer teams, both on the day and in following the accidental discovery protocols to recover lizards safely in the first place.

At 1 May the rules under which our contractors are building the site tighten up to apply to winter conditions. Rolling weekly inspections from Horizons Council continue throughout winter, and our contractor and all their crews understand that retaining permission to continue on-site works depends on our performance in meeting our environmental obligations, as was done successfully last winter.

## QUESTIONS?



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The picture shows a foggy morning and a grader working on the Reserve Road between the North and South ends of the wind farm. Dennis noted that vegetation clearance was tightly constrained and that the road followed the previous Reserve track wherever practically possible.

*The meeting was opened for questions and discussion.*

Question: more information about the blade manipulator. Dennis said it was brought over from Korea, and mounted on a trailer. Smith Cranes had imported it, engineered it and proven to Vestas that it could solve the challenges around moving blades to site.

Question: how long does it take to move the blade from the yard to site? Dennis said that the blade trailer travels at night to avoid the majority of other road users. It travels at up to 25km/hr, stopping at some locations to hook up extra tractor units. Waka Kotahi NZTA had published the route and advised when to avoid hold-ups, but the pilot vehicles are doing a good job and the most that traffic might be held up is 20 minutes. He acknowledged the patience of road users who might be held up by the blades movement.

Question: what specific noise standard was applied? Dennis said that it is NZS6808. The consent also includes cumulative noise layers between Turitea and Te Rere Hau wind farms. The meeting attendee said that international noise standards could underestimate the impact on people of noise, especially lower frequency noise. He was pleased to hear that both noise and wind monitoring was taking place. Mark Henry said that monitoring gathered both audio recordings and sound ratings.

Question: how does that apply to transmission noise? Noise conditions in the consent are turbine driven, rather than transmission, but we are aware that some people are experiencing noise from transmission infrastructure in particular wind conditions. Feedback from residents on this noise is very helpful to help work out which structures might be creating the noise and why. Please continue to provide feedback to us when you hear the noise, including the time, day and if possible wind conditions, as this will be invaluable in helping identify whether the design needs to be changed.

Question: was the frequency rating being monitored? **ACTION: Mark Henry would look into this.**

## MORE QUESTIONS?



Picture shows the second seal coat on Greens Road that was carried out by Mercury at the beginning of the year, completing Electrix's responsibility for maintaining the Road which now sits with Vestas.

Question: what was the maturity of the vegetation removed along the Reserve Road? Mark Henry said that there was a mix of vegetation but mainly Horopito. It was typically mulched and returned to the soil. Bigger trees are avoided in the planning. The road largely follows the alignment of the current road where practically possible, and revegetation and offset planting was part of the Consent conditions.

Question: contractors had come onto a property without permission to do water monitoring, and at a separate property the landowner came home to see vehicle tracks on her grass. Dennis said that the water monitoring team had misunderstood that permission they had to enter a property on behalf of another entity did not apply to this job. This had been cleared up quickly once the issue was raised, and an agreed process was now in place for that team to access that property with the owner's permission. Dennis asked the group to let Mercury know of any situation like this, as it is important to us to identify and remedy them.

Question: regarding the Haul Road/ Greens Road issue, a meeting attendee stated that when the consent was issued to Mighty River Power, it had stated that no trucks would access the site via the south – what had changed since then? Dennis said that the practicalities of civil works in the south, once undertaken, had highlighted the pinchpoint for construction at this point. The consent confirmed that no oversize wind farm components

(other than potentially the transformer) would be taken in via the south, but otherwise trucks are permitted within the consented limits. A solution to traffic restrictions through the south was being sought to provide improved access while the upgraded road was being constructed within the Reserve; after the Reserve road is complete there would be reduced need. Taking trucks from the quarry around to the northern entrance (as per the consent) takes traffic off Greens Road but puts it on to other roads.

The new suggested quarry road leading across private farmland onto Greens Road has been led by Vestas / Downer who are in talks with the Council, and part of any approvals process would involve engagement with affected parties.

The meeting attendee expressed disappointment at this potential change from the Consent after the very thorough consenting process. He asked if using Kahuterawa Road was an option being considered. Dennis said that the current suggestion meant Kahuterawa Road could be crossed, but that the intention remained to use the roads in the south as little as possible. He thanked the group for their feedback, as local input is very valuable when considering how to solve this issue from the perspective of what works for the community as well as for Mercury.

A meeting attendee suggested other innovative solutions might be considered, such as building a bypass that could later be gifted to the community as a walkway/cycleway, in the spirit of community and partnership. Dennis agreed to consider this idea and others from the community. He said that when Electrix was using and upgrading Greens Road, we had similar excellent input from the community that had led to construction of a diverted route for the Te Araroa trail. He said that Greens Road is central to how this issue is solved, and any changes to plan will necessarily involve conversations with people living on Greens Road. Mark Henry said that any proposed change from the Consent would consider broadly both benefits and costs. Nothing had been decided or was being discussed apart from the options outlined by Dennis.



FOR FURTHER INFORMATION > [TURITEAWINDFARM@MERCURY.CO.NZ](mailto:TURITEAWINDFARM@MERCURY.CO.NZ)

Dennis told the meeting that Mercury had acquired 20% of Tilt Renewables several years ago, and was in the process of selling that stake while acquiring Tilt's New Zealand wind assets (subject to Court approval and Tilt shareholder vote). If this transaction proceeds, Mercury would own the three Tararua wind farms on the range north of Turitea, doubling our presence in the Manawatū, and our commitment to being part of this community. The Puketoi wind farm development east of Turitea is likely to be constructed as Mercury continues with wind generation development.

MARGARET said that the variety and depth of question tonight had meant a very good discussion. She was happy to see people trying to work out a situation in a responsive and agile way. She praised Steph Kirk (Mercury's Consents & Compliance Manager) for her contribution to the project and responsiveness to questions from the community.

The new venue at the school felt good, and Margaret thanked Glenys Murphy, principal of Turitea School, for hosting the meeting.

The next meeting will be held at 5.15pm, 4 August, at the school.

Thank you all for coming.