Record of Meeting with AECL

Date: Wednesday 30th March

Via: Teams

Attendants:

John Henry	Cultural consultant at AECL.
Karl Russell	Cultural consultant at AECL.
Michael McMillan	Cultural consultant at AECL.
Kylie Hall	Principal Planner at AECL.
Andy Perry	General Manager at Lake Tekapo Enterprises.
Richard Neate	Infratec NZ.
David Francis	Infratec NZ.
Claire Kelly	Senior Planner at BML.
Jaz Morris	Senior Ecologist at BML.
Emma McRae	Senior Landscape Planner at BML.

Key messages

From our understanding of the discussions with Mike McMillian, Karl Russell, John Henry, Kylie Hall, the key areas of concern are:

- The management of ecological values.
- Opportunities for education and cultural health monitoring.
- The decommissioning of the solar array and the ability to recycle the solar panels.
- Adverse effects on the values of the outstanding natural landscape.
- The potential for more solar farms in Te Manahuna (the Mackenzie Basin).
- Setting the standard for any future developments in Te Manahuna.

We received a clear message that the desire is to ensure a high standard is set for this solar project or any project seeking to establish in Te Manahuna. We may be the 'thin edge of the wedge' but we want to be an example for others to follow and be influenced by.

We have endeavoured to achieve this to date by undertaking detailed landscape and ecological assessments, proposing stringent ecological mitigations and monitoring, engaging Te Rūnanga o Arowhenua early in the process and involving you in the ecological fieldwork and developing robust conditions of consent.

We have also set out below a suggested approach to managing the identified key concerns. Please feel free to provide any comments, changes or further recommendations/mitigations.

The management of ecological values

Specific areas of concern	Suggested approach
What fencing will be implemented for the wetland?	Rabbit and Stock fencing. Light sheep grazing is sometimes seen as positive for weed management however cattle grazing is generally seen as having a negative impact on an ecologically sensitive area. The plan is to remove rabbits and any stock from the wetland area.
What is the net effect of the proposal on the Skink population?	Rabbit and stock fencing will keep out rabbits, sheep and cattle and the proposed lizard management plan (to be developed in consultation with DOC and iwi) will look at including items such as planting food source plant species, implementing predator controls and rock areas for shelter/habitat.
The wetland continues into the neighbouring paddock, is there anything to be done to the downstream wetland?	There is the downstream wetland in the neighbouring paddock. At this stage controls to be implemented by the project are limited to the project site itself, however it would be beneficial to investigate it as part of any monitoring programmes to be implemented as it will help provide a baseline and also track any effects (positive and negative) over the course of the project lifecycle.
Will snow impact the ground between the rows of panels, if it is cleared off all the time?	Solar panels are somewhat resistant to light snow coverage as in the conversion of light to electricity they are around 5 degrees above ambient temperature and enough light does get through a few centimetres of snow. (This is partly why the sunny-but-cool climate of the Mackenzie is so great for solar!) However larger snow loads won't be able to be avoided - in this scenario the panels will likely be left until the snow melts off or the likelihood of another blanketing is low enough to justify the work required to clear the panels of snow. This may occur just once or twice per year.
Understand the ecological impacts of the project, and what the mitigation measures and monitoring are intended to achieve.	In your report, it would greatly assist if you could provide some guidance on the ecological and/or cultural outcomes you would like to see achieved. We can then

Also, that monitoring procedures are implemented.	discuss and determine any matters that need to form conditions of consent or can be addressed through a memorandum of agreement (MOA) as discussed below. Jaz and Claire to provide Ally and Kylie with draft ecology-specific consent conditions and monitoring procedures. The implementation of monitoring procedures and reporting relies on LTE/Balmoral Station adhering to the conditions of consent. It is their intent to do this and reinforce this through an ongoing relationship with Te Rūnanga o Arowhenua and Te Rūnanga o Waihao as discussed below.

The decommissioning of the solar array and the ability to recycle the solar panels.

Decommissioning: what happens if the solar array is not productive or electricity prices make it uneconomic? Are the solar panels recyclable? What is the recycling plan?	If decommissioned, the solar array, all associated cabling and buildings/structures will be removed from the site and the land returned to pastoral uses except that the wetland areas would remain fenced. This will form a condition of consent. The recyclability of solar modules is a high percentage, but it needs to be done at a dedicated facility. (A figure of 97% recyclability was mentioned in the meeting however this depends on the PV technology - this figure is more likely to be between 85% and 95%). Project components taking up much of the rest of the project tonnage (piles, framing, cables) also have a high recyclability rate as they are mostly made from steel, copper or aluminium.

Adverse effects on the values of the outstanding natural landscape.

Adverse effects on the values of the outstanding natural landscape (ONL).	The reason for choosing this site is the fact that it is screened by a pine tree shelterbelt. The irony being that the shelterbelt is a human-induced change that does not necessarily accord with the outstanding natural landscape values of Te Manahuna. Hence the concern that a project to deal with one issue ‘climate change’ may create

	adverse effects on an environment that has already lost so much, and it becomes the 'thin edge of the wedge'. The possibility of removing or replacing the shelterbelt was mooted but the initial impact on the values of the ONL was considered to be significant and unlikely to be acceptable to anyone. As such, some comfort can be taken from the Council's approach to managing effects on the values of the ONL.

The potential for more solar farms in Te Manahuna.

The potential for more solar farms in Te Manahuna.	The rules in the Mackenzie District Plan especially with regard to vegetation clearance are strong. The site of the proposed solar farm was identified as both improved pasture and ecologically significant, therefore one does not override the other, and consequently the clearance of vegetation is a non-complying activity. And further still, it is only enabled under the objective and policy framework because it is related to a renewable energy project. Most other developments would be subject to an 'avoid' policy with few exceptions.

Opportunities for education and cultural health monitoring.

Setting the standard for any future developments in Te Manahuna.

There were many issues raised at the meeting that cannot be readily addressed by conditions of consent such as: • Cultural health monitoring. • Recycling of the solar panels and other parts of the solar array. • Educational opportunities.	We propose developing a Memorandum of Agreement (MOA) between LTE and Te Rūnanga o Arowhenua and Te Rūnanga o Waihao to ensure an ongoing relationship, accountability, and sharing of information and ideas.