

In the matter of the Resource Management Act (1991)
and

In the matter of an application by Hydro Developments Ltd (HDL)
for resource consents for the proposed Stockton
Hydro.

Submission from: Frida Inta and Family,
P.O.Box 463,
Westport 7866,
Buller.

Date 3rd August 2009.

Introduction:

We support renewable energy generation proposals where the environmental, cultural and social impacts can be mitigated adequately.

While renewable energy generation is required to replace fossil fueled generation not all “renewable” energy proposals are environmentally appropriate. Renewable energy is not renewable if the ecological destruction involved is significant.

Management of the electricity system should focus on demand management and the displacement of existing thermal generation rather than attempting to meet ever-increasing demand growth.

We do not favour further large-scale hydros due to the vulnerability of hydro-dominated supply in dry years, the need to diversify renewable generation, the already extensive modification of our river systems for hydro schemes, the precarious state of indigenous ecosystems, and ever-growing development, pollution and biosecurity threats to freshwater environments.

Rivers are important habitats for wildlife, and are highly valued for recreation such as fishing and kayaking. We need to protect rivers from further injudicious development and pollution.

Where smaller-scale hydro can be built without significant threats to either indigenous biodiversity, or social and cultural values, then consideration is warranted.

We believe that the core principles of environmental protection must be upheld, including more vigilant enforcement of consent conditions by local councils.

In principle we support this renewable energy project although we still have concerns about some of the environmental effects.

After reading the RMA s42a Officers' Report we have found that a substantial amount of our concerns have been reiterated within the report.

Our Concerns:

I have read and understood most of the s42 Officers' Report, and the following is based mainly on this report.

Mt William Reservoir:

Having spent an hour or two at the proposed Mt William reservoir site I came across red tussock wetland and the cedar, *Libocedris bidwilli* (pahautea)/ mountain beech, *Nothofagus solandri* (Tawhairauriki) association, but admittedly it took an effort to get through the gorse forests to find these. From what I could see, much of the forest supporting the pahautea/ Tawhairauriki association could be on promontories above proposed water level, although I was visiting in white-out conditions. What I saw of riparian vegetation within the gullies appeared to support mainly *Leptospermum* sp (manuka/ kanuka) with some young, regenerating indigenous understorey vegetation, such as *Myrsine salicina* (toro).

As it was a very wet day there were no signs of any birds. However I recommend that degraded areas on the plateau which at present could support fernbird if rehabilitated, should occur. This move could contribute to the mitigation process for fernbird loss within the scheme footprint.

Alternatives to hydro:

The RMA requires that alternatives to what is being proposed must be considered.

I would like to comment here on an extract from Meridian Energy's submission on this hydro proposal, which says -

"Meridian agrees with HDL's comments about the lack of other renewable energy options for generating electricity on the west coast. Meridian has undertaken its own extensive investigations that show other renewable energy options such as wind, solar and wave energy to be unviable on the west coast at this stage."

I have looked into the wind data Meridian refer to and it shows little of the wind potential within the Buller (refer to slides). It may be that HDL has also used this data, although by this stage (2009 as compared to 2008) there is more accumulation of data.

Appendix 5:

We agree with and endorse most of the findings within this appendix.

Ecology:

We agree with the findings of Dr Alice Bradley of OPUS., in consideration of the ecology of the area.

Offshore Discharge:

We agree with Dr Jennifer Webster-Brown of GEOKEM, OPUS, that more indepth analysis of resulting water quality needs to be undertaken.

Although it would be desirable to have a high pH within the reservoirs to protect the health of waterfowl this may be getting away from the point of the hydro in the first place i.e. to increase the pH of AMD water once it has arrived within the reservoir. It is highly unlikely there would be fish within reservoirs that receive water of such low pH, but if fish did eventually habituate the reservoirs then that would be a very positive benefit for the scheme.

On the other hand however, we would like to see the discharge to sea as clean as possible, due to concerns about cumulative effects on benthic habitat, and this would involve a clean discharge from the proposed Weka reservoir.

We note that Dr Webster-Brown recommends pollutant-testing both up and down-current of the shore outfall area. HDL maintain that only testing down-current is necessary. I feel that the best chance of comparison is to compare with water in an up-current direction, and we recommend that this be done.

We would like more clarification as to whether Solid Energy's extant lime-dosing operations would continue.

Overall though, in considering pollution in the outfall area, the local councils need to set the conditions, and HDL must comply. The best approach for HDL is to use the water quality modelling recommended by Dr Webster-Brown, before construction commences, and to prove to council, before construction commences, that water quality can be contained within limitations set.

NIWA's report into shore pollution:

We agree with and endorse NIWA's recommendations on offshore AMD effluent disposal.

We do not want to see any AMD at all from scheme spillage going into the Ngakawau River, if this scheme gets approval, because this would negate the main thrust of the scheme i.e. to clean the Ngakawau River up.

Hydrology:

We agree with most of John McConchie's findings.

In relation to Mr McConchie's final comments (p12, Summary, 2nd paragraph) he states that some flood events may be completely retained by the reservoirs. It is important that complete clarification is given as to what size flood event water will be allowed to spill over the dam spillways.

Landscape and visual effects:

There seems to be some query as to how to hide the ugly scars of construction as quickly as possible at the Gravity end of works. There are a number of native trees that can establish and grow quickly, such as many of the coprosma species.

Noise:

Bunds can buffer and contain noise.

Terrestrial Ecology:

John Turner mentions that the pahautea/ Tawhairauriki association is represented better elsewhere on the plateau. This association is not well-represented (if at all) in the Ngakawau Ecological Area. It is our contention that the Ecological Area needs to be extended by some means to incorporate some of the southern area of the plateau, where this association is more common. If HDL could somehow manage to do this (e.g. negotiate with Solid Energy on areas within their jurisdiction where this association is abundant) matters could go some way towards compensation for the loss within the proposed Mt William reservoir.

On p4 Mt Turner mentions "direct killing of fauna" (by construction). This should not occur, and every precaution should be undertaken to protect fauna.

Loco Line:

I have recently walked along the public access track to Repo Basin and found it hard to find the track along the loco line in places. It is overgrown, with gorse mainly, and hard to recognize, except for a few sleepers here and there. However there is a bridge near Tintown corner which needs to be preserved.

Other comments:

Wetlands:

No mention has been made of metal-absorbing plants. These are used along the Waikato river in parts, I believe, to absorb some of the heavy metals resulting from geothermal activity in the area, and it is mainly arsenic that is being absorbed by the plants. A similar setup could happen on the Stockton Plateau, where the plants could maybe be incorporated into the wetlands that have been suggested to border some of the circumference of the proposed reservoirs. .

Warning systems:

In the case of a dam breach HDL have stated that there would not be enough time to use a siren to warn people. We disagree.

If there was an alarm system, like the present fire alarm systems (or louder) set up in the Hector/ Ngakawau area, with activation available at any of the proposed power stations, or other such area, residents could be informed of impending disaster within 5 minutes or less, of it occurring on the plateau. This would give them (worst case) about 20-25 minutes to take evasive action – this has to be better than no warning. There could also be warning lights installed either side of the Ngakawau Bridge. In case of dam breach, safety routes for downstream residents should be explicit and accessible to all in the area.

Seismicity:

No mention has been made of the need for paleoseismicity statistics. The scheme will run through major faulting (being second order, where the Alpine Fault is first order). It is essential that the forces these faults are capable of are known, and also when the return period is, so that the hydro structures can be built within these constraints.

Weed Control:

Weed control must be intensive, monitored and ongoing.

Public Access:

We would like to reiterate the importance of maintaining public access to Conservation Lands above and beyond the scheme footprint.

Revegetation:

We support the premise of revegetation proceeding until 90% cover is maintained, rather than any temporal arrangement.

Lighting:

We would like to thank HDL for accepting the use of hoods for lighting. There is already too much light pollution on the Stockton Plateau, which pervades the surrounding countryside for many, many kilometres. It is important to maintain lucid night skies. As West coasters we are privileged to be able to see an abundance of stars in our night skies, unlike city people, and it is imperative to keep it that way. It is also important for indigenous (and other) fauna to have dark skies at night.

Two Way Metering:

If HDL get approval we would like to see provision made for 2 way metering of electricity meters.

Conclusions:

If our concerns can be met we will support the proposed Stockton hydro.

Although flow within the lower Ngakawau River could be reduced by up to 30%, if the remaining water flows into the lower river are clean then this could go some way to compensating for the loss of flow. The final decision here needs to be left to debate by experts within their appropriate fields who know and grasp the relevant issues.

If guarantees that off-shore discharge can meet the constraints recommended by NIWA, GEOKEM and consent conditions then we would have no further concerns on this issue.

This hydro, because of its conservative size, the efficient use of the natural resource i.e. using the drop from the plateau to the sea to generate the power, and potential community base, is a good answer to chronic energy needs within the Buller. In addition the relatively small ecological footprint, due to the use of tunnels, with above-ground works within a somewhat ecologically degraded area, is a much more desirable option and a better choice than any proposed hydro within high-value indigenous ecosystems.

END