

Rebuttal of the submission on behalf of Meridian Energy Limited

The submission on behalf on behalf of Meridian Energy Limited comprises three parts. The first part is the submission presented by Steven Christensen. The second part is an Appendix A prepared by Nigel Connell, a water resource consultant. And the third is Appendix B prepared by Ray Brown, Transmission Manager of Meridian Energy Limited. I will address these three sections of the submission separately as they affect the consent application quite differently.

The first part of the evidence submitted by Steven Christianson, is a blatant commercial submission to protect two areas of commercial interests of Meridian Energy: 1) Meridian's interest in delaying consideration and final granting of consents for the Stockton Plateau hydro project (SPHP) until such time as the decision is made on the Mohikinui hydro project (MPH), and 2) avoidance of the suppression of power prices at the node that SPHP and MHP will report to.

HDL is of the opinion that Meridian Energy will substantially gain from the delay of the SPHP for the following reason. Objectors to the MHP are arguing that the benefit provided by the MHP to the local security of supply can be provided by SPHP without the dis-benefits perceived to the environment that will result from the construction of the MHP.

Steven's evidence includes a number of statements that are intended to raise doubt in the Commissioners minds that the evidence provided by HDL in support of the application is adequate.

Clause 2.2 states that there are still some aspects of HDL's proposal which are unclear and where the potential affects of the proposal cannot be ascertained. Meridian asserts that it is not in a position to unequivocally support the application. HDL does not believe that the professional hydro development staff working on the MHP are unable to assess the information that has been provided by HDL. They are professionally capable of assessing the uncertainties in the design process, how those uncertainties have been modelled and the hydro potential or otherwise of the SPHP. Without these skills they would not hold the positions they hold.

Meridian advisers have undertaken both landscape and other studies on the Stockton Plateau as part of their transmission line consent application and are perfectly well aware, through those studies, of the effects that a low level transmission line would have, either with or without the inclusion of Meridian's proposed 110 KV line. In HDL's opinion there is no doubt that the effects of the construction of the SHP are absolutely clear to Meridian and that the statement is purely to lead to doubt in the commissioners minds.

In clause 2.3 and in Section 6 of this evidence Meridian refers to HDL's proposal vis a vis Solid Energy's proposal. Meridian staff have the same information as HDL to assess the relative merits of the proposals.

In 2.4 Meridian states that it sought opportunities through consultation but HDL is yet to provide Meridian with any detailed information. This statement is blatantly incorrect. At Meridian's request HDL's staff attended a teleconference during which all the matters raised in Meridian's evidence were discussed. At each step of the evidence HDL referred Meridian back to the specific details within the supporting documents. The technical detail was discussed between the professional engineers

on the uncertainties associated with hydro generation, the potential or otherwise to inject power into the national grid and the potential or otherwise to fully embed the scheme within the local transmission network. The matters were not left in dispute. With respect to the Solid Energy proposal HDL made it quite clear that our knowledge of the Solid Energy proposal was as good as Meridian's - HDL has not been provided any details of the proposal.

The assertion in Section 6, clause 6.2, that HDL has advised Meridian that Solid Energy believes the HDL proposal to be preferred is totally incorrect. Solid Energy has commercial interest in frustrating the HDL process in favour of the construction of their own hydro scheme.

Clause 3.1 claims gaps in the information supplied in the AEE and attempts to build on the uncertainty created by the officer's report in order to frustrate the process.

Clause 3.2, without a clear articulation, is another process of. In this case Meridian refers to the relationship between maximum generation volume, storage volume and the timing of volume spill. As a hydro generator it is inconceivable that this relationship is not understood in great detail. Meridian have the capacity to work through the relationship between a scheme operated for the purposes of achieving a base load and a scheme designed to respond to spot market prices by providing peaks.

With regard to Section 3.3, HDL contend that the final design concepts presented by HDL are at a far greater and more advanced level of detail than anything submitted in support of the MHP proposal. The MHP proposal is some distance away from producing any plans that can be considered to be final construction. While to a uninformed observer they may appear to be detailed drawings, HDL does not believe that any part of the Meridian proposal is marked up and signed for construction purposes. MHP plans are all concept sketches although detailed at huge expense. The most obvious evidence of this is the plans that support the transmission line that crosses the Weka reservoir. Commissioners will note that the position of the line is indicative. The position of towers is indicative. The stringing of wires and the sag and ground clearance of various points, while obviously having to meet statutory requirements, are all indicative. HDL contends that the structure that will be built by HDL as part of the SPHP is defined to a greater degree of certainty than the MHP.

Meridian in clause 3.4 refers to the uncertainty of the hydrological information which has been supplied. Again HDL contend that the quality of hydrological information available to the SPHP is substantially greater than any information available to the MHP. Clause 3.4 is technical disinformation for the purposes of frustrating HDL's application.

The same observation can be made of clause 3.5. Any qualified engineer on visiting either of the Weka reservoir sites with a geological hammer in one hand and possibly a spade in the other will determine that both sides are ideal sites for the construction of a hard rock foundation embankment.

With respect to Section 4 and questions raised regarding claimed generation, the evidence provided by John Easter and in the supporting documents should by now have put this matter to rest. In determining the value of a hydro scheme the critical factor is total energy that can be produced in any particular year. The scheme modelling reports have established for HDL's purpose, and indeed for other

stakeholders such as Buller Electricity Limited, that the power potential from the Stockton Plateau exists. In Mr Mcsherry's evidence he identified that there was at least 30 MW capacity to provide power distribution through to Westport and he stated that in the order of 10 megawatt would be consumed by the local Westport demand and the rest would possibly be injected into the grid. Mr McSherry failed to comment on investigations that Buller Electricity Limited have been undertaking to extend their 33 KV network across the Buller River to the southern part of their area and hence avoid the need for Holcim and the other consumers in that part of the district to be fed from the grid exit point that currently serves Holcim. This is a proposal that BEL have been pursuing for some time, have discussed with Holcim and would proceed with if embedded generation was provided as proposed by In the event that the local distribution network was extended across the Buller, the demand at Westport would exceed 20 MW. By far the bulk of the power that is generated by the SPHP would be embedded and the scheme would be constructed around embedment.

HDL has been conservative in all aspects of the promotion of the SPHP and in the consenting process. The annual output stated by HDL is an intentional underestimate of the power as annual power per year is perceived as a benefit. Base load has been reported at an upper level of 25 MW, even though the model currently shows it significantly less than that. Base load places demands on transmission networks and is a dis-benefit if upgrades to transmission network are required.

Mr McSherry's and Mr Browns evidence both shown that upgrade of the grid transmission lines to provide for peaks that may coincide between the Arnold, MHP, or SPHP (or any other project that may be embedded or may be established as distributed generation within this region) can be accommodated through relatively minor changes to the transmission network. Mr Brown's evidence proposes upgrade costs in the order of \$10 million and \$15 million. HDL's project allows for a nominal \$10 million to be spent at some future stage as a contribution to some future upgrading of transmission capacity.

In summary HDL believes the submission prepared by Christensen to be a thinly disguised hydro development version of the supermarket wars that are currently being fought through the RMA process. Such submissions will not be permitted following introduction of the government's RMA reforms. We ask that the Commissioners treat the submission accordingly.

With respect to the attachment by Connell of Damwatch, we believe that it would be appropriate for the Commissioners to seek confirmation from Meridian that Mr Connell has the qualifications to discuss the merits or otherwise of RCC dams. Particularly to challenge work undertaken by URS in this regard. URS visited the site, involved geological and geotechnical experts in their assessment of the site, referred the matter back to a Mr Ron Fleming, who is generally regarded in New Zealand as one of the leading experts in RCC construction, and referred the matter back to URS Denver, Colorado, which is actively involved in the design of RCC structures. The information provided by Mr Connell may be beyond his area of expertise. The other information provided by Mr Connell can be put into the category of technical mis-information.

HDL believes that the attachment provided by Mr Ray Brown, Transmission Manager of Meridian Energy Limited, is substantial and of value in assessing the SPHP. It adds to the information that has been being provided by Mike McSherry and generally confirms all the statements that have made to date by HDL.