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28 March 2018

Hon David Parker
Minister of the Environment and Economic Development
Executive Wing
Parliament Buildings
Wellington

By post and email: d.parker@ministers.govt.nz

Dear David

WESTPOWER: PART 3B APPLICATION RELATING PROPOSED WAITAHA SCHEME

EXECUTIVE SUMMARY

My approach

I have taken an interest in this matter as an independent consultant with expertise in electricity and related legal fields. I am not acting for any party or position.

The purpose of this letter is to ensure that you are properly and fairly informed of my key conclusions.

Conservation Act

Under the Act¹, the Minister is not required to grant any concession if he or she considers it is inappropriate having regard to various matters, including the applicant's reasons for requesting the concession.

Reasons for request

Objective analysis of Westpower's reasons (and related justifications) for the Waitaha scheme finds that it is:

- > Not needed to meet demand growth
- > Not needed to meet good electricity industry practice standards for security and reliability

¹ Conservation Act 1987, s.17U(8)

- Not likely to be economic in the reasonably foreseeable future
- Weak to negative from a climate change perspective, and
- Not needed to support investor confidence in security of electricity supply.

Other reasons (or justifications) for the scheme are:

- > To give an injection of economic activity in the region for a few years
- > To give the community some sense of satisfaction that the power they consume is produced locally from sources they own
- > To enable Westpower to become bigger with more strings to its bow beyond its power lines business, and
- To create an electricity surplus simply because (in Westpower's words) "if we can, we should".

Natural values and adverse effects

Both sides agree that the location of the proposed scheme has "near pristine levels of naturalness and that the landscape (at both a district and regional scale) be considered 'conspicuous, eminent, especially because of excellence'".

Both sides agree that the scheme would have high adverse local effects on natural character, landscape and visual amenity values.

Key question for you to decide under the Act

A key question for you to decide as Minister under the Act is this -

Would it be appropriate under the purpose and scheme of the Act to grant concessions for activities that would cause high adverse local effects to a conservation area of high natural values where the reasons for those activities are weak?

Based on careful analysis, the answer is clearly no, it would not be appropriate under the purpose and scheme of the Act.

Consideration of this letter

The matters outlined in this letter are relevant considerations and therefore need to be taken into account with any further consultation arising to be undertaken if and as required.

I would be happy to provide any further information that may be helpful and I would welcome the opportunity to discuss this matter with you.

MY ROLE AND APPROACH

I am writing to you in your capacity as decision-maker in relation to Westpower's proposed hydro scheme for the Waitaha River.

I have taken an interest in this matter as an independent consultant with expertise in electricity and related legal fields. (My contributions to date and CV in brief are set out at the end of this letter).

To be clear:

- I am not acting for any party or seeking to advance the views of any particular position.
- My conclusions reflect the relevant available facts using generally accepted methods of analysis.
- I have taken an objective approach. If rigorous analysis had found that the Waitaha scheme is
 needed and likely to be economic from an electricity perspective in the reasonably foreseeable
 future, and that Westpower's application satisfies the requirements of Part 3B of the Act, I
 would have reported these conclusions.

The purpose of this letter is to ensure that you are properly and fairly informed of my key conclusions, which are set out below.

LEGAL TEST FOR MINISTERIAL DECISION

Under the Conservation Act 1987 ('the Act'), the Minister is not required to grant any concession if he or she considers it is inappropriate having regard to various matters, including the applicant's reasons for requesting the concession.

The statutory references that give rise to this legal standard are outlined in the box below.

- Conservation Act [s.17U(8)]:
 - "Nothing in this Act or any other Act requires the Minister to grant any concession if he or she considers that the grant of a concession is inappropriate in the circumstances of the particular application having regard to the matters set out in this section" namely, section 17U
- Section 17U(1)(d) includes -
 - "any information received by the Minister under sections 17S"
- Section 17S(g) includes:
 - "(i) reasons for the request; and (ii) sufficient information to satisfy the Minister that, in terms of section 17U, it is both lawful and appropriate to grant the lease, licence, or easement (as the case may be)"

- In short, the Minister is not required to grant any concession if he or she considers it is inappropriate having regard to various matters, including the applicant's reasons for requesting the concession.
- "Appropriate" is not defined in the Act, but most certainly it would be viewed by the courts as:
 - Appropriate in the context of the Act's purpose, which is the "preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values...", and
 - Appropriate in the context of the overall scheme of Part 3B, which is the part of the Act governing the granting of concessions. It is reasonable to conclude from its overall scheme that Part 3B sets relatively high hurdles for a non-recreation activity to be carried out on conservation land (see pages 11 and 12 of this letter for further explanation).

WESTPOWER'S REASONS

So, as required by the Act, it is necessary to carefully consider the reasons (and related justifications) for its proposed hydro scheme.

1. NEEDED TO MEET DEMAND GROWTH

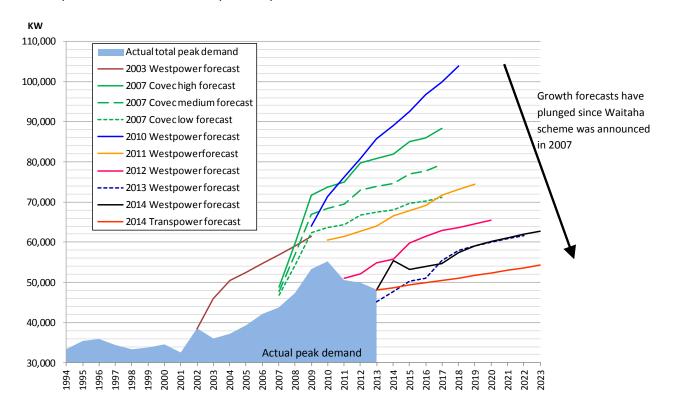
Not so

Westpower's region already has a large supply capacity surplus. In 2011, the Coast's transmission capacity was increased by 100% – this is the equivalent of a very large increase in generation. That upgrade was provided to cover expected major growth in mining and dairy, which has not eventuated.

In fact, peak demand now is lower than it was seven years ago when supply capacity was doubled. It will take decades to use up the surplus capacity.

The Waitaha hydro scheme has been driven by wildly optimistic growth forecasts:

- In 2007, when Westpower announced its intention to proceed (following a scoping study), peak demand was forecast to rise nearly 100% in 10 years.
- Growth in Westpower's 2009 forecast was even higher.
- Westpower's 2014 application for concessions² assumed peak demand growth of 60% over 15 years³, even in the face of year-on-year decreases since 2010-11.



² Page 118 of Westpower's 2014 application

³ From 50 MW in 2012 to 70-80 MW by 2030

Westpower's 2017 forecast projects growth of just 16% over 10 years, about the same as Transpower's 2014 forecast.

From the start, Westpower's case for the Waitaha scheme has been predicated on -

"helping to meet some of the Coast's anticipated new demand" (quotes from Westpower in 2007, 2012, 2014).

However, the case for new generation to meet new demand on the West Coast in the foreseeable future is demonstrably without foundation.

2. NEEDED FOR RELIABILITY OF ELECTRICITY SUPPLY

Not a strong case

Westpower claims that the scheme is needed to protect against transmission outages and improve reliability⁴. However, Westpower's own corporate reports from 2016 state that the transmission upgrade in 2011 –

"restored security levels to good electricity industry practice standards"⁵.

More generation on the West Coast could increase reliability of supply, however it is not evident that it is required, or that this would be the most cost-effective way of delivering it.

3. "IF WE CAN, WE SHOULD"

Not sufficient to make it appropriate to accept adverse effects

In December 2016, Westpower put its case for the scheme more plainly to DOC 6:

"If we **can** create a surplus of electricity generation on the West Coast...then we **should**" [Westpower's emphasis]

"If we can, we should" is not a sufficient reason to make it appropriate to impose adverse effects on a pristine conservation area.

4. WAITAHA IS ECONOMIC NOW OR SOON

Unlikely

The wholesale market price of electricity for the coming four years is around \$75 a unit

⁴ page 120 of Westpower's 2014 application

⁵ Westpower's Asset Management Plan 2016-2026, section 4.4.2, page 68

⁶ "Submissions in Reply for Westpower", 8 December 2016 at para 20 – the DOC Hearings Panel

(as shown in the Electricity Authority graph in the Appendix at the end of this letter).

By contrast, the full cost of power from the Waitaha is probably in the \$90 to \$100 range⁷.

So until wholesale prices rise by about 20% to 30% on average, Westpower's scheme is not likely to be economic.

I am not aware of any serious players in the electricity generation market who expect wholesale prices to rise to \$100 a unit by 2020.

Further, much cheaper (and already consented) new generation is available to meet demand growth well before Westpower's scheme would become economic.

When Westpower was scoping its Waitaha scheme – during 2004 to 2011 when mining and dairy were booming – various parties planned and obtained consents for other hydro schemes on the Coast.

Sensibly, those other hydro schemes have been put on hold given low electricity prices and relatively weak demand growth.

Westpower should be put its Waitaha scheme on hold too.

In truth, the Waitaha scheme wouldn't get off the ground now if the underlying shareholder funds were coming from private investors rather than the soft capital of the consumer trust that owns Westpower.

The **Appendix** at the end to this letter briefly sets out some further information on this matter.

5. LOW CARBON EMISSIONS

Weak to negative effect

Westpower's hydro scheme would make quite a weak contribution to the reduction of carbon emissions because its power output would drop in the winter (because of low river flows), which is when coal generation tends to be high

Other cheaper renewables – like geothermal and wind – are much better at reducing the need for coal- and gas-fired electricity year-round.

Building the Waitaha scheme ahead of cheaper geothermal and wind options would mean we save less carbon than we otherwise would because it is likely to cause those better renewable generators to be deferred.

In short, the Waitaha scheme would have a weak to negative effect in terms of reducing carbon emissions⁸.

⁷ For completeness, I note that the Waitaha's generation-weighted prices are lower on average than average prices at Westpower's grid exit points (which factor in the cost of transmission loses) and, in some years, also lower than average prices at Benmore. This sets a more demanding ceiling on the proposed scheme's unit cost – see my May 2015 Report at sections 11.6.8 and 11.6.9 – pages 165-170

6. NEEDED FOR INVESTOR CONFIDENCE

Not so

Westpower claims⁹ that greater security of supply from the Waitaha scheme would provide –

"potential investors and developers with the confidence to invest in the West Coast region assured that their energy demands can be met in both the medium and long term"

There is no evidence that confidence to invest in the West Coast region would be limited without the Waitaha scheme.

On the contrary, Westpower's own corporate reports state¹⁰ that there is sufficient transmission capacity –

"to ensure that major new loads can be supplied on an uninterruptible basis, and so electricity supply should not be a constraint to future economic development"

7. STIMULATE LOCAL ECONOMY

Tenuous and not sufficient to make it appropriate to accept adverse impacts

Given the weakness of its other reasons, Westpower now says¹¹ that the economic effects of the proposed scheme are the "starting point" for its rationale.

Westpower puts weight on its Brown Copeland report, and the economic stimulus and jobs expected from the scheme¹².

That analysis has not been independently reviewed. By its nature, it is high level and limited by its assumptions.

Any capital injection from building the Waitaha would obviously be short term with very few new jobs and low on-going expenditure by Westpower after the scheme is commissioned.

More importantly, unlike the Resource Management Act, Part 3B of the Conservation Act does not involve balancing the interests of development against conservation.

As the Parliamentary Commissioner for the Environment has highlighted 13:

⁸ Refer to Simon Coates, Director, Concept Consulting, for more information on the effects of generation with low winter output

⁹ Page 8 of Westpower's 2014 application

¹⁰ Westpower's 2016 Asset Management Plan at page 67

¹¹ Submissions in Reply for Westpower, 8 December 2016 at para 7

 $^{^{\}rm 12}$ Submissions in Reply for Westpower, 8 December 2016 at paras 7, 21 and 22

¹³ Parliamentary Commissioner for the Environment, "Hydroelectricity or Wild Rivers? Climate Change Versus Natural Heritage", May 2012, at page 66 www.pce.parliament.nz/assets/Uploads/Wild-Riversweb.pdf

"The role of the Minister of Conservation is very distinct from that of decision-makers in the resource consent process and should not be compromised. The core of the Conservation Act is the preservation of New Zealand's natural heritage. This is very different from the broader considerations in the RMA"

8. INCREASE SELF-SUFFICIENCY AND COMMUNITY OWNERSHIP

Not sufficient to make it appropriate to accept adverse effects

This is the recurring crux of Westpower's case for the Waitaha scheme. Westpower claims that its:

"...return to hydro-development is part of reinvigorating the generating capabilities of the West Coast community, both current and future generations, and is aimed at regaining a level of local self-sufficiency in generation and supply based on a local and renewable hydro resource" 14

It might sound good to buy locally produced electrons – like buying locally produced food – but it makes as much sense as arguing that Blenheim or Gisborne, or indeed any other part of New Zealand, should be self-sufficient in electricity.

That's why we have a national transmission grid – to provide electricity to consumers around New Zealand with access to lower cost generation that might be miles from where they live.

If it were cheaper on average to generate power locally compared to buying it off the grid, local generation would make sense. But the Waitaha scheme is not likely to be cheaper than power from the grid in the reasonably foreseeable future.

9. ADVANCE WESTPOWER'S GROWTH OBJECTIVES

Not sufficient to make it appropriate to accept adverse effects

Westpower has made it clear that it wants to grow as a business¹⁵.

Given weak growth in its lines business, Westpower is looking to grow its generation business. 16

The desire to grow as a business is understandable, but it is not a sufficient reason to make it appropriate to justify imposing adverse effects on a pristine conservation area.

¹⁴ Page 3 of Appendix 22 its Westpower's 2012 application. Also see Westpower's letter to DOC dated 23 September 2015 at page 9 – in relation to meeting more of existing demand from local generation

¹⁵ See for example Westpower's Statement of Corporate Intent 2015-2017

¹⁶ In 2006, Westpower advised that it would "re-enter electricity generation" on the grounds that it had considerable management expertise and experience in hydro generation – see Westpower's application to the Commerce Commission in relation to the Amethyst hydro proposal, August 2006, at para 20

NATURAL VALUES

Both sides agree that the location of the proposed scheme has -

"near pristine levels of naturalness and that the landscape (at both a district and regional scale) be considered 'conspicuous, eminent, especially because of excellence"

It holds "high intactness, scientific and distinctiveness values" [both quotes from Westpower consultant report]

The Morgan Gorge is particularly special. As the DOC Officer's Report states:

"the Morgan Gorge would likely meet the test of an outstanding natural feature within an outstanding natural landscape. It is a dramatic, deeply incised feature that has clearly been shaped through regular high energy river flows. It forms the 'gateway' between the upper and lower catchments, and is currently perceived as an unaltered, very highly natural and wild place".

Image below - The Morgan Gorge



"Few people venture into the wild, untarnished upper reaches of the Waitaha River valley, a place carved by ice and monumental rainfall, and hemmed by glaciers, cirques, high peaks and alpine tarns; a place strewn with house-sized boulders shrugged from mountainsides by tectonic power, and clad in tangled rainforest and scrub.

Fewer still have witnessed the roaring tumult of the Morgan Gorge, where the Waitaha River has fought its way through a narrow slot in the bedrock to form a sensuously sculpted canyon. It's thought that just nine people have travelled the furious, twisting length of the gorge – a place where the river is utterly in charge" - The Listener, 15 Oct 16

ADVERSE EFFECTS

Both sides agree that the scheme would have high adverse effects on natural character, landscape and visual amenity values.

Westpower's consultants, Boffa Miskell, drew the following conclusions on adverse effects:

Scheme's footprint

- It would introduce "two nodes of intensified industrialised-style modification occurring within an area retaining very little modification and holding high natural character values" [quote from Westpower consultant report]
- The weir structure would be 4-5 m in height above the river bed and 4 m in width, secured by rock anchors at either end;
- Other structures would include large tunnel portals, a power station and switchyard;
- Water flows through the Morgan Gorge would be substantially reduced; and
- Artificial stop-banks would also align the river margin from the outfall to close to where the exit tunnel portal is located.

Natural character values

"With the additional physical elements present of the intake and weir structure, this effect [of local flow reduction] is amplified to a high magnitude of natural character effects at this localised Intake Area"

"The stop-bank will also artificially modify the river bank. As a result, it is considered that the magnitude of permanent natural character effects at this localised powerhouse area is assessed as being high."

• Landscape values

"The magnitude of permanent landscape effects at this localised intake area (including intake access road) is assessed as being high."

Visual amenity values

"the magnitude of permanent visual effects at this localised intake area is assessed as being high at near distance views."

Construction period

During the construction period – "There will be a localised change of landscape character, from semi-remote and semi-natural, to industrial during construction, which would be at least 3 to 4 years".

'Dilution' argument

Westpower argues that the severity of these adverse effects drop from high to low if the scheme's footprint is viewed from scale of the total Waitaha catchment (12,760 hectares) and wider West Coast region.

However, Westpower's dilution arguments tend to be arbitrary and artificial, and should be treated with considerable caution. The quality of their arguments is open to serious challenge.

What is not in dispute is that the proposed scheme would have high adverse effects on a local scale.

YOUR DECISION AS MINISTER

As outlined above, the Minister is not required to grant any concession if he or she considers it is inappropriate having regard to various matters, including the applicant's reasons for requesting the concession.

It is clear in this case that -

- The location of the proposed scheme is a high value pristine wildness with features of conspicuous excellence
- The proposed scheme would cause high adverse effects on a local scale
- The reasons (and related justifications) for the scheme are weak.

A **key question** for you to decide under the Act is therefore –

Would it be appropriate under the purpose and scheme of the Act to grant concessions for activities that would cause high adverse local effects to a conservation area of high natural values where the reasons for those activities are weak?

Based on careful analysis, the answer is clearly **no**, it would not be appropriate under the purpose and scheme of the Act.

"Appropriate" - a relatively high threshold

As noted earlier, "appropriate" is not defined in the Act, but most certainly it would be viewed by the courts as appropriate in the context of:

- the Act's purpose, which is the "preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values...", and
- the overall scheme of Part 3B, which is the part of the Act governing the granting of concessions.

Part 3B sets relatively high hurdles for a non-recreation activity to be carried out on conservation land. This is clearly signalled by the circumstances in which an application must or may be declined (see **box below**).

Further, unlike the Resource Management Act, Part 3B of the Conservation Act does not involve balancing the interests of development against conservation.

Scheme of Part 3B - relatively high thresholds

The Minister must decline an application for a concession:

- If the concession and its granting is inconsistent with the a conservation management strategy or conservation management plan for a conservation area and the strategy or plan provides for the issue of a concession [s.17W(1)];
- If the proposed activity is contrary to the provisions of this Act or the purposes for which the land concerned is held [s.17U(3)]; or
- If the proposed activity could reasonably be undertaken in another location that is outside the conservation area, or in another conservation area where the potential adverse effects would be significantly less [s.17U(4)(a)].

The Minister may decline an application for a concession:

- If information is insufficient or inadequate to assess the effects [s.17U(2)(a)];
- If there are no adequate or reasonable methods for remedying, avoiding or mitigating the adverse effects of activity, structure or facility [s.17U(2)(b)]; or
- If the Minister considers that the effects of the activity are such that a review of the strategy or plan is more appropriate, whether or not an application is in accordance with any relevant conservation management strategy or conservation management plan [s.17W(3)].

The Minister is not required to grant any concession it if he or she considers that it is inappropriate in the circumstances of the particular application having regard to various matters [s.17U(8)].

The matters outlined in this letter are relevant considerations and therefore need to be taken into account with any further consultation arising to be undertaken if and as required.

I would be happy to provide any further information that may be helpful and I would welcome the opportunity to discuss this matter with you.

Yours sincerely

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Tony Baldwin

Brief CV

Tony Baldwin is a consultant specialising in corporate advisory, transaction management and public policy.

From 2011 to 2017, Tony served as project manager and strategy adviser for Genesis Energy in relation to the:

- Sale of 49% of the Crown's shares in Genesis Energy
- Acquisition of Nova Energy's LPG business, and
- Acquisition of NZOG's stake in the Kupe oil and gas field.

Over the last 30 years, Tony has worked on a range of electricity industry issues, including transmission investment upgrade processes, security of supply issues, and hedge market development.

Tony trained as a commercial and company lawyer at Chapman Tripp in Wellington.

More details are at www.tonybaldwin.co.nz

Contributions on the Waitaha proposal

- May 2015 an expert report for the Minister of Conservation under section 17S(4) of the Conservation Act 1987
- November 2016 interview for a short online video prepared by Whitewater New Zealand
- December 2016 a memorandum to DOC's public hearings panel, which included refutation of key claims made by Westpower and its consultants in response to my 2015 report
- February 2018 a brief article on the Waitaha hydro proposal to Forest & Bird for their members' magazine

Appendix:

Brief notes of economics of Waitaha scheme

The wholesale market price of electricity for the coming four years is around \$75 a unit.

As shown in the Electricity Authority graph below, it has been hovering around this level for the last 12 months – in fact, quite a bit longer.



Note also that a consultant for Westpower tried to refute¹⁷ my report by using a wholesale electricity price of **\$100** a unit in 2020. With this assumption, he says the Waitaha would be economic.

However, as noted above, the actual wholesale market price for electricity in 2020 is still around \$75 a unit.

The economics of the Waitaha scheme are also likely to depend on special payments from Transpower, which are still under review¹⁸.

It is not satisfactory for DOC to rely on financial analysis provided by Westpower without having it critiqued by an independent expert. If the Government does not accept my independent analysis on these matters, a person like David Hunt of Concept Consulting in Wellington would be well suited to the task.

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¹⁷ Report of September 2015 by Hugh Ammunsden for Westpower at page 24

 $^{^{\}rm 18}$ 'ACOT' payments – see section 11.8.5 of my May 2015 report