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15th December, 2023

By email:

Dear Directors and Shareholders of NZ Windfarms Limited,

Notified Resolutions for Special Meeting 20 December

Summary for the Special Meeting of NWF Shareholders:

a) The **Gross Revenue** (at an assumed power price of $92.50/MWh) of the Repower project would be an impressive $69.7M/yr for the entire windfarm (the proposed NWF Joint Venture with Meridian). **However, for the status quo version of NWF** (what I define as **"NWF SQ"** below), its share of the Gross Revenue after deducting only debt-servicing costs would decline from **$9.6 M/yr** (100% at present) to **$5.8 M/yr** (which is about 8.4% of that $69.7M/yr). Thus for NWF SQ, the existing TRH windfarm generates almost twice this measure of revenue than the Repower project *(and this is without counting any effect due to the interrupted generation during the two years' construction period and the resulting loss in revenue).*

b) The proposed NWF debt of up to 75% of NWF's total $300M Repower cost would be $225M, which is equivalent to about 460% of NWF's market capitalisation (about $49M). Such debt would cause interest and principal payments totalling around 4 times NWF's total 2023 income. The estimate presented in this letter based on 70% debt (there was none in the Notice of Meeting) is that, for the first 15 years, the **NWF SQ share of earnings before tax (EBT)** would decline from its current range of **$1.8 – 4.8M/yr** from the existing TRH to a range of **$0.3 – 3.1M/yr** after the proposed Repower project.

c) Not included in the NWF announcements were the dilution and dividend effects of the Repower project, therefore it is unknown to NWF SQ shareholders what will happen to their dividend streams if the Repower project goes ahead. However, the simple comparisons above indicate that hardly any dividends will be viable for the first 15 years of operation (17 years including the construction period). This contrasts with the first 17 years if the existing wind farm is kept running.

d) The risk analysis presented in the Notice of Meeting is insufficiently detailed about the risks of the Repower project (eg cost overruns) and seems biased against the status quo.

e) It is not clear why the Repowering project could not proceed with just the Aokautere Extension until the existing turbines reach the end of their life.

f) Section 129 of the Companies Act seems to require a special resolution.

g) As explained in detail further below, we believe the proposed timing to decommission the existing turbines is premature and destructive of shareholder value and we will be voting against the three notified resolutions.

Introduction and history:

I am writing this letter on behalf of (and with the assistance of) two long-term NWF shareholders, Wolfgang Rehfus (NWF's 10th largest shareholder) and Chris Lucas, who was one of the original shareholders of Aeolian Property Company, which bought the Te Rere Hau land for wind farm

development in 1992. By way of introduction (as some of you may be unfamiliar with the history), I am the original proponent and engineer-entrepreneur of Te Rere Hau (a name I came up with after consulting a Maori scholar at the University of Canterbury to find the closest translation of the word "Windflow"). I have worked in the wind industry since 1984, and I remain committed to it, being presently based in Europe as CTO of a start-up company working on the next generation of 2-bladed teetering turbines. My role with Te Rere Hau (TRH) has been:

- In 1992 I set up a private company to buy the original 240 ha TRH site (subsequently sold to NWF in about 2007). This was the first acquisition of land for wind farming in NZ. At the time the CEO of ECNZ (Electricity Corporation of New Zealand), Dr Keith Turner, publicly dismissed the future of wind power in NZ.
- I established good relations with the immediate neighbours and procured wind farm options on land that would become the TRH extension.
- I set up Windflow Technology which issued its initial public offering in 2001 to prototype and then commercialise the Windflow 500 as a Kiwi-built design optimised for turbulent NZ sites. I remained CEO and a director of Windflow from 2001 until its voluntary, solvent liquidation in late 2019.
- I led the resource consenting of TRH in 2004.
- Along with the other Windflow directors, I wrote NWF's founding documents and prospectus in 2005. I introduced an international partner which joined NWF in a 50/50 JV at that time.
- Windflow grew with the build of the TRH project to a peak of about 60 great people including the original team of technicians that became TRH Services Ltd, dedicated to the vision of NZ-made engineering excellence.
- Meanwhile NWF became fully independent from the Windflow parent in 2007. TRH ended up being built at lower-cost per kW than the other wind farms built at the time ($2300/kW vs $3000/kW), and similar cost per swept area. This fact alone is remarkable given that the turbines were the first serial production run of the design. But it is consistent with the fact that 2-bladed teetering enables major weight-reduction vs 3-bladers. And the gearboxes proved themselves more reliable (thanks to the torque-limiting feature) than those of the V47 and V90 Vestas turbines or the S82Siemens turbine installed in NZ.
- However, both companies went through stressful times from 2008 until TRH was completed in 2011 and a few years after. NWF suffered from its early decisions to buy out the international JV partner and to sell all TRH's output on the spot market. Windflow suffered from the warranty costs it met through to 2015, taking responsibility for all the "learning experiences" that come with a first production run of mid-size wind turbines on as demanding a site as TRH. These stresses, along with other external factors such as the 2008 global financial crisis, contributed to the eventual demise of Windflow. Naturally I am disappointed that Windflow did not go on to become a commercial success.
- Nonetheless, I am proud of the technical success that the Windflow turbines have proved to be at TRH and at several high wind sites in Scotland.
- I remain a small NWF shareholder and was very pleased two years ago when NWF started to pay good dividends which put it on the top rank of NZSX companies on that score. With the work done by the NWF board to establish the life of the turbines to be another 15-20 years at least, it seemed that NWF was well placed to become a commercial success by enjoying the fruits of the hard years behind it, based on finally getting respectable returns from the NZ electricity market.

Obviously with this background, I would be very disappointed to see the Windflow turbines decommissioned while they are still able to "earn their keep". I cannot be completely dispassionate on this prospect and thus I have stayed out of the picture while the board has continued to pursue an option to repower the site. This seems a sensible option to have, and I believe the NWF board is commercially competent and thus would not destroy value for current shareholders by prematurely decommissioning the Windflow turbines. Experience around the world shows that turbines that can earn their keep are kept running for many years after someone has the idea to attempt repowering with much larger turbines. This comes down to the essentially capital-intensive nature of wind farm development.

I believe the NWF board is to be complimented on securing Meridian as a cornerstone shareholder and joint venture partner for the future repowering of TRH. However, I have to say I don't understand the viability of this proposed repowering commencing in 2025. I have tried to keep an open mind to the possibility that the benefits for current shareholders would be so compelling that even I might be convinced to give the required shareholder approval for this transaction.

Questions:

However, having now received the Notice of Meeting (NoM), I have to ask the following questions:

1. Where is the incentive for current shareholders to approve this major transaction?
2. Why does this major transaction not need a special resolution under Section 129 of the Companies Act, given that its value ($50.3 million) is more than 50% of NWF's assets ($47.7 million according to the 2023 Annual Report)?

Incentives and effects for NWF shareholders:

To enlarge on the first question, I have put together a spreadsheet which is based on the table on page 7 of the NoM. The spreadsheet is both attached as an Excel file and pasted into the letter on the following page.

Note that I am asking where is the incentive for current NWF shareholders, as opposed to other funders of the Repower project, such as future NWF investors, future investors in the proposed NZWF SPV Limited Partnership, MEL and some bank(s). I will refer to these two groups of investors as:

- "NWF SQ" (SQ being short for status quo) and
- "TJV RP" (short for Total Joint Venture Repower, meaning what the NoM calls Te Rere Hau Project LP plus its bankers). For simplicity I will assume that means the total repower with 39 x 5 MW turbines with 132 m rotor diameters.

The point of this terminology is to clarify that it is NWF SQ which now has to make a decision, without being confused by the fact that NWF SQ (which has $47.7 million in assets) is planned to become a much larger NWF (with assets of between $150 and 300 million). The decision is whether to become a small part of TJV RP under a plan, which:

- terminates NWF SQ's current revenue stream about 2 years from now, and
- halts revenue for a 2 year construction period,

instead of continuing with a proven revenue stream requiring no new capex that the board of NWF SQ estimates will last approximately another 20 years.

Among other things, the "NWF SQ" terminology is intended to clarify the effects of dilution involved in such a major transaction.

Notes on this spreadsheet:

- The white and grey-shaded cells have the same information as the white and grey-shaded cells in the table on page 7 of the NoM (though not all rows from that table have been used). The presentation is slightly different so that units are not shown in each cell, and only top-of range figures are shown for the Repower project (except in the bottom two white rows where the top and bottom-of-range figures are given separate rows).
- In this top part of the table, some orange cells highlight seeming calculation errors in the original (eg 195 MW, not 170 MW for the total Repower project?

	NWF SQ	Te Rere Hau Repower	Aokautere Extension	TJV RP	Ratio TJV RP : NWF SQ	NWF SQ equity share of TJV RP	NWF SQ share of Yr 1-15 Revenue
Assumed Debt Funding (% of Assets/Capex)	**23%**			**70%**			
Interest rate (% p.a.)				**8%**			
Term (years)				**15**			
"NWF SQ share" effectively depends on amount of debt	**77%**					**27.9%**	**0.4% to 4.4%**
Number of Turbines	91	30	9	39			
Rotor Diameter	33	132	132	132			
Output per Turbine (MW)	0.5	5	5	5			
Max Output (MW)	45.5	150	45	195	4.3	54.5	8.6
Annual Energy Generation (P50) (GWh/yr)	117	574	194	753	6.4	210.4	33.0
Capacity Factor (P50)	29%	44%	49%	44%			
Land area (ha)	558			1207	2.2		
Wind farm's total turbine rotor swept area (ha)	7.8	41.1	12.3	53.4	6.9		
Energy per swept area (GWh/yr/ha)	15.0			14.1	0.94		
New Capex ($M)	$ -			$ 600.0		$ 50.3	$ 50.3
Gross Revenue ($M/yr) @ $92.50/MWh	$ 10.8			$ 69.7	6.4	$ 19.5	Not applicable
Opex ($/MWh)	$ 33.0			$ 12.0			
NWF Share of EBITDAF ($M/yr) - minimum	$ 3.0			$ 25.0	8.3	$ 14.0	Not applicable
NWF Share of EBITDAF ($M/yr) - maximum	$ 6.0			$ 30.0	5.0	$ 16.8	Not applicable
Estimated interest and principal payments ($M/yr)	$ 1.2	(Assumes table payments on 70% of new capex over 15 years at 8% p.a. interest)		$ 49.1	40.9	Not applicable once debt paid off (after 15 years)	$ 13.7
Revenue ($M/yr) after interest and principal payments	$ 9.6			$ 20.6	2.1	Not applicable (as above)	$ 5.8
NWF Share of Revenue ($M/yr) after interest and principal payments	$ 9.6			$ 10.3	1.1	Not applicable (as above)	$ 5.8
NWF Share of EBT ($M/yr) - minimum	$ 1.8					Not applicable (as above)	$ 0.3
NWF Share of EBT ($M/yr) - maximum	$ 4.8					Not applicable (as above)	$ 3.1

- The first three yellow rows set out the assumed debt ratio for the two scenarios (23% referring to NWF's current debt of about $11 million and 70% for TJV RP) and the assumed interest rate and term for the TJV RP finance.

- The fourth yellow row explains that NWF SQ share or interest in the wind farm's revenue effectively depends on amount of debt. (As explained above "NWF SQ" is used to clarify that it is the current NWF shareholders who are being asked to vote on the major transaction and who need to know where the incentive is for them.) It then calculates the NWF SQ equity share at 27.9% for 70% debt funding. This is based on the $50.3M "carry" and is calculated as 50.3 / (600 * 30%). This is an important number and a good prospect for current shareholders to consider once the project is debt free, but does not represent the situation while the debt is being serviced. That is difficult to calculate rigorously, but an indication is given by the figures in the first blue box.
- In comparison with the table on page 7 of the NoM, I have added the three columns on the right.

  a) The left-hand column "**Ratio TJV RP : NWF SQ**" sets out certain ratios for comparison with the ratios given elsewhere in the NoM. For example, TJV RP will produce 6.4 times the energy of NWF SQ according to this calculation, a bit lower than the factor of 7 quoted elsewhere.

  b) The middle column "**NWF SQ equity share of TJV RP**" becomes relevant only once all debt is paid off.

  c) The right-hand column "**NWF SQ share of Year 1-15 Revenue**" allows for comparison with the present situation (in the column headed "NWF SQ"). The two other blue boxes in this column are to give an indication of the "size of wind farm" which is serving the NWF SQ shareholders' interests in years 1-15 (which will be zero during the construction period, say years 0 and -1). These are based on the 4.4% upper limit of EBT which is calculated from the bottom right cell ($3.1M / $69.7M = 4.4% - though I would caveat that this is not a rigorous comparison because it ignores the effect of opex – I should not be the one trying to estimate this!).
- There are five new green rows in the top part of the table:
  - Rotor diameter (needed for calculation of rotor swept area).
  - Total wind farm turbine rotor swept area (hectares) – it is well-known that swept area is more important as a driver of both turbine cost and energy output than the rated power.
  - Wind farm energy per swept area (GWh/ha) – this shows that the proposed Repower project (if it produces 753 GWh/yr) is only 94% as productive by this measure as the existing farm (because it would produce only 6.4 times the energy in spite of having 6.9 times the swept area).
  - New capex ($M) – this captures the fact that the existing wind farm does not need further capex, along with the $600M figure for TJV RP, of which the NWF SQ share is $50.3M (being the "carry" in consideration of the existing assets which NWF SQ is contributing).
  - Gross revenue ($M/yr) – this assumes $92.50/MWh overall price received. Note that the total for TJV RP would be an impressive-seeming $69.7M/yr, and the NWF SQ share would be only $19.5M/yr before debt-servicing. Debt-servicing will reduce it to $5.8M/yr (see the orange lines below), which is less than the existing wind farm's $9.6 in row "NWF Share of Revenue ($M/yr) after interest and principal payments". However, the $19.5M/yr before debt-servicing will be good for NWF shareholders

once the TJV RP is debt-free, but not during the construction and debt-servicing years.

- The two bottom lines in the top part of the table "NWF Share of EBITDAF ($M/yr)" (minimum and maximum) set out individual scenarios for the top and bottom figures given for EBITDAF.
- The bottom part of the table (in orange) includes the estimated effect of debt-servicing (at 8% p.a. over 15 years). Note that the Gross Revenue for TJV RP comes down from $69.7M to $20.6M/yr ($10.3M/yr for NWF's half, which is barely better than the current value after debt-servicing, $9.6M), and the "NWF SQ share" falls from $19.5M to $5.8M/yr. Based on the last two years' results, debt-servicing seems to be costing NWF SQ about $1.2M/yr and this figure is subtracted from the NoM's EBITDAF figure to get EBT figures for the existing wind farm of $1.8 - 4.8M/yr. Similarly the NWF SQ share of EBT can be calculated by subtracting 27.9% of $49.1M from $14.0M and $16.8M respectively to get a range of $0.3 – 3.1M/yr. (Again I would note that the directors of NWF should be providing these estimates, not me.)

Summary:

In summary, I believe the proposed timing to decommission existing turbines is premature and destructive of shareholder value. I do not find the information in the NoM which would be required to convince me otherwise. I also question whether the NoM complies with Section 129 of the Companies Act.

The more detailed questions which follow from this analysis are:

3. Why does the NoM not set out the "NWF SQ" numbers for current shareholders who do not re-invest, rather than the figures for a new, enlarged NWF and/or NZWF SPV?
4. Why does the NoM not mention the word "dilution"?
5. Are the corrections and additions (orange shading) proposed above correct?
6. Are the directors aware that swept area is a more important driver of both turbine cost and energy output than the rated power? This means that the comparison of capacity factor is meaningless. GWh/yr/ha is much more commercially meaningful and (according to the NoM figures) the existing wind farm is <u>not</u> improved by the Repower project by this measure.

   As a coincidental aside, the respected Californian wind power commentator, Paul Gipe, just posted on this topic on the web (https://www.facebook.com/paul.gipe.9). As it happens, he cites a 2011 analysis I did on the Te Rere Hau wind farm and all the other lower North Island wind farms, making this point in response to some uninformed analysis put out by one of New Zealand's big advisory firms. Back then I used a parameter "specific average power" which has units of average W/m^2. This is essentially the same as the GWh/yr/ha I have given in the above table, using the conversions that 1 ha = 10,000 m^2 and 1 GWh/yr = 114 MW.

   (On a related note, having a high cut-out wind speed is more useful than having a low cut-in wind speed on a site like TRH where wind speeds exceed 30 m/s several times a year. The neighbouring turbines may be generating small amounts of power in winds below 6 m/s while the Windflow 33-500 is shut down. But the neighbouring turbines are shut down in winds above 20-25 m/s where the Windflow 33-500 is producing full power up to 27-30 m/s.)
7. Why does the NoM not set out the risks of the Repower project (for example cost overruns) in any detail? The risk analysis sets out 5 bullet points after the comment "the status quo contains material risk". It then says "As with any new renewable-energy project, there are

development risks in bringing the wind farm to fruition and then operating it". But it does not spell out these risks (eg cost overruns). Instead, the next 7 bullet points set out positive attributes in favour of the Repower project. This is the opposite of risk analysis and seems very biased against the status quo. It is the opposite of the old adages "better the devil you know than the devil you don't" and "a bird in the hand is worth two in the bush".

8. Why does the NoM not set out the expected effect on EBT and dividend stream of debt-servicing requirements? **The proposed project's financial performance is very sensitive to assumptions and risks around the debt.**

Conclusions:

I note that the Investors Agreement (IA) with Meridian needs NWF shareholder approval by October 2025. Therefore, it seems to be contemplated that there may be delays in obtaining shareholder approval, although there is also a December 2023 deadline for this approval in order for Meridian to be obliged to proceed with development work at its expense.

Given the significant questions outstanding from the NoM (not to mention the need for a special resolution under Section 129), this last issue should not be an overriding concern and we will be voting against all the resolutions. I will be emailing this to as many NWF shareholders as I can.

Finally, we would ask:

9. Why not go back to Meridian and propose doing just the Aokautere extension and keeping the existing turbines running as at present? Once this new Aokautere extension wind farm is built and run profitably for a few years, the existing TRH would come into the focus for repowering. This combination of existing and new would reduce risk, debt, capital rises and it would avoid the direct destruction of shareholder value by premature dismantling TRH. This combination of existing and new would enable the JV to plan for the Aokautere wind farm on the extension land while TRH continues to generate a steady revenue stream.
10. Why is the existing TRH land being transferred to the JV now (i.e. if these motions are passed)? There is no need for NWF to lose control in this way. The land should remain an asset of NWF and be leased to the proposed JV.

Yours faithfully,
For myself, Wolfgang Rehfus and Chris Lucas (NWF shareholders),

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