

**Submission on proposal for National Policy Statement for Renewable Electricity  
Generation from the Ohariu Preservation Society (OPS)**

To: The Chairperson, Board of Inquiry

This is a submission on the proposed National Policy for Remunerable Electricity Generation that was publicly notified on 6 September 2008

**Ohariu Preservation Society**

**Our purpose**

- To protect and preserve the unique environment, natural resources and communities of the wider Ohariu Valley area.
- To explore and evaluate information on any wind-farm developments proposed for the wider Ohariu Valley area.
- To assess any potential construction access options that would affect Ohariu or Makara residents in any way.

**Methods to achieve our purpose**

- Promote a consultation process that is fair to all parties.
- Employ the appropriate experts to gather information on the Ohariu environment to assess possible outcomes from a wind- farm.
- Provide this information to residents so they can make informed submissions on the planned Mill Creek wind-farm development.
- Inform residents of key dates in the development of the wind- farm.
- Ensure that the wider community is fully aware of any roading proposals planned as part of the wind-farm development.

***Ohariu Preservation Society supports***

- Electricity generation from environmentally sustainable resources in the right location
- Effective consultation processes eliminating costs to all parties, saves time and provides a better outcome to all parties
- Direct connection with the buyer (customer) of the electricity.
- Measurement of all costs and benefits.
- Net Present Value (NPV) of the project must be positive.
- Return of a developed site means returning developed site to the original condition prior to development. A theme consistent in the Petroleum Industry.

*If requested Ohariu Preservation Society is available to present to the Board*

**Comments about Policy 1 and 2**

The Renewable Electricity Energy National Policy should include a connection between who will be paying for the proposed projects, the customer, identifying the class of customer, residential, commercial or industrial customer, the geographic location of the

customers and the proposed project. From a scientific perspective this is impossible; electrons travel in any direction once they have entered the grid.

However from a commercial perspective the cornerstone of the Electricity Market is contracts between customers and retailers. Retailers purchase electricity for customers from Generators via the electricity market. Retailers and Generators are usually the same company. Delivering Electricity to customers over the nationwide electricity network requires Retailers to have contracts with Distribution Company's and/or Transpower (Transmission). Connecting customer benefits with project development and operating costs will ensure NPS outcomes are identified and measured.

Renewable Energy generation projects are not economic, at best marginal and will increase the average price of electricity to all customers. (Source: Bryan Leyland expert evidence in Mill Creek Case) The magnitude of the increase is dependent on various factors, the type of energy source. A further consideration, security of supply, may not be achieved, for example wind generation is intermittent and during times of high demand may not contribute to electricity production at all. Conversely water maybe scarce in times of drought and cold winter periods. Currently forecasting supply from renewable electricity sources further than 6 weeks is a lottery. South Island lakes hold about 6 weeks supply while wind might be consistent when it arrives, it is difficult to forecast when it will arrive and making exact times as to its availability for entry to the grid difficult. So for Generators to undertake Renewable Electricity Generation changing the landscape is required. To achieve this outcome the Government has added / changed laws, regulations, policies and rules. Examples are Resource Management Act, 10year moratorium on Thermal powered Generation, Energy Strategy Policy created, changing Electricity market Rules for Wind Generation.

Creating an artificial environment where values are swept aside creates risk and issues which over time may have been suitably addressed. Known issues are only now being addressed (noise) while some are only starting to surface (Vibro-acoustic Disease - VAD) just being assessed. Scarce environmental resources normally allocated according to normal economic criteria, have a different set of rules and may become a burden that the next generation pays. OPS believes prescribing to different methods to economically justify the allocation of resources will affect future outcomes. OPS expert Brian Leyland describes how this arises in the evidence he provided to the recent Mill Creek Wind Farm proposal hearing in September 08 (attached).

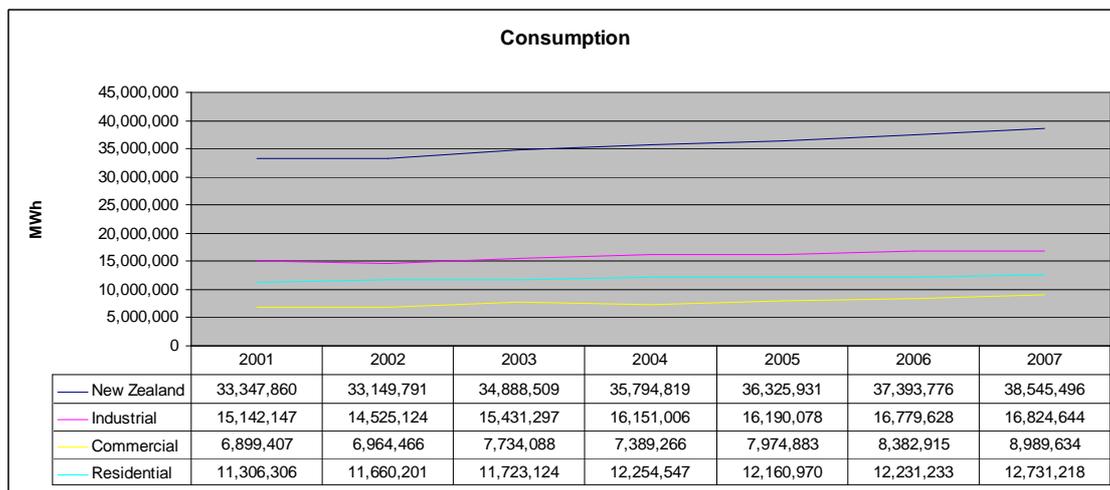
Technological change occurring in this environment is rapid. Wind farm Turbines are doubling in size to 150meters in height in less than 3 years. In a renewable electricity context this is positive with more electricity produced, in a local community context the cost can be huge. Protections to local communities are being eroded as focus is directed to achieving the national interest. OPS has discussed these issues with Dr Nina Pierpont who has just about to release the peer-reviewed book Wind Turbine Syndrome, a book describing the health effects of wind turbines on people. Due to the timing of the RMA hearing, this book had not been released, and we heard her work constantly being discredited by the energy industry, as early research on the health effects of cigarettes was discredited by the tobacco industry. With the vast amount of money available world

wide to develop renewable energy, none of this seems to be directed at looking at potential health effects as this would prove counter-productive to the industry.

OPS believes the NPS should take account of the health affects that new renewable electricity technology will have on people living in close proximity, for example within 3 kms of Wind Turbines, Early indication of potential health problems should be recognised and precaution should be taken until safe parameters are established. No members of OPS wished to be ‘guinea pigs’ and be part of a study in ten years time addressing health problems. Generators should be directed to create a safety zone whereby residents are protected from the effects arising from Renewable Electricity Generators. (an early on-line copy of Dr Pierponts book is attached).

Another challenge to communities when trying to gain independent assessment of potential adverse effects is the lack of industry experts not already aligned with the industry – this is also a reflection of the relative size and isolation of New Zealand. For their RMA hearing OPS located an acoustic expert in Christchurch with no previous wind turbine experience – there were no acoustic engineers experienced with wind turbines who were not already aligned with the wind industry. Eventually we found an American acoustics expert who is one of the few who recognises the potential of health problems from turbines and suggests solutions. Many communities have not had the resources to locate effective experts, so these problems remain un-challenged throughout the process.

Providing this type of protection will ensure Generators consider all environmental costs to the local community whereby consultation could occur earlier in the RMA process and should lead to better outcome to all parties.



Like all modern economies New Zealand Electricity consumption continues to grow. In 2007 New Zealand Energy consumption at 38,545,496MWh had grown 15.6% since 2001. Industrial consumption at 16,824,644MWh (43.6% of NZ) has grown 11.1% over that period. Commercial consumption at 8,969,634 MWh (23.3% of NZ) has grown by

30.3% since 2001 while Residential at 12,731,218 MWh (33.0% of NZ) has grown 12.6% (source MED Website). With buoyant economic conditions prevailing during this period it is not surprising commercial consumption has increased. OPS believes the NPS should specifically connect to the class of customers who will benefit from the project. OPS has observed that Generators will estimate the number of residential customers who are likely to benefit from a development. For Meridians Mill Creek project this is estimated at 35,000 residential customers yet Meridian have less than 15,000 customers in Wellington. Combined with Project West Wind, another Wind farm development less than 3kms away, where it has been estimated a further 70,000 customers could be supplied, electricity generation from both these projects is not destined for the local community or Wellington. With Commercial / Industrial Customers consuming 66% of the electricity the probability is high it will not be consumed by a residential customer. So linking renewable electricity benefits to residential customers is misleading, linkage in the NPS to the class of customer who is contracted for the electricity is responsible and realistic. Visibility at this level has the added benefit of ensuring renewable electricity is not being consumed for unsustainable purposes.

Load profiles describes the times when a customers consumes electricity. This varies across customer types. Residential customers use electricity when they are at home with peaks in the mornings and at night. Temperature fluctuations, seasonal dependency, also affect consumption. Profiles for Commercial and Industrial customers vary depending on the type of business, a local bank with operating hours from 8am to 6pm is different to a milking shed operating from 5am to 7am than again from 2pm to 4pm., and different to a Pulp Mill operating 24/7. Matching supply to demand is one of the roles Transpower plays. This aligns with security of supply. Renewable electricity generation requires large investments, both to upgrade existing infrastructure - Cook straight Cable- as well as new renewable generation. This new generation, notably the intermittent nature of Wind requires different more expensive hardware and software to be added to the Grid. These additional costs are passed onto customers. This further supports the NPS including a connection to customers.



Since 2001 New Zealand Average Electricity Prices (source MED) have increased by 48% (Residential 57.6%, Commercial 34.9%, Industrial 46%) during this time customers have been asked at least 3 times to reduce consumption. In return Electricity prices have increased every year, bills have been paid while the Electricity Industry has procrastinated. OPS like many consumers' struggles with why we continue to bank roll this industry when very little benefits in return have been received. Directly linking project outcomes in the NPS to customer's benefits will help restore trust and confidence in the industry.

The customer has been taken for an unceremonious 'ride', promised security of supply and cheaper electricity, in return the outcomes have been insecurity of supply with a faulty cable connecting North and South Islands, built over 40 years ago! Generators unwilling to invest in new Generation yet electricity prices have sky rocketed. An oligopoly of electricity retailers provides customers with little choice. The barriers to changing retailer have got easier but are still not simple. For example not all retailers trade nationally. Pricing policies throughout the industry are by stealth with no connection between when wholesale prices are very high as described in the media and when price increase are eventually passed on. Certainly not like Petrol where high prices for crude oil are reflected within hours at the petrol pump, customers can then make transport decisions in virtually real time, whereas electricity customers are asked to reduce consumption while prices rises 6 to 12 months later and new appliances may have been purchased!

Generators have Retail customer bases ('Genetailers') and operate as integrated businesses. The NPS entrenches separation, in reality this does not exist. Amending the NPS to include the connection with the customer, the type and location of the customer sends a clear unambiguous message that if the customer is expected to pay the customer wants to know what they are paying for, why they are paying for it and when they are going to pay it.

Transparency throughout the process and information disclosure will overcome perceived hurdles. Generators have linked to the long lead times for consent. Generation projects by their very nature are significant, significant in expenditure terms, significant in effects they will have on the environment in which they will be built and operated, significant in outcomes that will be delivered. The process from idea to completion of a successful business case with Board of Director approval can take by itself considerable lead time, even years before the RMA consent process is even undertaken. Once contemplated numerous strategy options are considered before deciding on the one which will succeed in obtaining RMA consent at least cost and shortest timeframe. The OPS Meridian Mill Creek experience is a good example, the wind farm proposal, 31 Turbine, 72MWh, proposal, reputedly producing enough electricity of 35,000 customers started with a group of local Ohariu farmers initiating the process with a RFI in 2002. Consent was applied for in March 08 with the RMA hearing decision due sometime in December 08. In the period between RFI and RMA consent application, Meridian have signed contracts with a company established by the farmers – Windcorp, Wellington City Council, Porirua City Council and Wellington Regional Council, this has been confirmed in Official Information Act requests or information disclosed by Meridian. Other contracts that are known to exist but are not confirmed include, Sale and Purchase of Land with an Ohariu farmer not part of Windcorp, Port of Wellington where turbines will be landed before transfer to site. (Port of Wellington not covered by Official Information Act), Transpower about connection to the National Grid, Siemens the turbines' manufacturer and infrastructure and road engineers, Goodmans and Higgins. Preliminary RMA application discussions started with council in September 08, Meridian asked for notification to start in January over the quiet Christmas period, notification was made in March. Local Ohariu community members were notified by Windcorp farmers and Meridian in January 08 of the proposal. Clearly the strategy adopted was to about avoiding local community consultation until the end of the planning process. One can only suggest why this strategy was adopted, perhaps farmers holding out as being representative of the community so would be supportive of the proposal while Meridian took them at face value. Or perhaps anecdotal evidence suggesting local residents would oppose the proposal so late notice ('ambush'), minimal information disclosure and condensed notification and consultation time frames. An applicant is under no obligation to consult with the local community. Consultation leading to support from an affected community is considered by Commissioners when reaching their decision. However once the notification process commences RMA timeframes apply. In the Mill Creek case Notification commenced 17 April concluding on 16 June, the maximum notification period under RMA. The Hearing commenced in September closing at the end of October with a decision due in early December. So once the RMA process commences local communities cannot affect duration. The applicant (Generator) in conjunction with the adjudicating local authority can petition the minister to have the proposal called in.

So in the RMA context the Generators controls the projects outcomes through strategy, the process selected to deliver the consent and the competency of the team the Generator has selected.

OPS do not believe an NPS is required other than to provide certainty. In fact the NPS may muddy the waters developing uncertainties as adoption and consequently interpretation take time to evolve and mature. The NPS is useful where further transparency and disclosure occurs. Where it is not useful is where it plugs a Generators business case and RMA competency gaps.

The OPS experience with Meridian is a mixed bag. Within the Electricity industry Meridian are highly regarded, and in the context of the RMA, are considered as the “best” for obtaining Wind farm consents. In fact their record has no blemishes; if Meridian applies for RMA consent they get RMA consent. There are probably many factors contributing to why Meridian is so successful, at one end of the spectrum it might be only the projects most likely to succeed are selected through to the capability developed where the RMA process is a template filling exercise so the ‘lottery’ outcome is eliminated. At the other end it is spending the most money for the best independent experts and picking the projects they know they will win.

An NPS will provide Generators not willing to do the necessary planning with an easy option; they will not have to lift their game, the bar is lowered, consent will be obtained and renewable energy goals achieved at a cost which future generations will have to pay. A positive outcome which has evolved from the status quo are consented outcomes which maybe marginal or uneconomic to one Generator may actually be economic to another. The recently consented Motorimu case maybe a case where this becomes a reality. Joint Ventures are another vehicle being used; the recently consented Te Uku Project has become a Joint Venture between WEL Networks and Meridian. Generators and the other industry players are creating innovative solutions using the current rules to meet company objectives.

Competition for renewable electricity sites is about ensuring the best projects are consented. OPS believes Generator (applicants) receive significant advantages from existing renewable framework. Meridian demonstrates that if you have developed the right capabilities any RMA lottery element is eliminated. Other generators need to lift their game if their projects are to be successful.

#### **Comments on Policy 3 and 4**

OPS believe local community consultation occurring earlier in the process will lead to better outcomes. Generators are nervous and uncomfortable about how to consult and negotiate with local communities, mandating such change, particularly when they have poor or non existent records of achievement will be a test. However these are integrated Generation and Retail businesses and within Retail arm the ability to listen and negotiate with customers is a core competency would be occurring daily. So it is not that the capability does not exist it is a reluctance and willingness (or Culture?) to use this competency in another part of the business.

Informed decisions require quality information to be available. NPS and the requirements placed on Local Councils to disclose information about sites and why those sites are ideal will benefit site selection by Generators. The OPS experience when requesting

information from Meridian and being politely told the information was commercially sensitive and would not be disclosed was used often and followed no logical pattern. This extended to noise and wind monitoring data recordings from resident's houses where permission had been given to collect the data. Interestingly enough if Commercial type Confidentially Agreements were signed the data was made available to an Independent expert. Or if disclosure benefited the application, the information was disclosed at the hearing, suddenly no longer 'commercially sensitive'. So OPS believe quality information should be available with quality standards. Standards will ensure consistency and can include but not limited to about how the information is collected, when it is collected and over what time periods. The Petroleum Industry and the use of seismic data have some similarities to how information maybe used and the value placed upon that data.

For a local community and the local council information site disclosure will have immediate affects. Council disclosure on Land Information Memorandums (LIM) maybe required. Recent High Court Cases McNab vs. Moorhouse and Marlborough District Council has discussed information disclosed on LIM. Availability of this information will benefit buyers, sellers and valuers. Whether this is positive or negative will become apparent over time. Transparency will enable issues affecting households to be addressed well in advance of an RMA application allowing the market to adjust to the new information.

This proposed energy policy implies that if someone makes the political decision that a renewable energy project is 'essential' the effects on local communities can be virtually disregarded.

On the political landscape the OPS experience through Project Mill Creek has seen the Labour government using wind energy to capture the Green Party vote. So Renewable Electricity projects always start with an advantage when compared to less sustainable options. Within this environment local communities are viewed as 'troublemakers' they should put up with what "we" think is best for the rest of the country. Yes the royal "we" decree, we know what's best and yes for the benefit of the indefinable 'National Interest' The 'national benefit' v 'adverse effects' trade-off always has the local community losing with no compensation and very little protection from having living in close proximity to a Power Station. The draft proposal at it is, places local communities at more risk to significant adverse effects, their lives and way of life dis-regarded due to politics.