

RECEIVED
21 APR 2008
THE WEST COAST
REGIONAL COUNCIL

SUBMISSION ON RESOURCE CONSENT APPLICATIONS
Section 96 Of The Resource Management Act 1991



TO: THE WEST COAST REGIONAL COUNCIL
PO BOX 66
GREYMOUTH

Copy to:
Meridian Energy Limited
PO Box 2454,
Christchurch.

Applicant: Meridian Energy Ltd **Application Numbers:** tick boxes overleaf
Closing Date for Submissions on the Mokihinui Hydro Proposal: (Wednesday 23 April 2008)

(Please print clearly) Title: Mr Mrs Miss Ms (Please circle the appropriate title(s) or write below)
My/Our Full Name(s): GRAEME PALMER

Postal address: 196 SCENIC DRIVE, TITIRANGI,
WAITAKERE CITY

Wk Ph: 09/815-5151 Hm Ph: 09/817-1583 Cell: 027-417-8731
Wk Fax: 09/815-5153 Hm Fax: — Email: tinpigs@yahoo.com

I/we support the application numbers ticked on the back of this form (tick one)
I/we oppose the application numbers ticked on the back of this form

The reasons for my/our submission are as follows (*further information attached (tick for yes)*)
[State in summary the nature of your submission, giving reasons]
My submission concerns all the resource consent applications.
→ destruction of the gorge
→ deforestation for Staging Area
→ dredging of the Mokihinui River
→ erosion of the river mouth
→ erection of high voltage power lines and consequent
negative health effects — see attached information.

I/we wish the consent authority to make the following decision [Give details, including the nature of any conditions]
I ask the consent authority to decline the
application in its entirety

Use the tick boxes below to indicate the resource consent applications your submission concerns.

I/we make my/our submission concerning **all** the resource consent applications below (tick)
My/our submission **only** concerns the resource applications ticked below (tick)

I/we **wish to be heard** in support of my/our submission (tick one)
I/we **DO NOT** wish to be heard and hereby make my/our submission in writing only

Signature(s): Greene Palmer

Date: 13-4-08

If this is a joint submission by 2 or more individuals, each individual's signature is required)

I/we have served a copy of my/our submission on Meridian energy Limited as per Section 96(4) of the RMA (tick)

Consent List

Mokihinui River
consents RC07150/1 – RC07150/6

Earthworks and Vegetation
consents RC07150/14 – RC07150/19

Inundation Area
consents RC07150/7 – RC07150/8

General Construction
consents RC07150/20 – RC07150/23

Staging Area
consents RC07150/9 – RC07150/10

Access Roads, Walking Tracks and Recreational
Activities
consents RC07150/24 – RC07150/26

Substation and Transmission
consents RC07150/11 – RC07150/13

In support of my objection to the erection of transmission lines close to my property boundary and within approximately 100 meters of the cleared house site please accept these references and the attached articles.

Smart, Robin F. (2005) Health Effects of High Transmission Lines

Draper G, Vincent T, Kroll M and Swanson J,(2005), Childhood Cancer in relation to distance from high voltage power lines in England and Wales: a case-control study, British Medical Journal

Dr Neil Cherry: Evidence that electromagnetic fields from high voltage powerlines and in buildings, are hazardous to human health, especially to young children. (2001) Environmental Management and Design Division, Lincoln University, New Zealand.

'Powerlines cast cancer cloud'. New Zealand Herald, April 24, 2005.

While there are some who may argue that there are no adverse health risks related to high voltage power lines the evidence for this is far from conclusive.

Should the Mokihinui hydro project proceed I would respectfully ask that the power lines passing by my property be buried- an option originally put forward by Meridian Energy and later retracted due to the 'prohibitive' cost.

Power Line Health Facts

...information for the concerned

Home

EMF

Motors

Search

Contact Us

FAQ

More EMF Evidence * Specific Diseases * Expert Opinions * International * Property Values * Other Sources

- ◆ Introduction
- ◆ Major Findings
- ◆ Other Findings
- ◆ Specific Results
- ◆ Studies Need

Summary

Magnetic fields **likely cause** childhood and adult leukemia, adult brain cancer, spontaneous abortions, and ALS.

They **possibly cause** childhood brain cancer, female and male breast cancer, Alzheimer's disease, suicide, and heart problems.

"Even a slight additional lifetime risk could be of concern to regulators, who already regulate other environmental concerns that convey even lower risks."

The California EMF Project Findings

Note: This is an analysis of the draft report. An analysis forthcoming shortly.

Since 1993, the California Department of Health Sciences has led a project for the California Public Utilities Commission titled "The California EMF Project." The project cost \$10 million, and is now complete.

As part of this project, the Department of Health Sciences initiated a review of new literature.

Here is our analysis of its findings.

Introduction

The Evaluation does not specifically incorporate studies published after 2000. Research produced after the deadline include the *British Journal of Cancer*: major previous studies reversed their previous findings, the Washington study finding an increase in childhood leukemia, and the German study finding children exposed to magnetic fields are particularly likely to develop childhood leukemia.

Nevertheless, even without these studies, the Evaluation is valuable because of health experts derived after a long period of research.

It evaluates the risks associated with EMF based upon a new measure, which usually have asked if there is an *association* between EMF and various diseases associated without a cause/effect relationship. The association could be spurious when it does not because of study errors. An association might exist but because of confounding factors like pollution or level of income.

The causation standard is more rigorous because it demands the cause and effect; there is no evidence of bias, errors, or confounding factors.

Major Findings

- Magnetic fields **likely cause** childhood and adult leukemia, adult brain cancer, spontaneous abortions, and ALS.
- They **possibly cause** childhood brain cancer, female and male breast cancer, Alzheimer's disease, suicide, and heart problems.
- They are unlikely to universally impact all types of cancer; the risk is higher than spontaneous abortions.
- There is insufficient information to determine if magnetic fields cause heart disease.

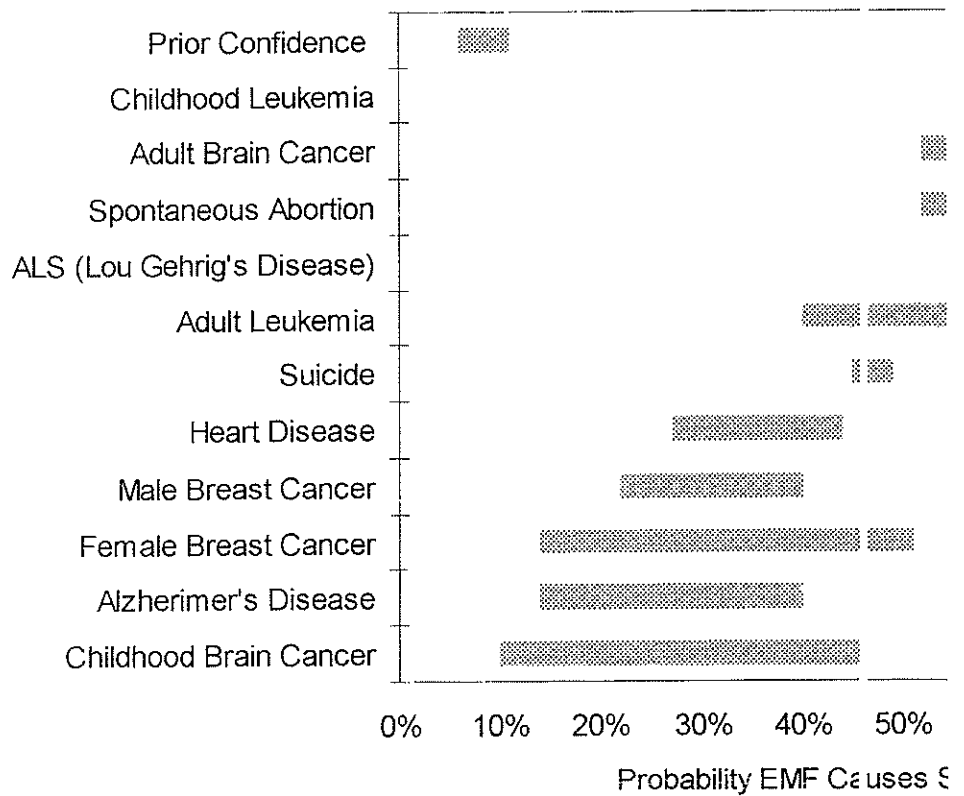
Associated Findings

- Animal studies show that magnetic fields at low intensity affect selective biological organisms.

- The report finds that, with respect to the diseases posed, a slight additional lifetime risk could be of concern to regulatory environmental concerns that convey even lower risks.
- The report notes a full mechanistic understanding does not yet exist. The report goes on to note that such understanding is initially ... common in harmful agents.
- Once the benchmark 2 to 16 mG intensities of ELF are reached, the risk of disease increase substantially as EMF increases.

Specific Results

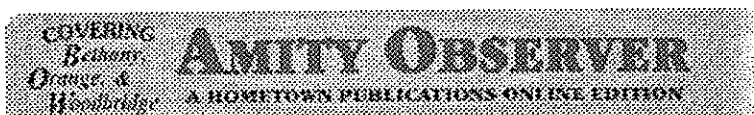
The following graph shows the Project's range of the estimates of probable diseases. "Prior confidence" is the researchers' estimate of the overall confidence in the learning about the recent research results.



The Need for New Studies

- Funding for magnetic field research has declined dramatically in particular, in spite of the utilities industries call for more research on the health effects of power lines. In fact, the EPRI, which was founded in 1962, has declined significantly in the years since its founding.

Table of contents



Burying power lines may be feasible

Derek DiFronzo, *Staff Writer*

October 20, 2004

ORANGE - An independent review of the proposed 345kV power line upgrade has shown that it may be technically feasible to bury 10 to 20 miles of lines underground.

KEMA Inc., a consultant for the Connecticut Siting Council, released a report on the project last Wednesday in Hartford that produced excitement among political leaders and interest groups.

According to the report, steps can be taken that would make it possible to bury the lines for up to 20 miles along the proposed corridor from Milford to Wallingford.

Although pleased with the report's findings, First Selectman Mitchell Goldblatt remains concerned about the cost of burying the lines and would like to see another study conducted.

"Certainly, this is what we've been calling for all along," Goldblatt said. "It is encouraging news, although we've been warned that the cost of burying lines is much more expensive than going overhead."

The proposed power line project involves running new, high voltage lines from Norwalk to Middletown, which includes parts of Orange.

Goldblatt said a major concern among residents of Orange and surrounding towns has to do with whether the lines will be constructed above-ground or buried underground.

If the lines were above-ground, Goldblatt said, then the lines would require higher electromagnetic field (EMF) levels and higher towers.

Due to safety concerns about high EMF levels, Goldblatt and Woodbridge First Selectman Amey Marrella have called for underground lines.

In May, state legislators approved a bill that required burying the lines underground, or, if they must run above-ground, that there be adequate buffers from schools, houses of worship and residences within 300 feet of the power lines.

Many residents of Orange and Woodbridge have expressed concern about the potential impact of a 300-foot buffer from the lines. According to studies, many homes might have to be removed to conform to the buffer requirement.

State Sen. Win Smith Jr. (R-14) and House Majority Leader James Amann (D-118), both members of Power Lines Underground (PLUG), couldn't have been happier with the results of the independent review.

"This is pure dynamite," Smith said. "What this means is that we were right all along. The power line can be buried. The technology exists to make it possible."

Legislators who represent the communities most affected by the proposed power line project created PLUG earlier this year to ensure compliance with the law signed in May.

Goldblatt said he was pleased with the study but believes another review is

needed to ensure that burying the lines would be technologically feasible.

"I hope this undergrounding will be possible," he said. "Then we can look at potential underground routes through existing streets. If it does go underground, it won't go right away."

Smith said he believes further research would show that it would be technologically possible to bury even more of the lines.

"As it is our intention to protect the health and safety of our constituents," he said, "as well as provide Connecticut residents with sufficient electricity, we will continue to insist that the lines be buried."

Amann also expressed his enthusiasm and thanked the Siting Council for ordering the independent study.