Hans Karow Coalition to Reduce Electropollution (CORE) S2 / C 49, RR # 1 3075 Hayman Road Naramata, BC, V0H 1N0

Mr. Robert J. Pellatt Commission Secretary British Columbia Utilities Commission Sixth Floor, 900 Howe Street, Box 250 Vancouver, BC, V6Z 2N3

June 11, 2007

Without Prejudice

Dear Mr. Pellatt,

Re: FortisBC Inc. - Certificate of Public Convenience and Necessity (CPCN) for the Naramata Substation & Transmission Line Project No. 3698458
http://www.bcuc.com/ApplicationView.aspx?ApplicationId=150

1. With kind permission from the author, please accept my <u>Evidence # 25</u> for future reference in subject hearing.

Attachment contains Don Maisch's paper

"Conflict of Interest and Bias in Health Advisory Committees: A case study of the WHO's EMF Task Group

Source: http://www.emfacts.com/papers/who_conflict.pdf

and Don Maisch's CV.

At the bottom of this letter I cite Don Maisch's conclusion, however in the interest of the general public's health and well-being it is <u>urgently</u> recommend that the members of the Commission, the members of the Applicant and all parties in this hearing, as well as the local media read the whole paper!

FortisBC is conveniently avoiding and lately convincing the Commission that the EMF issue not to be dealt with in the Naramata hearing (a new strategy already applied in the Kelowna Ellison and Kelowna Black Mountain case) but just to have

"Project compliance with the WHO and ICNIRP EMF standards"

be included in the hearing's issues list. As indicated in my earlier submissions, WHO/ICNIRPS EMF standards/guidelines are set <u>far</u> too high and convenient for power companies, but are erroneous and dangerous for the innocent general public directly and/or indirectly affected by/exposed to external EMF sources they do know little about, and they have not been informed about nor agreed to!

2. REQUEST to the Commission: It is hereby kindly and urgently requested that the Commission admits the EMF issue of <u>various</u> backgrounds, as indicated in my earlier submissions, to be included in the hearing issue, which issues list obviously is not yet finalized:

DRAFT HEARING ISSUES LIST

as per APPENDIX B to Letter No. L-40-07 Page 1 of 1,

source:

http://www.bcuc.com/Documents/Proceedings/2007/DOC_15406_A-6_Notice%20of%20Hearing%20&%20Hearing%20Issues.pdf

This will assure that intervenors, who have a concern about the EMF issue, including about the WHO/ICNIRP EMF Standards, that they get informed about this complex EMF issue during this hearing process and express their opinion and rights in their oral submission, cross-examination and written argument.

3. **Don Maisch's Conclusion cited here**:

In conclusion

It is acknowledged that in an ever increasingly globalized world the reliance on international organisations to set standards to protect public health is an irrefutable fact of modern life. It is also a fact that international organizations charged with this task need to be "eternally vigilant" to ensure that their organisations are not co-opted by vested interests groups – as exampled by Big Tobacco and WHO.

However when it comes to non-ionizing radiation issues (in this case for power frequency health risk assessment) the evidence is clear that Michael Repacholi has used his standing in both WHO and ICNIRP to stack the WHO's Environmental Health Criteria Task Group for power frequency exposures with representatives of the power industry in contravention of WHO policy. This can only be to the detriment of the group's ability to evaluate the scientific literature in an unbiased way. This action can only be construed as being aimed at ensuring that industry involvement in determining the WHO Environmental Health Criteria will bias ICNIRP's risk assessment for power frequency exposure limits for years to come. This will conveniently provide economic protection for the industry against the need to spend enormous sums of money on upgrading distribution systems as well as risks of litigation. Such a blatant disregard for the fundamental principles of credible science as well as WHO's mission on protecting world health speaks of a desperation to bury independent science at all costs, even if that cost is at the integrity of WHO.

Respectfully submitted,

Hans Karow, CORE

Conflict of Interest and Bias in Health Advisory Committees: A case study of the WHO's EMF Task Group

Maisch Don,

JACNEM, Vol. 21 No. 1, pages 15-17, April 2006

Author's note:

On the website of the National Grid in Northeastern USA, it is mentioned under the section, "Additional Information": "If you decide to research EMF, it's important to check the credentials of those who provide or produce the information. For example, websites can be developed by anyone regardless of training or experience and are sometimes created to promote limited agendas or points of view."

http://www.nationalgridus.com/non_html/shared_env_emfslink.pdf

National Grid then lists a number of EMF websites that "were selected solely on the basis of the scientific qualifications of the sponsoring organizations. These sites are sponsored by federal agencies and professional organizations and provide information that reflects the work of many experienced scientists."

Included on their list of approved web sites are the locations for the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and the World Health Organization's International EMF Project, established and headed by Dr. Michael Repacholi.

The following paper very much supports the National Grid's call to check the credentials of those who provide EMF information for limited agendas or points of view.

Introduction

The potential problem of conflicts-of-interest biasing outcomes in papers submitted to bio-medical journals, including papers published in journals by expert advisory bodies, was an issue addressed by the International Committee of Medical Journal Editors in November 3003. To quote from their "Uniform Requirements":

"Conflict of interest exists when an author (or the author's institution), reviewer, or editor has financial or personal relationships that inappropriately influence (bias) his or her actions. . . The potential for conflict of interest can exist whether or not an individual believes that the relationship affects his or her scientific judgement. Financial relationships . . . are the most easily identifiable conflicts of interest and the most likely to undermine the credibility of the journal, the authors, and of science itself." (1)

This paper briefly examines this problem, using recent actions taken by the World Health Organisation's (WHO) International EMF Project and the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

In both organisations the case is presented that maintaining independence from industry vested interests is essential for maintaining scientific objectivity and credibility in giving expert advice on public health matters.

At the May 2001 Australian Senate Inquiry into Electromagnetic Radiation, Michael Repacholi, head of the WHO's International EMF Project, informed the Senate Committee that the WHO had a firm policy against industry involvement in its processes. To Quote:

"The world health Organization does not allow industry to participate in either standard setting or in health risk assessment. The WHO takes the view that there cannot be industry representation on standard setting working groups. There cannot be someone on the working group who is having an influence on health effects for an industry when they derive benefit from that industry."(2)

ICNIRP clearly states on its website that all commission members are independent experts in their respective scientific disciplines and do not represent either their countries or institutes and specifically they cannot be employed by industry. In order to maintain this independence from industry or other vested interests it is stated:

"Members are reminded frequently of the need to declare any interests detrimental to ICNIRP's status as an independent advisory body. . . ICNIRP also does not accept funding from industry." (3)

These requirements were established so that ICNIRP's credibility of its advice and guidelines cannot be said to be influenced or biased by industry vested interests. Dr. Ken Joyner, from Motorola, stressed the independence of ICNIRP from industry at the Australian Senate "Inquiry into Electromagnetic Radiation" in May 2001. Joyner stated:

"If you want to look at one standards body that has specifically excluded any industry representatives, there is the ICNIRP body. You cannot be a member of the ICNIRP if you are part of industry. They exclude you from that process." (4)

The ICNIRP website also explains that the scientific reviews carried out by ICNIRP members are combined with risk assessments done by WHO International EMF Project working groups with the resultant being the publication of ICNIRP's EMF exposure guidelines. Therefore the claim that ICNIRP's scientific advice is value-free from industry influence must also include the same requirement for any WHO risk assessment task group. That was what Repacholi stated to the Australian Senate Committee in May 2001 (as quoted previously).

"There cannot be someone on the working group who is having an influence on health effects for an industry when they derive benefit from that industry".

The close working relationship between ICNIRP and the WHO's EMF Task Group evaluating power frequency research is seen in the make up of the membership of the Task Group. Out of the 20 members from 17 countries (5), we have Paolo Vecchia, the current ICNIRP Chairman, Anders Ahlbon, Larry Anderson, Rudiger Matthes as members of ICNIRP's main commission, with Ahlbon as also on ICNIRP's Standing Committee on Epidemiology. Other ICNIRP Standing Committee members include Christoffer Johansen, Jukka Juutilainen, Alasdair McKinlay and Zhengping Xu. Eric van Rongen is a consulting expert for ICNIRP. In addition, Michael Repacholi, head of the WHO's International EMF Project, is also Chairman Emeritis of ICNIRP. (6)

Including Repacholi, half of the official members of the WHO task group are also members of ICNIRP, so it is obvious that there are no secrets between ICNIRP and the Task Group.

Industry influence endemic in the decision making process

As reported by the New York based publication, Microwave News, on October 1, 2005, the 20 member WHO Task Group writing a new Environmental Health Criteria (EHC) document on power frequency EMFs included, at the request of Repacholi, representatives from the electrical utilities, or organisations with close ties with the industry. Their task was to both assist in writing the initial draft and review the completed draft.(7) This is in clear conflict with what Repacholi stated in his testimony in the May 2001 Australian Senate Inquiry hearings. To quote again: "There cannot be someone on the working group who is having an influence on health effects for an industry when they derive benefit from that industry."

One of the central authors of the draft, and member of the EHC Task Group, Leeka Kheifets, was a former WHO assistant to Michael Repacholi. She disclosed in Sept. 2005 in a letter (declaring any potential conflicts of interest) to the British Medical Journal that she "works with the Electric Power Research Institute... and consults with utilities." (8) Other power industry representatives who assisted Kheifets on preparing the draft were Gabor Mezei, from the EPRI, Jack Sahl from Southern California Edison, USA, and Jack Swanson from the National Grid, UK. When Repacholi sent a draft of the EHC out for review in early July 2005, the reviewers included representatives from the power industry bodies: The Federation of Electric Power Companies of Japan, Pacificorp (USA), Hydro-Quebec (Canada), the Utility Health Sciences Group (USA) and Exponent Inc, (USA). (9) The question of liability must have also been on the agenda, as Exponent has described its business activities as follows:

"Exponent serves clients in automotive, aviation, chemical, construction, energy, government, health, insurance, manufacturing, technology and other sectors of the economy. Many of our engagements are initiated by lawyers or insurance companies, whose clients anticipate, or are engaged in, litigation over an alleged failure of their products, equipment or services." (10)

In addition to WHO staff, the only other observers that Repacholi invited to the WHO Task Group meeting in Geneva on 3 October to recommend exposure limits, were eight representatives from the power industry. Members of the press were barred from attending.(11) In addition the meeting was not publicised on either the WHO web site meetings list or the Bioelectromagnetics Society Newsletter's conference calendar and very few members of the EMF scientific community, including important EMF epidemiologists, were even aware of the meeting. (12) Only industry representatives received invitations. Why were the epidemiologists who were directly involved in the research that the WHO's risk assessment task group would evaluate, not also invited as observers and reviewers?

The Microwave News article points out that a number of independent researchers were involved in the preparation and review of the draft, but it was "highly unusual, if not

unprecedented, for a WHO health document to be reviewed by so many with such strong ties to the affected industry," (13)

One example of an industry reviewer's viewpoint, seeking to downplay potential health hazards, is seen in the comments from Michel Plante, representing Hydro-Quebec:

"The whole section on cancer seems more like a desperate attempt to maintain some positive statistical association from epidemiological studies alive than a factual and honest presentation of arguments both, for and against, carcinogenicity." (14)

Plante's role as a protector of his employer's interests in denying a cancer link with EMFs was amply demonstrated in his involvement, as a Hydro-Quebec representative, in suppressing potentially damaging cancer data in a 1994 Hydro-Quebec funded epidemiological study By Dr. Gilles Theriault et al, from McGill University. The initial analysis of the data collected from three electric utilities found that workers who had the greatest exposures to magnetic fields had twelve times the expected rate of astrocytomas, a type of brain tumour, based on a small number of cases. (15)

In a later re-analysis of the data (16), this time looking at high frequency transients (HFT), the McGill University team found up to a 10-fold increased risk of developing lung cancer amongst highly exposed utility workers, with a "very clear" exposure-response relationship. (17)

When Gilles Theriault's McGill team wanted to further analyse the HFT data for other associations, Hydro-Quebec, which funded the \$3 million study, and therefore owned the collected data, refused further access to the data. Plant said at the time that "we have a contract problem that has to be resolved and there will be no new mandate until it is solved." Plante argued that by Theriault publishing the findings on HFT he had violated the contract with the utilities. Many senior EMF researchers and epidemiologists saw the HFT data as having important implications and needing further analysis by other researchers. (18) As of October 2005 the Hydro-Quebec HFT data has continued to be suppressed from any further analysis from the scientific community – and Plante, as Hydro-Quebec's man at the centre of that suppression, has now been asked by Repacholi to review the WHO's Environmental Health Criteria risk assessment.

It is not known if Plante was asked at the meetings about the "positive statistical association" seen in the Hydro-Quebec HFT data but he could have replied that it is not important because it has not yet been replicated!

The Utility Health Sciences Group, another power industry group that Repacholi asked to review the EHC draft document, plainly indicated that they considered increased costs to industry should take precedence over health considerations when they proposed a change in the chapter on protective measures that stated:

"It should also be pointed out that redirecting facilities or redesigning electrical systems may be so expensive as to be inconsistent with the low-cost and no-cost steps typically viewed as prudent avoidance." (19) The UHSG also proposed a statement be included in the summary"

"It would be useful for the summary to include a clear statement that the scientific research does not establish ELF EMF as a cause or contributing factor in any disease or adverse health effect, including cancer." (20)

The Myth of not accepting funding from industry

It is stated on the ICNIRP web site that in order to protect its status as an independent advisory body, " *ICNIRP also does not accept funding from industry*".(21) When it comes to the WHO's International EMF Project, however, no such restrictions apply. As Repacholi has stated, the "[EMF]*Project can receive funding from any source through Royal Adelaide Hospital; an agency established through WHO Legal Department agreement to collect funds for the project.*"(22) Questions of a conflict-of-interest and even money laundering could be raised at this point when it was revealed by "*Microwave News*" that Repacholi, as head of the EMF Project, receives \$150,000 annually from the cellphone industry. (23) However, Repacoli could rightfully still claim that he does not receive any direct funding from industry sources since it is funneled through the Royal Adelaide Hospital. This arrangement may be in violation of current WHO rule against employees and consultants accepting any "gift or remumeration" from external sources "incompatible" with their duties to WHO. (24)

A Claytons oversight committee?

According to a fact sheet "New Electromagnetic Fields Exposure Guidelines" published by the European Commission in December 2005, an "International Advisory Committee" (IAC) has been set up to provide oversight to the WHO's International EMF Project. This committee consists of representatives of international organisations, independent scientific institutions and national governments who are supporting the Project. (25)

In this case IAC oversight should essentially operate much the same as a Judicial oversight committee where a judicial branch of the government watches or monitors what is going on or happening in a case or matter. In the judicial arena it is a form of checks and balances that operates to keep law officers from abusing their powers. (26) In the case of the WHO's EMF Project IAC oversight should operate to prevent WHO officials from abusing their powers - and this should include preventing the possibility of bias through conflict-of-interest. It would also be important for the IAC to maintain an "arms-length" distance from the project activities that it is supposed to monitor.

The question then needs to be asked of the IAC: Why have they failed to intervene in the case of blatant industry influence on the WHO's EMF Task Group?

Forgotten lessons: Big Tobacco and Protecting the Integrity of WHO Decision Making

In July 2000 the WHO Committee of Experts on Tobacco Industry Documents released a 260 page report documenting the tactics used by the tobacco industry's strategies to undermine the work of the WHO. (27) At the same time the WHO issued a 15 page

response document listing a detailed response to ensure that the WHO was never undermined again. Just a few of the 58 recommendations were as follows (To quote):

- #6. WHO should urge other UN organisations to investigate possible tobacco company influences on their decisions and programs, and to report their findings publically.
- # 7. WHO should advocate implementation and consistent enforcement of effective conflict of interest and ethics policies throughout UN agencies.
- #8. WHO should urge Member States to conduct their own investigations of possible tobacco company influence on national decisions and policies, and to publish reports on their findings."
- #11: Appoint an ombudsman or other independent offices, outside the standard lines of reporting authority, with autonomy and clear authority for enforcing ethical rules.
- #12. Disseminate conflict of interest rules more broadly.# 14. Introduce a formal process for vetting prospective employees, consultants, advisers, and committee members, to identify conflicts of interest.
- # 19. Prohibit employees, consultants, advisers, and committee members from holding any substantial financial affiliation with the tobacco industry, including any employee or consulting relationship. . . "
- #20. Disqualify any professional services from performing work on behalf of WHO if the firm also provides a tobacco company with services likely to be adverse to the interest of public health. . . "
- #21. Prohibit employees, consultants, advisers and committee members from accepting any item of value from a Tobacco company or its affiliates. . . "
- # 35. WHO and IARC should take steps to educate their scientific investigators and collaborators about tobacco company efforts to undermine research and the need for special vigilance in protecting the integrity of tobacco-related research." (28)

Although the above sampling of WHO recommendations were in response to Big Tobacco's attempts to undermine WHO integrity, its direct relevance to other large industrial interests cannot be ignored, be it the power industry or Telecommunications.

Unfortunately it seems that in this case at least, WHO has forgotten the hard lessons learnt with its previous experiences with Big Tobacco. In the case of WHO's Task Group writing the new Environmental Health Criteria (EHC) for power frequency EMFs, a violation of the above recommendations urgently calls for an independent evaluation to protect both public health and WHO's public credibility.

In conclusion

It is acknowledged that in an ever increasingly globalized world the reliance on international organisations to set standards to protect public health is an irrefutable fact of modern life. It is also a fact that international organizations charged with this task need to be "eternally vigilant" to ensure that their organisations are not co-opted by vested interests groups – as exampled by Big Tobacco and WHO.

However when it comes to non-ionizing radiation issues (in this case for power frequency health risk assessment) the evidence is clear that Michael Repacholi has used his standing in both WHO and ICNIRP to stack the WHO's Environmental Health Criteria Task Group for power frequency exposures with representatives of the power industry in contravention of WHO policy. This can only be to the detriment of the group's ability to evaluate the scientific literature in an unbiased way. This action can only be construed as being aimed at ensuring that industry involvement in determining the WHO Environmental Health Criteria will bias ICNIRP's risk assessment for power frequency exposure limits for years to come. This will conveniently provide economic protection for the industry against the need to spend enormous sums of money on upgrading distribution systems as well as risks of litigation. Such a blatant disregard for the fundamental principles of credible science as well as WHO's mission on protecting world health speaks of a desperation to bury independent science at all costs, even if that cost is at the integrity of WHO.

References

- 1) Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication, International Committee of Medical Journal Editors, http://wwwicmje.org/index.html#peer, page 8, November 2003
- 2) Inquiry into Electromagnetic Radiation, Report of the Senate Environment, Communications, Information Technology and the Arts References Committee, Section 4.115, page 151, May 2001
- 3) http://www.icnirp.de/what.htm Accessed August 22, 2005.
- 4) Inquiry into Electromagnetic Radiation, (as above), Section 4.68, page 137, May 2001
- 5) As listed in Microwave News, WHO Welcomes Electric Utility Industry To Key EMF Meeting, Bars the Press, Sept. 22, 2005 http://www.microwavenews.com/fromthefield.html#partners Accessed October 10, 2005.
- 6) As listed on the ICNIRP website: http://www.icnirp.de Accessed October 12, 2005.
- 7) Microwave News, From the Field, WHO and Electric Utilities: A Partnership on EMFs, October 1, 2005. http://www.microwavenews.com/fromthefield.html#partners Accessed October 10, 2005.
- 8) Letters, Childhood cancer and power lines, British Medical Journal, Vol. 331, pp. 634-638, Sept.17, 2005.
- 9) Microwave News, WHO and Electric Utilities... (as above).
- 10) Bohme, SR, et al, Maximizing Profit and Endangering Health: Corporate Strategies to Aviod Litigation and Regulation, Int J Occup Environ Health, Vol. 11, No. 4, pp.338-348, Oct/Dec 2005.

- 11) Microwave News, WHO Welcomes Electric Utility Industry To Key EMF Meeting, Bars the Press, Sept. 22, 2005 http://www.microwavenews.com/fromthefield.html#partners Accessed October 10, 2005.
- 12) ibid.
- 13) ibid.
- 14) ibid.
- 15) Theriault G, et al, "Cancer Risks Associated with Occupational Exposure to magnetic Fields Among Electric Utility Workers in Ontario and Quebec, Canada, and France: 1970-1989, American Journal of Epidemiology, Vol. 139, pp. 550-572, 1994.
- 16) Armstrong B et al, "Association Between Exposure to Pulsed Electromagnetic Fields and Cancer in Electric Utility Workers in Quebec, Canada, and France", American Journal of Epidemiology, Vol. 140, pp. 805-820, 1994.
- 17) Microwave News, "Transients and Lung Cancer: A "Strong" Association and a "Remarkable" Exposure-Response", Vol. XIV, No. 6, Nov/Dec 1994.
- 18) ibid
- 19) Microwave News, WHO and Electric Utilities... (as above)
- 20) ibid.
- 21) http://www.icnirp.de/what.htm (as above)
- 22) Welcoming speech by Michael Repacholi, 9th International Advisory Committee (IAC) meeting, Istanbul Turkey, June 7, 2004.
- 23) Communication with Louis Slesin, editor of Microwave News, November 21, 2005. Also see: http://www.microwavenews.com/fromthefield.html#whoottawa
- 24) "Response of WHO to the Report of the Committee of Experts on Tobacco Industry Documents", WHO, June 10, 2000.
- 25) Science for Environment Policy, New Electromagnetic Fields Exposure Guidelines, European Commission DG ENV, News Alert Issue 3, December 2005.
- 26) Wikipedia definition, http://en.wikipedia.org/wiki/Judicial_oversight, Accessed February 25, 2006.
- 27) Tobacco Company Strategies to Undermine Tobacco Control Activities at the World Health Organization, Report of the Committee of Experts on Tobacco Industry Documents, July 2000.
- 28) Response of WHO to the Report of the Committee of Experts on Tobacco Industry Documents, WHO document, June 10, 2000.

Resume of Donald R. Maisch

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2002 - 2007

PhD candidate, STS, University of Wollongong, Wollongong, NSW.

Thesis title: A Procrustean bed: Health risk assessment for setting human exposure standards for Radiofrequency/Microwave Radiation

1973-74

Nuclear powerplant structural & emergency design – Stone & Webster Engineering, Boston, Massachusetts

1971-73:

Associate in Applied Science -Architectural and Structural Building Design. Dutchess Community College, Poughkeepsie, New York

Referees:

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Organizational associations:

October 2006 – Scientific advisor: The Human Ecological Social Economical Project (HESE)-U.K. branch. http://www.hese-project.org/hese-uk/en/main/index.php

March 2005-present

Consumers Federation of Australia (CFA) and Consumer Law Centre (CLC): Public interest representative on the re-constituted Standards Australia TE/7 Committee: Human Exposure to Electromagnetic Fields (measurements)

2003 **-** present:

CFA representative on the Consultative committee, ELF powerline standards, The Australian Radiation Protection And Nuclear Safety Agency (ARPANSA)

1999 - present:

Associate member: Australasian College of Nutritional and Environmental Medicine (ACNEM)

1998-2001:

CFA representative to the Standards Australia TE/7 Committee-Human Exposure to Electromagnetic Fields. (committee concluded)

Internet:

1996-present:

EMFacts Consultancy Web Site: http://www.emfacts.com

2000 -present

"Weblog" Internet information service dealing with EMF and chemical exposures in the home & workplace. http://www.emfacts.com/weblog

Published papers:

Maisch D, "Warnings Needed on DECT Cordless Phone Use", ACNEM Journal, Vol. 25 No. 2, pages 5-7, Sept. 2006

Maisch D, Podd J, Rapley B, "Electromagnetic Fields in the Built Environment – Design for Minimal Radiation Exposure, BDP Environment Design Guide, Royal Australian Institute of Architects, Aug 2006

Maisch D, Conflict of Interest and Bias in Health Advisory Committees: A case study of the WHO's EMF Task Group, ACNEM Journal, Vol. 21 No. 1, pages 15-17, April 2006

Maisch D, Report on the International Conference: 'Mobile Communications and Health: Medical, Biological and Social Problems', Sept 20-22, 2004, Moscow, Russia, European Biology and Bioelectromagnetics, Vol. 1, Issue 1, January 2005

Maisch D, Children and mobile phone use: Is there a health risk? The case for extra precautions ACNEM Journal, Vol.22, No.2, August 2003

Maisch D, Podd J, Rapley B, Changes in Health Status in a Group of CFS and CF Patients Following Removal of Excessive 50 Hz Magnetic Field Exposure. ACNEM Journal, Vol.21, No.1, April 2002

Maisch D, Mobile Phone Use: It's time to take precautions. ACNEM Journal, Vol.19, No.2, April 2000

Maisch D, Podd J, Rapley B, Roland A, Chronic Fatigue Syndrome (CFS) - Is prolonged exposure to environmental level powerline frequency electromagnetic fields a co-factor to consider in treatment? ACNEM Journal, Vol. 17 No. 2, Dec. 1998

Maisch D, Rapley B, *Powerline Frequency Electromagnetic Fields and Human Health - Is it the time to end further research? An Overview of Three Recent Studies*. ACNEM Journal Vol. 17 No.1, June 1998

Maisch D, Melatonin, Tamoxifen, 50-60 Hertz Electromagnetic Fields and Breast Cancer: A Discussion Paper, Australian Senate Hansard, Oct 27, 1997 Commissioned reports:

Comforting the community or deceiving the public: The Australian Government's DVD presentation

2

"Mobile Communications and Health". Communications, Electrical and Plumbing Union (CEPU), November 21, 2006.

New Zealand public health agencies fail public health protections by following outmoded WHO EMF guidelines: Transpower's proposed 400 kV transmission line from Whakamaru to Auckland. Commissioned by New Era Energy, Hamilton New Zealand, Compiled March 2005

Conference Posters:

Podd J, Maisch D, Reducing the Level of 50 Hz Magnetic Fields Lessens Symptoms of Chronic Fatigue and Improves Sleep. (Poster presentation), 2nd International Workshop On Biological Effects of Electromagnetic Fields 7-11 October 2002, Rhodes, Greece

Submissions:

Maisch D, Podd J, Rapley B, An independent perspective on extremely low frequency magnetic fields as a possible risk factor for the breast cancer cluster at the Brisbane ABC studios at Toowong Queensland January 10, 2007

Maisch D, An independent commentary: RMIT Building 108: An incomplete risk assessment for ELF-EMF, June 20, 2006

Maisch D, Why 4 mG is preferable to the NH&MRC'c 1000mG as a reference level for a health based environmental EMF exposure limit, A discussion paper prepared for the Tasmanian Education Department, September 7, 2006

Maisch D, A Discussion Paper concerning the validity of the science, promotion and sales of EMR "Protective Devices, Inquiry into electromagnetic emissions & exposure standards, June 15, 2000

Maisch D, An examination of the efforts to set an Australian Standard dealing with electromagnetic emissions, and an examination of the merits of the transfer of the responsibility for setting a new Australian standard for electro-magnetic emissions to the Australian Radiation Protection and Nuclear Safety Agency, Senate Inquiry into electromagnetic emissions & exposure standards, May 10, 2000

Maisch D, The case for a strong Precautionary Approach, and statement of intent, which takes into account possible non thermal effects, to be included in the Australian Standard. A Discussion paper, Standards Australia TE/7 Committee-Human Exposure to Electromagnetic Fields, March 1999

Maisch D, Comments on the South Australian Health Commission's (SAHC) Information Sheet: Radiofrequency Fields: Is There a Health Hazard? , South Australian Health Commission, August 1996

Maisch D, Mobile Phones and Their Transmitter Base Stations: The Evidence For Health Hazards - A local Government and Community Resource Document, Senate Hansard, April 1996

Maisch D, Right-of-Reply: To the Electricity Supply Association of Australia's supplementary submission (7 Nov.1995) to the Senate Economics References Committee. East-Link enquiry, House of Representatives, April 1996

Maisch D, (Non-ionizing) Electromagnetic Fields and Human Health: Are current standards safe?, Senate Hansard, Oct. 1994

Maisch D, Report on the International Strategy for the Implementation Food Irradiation, House of

3

Representatives Inquiry, May 1988

Maisch D, Tasmanian Conservation Trust's submission to the Inquiry into the Use of Ionizing Radiation for Food Preservation, House of Representatives Inquiry, Nov.1987

Magazine articles:

Electromagnetic Radiation and Health, Complementary Medicine, May/June 2004

Children and mobile phone use: Is there a health risk? The case for extra precautions, D. Maisch, Latitudes, Vol. 6, Issue 1, 2003

Presentations:

"A High-Tech Challenge: Addressing the health impacts of increasing exposures to electromagnetic radiation (EMR), Victorian Trades Hall Strategic Planning Forum 2007. Lorne, Victoria, Feb. 15, 2007

"Electromagnetic Fields & Chemicals in the Built Environment: Design for Minimal Exposure", The Royal Institute of Architects, Lunchtime Series, Hobart, Tasmania, Sept. 15, 2006

"EMF Power Frequency exposure guidelines: Exploring the myths, managing the risks", Presbyterian Hall, Canada St., Morrinsville, New Zealand, March 16, 2005

"Health Problems Associated with Power Frequency EMFs: The case for an environmental hazard", Community Nurses Association, Bellerive Community Health Centre, Bellerive, Tasmania, March 1, 2005

"The case for a precautionary approach for children's use of mobile phones", Mast Sanity AGM, Bristol Cricket Club, Bristol, U.K., 25 Sept. 2004

" *Powerline Research in Australia: EMF effects on the immune system*", Wimbleton Pacific Forum, Wimbleton, U.K., 14 Sept. 2004

"Children and Mobile Phone Use: Is there a health hazard?", Mast Sanity public meeting, Curzon Cinema, Soho, London, U.K., 13 Sept. 2004

"Where are the electrosensitives? A study on electrosensitivity in Australia" A Symposeum on Electrical Sensitivity in Human Beings, Royal Society of Medicine, London, 11 Sept, 2004

A corporate risk assessment of RF Bioeffects Studies Relevant to the Use of Mobile Phones by Children: Is it Really Science? International Conference: Childhood Leukaemia, incidence, causal mechanisms and prevention, Children with Leukaemia charity, London England, Sept. 6 -10, 2004

"Bypassing Peer Review: Motorola's influence on mobile phone research in Australia (or Beware of Mickey Mouse Reviews)" ACNEM Primary Course, Sydney, Manly Quarantine Station, December 3, 2003

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- "Bypassing Peer Review: Motorola's influence on mobile phone research in Australia, (Or Beware of Mickey Mouse Reviews)", STS Conference, Wollongong University, Wollongong NSW, November 26, 2003
- "New research into chronic fatigue syndrome (CFS) and EMF exposures at home and work", Tasmanian Environment Centre, Hobart, June 26, 2002
- "The latest research on EMF and chemical exposures as a health hazard", Comcare Health Expo. Dept.Employment & Workplace Relations, Hobart, April 16, 2002
- "Environmental Hazards To Health in Today's IT Office", OH&S Training Course, TTLC, Hobart, April 12, 2002
- "Introductory course on the use of the EMFacts Survey Program", Community Workshop, The Chinese Museum, Melbourne, March 24, 2002
- "The latest research on EMFs and health". ACNEM training course, Melbourne, Vic., March 22, 2002
- "Environmental Hazards To Health in Today's IT Office", OH&S Training Course, TTLC, Hobart, October 30, 2001
- "Preliminary Findings from a CFS /EMF study", ACNEM training course, Melbourne, Vic., August 4, 2001
- "EMF and Chemical Exposures as Workplace Stressors: The latest research", CPSU OH&S meeting, Hobart, Tasmania, July 12, 2001
- "EMF and Chemical Exposures in the IT office/ mobile phones", TasIT workshop, Hobart, Tasmania, June 12, 2001
- "EMF and chemical exposures in the IT office", AWU Call Centre Committee, Melbourne, June 4, 2001
- "Introductory course on the use of the EMFacts Survey Program", Community workshop, The Chinese Museum, Melbourne, May 27, 2001
- "EMF and Chemical Exposures in the IT office", CEPU, Melbourne, May 24, 2001
- "An EMF policy for Australia", Public meeting at the Playford Bldg., University of SA, organised by the SA Greens, May 16, 2001
- "OH&S hazards in the IT Workplace", UTLC Combined Unions meeting, Adelaide, SA, May 8, 2001
- "Electromagnetic fields as an OH&S Issue", ITSSA / Workcover conference "OHS&W: Working Together, Adelaide, South Australia, May 7, 2001
- "EMF and Chemical Exposures as Workplace Stressors", The Tasmanian Trades & Labour Council, (TTLC), Hobart, Tasmania, November 1, 2000
- "Stress in the IT workplace: Call Centres and the Swedish solution", Victorian Trades Hall Council, Melbourne, Vic., October 9, 2000
- "EMR Health Hazards in the Home & Office", Conference at the Savoy Hotel, Melbourne Vic.,

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October 8, 2000

"Powerline Health effects, Exposure Standards and Case Histories", Coomera Valley Progress Association, Coomera. Qld., August 22, 2000

"Is EMF/EMR Exposure a Public Health Hazard? An overview of the issues", Qld.Greens State Conference, Springbrook, Qld., August 19, 2000

"EMF Exposure as an Immune System Stressor and CFS: Case Histories", Community meeting, The Theosophical Society, 355 Wickham Terrace, Brisbane, Qld., August 18, 2000

"Mobile Phones and Their Base Stations: How Safe are They?", G.E.C.K.O. House, 139 Duringan St. Currumbin, Qld., August 17, 2000

"Call Centres and Stress; The Swedish Solution" and "Mobile Phone use is an OH&S Issue", The Community and Public Sector Union (CPSU), Tasmanian Branch, Hobart. August 12, 2000

"Call Centres and Stress; The Swedish Solution" and "Mobile Phone use is an OH&S Issue", OH&S officer's training course, TTLC, August 4, 2000

"Mobile Phone Towers, EM Fields and Public Health Risks", Presented at three public meetings in Brisbane, Mapleton and Maleny Qld., May 24-27,2000

"Is EMF/EMR Exposure a Public Health Hazard? An overview of the issues", Nexus Conference, Sydney, May 20, 2000

"Mobile Phone use is an OH&S Issue", OH&S officer's training course, TTLC, April 7, 2000

"Stress / Fatigue in the Workplace and EMF Exposure: Is there a connection?", ACTU national OH&S Committee meeting, Melbourne. February 18, 2000

"CFS and EMF Exposure: Is there a health hazard?" Two talks given at the Melbourne training course for the Australasian College of Nutritional & Environmental Medicine (ACNEM), February 17-18, 2000

"EMF Exposure as a Risk Factor for the condition of Chronic Fatigue Syndrome." ACNEM training course, Melbourne, February 26, 1999

"EMF Exposure and Human Health: Is it time to end further research?" ACNEM Training course, Melbourne, February 18, 1998

Reference reports:

Pseudo-iron deficiency in a French population living near high-voltage transmission lines: A dilemma for clinicians, Emfacts Consultancy, compiled March 14, 2001

Maisch D, Setting radio frequency/Microwave (RF/MW) exposure guidelines to protect workers and the public: Russia and the West in major conflict. D Maisch, January 2000. http://www.emfacts.com/papers/russia.html

Magnetic Fields Due to Grounding to Water Pipes, Emfacts Consultancy, compiled July 1999

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The Ross House Substation: Chronic Fatigue Syndrome (CFS) symptoms attributed to exposure to electromagnetic fields (EMF) due to proximity to an electrical substation, Workcare compensation case, Melbourne Victoria, 1991-1992. Emfacts Consultancy, Compiled Jan - Feb. 1999

EMFs from Electrical Wiring and Appliances: A guide for homeowners. Emfacts Consultancy, < http://www.emfacts.com/papers/home_infosheet.pdf >, April 1999

Electromagnetics Forum; A News Report on the Health Effects of Electromagnetic Radiation. (4 quarterly issues published), Emfacts Consultancy < http://www.emfacts.com/forum/index.php >, 1996-1997

Fields of Conflict: The EMF health hazard controversy, Maisch D., Aug. 1995

The Food Irradiation Digest, Maisch D., Dec 1988

Research Projects:

"An Investigative Pilot Study: Is Excessive Electromagnetic Field (EMF) exposure a risk factor for the conditions of Chronic Fatigue Syndrome (CFS) and chronic fatigue?" (49 subjects) Melbourne, Adelaide & Hobart, Published JACNEM (above), May 2001-March 2002

The EMFacts Home & Workplace EMF Survey Program: A "Community Based" electromagnetic field (EMF) survey program, June 1999 - ongoing

Nine case histories: Background to paper - Chronic Fatigue Syndrome (CFS) - Is prolonged exposure to environmental level powerline frequency magnetic fields a co- factor to consider in treatment? < http://www.emfacts.com/papers/case-histories.html >, 1997 - 1998

[&]quot;Powerline Frequency Electromagnetic Fields (EMF), the Melatonin Hypothesis and Breast Cancer: A Residential EMF Exposure Investigation", (27 subjects), Grace Gawler Womens Centre, Yarra Junction, Vic., (Unpublished), February 1998