# ABOUT ELECTRIC AND MAGNETIC FIELDS

## What are electric and magnetic fields?

Electricity is an essential part of our every day lives, and many might wonder if the electric and magnetic fields (EMF) produced by the generation, transmission and use of electric power are harmful. Today, after more than two decades of scientific research in human health studies, the results are inconclusive and nonconcensus has yet been reached about EMF effects on health.¹ Thus, Hawaiian Electric Company supports further investigation and a cautious approach concerning exposure to EMF.

As the research on EMF continues, we at Hawaiian Electric consider the health and safety of our customers, employees and the general public our highest priorities. To address the EMF issue, Hawaiian Electric:

- Designs and builds facilities to prudently avoid EMF exposure, consistent with the Hawai'i State Department of Health's policy on EMF.
- Complies with state construction standards for both overhead and underground electric lines.
- Continues to support industry, medical and scientific research at the national level, including research efforts of the Electric Power Research Institute.
- Shares information with customers and employees through such services as:
  - EMF information packets offered to all customers at no cost.
  - Home measurements of magnetic fields upon request (EMF Survey form included in this packet).
  - EMF information section at the Hawai'i State Library, main branch.
  - Information to customers on Hawaiian Electric's website at www.hawaiianelectric.com regarding the available EMF information packets, home measurements and contact information.

1. U.S. National Institute of Environmental Health Sciences, 1999.



## **Additional Resources**

If you are concerned about EMF, you can educate yourself on this issue. For more information on EMF:

• Call or write to Hawaiian Electric's Education & Consumer Affairs department:

• Phone: (808) 543-7511

• Mail: Hawaiian Electric Company

Education & Consumer Affairs (KS2-QE)

PO Box 2750

Honolulu, HI 96840

Call the Hawai'i Department of Health; Environmental Health Services Division;
Noise Radiation & Indoor Air Quality Branch:

• Phone: (808) 586-4701

• View these websites for general information and/or study results:

### **INDUSTRY**

 Edison Electric Institute www.eei.org

#### **GOVERNMENT**

 National Institute of Environmental Health Sciences www.niehs.nih.gov/health/topics/agents/emf

#### **CANCER STUDIES**

• International Agency for Research on Cancer - EMF Risk Assessment http://monographs.iarc.fr/ENG/Monographs/vol80/index.php

### **NATIONAL REVIEWS**

 International Agency for Research on Cancer - EMF Risk Assessment http://monographs.iarc.fr/ENG/Monographs/vol80/index.php

### **OVERVIEW, STANDARDS AND REVIEWS**

 World Health Organization www.who.int/peh-emf/en

# OUR EMF POLICY STATEMENT

# Hawaiian Electric continues to support scientific research on EMF.

At Hawaiian Electric Company, we consider the health and safety of our customers, employees, and the general public our highest priorities and recognize our responsibility to deliver electric service in a manner that is safe, reliable, and environmentally sound. In accordance with our Corporate Environmental Principles, we are addressing the issue of electric and magnetic fields (EMF), which are found wherever electricity is produced, transmitted or used.

For over 20 years, scientists have been investigating whether EMF produce harmful effects. Thus far, no conclusive, convincing and consistent relationship between exposure to EMF and adverse health effects has been demonstrated the scientific community which has been researching EMF has not established a causal link between EMF and adverse health effects. This is reflected in a policy statement by the Hawai'i Department of Health noting that,

"the existing research data on possible adverse health effects, including cancer, are inconclusive and not adequate to establish or quantify a health risk." (January 19, 1994)

While the scientific community continues to study EMF, we will continue to support EMF research, providing financial support through our membership in national organizations such as the Electric Power Research Institute and the Edison Electric Institute. We will continue to support and monitor these studies as they progress and will design and construct our facilities in a manner that will minimize EMF where technically feasible and economically reasonable.

We will keep our customers and employees informed on the EMF issue and will assist those who desire more knowledge in contacting appropriate sources of information or professional services.



# ENVIRONMENTAL PRINCIPLES

# Hawaiian Electric's commitment to safety, health and the environment.

To emphasize our commitment to consider the safety and health of the public and the environment in our business decisions, we at Hawaiian Electric Company have adopted environmental principles governing the conduct of our companies. In keeping with this commitment, we will:

- Conduct affairs in a manner that protects Hawai'i's unique historic and cultural heritage.
- Protect the air, land and water resources where we operate by limiting the generation of wastes and discharge of pollutants.
- Take reasonable measures to address the effects that our facilities and operations may have on protected seabirds and other protected species.
- Prepare for environmental emergencies that may arise from our operations and act promptly to minimize environmental damage.
- Conserve natural resources in all our pursuits and encourage our customers to use electricity and other forms of energy wisely and efficiently.
- Support research on safety, health and environmental effects associated with company operations.
- Advise the public on how to use our products safely and inform them of any known potential health or environmental risk associated with our operations.
- Be a good neighbor in the communities in which we do business and respond in a timely manner to inquiries and complaints about the environmental effects of our operations.
- Work cooperatively with citizen and government organizations to identify emerging environmental problems and develop realistic, cost-effective solutions to protect the safety and health of Hawai'i's people and the environment of our state.



## OUR SAFETY COMMITMENT

# Hawaiian Electric adheres to federal and state government standards and guidelines.

Electric and magnetic fields (EMF) are found wherever electricity is in use - near power lines; electric appliances used every day in your home; tools and motors; and in buildings such as offices, schools and homes. Whether or not these fields constitute a health hazard is the question investigated by scientists in the U.S. and Europe as they pursue definitive answers about EMF.

Since current scientific knowledge cannot explain how the relatively low EMF associated with power lines might produce adverse human health effects, and since no conclusive, convincing and consistent relationship between exposure to EMF and adverse health effects has yet been demonstrated, the Hawai'i Department of Health (DOH) adopted a policy that states that, "reasonable, practical, simple and relatively inexpensive actions should be considered to reduce exposure." The DOH continues to "collect and evaluate information on possible health hazards associated with EMF, and if adequate data establishes what levels will be harmful, appropriate standards will be established."

At Hawaiian Electric Company, we will continue to monitor EMF research developments while remaining committed to a policy of safely providing our customers with the electricity they need, adhering to federal and state government standards and guidelines. Should future research convince regulatory authorities that EMF constitutes a health hazard, every reasonable precaution will be taken to protect our customers and employees.

