

HOUSE RESEARCH

Bill Summary

FILE NUMBER: H.F. 393

DATE: February 19, 2007

Version: H0393A1 (Author's amendment)

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Subject: Geothermal heat pumps

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Overview

House File 393 authorizes the Department of Commerce to conduct an assessment of the potential contribution greater use of geothermal heat pumps could make to energy conservation in Minnesota. Geothermal heat pumps, or ground-source heat pumps, take advantage of the constant source of the earth, approximately 55 degrees, to heat and cool a building. They circulate water or a water/antifreeze solution through a closed loop of plastic pipe buried in the ground, transferring heat between buildings and the earth.

This bill funds a study to examine the energy, economic and environmental benefits to be gained from geothermal heat pumps as compared to fossil fuels, in both newly-constructed and retrofitted commercial, institutional and residential buildings. The analysis will also identify the barriers to more widespread use of this technology, and measure the potential economic development effects in Minnesota if these devices are more widely adopted.

Section

1 Geothermal heat pump study.

Requires the Department of Commerce to conduct a study of the use of geothermal heat pumps in Minnesota., including:

- current extent of use;

Section

- energy and economic savings from their use, on both a capital cost and life-cycle basis;
- environmental impacts, compared with fossil-fuel use;
- financial assistance available from Minnesota utilities, the state, and the federal government to defray the costs of installation; and
- barriers preventing more widespread use of the technology and strategies to overcome them.

The report is to be presented to the legislature no later than March 15, 2008.

2 Appropriation. Appropriates \$50,000 from funds assessed by the Public Utilities Commission on Minnesota utilities.