



WATER ENERGY DISTRIBUTORS, INC.

603-329-8122

[www.northeastgeo.com](http://www.northeastgeo.com)

## GEOTHERMAL HEATING COST NUMBERS TO REMEMBER, RELATIVE TO FOSSIL ALTERNATIVES

**BREAK-EVEN OPERATING COST COMPARISON**, such that the cost of the fossil fuel heat alternative is equal to the cost of geothermal heat

To provide the same amount of heat for the same cost as geothermal, with the CMP electric rate at \$0.14 per kwhr, fossil fuels would have to cost as follows:

- Propane would have to cost \$0.70 per gallon
- #2 Oil would have to cost \$1.06 per gallon
- Kerosene would have to cost \$1.06 per gallon

For fossil costs above these levels, the cost of fossil heat will be greater than geothermal. **Compare these threshold numbers with present fossil fuel costs, and think about future trends!**

**TO INCLUDE THE INSTALLATION COST DIFFERENTIAL**, the best metric for an equitable comparison of the total geothermal picture with an equivalent fossil installation is **homeowner cash flow comparison**.

The “Stimulus” Bill now provides a 30% Tax Rebate for residential geothermal system installations. An average sized new Maine home with the heating system installation included in the mortgage, will have **ZERO cash flow difference between an installed oil fired home and an equivalent geothermal heated home**, for oil at the following costs:

- For homes requiring a well for domestic water, **zero cash flow difference** typically occurs when oil costs \$1.33 per gallon
- For homes on town water, requiring a geothermal-only well for the geothermal home, the typical corresponding cost of oil for **zero cash flow difference** is \$1.58 per gallon.

What this means is that, with homes requiring a well for domestic water, **for oil at any cost above \$1.33 per gallon, the homeowner with a geothermal system will be paying (much) less monthly money to the bank than they would be paying to the oil man, if they used oil heat.**

The corresponding numbers for comparison with propane are \$0.87 per gallon for homes with a well and \$1.04 per gallon for homes on town water.