



Electric vs. Natural Gas vs. Propane

Walton De-Ice

Heated

W.B. Walton Enterprises, Inc. offers Natural Gas, Propane Gas and Electrical heaters for heating the air inside the Plenum, located on the back side of the Satellite Earth Station Antenna. While all three fuel sources have some safety concerns, if used properly they can all be safe and reliable fuel sources. Every customer should make sure that they follow all safety recommendations from their local supplier, the fuel source industry and the equipment operation and maintenance manuals. The customer should also make sure they follow local and national safety codes pertaining to the selected fuel source.

One of the first considerations, when deciding which fuel source to use, is availability of the fuel source at the intended site. Electricity is more likely to be available than either Natural Gas or Propane Gas, but you will often find Natural Gas and/or Propane Gas is also available. You should also consider the reliability of the delivery method. Does the Propane truck have trouble getting to your site, are the electrical cables underground or in the air, and does the gas line have enough pressure to adequately supply your needs.

Next you should consider the cost of operation. Natural Gas is measured in Cubic Feet or Hundred Cubic Feet (CCF) yet sold by the therm with Propane Gas Sold by the gallon or weight, and Electricity sold by the Kilowatt-hour. These different ways of measuring and selling the energy sources, coupled with multiple heaters in different sizes, makes it difficult to compare. In order to simplify the comparison, we present the table below, which converts everything to a cost per million BTU's. Using the average United States cost from the U.S. Department of Energy derived the cost data. The effective date is March 3, 2008.

Representative Average Unit Cost of Energy

Energy Type	In Common Therms	\$ per million BTU (British Thermal Unit)
Electricity	10.8 cents per KWh	\$31.65
Natural Gas	75.3 cents per therm	\$13.28
Propane	2.42 dollars per gallon	\$26.50

Note: Representative average unit energy costs for energy sources as reported by the U.S. Department of Energy, effective March 3, 2008.