



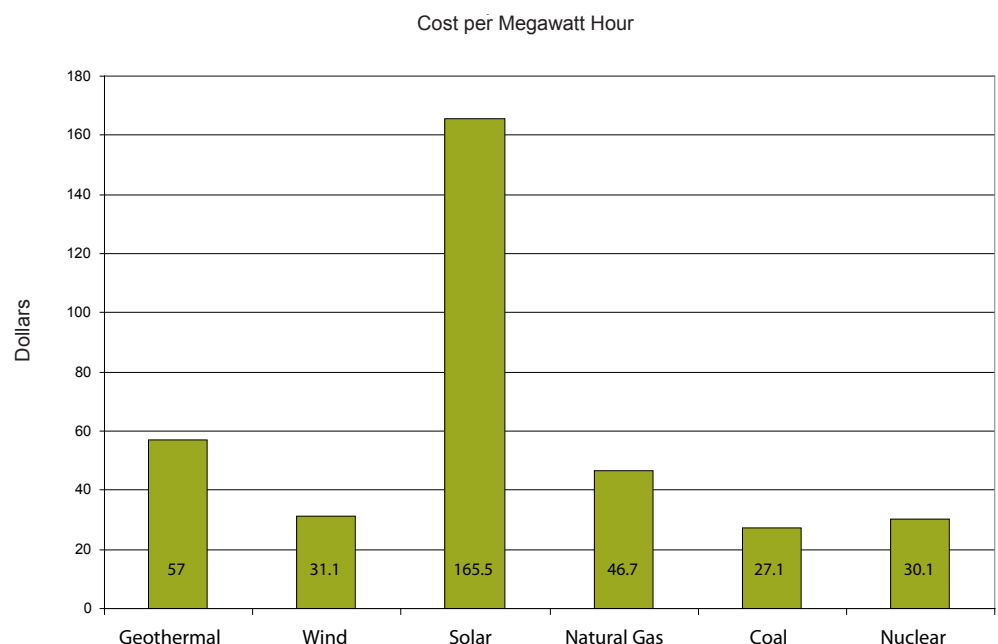
## **THE CORE OF NUCLEAR POWER: AFFORDABILITY**

Nuclear energy will provide affordable electricity that will keep utility costs low for those in need.

**FACT: ELECTRICITY FROM NUCLEAR POWER IS BETWEEN 31 AND 229 PERCENT CHEAPER THAN ELECTRICITY FROM OTHER POWER SOURCES**

Keeping electricity affordable is a major issue for Utah's indigent. For them, higher utility costs mean they have to choose between feeding their family and keeping their family warm. While it is certainly inconvenient for middle-class and upper-class Utahns to pay higher power bills, they generally have the financial means to make ends meet. In this light, nuclear power is one of the best sources of electricity for our neighbors in need.

In terms of overall cost to produce electricity, nuclear power is the second least expensive.<sup>1</sup> The bulk of our utility bill, however, is determined by the cost to fuel, operate, and maintain a power plant, not the cost to build it. When plant construction costs are factored out, the affordability of nuclear power becomes even more pronounced.<sup>2</sup> Relative to all other energy sources, save one, reliance on nuclear power would mean lower utility bills – between 31 percent and 229 percent lower.<sup>3</sup>



In terms of production costs, nuclear power is more affordable than all other options except wind. Unfortunately, wind power will, at best, only be able to provide about 1/3 of Utah's current electrical needs, meaning that wind power will be unable to keep utility costs down for the poor as demand in Utah grows.<sup>4</sup> This leaves nuclear energy as the best source of electricity available to keep power bills affordable.

Unlike wind energy, nuclear energy is both plentiful and reliable. Uranium provides an abundant source of nuclear fuel, which means that nuclear power plants can generate electricity continuously. Additionally, because the costs of nuclear power are less sensitive to fuel prices, nuclear power will keep utility costs consistent, avoiding spikes in power bills that stretch the resources of those living from month to month even further.<sup>5</sup>

The inexpensive cost of producing electricity from nuclear energy makes it an affordable source of power for those in need. If the costs of electricity increase, some Utahns will not be able to feed and clothe their families, let alone improve their economic situation. Public policy that encourages nuclear power will strengthen the economic situation of Utahns most in need.

## ENDNOTES

1. International Energy Agency. 2005. *Projected Costs of Generating Electricity – 2005 Update*. Organization for Economic Co-Operation and Development: Paris, France. For cost figures on geothermal power, see Hance, Cedric Nathanael. 2005. *Factors Affecting Costs of Geothermal Power Development*. Geothermal Energy Association: Washington, D.C.
2. *Ibid.*
3. These estimates were derived by dividing Utah's total megawatt-hour consumption of electricity in 2006 (25,901,000 MWh) by the number of households in Utah in 2006 (901,322 households), then multiplying that number by the cost per MWh for each energy source. Governor's Council of Economic Advisors. 2008. *2008 Economic Report to the Governor*. Governor's Office of Planning and Budget: Salt Lake City, UT; and American Community Survey. 2006. "Fact Sheet – Utah." US Census Bureau. At [http://factfinder.census.gov/servlet/ACSSAFFacts?\\_event=Search&geo\\_id=&\\_geoContext=&\\_street=&\\_county=&\\_city-Town=&\\_state=04000US49&\\_zip=&\\_lang=en&\\_sse=on&pctxt=fph&pgsl=010](http://factfinder.census.gov/servlet/ACSSAFFacts?_event=Search&geo_id=&_geoContext=&_street=&_county=&_city-Town=&_state=04000US49&_zip=&_lang=en&_sse=on&pctxt=fph&pgsl=010).
4. Sutherland Institute. 2008. *Natural Resources: Lighting our Future*. Fact Sheet – April 2008. At [http://www.sutherlandinstitute.org/uploads/natural\\_resources\\_lighting\\_our\\_future.pdf](http://www.sutherlandinstitute.org/uploads/natural_resources_lighting_our_future.pdf)
5. Nuclear power plants only require refueling once every 18-24 months, whereas other power plants, such as fossil fuel-based power plants, require constant refueling, and are thus more sensitive to fluctuations in fuel prices. Nuclear Energy Institute. 2008. "Costs, Fuel, Operation, and Waste Disposal." Nuclear Energy Institute. At [http://nei.org/resourcesandstats/nuclear\\_statistics/costs/](http://nei.org/resourcesandstats/nuclear_statistics/costs/).