

COMMENTS FROM THE EDITOR

This issue, which may be our last depending on funding, is devoted to topics from three well-known international experts in the field of geothermal energy. All three are newly elected members of the International Geothermal Association and represent Australia, Italy and Switzerland. Their topics are of current interest, as they address important issues being discussed by geothermal investors and developers. The recent report published by Massachusetts Institute of Technology: "The Future of Geothermal Energy – Impact of Enhanced Geothermal Systems (EGS) on the United States in the 21st Century" written by a committee of international experts chaired by Dr. Jefferson Tester, emphasizes the importance and potential of geothermal energy in the United States and implications for similar development elsewhere in the world. The report states that over 100,000 MWe of installed capacity could be in place by 2050, given the resource, technical and economic incentives. This is certainly an appropriate and positive report.

Unfortunately, funding for the USDOE geothermal program appears to be in jeopardy and slated to be phased out in 2008 by the current administration. On the other side, Congress has several bills which include supporting the USDOE geothermal program and other R&D activities at even a higher level. Hopefully, by 2008, funding will be restored and new programs started to continue the development of geothermal in the U.S. Elsewhere in the world, funding appears strong in Europe, Philippines, Indonesia and Australia. Even though geothermal and other renewable energies will not play a major role in the near future, they must be promoted and developed as they will be significant in the long term.

Based on recent reports (see Bertani this issue) and data from the World Geothermal Congress 2005, the growth of geothermal appears strong worldwide. The current estimate for geothermal electric power is over 9,700 MWe of installed capacity generating 60,000 GWh/yr in 24 countries. The growth has been around three percent per year over the past ten years, with approximately 250 MWe of capacity added each year. Direct use has an installed capacity of around 29,000 MWt and annual energy use of 76,000 GWh in 72 countries. The growth of both installed capacity and annual energy use has been good at 6.5% per year over the past ten years (excluding geothermal heat pumps). Geothermal heat pumps have experienced the largest growth of all the geothermal applications, with the installed capacity growing almost 24% annually and the annual energy use growth at 20% in 33 countries. Since geothermal heat pumps use ground or groundwater temperatures between 5 and 30°C, they can be installed anywhere in the world, and used for both heating and cooling. The installed capacity growth for both electric power and direct-use over the past 30 years is shown in Figures 1 and 2. The rapid rise in direct-use growth since 1995 is due to the recently popularity of geothermal heat pumps.

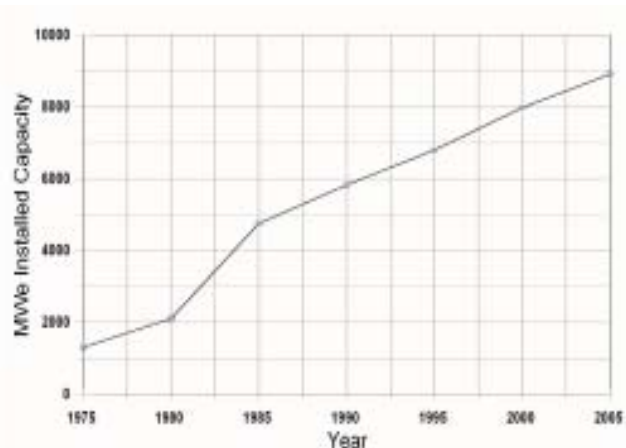


Figure 1. Worldwide growth of installed capacity of geothermal power.

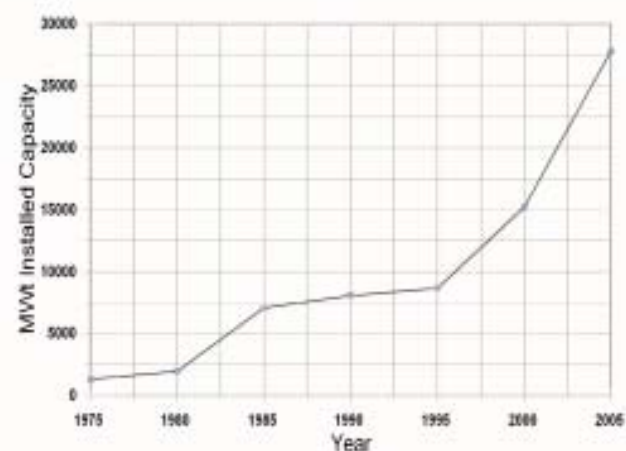


Figure 2. Worldwide growth of installed capacity of geothermal direct utilization (including geothermal heat pumps).

The funding for the Geo-Heat Center is presently limited and may be exhausted by the end of the year. Hopefully, funding in the U.S. House and Senator energy bills, and from other public and private sources, may restore our program, we just have to wait and see what develops for 2008. Thus, this may be the last issue of our Quarterly Bulletin, which has been in existence since 1975, or we may only provide issues in electronic format on our website, as we now do for back issues once they have been printed and mailed. We will let you know.

John W. Lund, Editor