

NUCLEAR ENERGY IS RENEWABLE

February 15, 2005

President George W. Bush
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear Mr. President:

You recently stated that nuclear energy belongs among the renewable sources of energy. Subsequently, a group of persons representing environmental interests objected, maintaining that the only sources of energy that can be classified as "renewable" are bio-fuels, biomass, geothermal, hydropower, solar, and wind. They are wrong. You are right.

In the context of energy, "renewable" clearly means "inexhaustible." For example, geothermal energy and the sun's energy are inexhaustible even though never renewed. The same holds true for nuclear energy from fission of uranium and other actinides.

Today's uranium-fueled nuclear power plants can provide the nation with clean and reliable energy for many decades and probably well into the next century. Furthermore, American scientists and engineers have the knowledge necessary to provide our nation with an inexhaustible energy source through the use of fast-neutron reactors. This technology has already been proved -- all that is needed is to develop it to a commercial level. The amount of depleted uranium already mined and available at U.S. enrichment plants can be used in fast reactors, and contains enough energy to supply the nation for several hundred years. Mining additional uranium -- including, if necessary, extracting it from seawater -- can supply humanity's energy needs for millions of years.

Nuclear fission is among the energy sources that are least polluting and have the lowest environmental impact. This conclusion is based on careful and extensive studies by numerous individuals and scientific commissions around the world. Moreover, proven advanced fuel reprocessing and recycling technology can eliminate the need to isolate nuclear waste for more than a few hundred years.

The American Nuclear Society believes that all energy sources have useful applications and should be part of the nation's energy mix. However, in the long term only nuclear power plants are capable of supplying the copious quantities of clean and reliable energy needed to run an advanced industrial society such as ours. Nuclear energy is not limited to the generation of electricity, but may equally well be used for production of hydrogen, desalination, and for process-heat applications such as recovery of crude oil from very large tar-sand deposits in politically stable regions of the world.

We stand ready to provide the scientific and technical information that substantiates the above statements.

Sincerely,

(Signed): James S. Tulenko
President,
American Nuclear Society