

# Atoms In Japan

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## Outlook for 1988 World Nuclear Scene

A year and a half after Chernobyl, 1988 has not exactly opened with a bright future for nuclear industries of the world. Japan is somewhat exceptional in the improved support of nuclear power, but nearly 90% of the Japanese people have misgivings about nuclear safety. (See companion article) Nuclear moratoria in some European countries and in the United States are having more serious consequences. Dull energy demand and declining prices of crude oil have reduced orders for present types of reactors and the outlook for FBRs is dim. If these conditions continue, it could lead to discouragement and demoralization among nuclear interests.

We must reaffirm and reconfirm the characteristics of nuclear power and its roles — notably with a long-range perspective. Needless to say, nuclear power produces energy by sophisticated technology and has the role of freeing mankind from the limitations of natural resources. Its capacity to produce large quantities of energy from small quantities of nuclear material gives nuclear power an advantage over most other sources of energy in both economic terms and from consideration of the earth environment. When various spill-over effects of nuclear development are taken into account, we cannot overlook its role in leading the development of science and technology. But we still have a long way to go for the nuclear potential to be given full use.

At the same time we must recognize that the day has gone when nuclear power could be treated with indulgence like a molly-coddled child.

From now on, the task requires meticulous care and untiring perseverance amid circumstances of insufficient funds and harsh treatment — so much so that no matter how successful one may be, one will have to wait for one's

number to be called for the show. If we are to make a sustained effort in these days to realize life's springtime, it is most important to achieve the stability of a favorable international climate and assure the continuation of effective and constant international cooperation.

This is the primary reason why Japan, in its revised Long Term Program for Development and Utilization of Nuclear Energy issued last year went on record independently and positively for international cooperation. During the debate on the long term program, I suggested that the Japanese should see international cooperation as a benefit to themselves, rather than for other countries, developing or industrialized, to which they extend it. But this idea is not exclusive to nuclear power.

Cooperation with developing countries is one of the most important matters for consideration under our long term program. Some developing countries are preparing for nuclear power generation with start-up scheduled for some time after the year 2000, some building or preparing to build plants with some positive nuclear power programs, and some to operate their own nuclear power plants. Proper care must be taken to approach each of them in accordance with its level of progress. Cooperation with such countries is especially important in helping them to lay the foundations for the research and technology necessary for them to move ahead independently with their nuclear power programs. From the time they formulate their programs, they need constant cooperation in everything, including the development of personnel.

Some developing countries, however, by reason of their national resources and economic conditions, cannot wait until they can derive benefits from the steps in nuclear development they are supposed to follow, as the advanced