Nuclear option favored at Senate hearings on accord with China

by Suzanne Rose

Will the U.S. go nuclear again? was a major theme of hearings before the Senate Energy Committee on "Peaceful Nuclear Cooperation with China." The hearings were convened on Oct. 23 by the chairman of the committee, Sen. Frank Murkowski (R-Ak.), to discuss the desire of the Clinton administration to implement the long-stalled 1985 agreement on nuclear cooperation with China.

The Chinese effort to acquire nuclear technology from the United States had been anticipated to be a leading subject of the summit between President Clinton and Chinese President Jiang Zemin. President Clinton had been expected to certify that China has met the conditions for the agreement to be implemented, so that the United States could begin to export nuclear reactor technology.

The agreement has the historic potential, in conjunction with a reform of the monetary system, to begin reestablishing technology transfer as the basis of productive relations with developing economies, and the transformation of the U.S. economy itself back to high-technology manufacturing.

The drive to revive this most efficient, and essential, form of energy production will have to take on directly the decades of brainwashing against high-technology energy, which has taken over the United States, destroying *rationality,* as well as the industry.

The energy requirements of China, the world's only physically growing economy and most populous nation, which are at issue in the implementation of the agreement, could, ironically, spur the return of nuclear energy to the United States. The expansion in the United States of nuclear energy, the world's safest and most efficient form of energy, has long been sabotaged by the Malthusian environmentalist movement and the speculative financial policies of London and Wall Street. William Martin, of the think-tank, Washington Policy and Analysis, testified before the committee hearings that "by helping China, it may help the U.S. return to nuclear."

In contrast to the United States—which, under the insane "post-industrial society" policy, has closed down much of its manufacturing and agricultural capacity, and therefore has no need for advanced energy sources—China is, according to a memo provided by committee staff, installing more electricity capacity over the next ten years than any nation in history has done in a comparable time period, to meet the requirements of raising the living standards of the population.

The potential which China's demands have to shift the anti-nuclear attitude in the United States, was demonstrated by the comments of Sen. Dale Bumpers (D-Ark.), who is known for his environmentalism. Bumpers told the hearing that he was convinced that the nuclear agreement with China was the way to go.

The panelists at the hearing included Robert Ebel, director of Energy and National Security of the Center for Strategic and International Studies at Georgetown University; Robert Gallucci, dean of Georgetown's Foreign Service School; William Martin, chairman, Washington Policy and Analysis; and Joe Colvin, president, Nuclear Energy Institute. They painted a grim picture of the state of the nuclear industry in the United States, while describing the enormous potential from meeting the needs of China.

Senator Murkowski, the committee chairman, pointed out that the United States has built no new nuclear plants since 1975. It was pointed out by others that the plants in existence are being phased out. The deregulation of utilities is undermining the ability to maintain a rate structure to support nuclear plants. Twenty-six plants have run out of space in which to store their spent nuclear fuel, and the Carter administration prohibited reprocessing.

Under the present constraints of the Environmental Protection Agency, etc., we will be allowed no coal, no hydropower, and no nuclear energy, said Murkowski. "We need a dose of realism," he said. On the other hand, China intends to double its GNP by the year 2010. To do this, it needs massive amounts of energy. According to the panelists, to meet its goals of having 20,000 megawatts of nuclear capacity by the year 2010, China would have to order two new reactors each year.

They want to select from U.S. light-water reactor designs to build families of plants using standardized designs, because they are the safest and have been tested internationally. Every 1,000-megawatt nuclear unit ordered, means 15,000-30,000 U.S. jobs and $1-2 billion in exports, according to the testimony—and these are professional, high-salary jobs in manufacturing.

Wrong argument

Unfortunately, the hoax of global warming provided those discussing the issue at the committee hearing (who must have

known better) with the rationale for the necessary turn toward nuclear energy in the United States and China. It was said by panelists and senators alike, that the targets for reducing so-called greenhouse gas emissions recently released by President Clinton, could not possibly be met without nuclear energy, even though there is no scientific evidence that global warming exists, much less that links the carbon dioxide emissions of fossil fuels with the so-called effect.

It was rightly noted that China needs to reduce its reliance on coal, from the standpoint of energy efficiency and transportation costs. China is currently the largest producer and consumer of coal, much of which is poor quality and causes pollution. Its currrent supplies of natural gas and oil fall far short of meeting requirements, the committee was told. "Energy is the motor of development in China," said panelist Bill Martin. "They need energy and we can provide it."

Documentation

From a memorandum prepared for the Oct. 23 hearing by congressional staff:

. . . It is . . . important to stress the fact that China will develop its civil nuclear power infrastructure with or without the participation of the United States. Currently, China has three operational nuclear power reactors, including one indigenous design and two French reactors based on an older U.S. design. Eight additional reactors are under construction or on order, including two indigenous reactors, two Canadian reactors, two French reactors, and two Russian reactors. China plans to install 50,000 megawatts of new nuclear capacity by 2030, and hopes to standardize around a single design. A Chinese decision to standardize around a modern U.S. reactor design would be beneficial from the standpoint of nuclear safety, not to mention the positive implications for U.S. jobs and exports. A recent study by the Center for Strategic and International Studies suggests that U.S.-China nuclear exports could reach $1.65 billion per year in the near term, supporting an equivalent of 25,400 full-time U.S. jobs. . . .

China, already home to 1.25 billion people or roughly 20% of the world's population, is growing at the rate of 1.2 million people *per month*. Economically, they are growing even faster with rates of growth during the 1990s running from 8-13%. With an installed capacity of 236.5 GW(e), China only ranks 80th among the nations of the world in per-capita energy consumption. To meet its growing energy demand, China has installed more new electric capacity in the past ten years than any nation in history over a comparable time period. 300 GW(e) of capacity is expected to be in place by the year 2000, and China has established a goal for a total of 511.5 GW(e) to be in place by 2010. . . .

From a September 1997 report issued by the Center for Strategic and International Studies (CSIS), "U.S.-China Commercial Nuclear Commerce." These excerpts are taken from Appendix I, "Potential U.S. Jobs Resulting from China Nuclear Reactors Sales."

China has established for itself a very ambitious program for expanding its electricity generation from nuclear energy plants. [2010—20,000 MW of nuclear generating capacity; 2020—50,000 MW; 2050—150,000 MW.]

Although these goals are subject to revision in the coming years, nonetheless the commitment is massive. . . .

If the goal for 2020 of 50,000 megawatts of nuclear generating capacity is to be met, the Chinese will need to procure an additional 41,200 megawatts of nuclear generating capacity beyond what is already operating or on order. If the capacity is to be available and operating by the year 2020, however, all nuclear plant orders would have to be placed by 2014, allowing for six years from ordering a plant until it begins operating. In other words, if China is to meet its 2020 goal, orders must be placed for just over 2,400 megawatts per year on average from 1998 to 2014. Further, to meet the 2050 goal, the order rate would have to increase to 3,300 megawatts per year after 2014. . . .

To put all this in perspective, a nuclear plant consisting of twin units (nuclear plants are always ordered in pairs, for economic reasons) would provide between 2,000 to 2,800 megawatts, depending of course on the size of the reactors chosen. Thus, to meet its 2020 goal, China would effectively need to place an order for a new nuclear plant every year, for the next 17 years. . . .

. . .The U.S. Department of Commerce periodically provides data on the number of U.S. jobs supported by goods and services exports. The latest report (November 1996) states that the average output per job (for all goods and services exported from the United States) was $64,700. The Commerce report also notes that export-supported jobs produced salaries that were, on average, 13% higher than non-exporting jobs in the United States. . . .

Inverting the $64,700/job relationship indicates that every $1 billion in exports supports more than 15,400 jobs. Thus, exporting more than $1.65 billion per year to China in nuclear-related goods and services would support over 25,400 *full-time equivalents*. Actually, only a fraction of the individuals would be devoting 100% of their time to work on China export activities. The vast majority of individuals would be performing other tasks within their companies. Thus, in reality there would be hundreds of thousands of U.S. employees that would owe some part of their job to the support of nuclear trade with China. . . .

This evaluation . . . does not attempt to estimate the export market that would also result from supplying the goods and services needed to support the operation and maintenance of all these new nuclear plants. . . . This will likely prove to be a very substantial market in itself.