Start Now Building 28 U.S. Nuclear Plants!

by Marsha Freeman

Forecasts for this Summer are that entire sections of the United States, particularly the West and East coasts, will likely experience brownouts and blackouts, because of shortages of electricity. If millions of manufacturing jobs had not disappeared over the past 30 years, capped by tens of thousands of layoffs recently announced in the automobile and related machine-tool industries, this country would have already reached Third World conditions, where electricity is rationed and available for only a few hours per day.

Congress must act now, and reverse the policies of deregulation, financial manipulation, "environmentalist" sabotage, and "free market" government non-intervention that led to the take-down of the nation's most productive technologies, and the halt to the construction of new nuclear power plants.

There are currently 103 nuclear power plants operating in the United States, with a capacity of 98,000 megawatts (MW). During the decade from the mid-1970s to mid-1980s, an equal number of nuclear plants that had been ordered were cancelled, which would have provided an additional 107,000 MW. Rather than being 20% nuclear today, more than half of this nation's electricity could, and should have been, produced by nuclear power *a decade ago*. Had that momentum continued, we would not be burning coal today, or worrying about the skyrocketing price of natural gas.

The Bush/Cheney Administration "energy policy," centers on billions of dollars of tax giveaways to their oil and gas patrons, but includes a sop to the nuclear industry. The idea is to coax utilities to order one or two new nuclear plants over the next five years. Congress has tried to add incentives, by proposing that the government provide, or at least guarantee, loans for new plant construction. These measures do not address the problem; nor are they the solution.

We must immediately return to a Federally directed program geared to maximize the use of a variety of nuclear technologies, and return to rates of growth in energy production that are triple those that exist in today's depression economy. This is a prerequisite for global economic expansion.

The approach must be the one taken by President Franklin Delano Roosevelt. Through the creation of the Tennessee Valley Authority, the Rural Electrification Administration, and other legislative and executive initiatives in the 1930s, President Roosevelt make it the responsibility of the Federal government to provide the citizens of this nation with the electricity that would bring them a modern, industrial standard of living. The Public Utility Holding Company Act (PUHCA) of 1935, and other legislation, mandated *by law* that regulated electric utilities must provide reliable and affordable electricity to every American. It made it illegal for utilities to use their financial holdings as gambling casinos, through stock-market pyramid schemes comparable to today's derivatives market.

Two decades later, when the Atomic Energy Act was signed into law by President Dwight Eisenhower in 1954, it made it the policy of this nation to develop and deploy civilian nuclear power. Nothing less than that national commitment will remove the "environmental," regulatory, and Wall Street/ financial obstacles to building new nuclear plants.

It is not good enough to improve the "business environment," so a now largely deregulated and highly concentrated utility industry will be "induced" to build nuclear plants. There can be no quarter given to anti-growth "local concerns." We are in the midst of a national economic emergency.

Start With 'Brownfield' Plants

Among the 104 nuclear power plants that were cancelled 30 years ago, approximately one third were to be additional units at sites already housing at least one operating nuclear power plant. Construction of those 28 cancelled plants must begin immediately.

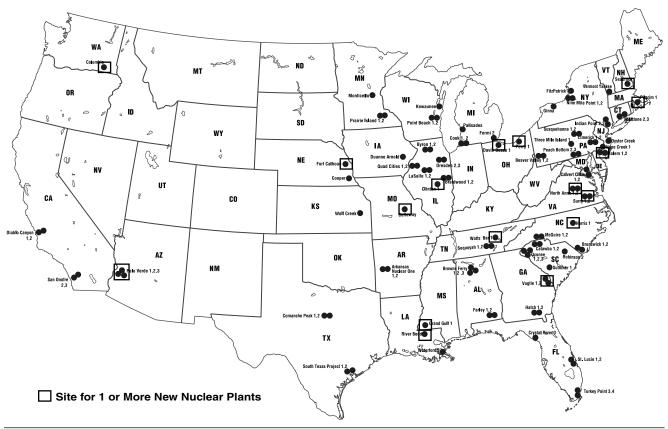
At these "brownfield" sites, where there is at least one operating plant, a skilled workforce is available, and sitepreparation work was already done. The overall transportation, energy, and other infrastructure is in place. In some cases, the infrastructure for the additional unit was also in place, and construction of the reactor had begun. At the Tennessee Valley's Watts Bar 2 unit, for example, the plant was 80% complete when construction was stopped.

It was the cancellation of more than 100 nuclear plants that planted the seeds of destruction of our world-class national electric grid system. And the effects are not seen anywhere more clearly than on the West Coast of the United States.

Four years ago, California suffered rolling blackouts, soaring electricity prices, and the bankruptcy of its largest electric utility company. Although it was the energy pirates, led by Enron, which orchestrated the crisis, it was the fact that the "counterculture" state had built virtually no new power plants or transmission lines in decades, that made the deregulated market manipulation possible.

California, and the rest of the Western states, would have no energy shortage, if the nuclear plants that were cancelled had been built. In the 1960s, Pacific Gas & Electric, which is now in bankruptcy reorganization, projected that it would be entirely nuclear by the 1980s. Nuclear-powered desalination had been part of California's energy and water plan. Instead, today farmers are fighting over limited supplies of water with cities that use electricity produced from dams in the droughtstricken West.

FIGURE 1 Ready Sites for 28 New Nuclear Plants, at 17 Current Nuclear Power Locations



Source: Nuclear Energy Institute.

In 1973, the Washington Public Power Supply System (WPPSS) began construction of its first nuclear power plant, Unit 2, on land leased to the utility by the Federal government, at the Hanford nuclear reservation. Two years later, Unit 1 was under construction, and three years later, construction began on Units 3, 4, and 5.

After Federal Reserve Chairman Paul Volcker moved to wreck the U.S. economy in October 1979 by raising interest rates to double-digit heights, WPPSS estimated that it would cost \$23.8 billion to complete all five reactor units, because interest rates had soared to 16%. Wall Street considered the project financially unfeasible. In 1982, construction was halted on Unit 1, which was more than 60% complete. The next year, having run out of funds, WPPSS stopped work on Unit 3, which was 75% complete. WPPSS went bankrupt, and today, only Unit 2 is operational.

The previously operating Trojan nuclear plant in Oregon and the San Onofre unit in California have been shut down, because the utilities refused to invest in the upgrades, maintenance, and refurbishment needed to bring these older plants up to regulation standards.

During the 1980s, the Tennessee Valley Authority, which

had undertaken the largest nuclear construction project in the world, cancelled a whopping 11 nuclear plants. But with the Southeast now short of power, TVA has reconsidered, and is spending \$1.7 billion to upgrade and reopen its shuttered Browns Ferry Unit 1 plant.

How quickly could these 28 previously cancelled plants at brownfield sites be put on line? Nuclear experts advise that although about a dozen of the plants were more than 50% complete at the time they were cancelled, they have longsince been stripped of any usable equipment, and today's more advanced reactor designs should be built in their place. General Electric builds modern, safe, and efficient standardized nuclear power plants in Japan in 48 months, and there is no reason that cannot be done here.

This will require the reassertion by the Congress of the general welfare clause of the United States Constitution.

Former Washington State Governor Dixy Lee Ray had proposed in the early 1980s that if the private utilities could not complete the WPPSS nuclear plants, they should be built on the Federally owned Hanford nuclear reservation, outside the clutches of Wall Street and the environmentalists. Where there is the political will, there is a way.