Energy Insider by William Engdahl

Nuclear program unravels further

Americans ought to carefully study the result of the French atomic-energy commitment.

Continuing cancellation of U.S. nuclear plants was the subject of a Jan. 5 year-end review in this space. Since that writing the situation has deteriorated further.

Most dramatic and potentially most devastating is the Jan. 8 decision by the U.S. Circuit Court of Appeals in Washington, D.C. regarding the fate of the Three Mile Island-1 nuclear plant.

That three-man court established a very dangerous precedent. It ruled that the National Environmental Policy Act includes "anxiety and psychological stress" as environmental factors which must be determined by the government.

The specific case involves the ridiculous three-year delay in restarting the undamaged unit, which happened to be down for refuelling the day of the bizarre TMI-2 disaster. Shutdown of the TMI-1 unit threatens to make GPU, the parent utility, the first electric utility in the United States to declare bankruptcy. Such an event would trigger further cancellations.

This TMI precedent will be used by anti-nuclear groups later this month in hearings on the Indian Point nuclear units 2 and 3. Government hearings will weigh the demand to shut down a major power source for New York City on the explicit issue of "fear of nuclear power," due to proximity to a city!

In New Jersey, Public Service Electric & Gas has formally canceled its Hope Creek-2 nuclear unit, having already invested \$172 million on the partially complete plant. The decision, according to PSE&G, was based on "lower consumer demand" projections.

Carolina Power & Light has just announced cancellation of its Harris-3 and 4 nuclear units and postponement of Harris-2. The Tennessee Valley Authority (TVA), with the nation's largest nuclear commitment, announced on Jan. 6, 1982 that it will decide on the fate of Yellow Creek-1 and Hartsville-A1 and A2. This, if adopted, would bring to eight the number of nuclear plants deferred or cancelled by the TVA since Carter put anti-nuclear strategist S. David Freeman in charge of TVA.

There is a fundamental flaw in each of the above economically devastating cancellations. First, one of the major capital spending components of the total U.S. economy is the hundreds of billions in planned new power plant construction. Cancellation of the scale of recent years becomes, then, a "self-fulfilling" prophesy. The economy declines in short term. Long-term "demand" is then extrapolated.

Further, every dollar spent today on advanced nuclear infrastructure is of greater real worth, compared dollar for dollar, than even a coal-fired plant. The energydensity of nuclear power is seven times greater than coal. It is worth noting the one most outstanding recent international example of a nation that has maintained an aggressive nuclear energy program, France

The present French program is the result of policies made prior to the "Aquarian" government of Socialist President François Mitterrand. The central state-owned electric utility. Electricité de France (EdF), has added 15 new nuclear plants to the national electric grid in the past 15 months. France, with a total of more than 23 gigawatts of installed nuclear capacity and another 27 gigawatts under construction, is the world's second largest nuclear producer in absolute size. The largest, our own, has been stagnated since 1979 at about 71 gigawatts.

While the United States produces about 11 percent of total electric power from our nuclear base, with the vast majority from inefficient and expensive coal or oil generators, France last year produced 40 percent of all its electric power from nuclear sources.

With an absence of the absurd regulatory problems and with centralized design standardization built into the French program, the average construction of a French nuclear plant takes five to six years. Current completion time in the United States is verging on 12 to 14 years, with no relief in sight.

With far cheaper construction costs, and cheaper unit generating costs of uranium, EdF has just calculated the cost of a kilowatt-hour of nuclear electricity at an impressive low 16.5 centimes (approximately 3 cents). Coal is calculated at a whopping 34.6 centimes, more than double nuclear. The EdF calculates oil generation at almost 400 percent more than nuclear, 58.3 centimes. We need to break out of this absurd nuclear deadlock rapidly.