

*Charles Washburn - Nuclear Power and the Democratic Dilemma

In one of his broadcasts last week, Eric Sevareid noted that it's 100 times easier to be in the doubt-raising business than the doubt-dispelling business. Consequently, it seems to me, the most important thing at this time is to continue trying to communicate the facts of nuclear power development to the public. We shouldn't be too discouraged by isolated setbacks.

The March 1975 issue of Mechanical Engineering magazine has an article by Emilio Daddario, Director of Congress' Office of Technology Assessment. The article is entitled "Technology and the Democratic Dilemma." I think the role of public opinion in deciding highly complex and technical questions is the problem we face and that problem is the heart of the democratic dilemma. Daddario lists five basic dilemmas partly or solely caused by technology; the first three items only tangentially involve our topic but the last two bear directly on our topic.

1. The first dilemma is the question of the eventual need to stop economic growth.
2. The second dilemma is the question of the eventual need to further restrict individual freedom, especially individual initiative, because of resource constraints.
3. The third dilemma is the question of the need to abandon our belief in eventual world comity gained by helping others develop, or to accept drastic reduction in our own living standard.

Moving to the two dilemmas of direct interest:

4. The dilemma of time constraints in a democratic society. Before the public can gain enough experience to *intelligently* accept or reject a new technology, the technology is so heavily committed that quick "backing out" is impossible. This dilemma has also been addressed by Professor Les Lees of Cal

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- Tech--Lees has pointed out that the time lag for effective decision making in the U. S. is so long that, at least in the energy area, we're always working on the old problems.
5. The dilemma of different values between the public at large and the technical community. I think it is important to recognize that there are value differences, not just the need to talk more clearly. Daddario says, "This problem is based on the fact that, in considering technical problems and issues, the technical community and the general public employ rather different criteria of importance. This situation creates a communication gap that our recent history suggests is not an easy one to bridge, and which will demand a considerable amount of effort and goodwill on the part of both camps to overcome."

In California we're soon going to be able to test our effort and goodwill. California, as you probably know, has the referendum: by a 2/3-plus vote the citizens can directly amend the constitution and by a 1/2-plus vote they can pass a law. A referendum dealing with nuclear power, "The Land Use and Nuclear Power Plant Liability and Safeguards Act" is now being circulated for signatures. All parties agree that it will qualify for the ballot. Unless Governor Brown sets a special election, the vote will be held in June 1976. The measure states: "The people of the State of California hereby find and declare that nuclear power plants have a profound effect on the planning for, and the use of, large areas of the state, as do the manufacture, transportation, and storage of nuclear fuel, and the transportation, reprocessing, storage, and disposal of radioactive materials from nuclear power plants.

Omitting some of the more drastic parts of the referendum, which require essentially immediate repeal of Price-Anderson indemnification and which require that the legislature make findings

by 2/3 majority on specific aspects of reactor safety if existing plants are not to be shut down and new construction halted, the measure goes on to require:

"After five years from the date of passage, the legislature must find by a 2/3 vote, "the radioactive wastes from such plants can be stored or disposed of during the period in which the waste material remains harmfully radioactive with no reasonable chance, as determined by the legislature, of intentional or unintentional escape of such wastes or radioactivity into the natural environment which will eventually adversely affect the land and the people of the State of California, whether due to imperfect storage technologies, earthquakes or other acts of God, theft, sabotage, acts of war, governmental instabilities, or whatever other sources the legislature may deem to be reasonably possible."

If the legislature fails to make the positive finding by a 2/3 vote, the measure calls for immediate de-rating to 60% of design capacity and additional de-rating of 10% of design capacity per year.

Well, I guess the measure can be dismissed by saying "even if it passes the Atomic Energy Act pre-empts the field, so the courts will throw it out." That may well be so, but the measure is so constructed that each part must be tested separately, and if you will predict what courts will do today, you're bolder than me. Secondly if the measure passes, the California Attorney General defends it and he has a lot more resources than the Sierra Club, the Natural Resources Defense Council, the Environmental Defense Fund, the Audubon Society, or whomever you choose. If the measure should pass or fail narrowly, state and federal legislators will be emboldened to press for modification of the Atomic Energy Act to give the states greater authority to

regulate nuclear energy. Nader has opened an office in Sacramento and will certainly give major effort to passage of the measure. You might say that Nader isn't qualified to judge whether or not the risks of nuclear power are acceptable, but every time we say that most legislators think: "Hey, I'm more like Nader than I'm like you. Are you telling me that I'm not competent to decide this?"

In practical terms, I have several points I would like to make. I think we must admit that the Naders and the Browsers and the others do have as much right to try to influence public opinion in this area as we do. Secondly, an individual--whether from NRC, ERDA, a national lab, a contractor, a university, or whatever--can bank only on his own integrity and knowledge when he's talking to the public about these matters. If he tries to defend everything the AEC or a utility has done, he's sure to be ineffective. I once saw a strange dynamic on this. Three representatives from a utility were facing two adversaries before a public audience. The topic was a proposal for a nearby multiunit plant. The utility representatives seemed to say everything wrong. They seemed to be trying to antagonize the audience. I didn't understand why and asked a friend who was with me. The friend said, "Oh, they don't care what these people think, but each is worried about what the other two will say when they go back to work Monday morning." Well, it may be coincidental, but the most belligerent of the three was promoted to vice-president within a few weeks.

Also, we still underestimate the public's commitment to environmentalism and to open government decision making. For far too long the utilities counted upon a few brownouts quieting the opposition. Not only did that not occur, the problems are now entirely different. One indication of the public's changing values

was provided by the California Poll last week--only a very small minority of Californians (1 in 5) favor delaying advanced emission standards to gain better mileage and lower car costs.

Overall at this time, the public favors nuclear power development. There's no question about it. We had a very detailed public opinion survey performed in Sacramento in conjunction with the recent Sacramento Municipal Utility District bond issue election. This poll indicated that only about 15% of the public are outrightly opposed to nuclear power. Less formal polls by local state legislators and representatives gave very similar results. But, I believe, the mood could change rapidly. It may be worthwhile to carry out a series of opinion surveys in California and carefully study changing moods during the up-coming battle over the Land Use and Nuclear Power Plant Liability and Safeguards referendum. The attempt would be to identify as positively as possible the important favorable developments as well as the unfavorable developments during the campaign.