Myers (R-Pa). He reported that several subcommittee members will be voting for full restoration of the nuclear cuts. "A number of Democrats — including Rep. Mike McCormack — will go for full restoration of the cuts while Republicans — like Rep. Myers — will initially support only partial restorations," he said. "But when the Dems move openly to restore the cuts, the Republicans will back them."

Such wheeling and dealing — while in the right direction — leaves the anti-Carter coalition vulnerable to a Carter counterattack, an observer remarked. Earlier in the week, Congressional sources say, a number of members on the House Science and Technology subcommittee were subjected to heavy pressure tactics.

According to informed sources within the subcommittee, Carter has been wining and dining members of the subcommittee and pressuring them to stop opposing his cuts in nuclear energy. One enraged source said that Carter offered a number of Congressmen "restoration of water projects in their districts if they supported him on the fusion cuts" — a weapon which the Senate has subsequently removed from Carter.

Concurrently, Carter succeeded in inducing the committee to postpone the markup on the ERDA budget, originally scheduled for yesterday until Tuesday. At that point, a number of previously outspoken proponents of nuclear energy began issuing leaks that the subcommittee would only partially restore the cutbacks. When asked why the Congressmen would not go for full restoration, a top-ranking aide said "to go that far would be like waving a red flag to that man in the White House."

'Nuclear Swords Into Nuclear Plowshares'

Statement by Senator Strom Thurmond (R-SC) on the Senate floor
Reference the need for emphasizing research and development of nuclear energy. March 3, 1977.

MR. PRESIDENT:

Over the last few weeks, our Nation has suffered the most serious energy shortage within memory. Unfortunately, many representatives of the media and even some members of the Administration have either misunderstood or misrepresented the underlying problem. By raising the spectre of greedy businessmen hoarding energy reserves to boost prices, they have encouraged the gullible to believe that the shortage is artificial.

Let us stop this charade once and for all. The problem is real and serious. Despite the world's most advanced energy technology, this Nation cannot keep its factories busy or its homes warm without expensive assistance from abroad. Even with this assistance, we have seen severe weather cause widespread national suffering. Unless we act now to develop alternative energy sources, we shall soon be utterly at the mercy of foreign governments and the elements. It would be hard to say which is more unreliable.

A small group of single-minded environmentalists has succeeded in blocking such development through litigation and scare tactics. I do not mean to belittle the environmentalist cause. There is good reason to be concerned about the conservation of natural resources and the preservation of wild life.

It is only common sense, however, to balance environmental goals against energy needs. The Hindus of India, as Congressman Poage has pointed out, let people starve rather than kill the rats that eat their grain. Some environmentalists seem to want us to let people freeze rather than exploit the energy resources that could provide heat.

Two of the many accomplishments of such shortsighted activists are a three-to-five year delay in construction of the Alaska pipeline, and a nearly total blockage of off-shore oil and gas exploration. For instance, a couple of weeks ago, a Federal judge in New York nullified a contract of $1.1 billion for the lease of oil and gas rights off the coast of New Jersey. He justified his action on the ground that there has been insufficient study of the environmental background. The paperwork on the subject runs to 4,043 pages.

Another trophy claimed by such environmentalists is the obstruction of a $116 million TVA hydroelectric project on the Little Tennessee River. They protested that the project threatened a fish called the Tennessee snail darter.

Nuclear power is the energy source which has come under the most constant—and the most illogical—attack. Countless legal, emotional, and environmental arguments are made against nuclear development. Most of these, especially the frequent forecasts of doom, are the product of unthinking opposition to progress. Perhaps the most ridiculous charge is that energy-producing reactors could explode like nuclear bombs.

The true facts about nuclear energy should allay any such hysterical fears. Here they are:

1. Nuclear power is *safe*. No one has died in an accident involving nuclear generation at any plant in America. In fact, one university study indicates that an all-nuclear U.S. electrical power system, at worst, would be three times safer than a similar all-coal system.
2. Nuclear wastes can be stored safely in sub-surface salt deposits which are stable and virtually impenetrable. The entire process can be accomplished with little danger to man or the environment.
3. Nuclear plants produce only small amounts of waste. A large power plant in one year produces about two cubic yards of high-level waste. The current stock of nuclear waste in America would barely fill one small room and this quantity is not growing rapidly.
4. Nuclear fuel can be reprocessed for continuing use in nuclear energy generation. Facilities for such reprocessing have been completed in Barnwell, South Carolina, but environmental complaints have held up operation.

5. Nuclear energy is less expensive than fossil fuels. Due to the huge increases in the price of crude oil, it should continue to be so for the foreseeable future.
6. The people of the Nation want nuclear power—by a margin of two-to-one, according to a 1976 poll. Approximately that same percentage approved nuclear development in recent referenda in states from California to New Jersey.

These facts demonstrate that rapid development of nuclear power is both feasible and desirable. Now that shortages of fossil fuels have become chronic, such development is also necessary.

The production of nuclear energy, however, requires enormous capital investment. Before power companies will make this investment, our government must formulate a nuclear energy policy in which they can have confidence. Inconsistent and burdensome policy in the past has greatly depressed investor interest. With five-to-eight years of lag time between conceptualization and power production, any additional delay in encouraging investment will assure energy impoverishment in the 1980's.

There are some 58 nuclear energy electrical generating plants now in operation in the United States. Add 69 more under construction, 90 on order, and 11 soon to be ordered, and the total for the Country is 228. (This compares with a worldwide total of 450.) Nuclear power now provides seven to eight percent of our electrical power across the Nation, and over 20 percent in some particular areas.

Nuclear energy has proved to be invaluable during the recent energy crisis. A recent survey by the Atomic Industrial Forum, a trade association for the nuclear industry, estimates that nuclear power accounted for approximately 20 billion kilowatt-hours of electricity in January. Had this energy not been available, the following consequences would have ensued:

1. More than 257,000 additional lost jobs;
2. Nearly $230 million in lost wages;
3. A reduction of some $3.8 billion in the various goods and services that make up the Gross National Product.

To make up the resultant energy shortage from other sources would have required the following:

1. 32 million barrels of oil, nearly 13 percent of current monthly domestic production; or
2. 182 billion cubic feet of natural gas, more than 10 percent of current monthly production; or
3. 9.6 million tons of coal, about 17 percent of current monthly production.

These figures give us some indication of the usefulness of nuclear energy. If some of the unnecessary bureaucratic red tape could be cut, several more nuclear plants could be quickly completed to add to the benefits. For example, the New Hampshire Public Service Company is trying to build two nuclear power plants to help meet the future energy needs of New England. $140 million has already been spent on the Seabrook project, which the government originally approved but which the EPA is now delaying so it can investigate a possible danger to clam larvae. This problem arose four months ago. The delay costs Seabrook $15 million per month.

Increasing energy demands will necessitate increasing construction of electric plants as we approach the next century. How we run these plants will depend in large part on the outcome of the momentous research now being done on solar power, fusion, and other space-age technologies. At the present time, though, given the scarcity of oil and natural gas, the choice of fuel comes down to either nuclear material or coal.

President Carter seems to prefer coal. He has indicated that he would fall back on nuclear power only as a last resort. Without question, it is necessary to increase our use of coal. This precious resource is so abundant in the United States that the United States has been called the Saudi Arabia of coal. However, a substantial increase in coal mining and production would entail serious risks.

The National Academy of Science states that major expansion of coal production would bring with it "the expansion of one of our most hazardous occupations." The Academy also notes, "The hazards to the general public arising from the burning of coal are less obvious....But they become even more compelling because of the vast number of ramifications that air pollution has for rainfall, vegetation, and segments of our food chain."

Injured and diseased miners receive over a billion dollars a year in disability compensation, and the additional cost in suffering and sorrow cannot be given a monetary equivalent. Equally incalculable is the harm done to society at large by coal production and use. Considering the factors of safety and environmental effect, I believe it would be wise to place more emphasis on nuclear energy.

Mr. President, nuclear power bears an enduring stigma from the first terrible uses to which it was put. It has become associated, in the public mind, with bombs and destruction. It also has evoked the same fear and suspicion that seems to beset every technological advancement, potentially dangerous or not.

Looking back in history, we find that many people had misgivings about the airplane, the car, the telephone, the electric light, and all the inventions and discoveries on which modern society is based. Indeed, in writings from the dawn of recorded history, there was vocal opposition to the use of so essential a commodity as iron, which was then replacing softer metals. Early man was afraid that it would be used for more destructive weapons.

So it was. That which is capable of harm, however, is often equally capable of good. No one would propose that we do without valuable tools because they are liable to be abused. Technological advancement brings the high standard of living which, in the long run, is the only sure remedy for human discord.

In an age which is now long gone but in which war was just as abhorrent as it is today, men prayed for the day when their swords could be beaten into plowshares. As the sword was the symbol of war, so the plow was the symbol of peace and prosperity. Through the miracle of modern technology, we have beaten our nuclear sword into a nuclear plowshare. Such is the relation between the bomb and the reactor.

Yet no benefit comes to anyone from a plow that lies idle. It still remains to us to harness the plow and use it. Let us get on with the job, for our own betterment and that of all mankind.