(from the Earthscan agency, 1982)

Death of the Peaceful Atom

By Walter C Patterson

The United States, which three decades ago launched the concept of “Atoms for Peace”, now appears ready to give it the kiss of death. The Reagan administration apparently intends to use the spent fuel from US nuclear power station as a source of plutonium for nuclear weapons.

This step would involve no new technology. But it would represent the admission that “peaceful nuclear energy”, as preached by both the United States and the United Nation, is a myth. It would also warn developing nations considering starting nuclear generating programmes that they were, like it or not, entering the field of weapons technology and that their civil reactors might one day be considered legitimate military targets.

The “Atoms for Peace” programme was based on the premise that it was possible to effect a complete separation between civil and military nuclear activities. Production of weapons material in civil power stations will destroy once and for all that comforting illusion. It will also bring to an ignominious end the anti-proliferation policy so vigorously espoused by the Ford and Carter administrations.

In the mid-1950s, when the Atoms for Peace programme got under way, civil nuclear power was seen as an imitation of military nuclear technology, but for the good of mankind. Uranium would have to be enriched for use in electricity-producing reactors, just as it was enriched for bombs. Spent fuel discharged from a power reactor would be reprocessed to recover plutonium, not for weapons but for “fast breeder” reactors, which produce more fuel than they consume.

By the mid-1970s, this presumption was providing an international embarrassment. In June 1974 India exploded a nuclear device made from plutonium manufactured in a CIRUS research reactor, a civil facility provided by the US and Canada. The plutonium had been recovered in a reprocessing plant built, according to the Indians, to further their breeder reactor programme.

After much heart-searching, the nuclear exporting countries agreed not to sell reprocessing plants, enrichment plants or other “sensitive” (weapons-related) facilities to non-weapon countries. The decision was greeted with wrath by the customer countries, who declared that those already possessing vast numbers of nuclear weapons had no right to lecture them about the evils of proliferation.

In October 1976, US President Ford announced a major change in the US approach to civil nuclear activities. Reprocessing, he said, was no longer to be considered an essential civil activity. To prove his point, he withdrew government support for the only civil reprocessing plant then under construction in the US, at Barnwell in South Carolina.

In April 1977, President Carter took a firmer stand. As the separation of plutonium from nuclear fuel (reprocessing) would make it possible for a nation to manufacture a bomb in a very short time, the US would henceforth do everything in its power to dissuade other nations from reprocessing as part of a civil nuclear programme.

This step caused a series of confrontations between the US and some of its closest allies. The US persuaded France not to sell reprocessing plants to South Korea or Pakistan; tried to dissuade Japan from starting up its own prototype reprocessing plant at Tokai Mura; and tried to influence the outcome of the British inquiry into the construction of a new civil reprocessing plant at Windscale.
The resulting tension increased until the London Downing Street summit of May 1978, at which Western political leaders agreed to set up an “International Nuclear Fuel Cycle Evaluation” (INFCE) to review the whole issue. But after two years, the INFCE study found that all civil nuclear activities present more or less the same proliferation problems.

In 1980, however, President Carter announced a new programme of US nuclear weapons manufacture, one apparently requiring greatly increased production of plutonium. Meanwhile, the cooling ponds of the US nuclear power stations were being filled with spent nuclear fuel, and there were no long-term plans for its disposal.

In 1981, the Reagan administration put two and two together, and let it be known that the US was thinking of relieving the power companies of their nuclear fuel and reprocessing it, in a military plant, to recover the plutonium to use in weapons.

The suggestion triggered a furore. The electrical companies had spent 20 years insisting that their power stations had nothing to do with weapons. Peter Bradford, a commissioner of the US Nuclear Regulatory Commission, said in October 1981: “…the average nuclear utility realises… that most of its customers do not want the feeling that when they turn on their lights they are also turning on the local atomic bomb factory”.

The Reagan administration also wants to start up its long-delayed Clinch River Breeder Reactor, for which it needs five tonnes of plutonium that it cannot spare from its weapons programme. It proposed to buy the plutonium from British civil stocks. This proposal caused as outcry in Britain, because it meant that – no matter which plutonium went where – British civil nuclear power was making possible US nuclear weapons.

But the international implications of these plans are much broader. The premise of a natural boundary between civil and military nuclear technology is the basis not only of the UN’s International Atomic Energy Agency (IAEA) but of the Non-Proliferation Treaty as well.

“The very last thing in America’s security interest would be to take a step that could easily destroy what remains of that system’s effectiveness and at the same time cripple America’s capacity for leadership in the continuing effort to slow nuclear proliferation”, the Washington Post warned in a recent editorial.

Whatever the outcome of the controversy, it is bound to cause non-weapons countries to take a second look at their own nuclear programmes. And they are unlikely to hear any more moralising from the United States. “Atoms for Peace” has lost its last vestige of innocence.

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