

Statement of
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before the

Subcommittee on Energy and the Environment
of the House Committee on Interior and Insular Affairs

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Mr. Chairman and Members of the Subcommittee, thank you for inviting me to appear before you to testify with regard to The Plutonium Licensing Control Act, H.R. 5234 introduced by Congressman Bingham. I support the Bingham bill as it is designed to prohibit the licensing of commercial nuclear fuel reprocessing facilities and plutonium fueled reactors. As Congressman Bingham has noted this is a simple and straightforward bill designed to put the United States on record as rejecting the development of a plutonium economy in which we would depend upon plutonium fuel as a principal source of energy. As this committee is aware, the President in his April 7, 1977 message espoused essentially the same policy. The President's nuclear nonproliferation policy, among other things, calls for a) indefinite deferral of commercial reprocessing and recycling of plutonium produced in U.S. nuclear power programs, b) restructuring of the U.S. breeder reactor

program to give greater priority to alternative designs of the breeder other than plutonium and deferral of commercialization of the breeder option and c) a redirection of funding of U.S. nuclear research and development programs to accelerate research into alternative nuclear fuel cycles which would not involve direct access to materials suitable for use as nuclear weapons - in particular, plutonium.

The President has concluded that a viable and adequate economic nuclear program can be maintained without such reprocessing and recycling of plutonium. This conclusion is shared by the Nuclear Energy Policy Study Group, sponsored by the Ford Foundation and administered by the Mitre Corporation,^{1/} and by four of the members of ERDA's LMFBR Review Steering Committee.^{2/}

On April 26, 1977, this Committee heard the testimony of three Administration witnesses, Robert Fri, Acting Administrator of ERDA, Thomas D. Davies of the U.S. Arms Control & Disarmament Agency and J. Gustave Speth of the Council on Environmental Quality. As I read their testimony, the Administration's position is that passage of the Bingham bill is not necessary at this time, but legislation of this type would be essential if the Nuclear Regulatory Commission (NRC) were to proceed with the type of licensing activities that the Bingham bill is designed to prohibit, e.g. the GESMO proceeding or licensing activities related to the

^{1/} Nuclear Power Issues and Choices, a Report of the Nuclear Energy Policy Study Group, sponsored by the Ford Foundation, administered by the Mitre Corporation, 1977, Ballinger Publishing Company, Cambridge, Massachusetts.

^{2/} Thomas B. Cochran, Russell E. Train, Frank von Hippel, Robert H. Williams, "Proliferation Resistant Nuclear Power Technologies: Preferred Alternatives to the Plutonium Breeder" April 6, 1977.

AGNS fuel reprocessing facility at Barnwell, the proposed Exxon fuel reprocessing plant at Oak Ridge, and the Clinch River Breeder Reactor (CRBR). At present the GESMO proceeding and the CRBR licensing hearing have been suspended, but it is important to note that these have not been terminated. In the CRBR case the Atomic Safety and Licensing Board (ASLB) stated:

Good cause having been shown, the motion of ERDA is granted and all hearing procedures and schedules are suspended until such time as the Administration and Congressional action is completed with respect to the CRBRP. (Emphasis supplied) 3/

The NRC has scheduled a prehearing conference on the proposed Exxon facility. Clearly the Bingham bill represents the type of legislation that is needed to terminate these licensing activities.

There are several additional important reasons for proceeding with this legislation now. First, as Mr. Speth of the Council on Environmental Quality has testified, the Administration "has set a strong, unilateral and vitally necessary example in calling a halt to further domestic efforts to commercialize plutonium". The Congress needs to give the Administration's policy its stamp of approval. Without legislation the U.S. policy is ambiguous and will be perceived abroad as lacking public support.

3/ U.S. Nuclear Regulatory Commission, in the matter of U.S. Energy Research and Development Administration, Project Management Corporation, Tennessee Valley Authority, (Clinch River Breeder Reactor Plant), Docket No. 50-537 ORDER SUSPENDING HEARING PROCEDURES AND HEARING SCHEDULE, (April 25, 1977)

Second, and somewhat related to the first, there are those in the Administration who think we can govern by Executive Order. Obviously, a new Administration could reverse the present policy with a new Executive Order. The Bingham bill would provide much needed stability and consistency to the U.S. nuclear non-proliferation policy. A return by the U.S. to the plutonium economy would have a profound effect on the world and should not be initiated without an act of Congress, i.e. repeal of the Bingham legislation.

Third, there are those within the Administration who would like to undercut the President's nuclear non-proliferation policy. While we have a new President, and a new policy, the same people whose careers have been devoted to fostering plutonium recycle and the LMFBR program are still entrenched at ERDA and NRC. The Acting Administrator of ERDA has in the past supported plutonium recycle and construction of the CRBR. In his testimony of April 26, he stated that "the President's emphasis was on delay while research and development on alternative fuel cycles is conducted." (Emphasis supplied). I thought the emphasis was on curbing nuclear proliferation by turning away from plutonium. The Congress must make it clear to ERDA and the NRC by passage of the Bingham bill that we are turning away from plutonium and are not simply marking time until a more favorable political climate exists.

Next, I wish to address several criticisms of the Bingham bill. Thomas Davies of the Arms Control and Disarmament Agency (ACDA) testified that it is unclear whether this bill is designed to proscribe domestic licensing only. This could be readily clarified by amending the bill to so indicate. Admiral Davies

also indicated that while passage of the bill will reinforce foreign opinion that we are serious about seeking alternatives to fuel cycles involving the reprocessing of spent fuel, it could also make it difficult for the Administration to launch the international fuel cycle evaluation program. I believe this problem could be avoided by adding clarifying language to the bill to make it clear that while we are turning away from plutonium, this legislation is not designed to impose our will on other countries.

Finally, I would like to offer a proposal to supplement the Bingham bill. This proposal I believe would provide a preferred mechanism for the Administration and Congress to determine whether to fund the development of a particular nuclear technology with consideration given to its nuclear proliferation risks. This proposal grew out of a conversation I had with Dick Speier of ACDA and was one of the recommendations Russell Train, Frank von Hippel, Robert Williams and I made in our report as members of ERDA's LMFBR Review Steering Committee.

As you know EPA and NRC exercise control over the development of technologies through their regulatory responsibilities in the environmental and nuclear safety areas. They also provide guidance to other federal agencies in these areas, for example, EPA provides radiation protection guidance, a function previously held by the old Federal Radiation Council. The government currently has virtually no criteria or guidance to federal agencies covering nuclear proliferation.

To fill this void I am proposing that nonproliferation criteria be established to govern fission energy activities, including R, D&D, the commercialization of fission energy supply alternatives (e.g. breeder and advanced converter reactors), licensing, exports and our international posture.

These criteria should be sufficiently restrictive to define unambiguously U.S. nonproliferation objectives, while allowing scientists and engineers as much freedom as possible in designing proliferation resistant nuclear power technologies that conform to the ground rules, i.e. U.S. nonproliferation objectives. These nonproliferation criteria I believe are even more important than the current safety regulations and criteria that presently govern the domestic nuclear power industry.

For example, one criterion might be as follows:

The minimum criterion of acceptability for the commercialization of an energy supply alternative must be the demonstration that the development and commercial utilization of the technology by a non-nuclear weapons state leaves that state no closer to a nuclear weapons capability than would be the case if all its nuclear power were derived from low-enriched uranium fueled reactors operating in a once-through fuel cycle mode (that is, without reprocessing) and with verified spent fuel storage in secured international facilities. (This leaves the non-nuclear weapons states at least months to years away from obtaining via this technology the fissionable material necessary for the production of nuclear weapons.)

The institutional framework under which these nonproliferation criteria would be promulgated might be analogous to the old Federal Radiation Council. I would recommend that an agency with responsibilities for national security, e.g. ACDA, State or DoD, be given the responsibility for establishing the criteria and

insuring that they were followed by the other federal agencies, e.g. ERDA or the Department of Energy.

Decisions on which major new nuclear energy technology to demonstrate and commercialize would thus not be left to the nuclear industry and ERDA, subject only to review through the ordinary budget process. Instead, ERDA would be obliged to comply with the nonproliferation criteria established by a separate agency. ERDA, other agencies, and the public could at any time petition the responsible agency to amend the criteria. One might require that the decision to develop a new technology follow the recommendation of the President and approval by the Congress, following a comprehensive nuclear weapons proliferation impact assessment carried out by the agency with these new responsibilities.

When Congress reviews the ERDA budget it could turn to this agency for guidance on whether to fund a particular project. If this regulatory structure were in place, many of the programs with high proliferation risks would be weeded out before billions of dollars were spent on their development.

Under the proposed minimum criterion of acceptability above some research - theoretical in nature - on any technology could be pursued to explore whether further development should take place.

In closing I want to emphasize this is not a substitute for the Bingham bill, rather it would supplement the Bingham bill which I heartily endorse.