

F I N A L R E P O R T

NUCLEAR FUELS TRANSPORTATION SUBCOMMITTEE

January, 1983

The Nuclear Fuels Transportation Subcommittee of the House and Senate Standing Committees on Energy and Transportation was created by the Legislative Council pursuant to Senate Concurrent Resolution 116 to study the transportation of spent nuclear fuels across Iowa in regard to the methods of shipment used, the safety measures observed and the risk of and ramifications of any accident, with particular attention to be accorded the proposed rail shipments over the Burlington-Northern rail line from the Nebraska Public Power District Cooper Nuclear Plant to the General Electric waste storage facility in Morris, Illinois. The members appointed to the Subcommittee were:

Senator Dale Tieden, Co-chairperson
Representative Sue Mullins, Co-chairperson
Senator Ted Anderson
Senator John Jensen
Senator Alvin Miller
Senator Sue Yenger
Representative Elaine Baxter
Representative Wayne Bennett
Representative Kenneth DeGroot
Representative Rollin Howell

The Subcommittee met on November 19, 1982. Those scheduled to appear before the Subcommittee to give testimony were the Honorable Jerry Rigdon, Mayor of Burlington; the Reverend Arthur Campney also of Burlington; Mr. Eugene Voiland from the General Electric Morris Operation in Morris, Illinois; Dr. Adolf Voit recently retired from the Department of Environmental Health and Safety at Iowa State University; Mr. Emery Sobottka, Director of that department, and Mr. Jack Crandal, Director of Disaster Services. Mr. John Eure of the Department of Health, currently Chairman of the Interagency Coordinating Council on Radiation and Mr. Walt McDonald of the Department of Transportation were available for questions.

Mayor Rigdon and the Reverend Campney spoke to the proposed Cooper-Morris shipments which would travel by rail through Burlington. Both reflected the concerns of the citizens of Burlington and raised issues of the safety and necessity of the shipments from the Cooper power plant to the Morris storage facility. They also urged the Subcommittee to determine the financial responsibility for both the long-term and short-term effects of any accident. Mayor Rigdon questioned the ability of

the local and state authorities to respond to any nuclear accident and expressed concern about the seeming dependence on industry experts in setting safety regulations which would apply to the shipments. He suggested that it should be state policy to notify local officials when nuclear materials are to pass through their jurisdiction.

Mr. Eugene Voiland informed the Subcommittee that his facility would supervise the loading and shipping procedures to transport the spent fuel from the Cooper Nuclear Plant. He spoke to the Subcommittee on the design standards the shipping casks must meet and a short film was shown which documented the tests performed on similar casks to confirm the use of the mathematical models used in their design. He then informed the Subcommittee of the nature of the material to be transported, the features of the special train with the attendant safety procedures, and his assessment of the risks involved.

Dr. Adolf Voit spoke to the Subcommittee on his supervision of twenty over-the-road shipments of high level waste from the research reactor in Ames. He discussed the loading and shipping procedures of his shipments and informed the Subcommittee of the safety measures taken and the notification requirements followed. He expressed approval of the safety measures to be followed for the Cooper-Morris shipments.

Mr. Emery Sobottka briefed the Subcommittee of the nature and properties of radioactive materials. He then spoke in his capacity as the leader of one of the radiation emergency response teams, and informed the Subcommittee of its responsibilities and capabilities. He outlined procedures that would be followed in the event of the release of nuclear materials in a shipment accident, but expressed doubt that any accident could result in the release of nuclear materials. He stated that additional regulation of shipments would do little to improve their safety, but he spoke in favor of an increased appropriation to purchase more equipment for emergency response teams and radiation detection instruments and training in their use for local authorities. He also expressed approval of the Illinois procedure of equipping a percentage of highway patrol cars with radiation detection equipment which is used in routine patrols.

Mr. Jack Crandal spoke briefly to the Subcommittee of the duties of his office. He informed the Subcommittee of the special precautions to be taken by the state to insure the safety of the Cooper-Morris shipments. He and Mr. Walt McDonald discussed the selection of shipping routes, notification regulations, and safety measures required in spent fuel shipments. He also informed the Subcommittee of a plan to negotiate contributions from the five nuclear utilities which impact on the state for equipment and training for local police and fire departments. He stated that since July 1 he has received money to support a program planner in his office and is seeking a start-up contribution of \$170,000 and sustained contributions of \$100,000 yearly.

The Subcommittee discussion following the presentations revolved about the need for additional safety regulations particularly in terms of local notification, shipment labeling, and escorts. The Subcommittee staff was instructed to obtain further information to determine if this area had been preempted by federal law. Another meeting date was set contingent upon a determination that these areas were open to state regulation. It was recommended that if another meeting was not held, the minutes of the meeting and pertinent related materials be transmitted to the House and Senate Standing Committees on Energy and Transportation. Upon receipt of the additional information on federal preemption it was determined that these areas are largely preempted by federal law and the meeting was canceled. The Subcommittee made the following recommendations:

1. That the Office of Disaster Services notify local government officials when nuclear fuels shipments will be made through their jurisdiction.
2. That an appropriation be made to the Department of Disaster Services for the equipment and training of first response safety personnel within the local governments through which nuclear fuels will be transported.