

**UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001**

July 28, 1997

Mr. Paul Leventhal, President
Nuclear Control Institute
Suite 804
1000 Connecticut Avenue. NW.
Washington, D.C. 20036

Dear Mr. Leventhal:

I am responding to [your letter of May 20, 1997](#), regarding Commonwealth Edison Company's (ComEd's) possible use of mixed oxide (MOX) fuel in one or more of its twelve nuclear power plants. Your letter states that in light of questions raised about ComEd's safety record, ComEd is an inappropriate candidate for participation in any MOX plutonium disposition program. Further, you believe that the U.S. Nuclear Regulatory Commission (NRC) should advise ComEd that such participation is likely to detract from efforts to resolve current safety problems.

As you know, performance at some ComEd plants has been a concern to the NRC for some time. As a result of continuing inconsistent safety performance at a number of ComEd nuclear stations, the NRC issued a letter pursuant to 10 CFR 50.54(f) on January 27, 1997, requiring ComEd to submit information on its ability to operate six nuclear stations while sustaining performance improvement at each site. ComEd responded on March 28 and April 15, 1997. On April 25, 1997, ComEd and the NRC staff discussed ComEd's performance at a public meeting. The NRC is conducting regulatory oversight activities aimed at ensuring that ComEd can safely operate its six nuclear stations while sustaining performance improvement at each site.

With regard to the use of surplus weapons-grade plutonium as a component of the MOX fuel in commercial nuclear power plants, ComEd has not officially asked the NRC to evaluate the acceptability of its use of MOX fuel in any of its plants. ComEd has, in meetings, told the NRC that it belongs to a consortium that is considering using MOX fuel in several reactors. Before the use of MOX fuel can occur, a number of steps must be completed over a period of years. The Department of Energy (DOE) issued a Record of Decision in January 1997, in which it stated that some of the excess plutonium from weapons could be used to fabricate MOX fuel. Before any MOX fuel is used in domestic commercial nuclear power plants, DOE must conduct a formal evaluation process and issue a request for proposals to solicit expressions of interest from parties which potentially could use the fuel. After proposals are received, an evaluation will be conducted by DOE to select one or more finalists for the MOX fuel program, followed by contract negotiations with the selected finalists.

If ComEd continues to pursue the use of MOX fuel, and if DOE were to select ComEd to participate in the MOX fuel program, ComEd would be required to perform a safety analysis of the impact of using MOX fuel and to request an amendment to one or more of its nuclear plant operating licenses. Before such an amendment could be granted, the NRC would conduct a review to determine if using MOX fuel would affect the safe operation of the plant and the NRC may have to assess the environmental impacts of plant operation using MOX fuel. The NRC's review would also assess the measures that would be employed to ensure the physical security of the MOX fuel. Any request for a license amendment will be subject to a licensing hearing at the request of an interested person who properly shows standing under NRC regulations. If ComEd does make a request to use MOX fuel, it will be evaluated on its merits using the information available to the NRC at that time. Consequently, at this time, it would not be appropriate for the NRC to advise ComEd that any future application will not be considered.

In summary, the NRC's current regulatory oversight initiatives are aimed at ensuring that ComEd can safely operate its six nuclear stations while sustaining performance improvement at each site. It would be premature, at this time, for the NRC to take a position regarding the acceptability of the

potential use of MOX fuel prior to the receipt of any proposal or request by ComEd for a license amendment to authorize the use of such fuel.

I recognize your interest in this issue and hope that this letter explains the NRC's current views with respect to the concerns you have expressed.

Sincerely,

Shirley Ann Jackson

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