

GENERAL ELECTRIC  
GENERAL ELECTRIC COMPANY  
310 DE GUIGNE DRIVE  
P.O. BOX 508  
SUNNYVALE, CALIFORNIA 94086

ROBERT B. RICHARDS—GENERAL MANAGER  
ADVANCED REACTOR SYSTEMS DEPARTMENT  
ENERGY SYSTEMS AND TECHNOLOGY DIVISION



DOCKET NUMBER  
50-5  
50-201

September 8, 1980

50-332

50-564

70-1327

70-1432

70-1821

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Chief, Docketing and Service Branch

Subject: GESMO Proceedings, Docket Nos. RM 50-5 -201, -332, -564,  
-1327, -1432, -1821

Dear Mr. Secretary:

I am pleased to have the opportunity to comment on the question of whether or not GESMO and other recycle-related licensing proceedings should be reopened. The Advanced Reactor Systems Department of the General Electric Company is a participant in Department of Energy development programs for advanced reactors and has a vital interest in the future of fuel recycle.

There are a number of reasons why it is important that GESMO proceedings be reopened, and I strongly urge that the NRC do so in the near future. Fuel recycle is necessary to achieve the energy supply advantages of breeder reactors. While fuel reprocessing and mixed oxide fabrication have both been performed in the past, technical questions still remain with regard to the chemistry and equipment designs to be used for multiple recycling on a commercial scale. Answers to these questions cannot be fully obtained in the laboratory, but must be demonstrated in prototypes of commercial facilities. As with the development of the reactors themselves, this will necessitate a series of prototypical reprocessing and MOX fabrication facilities. It is a mistake to assume that recycle facilities can be easily obtained after the decision is made to commercialize the breeder. Rather, they must be developed together with the reactor in a parallel and integrated program. To do less would be similar to building a space station without the vehicle needed to put it in orbit.

Licensing of recycle facilities is likely to be as difficult and time consuming as that of breeder plants. Some of the issues will be of a similar nature but others unique to those facilities. Reopening of the GESMO proceedings will provide an early procedural framework that can aid the licensing of later facilities much in the way that LWR licensing will provide the initial step in licensing of breeders. Without such an initial step, fuel facilities are likely to continue to lag behind the development of breeder reactors.

In 1977 the Administration was highly concerned with the danger of weapons proliferation resulting from widespread use of plutonium and construction of recycle

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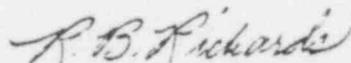
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facilities. The International Nuclear Fuel Cycle Evaluation (INFCE) has been instrumental in allaying such concerns. In addition to making the participating nations more aware of the dangers of weapons proliferation, INFCE showed that

- a) Breeders and plutonium recycle are not likely to be economical outside of industrialized nations for many years,
- b) Adequate protection against using recycle facilities for proliferation can be achieved by international agreements, international inspections and physical safeguards,
- c) Recycle and the use of plutonium are vital to the economic welfare of some industrialized nations.

While the Administration continues to feel the need for a moratorium on reprocessing as a part of the U.S. non-proliferation policy, such a moratorium is actually counterproductive to the establishment of the non-proliferation measures identified in INFCE, since it undermines U.S. influence in those proceedings. Thus, the stance against fuel recycle is viewed by other nations as more of a posture against the breeder than a non-proliferation statement. Any non-proliferation advantage to be gained from continued suspension of GESMO is heavily outweighed by the considerable advantage of dealing with the licensing issues at this time.

Yours very truly,



R. B. Richards

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