



## Nuclear Safety Oversight Committee

September 26, 1980

The Honorable Jimmy Carter  
President of the United States  
The White House  
Washington, D.C. 20500

Dear Mr. President:

By letter of July 29, 1980, Mr. Eizenstat asked the Committee to respond "as soon as possible" with our evaluation of the Nuclear Regulatory Commission (NRC) Action Plan. This letter is an interim report on that subject. The Eizenstat letter and your letter of last December 7th also request our views on the topics of emergency planning, operator training, and the status of industry reform efforts, all of which will be covered in subsequent reports to you. In addition, we shall be considering the fiscal 1982 budget as it relates to safety issues.

The Action Plan was designed to guide the response of the NRC to the accident at Three Mile Island. It is a list of more than 150 items derived from recommendations of the Kemeny Commission, the Rogovin inquiry, and the various NRC internal task forces. The Action Plan has been aptly described as a "dragnet" response to the Three Mile Island accident; it also considers additional safety issues and hardware problems not immediately linked to the Three Mile Island accident.

Early drafts of the plan were quite properly criticized as shopping lists, lacking in priorities or details of implementation. The current version is substantially improved, and although a great deal of "engineering judgment" has been used in place of analysis to derive the priorities within the Plan, it at least suggests which items are regarded as most important by NRC. The NRC has separated out of the Action Plan a subset of the most important safety changes (the Near Term Operating License [NTOL] requirements) that must be implemented prior to the issuance of new operating licenses.

In our judgment, the Action Plan constitutes a reasonable response to the TMI accident. Inevitably the action items, their resolution, and the priorities assigned to them will evolve and change with time and additional technical work and study. Nonetheless, we believe it in the best interests of industry, the regulatory system, and the public to accept the NTOL requirements as a reasonable basis for the renewed licensing of nuclear power reactors. Stability is itself a safety asset, and complaints from the industry that the rules change too frequently are not entirely without merit.

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Although we consider the Action Plan to be a reasonable beginning, it does not and will not of itself solve the more fundamental problems of leadership and attitude within both the industry and the Nuclear Regulatory Commission. We continue to be troubled by the lack of an underlying regulatory philosophy, which leads in turn to uncertain priorities and failure to highlight the most essential items. In a sense the Action Plan is "a pudding without a theme." For all its virtues, it represents a somewhat more intensive form of "business as usual."

An illustration of the "business as usual" mindset is recent NRC staff advice that technical fixes have so reduced the likelihood of a repeat of Three Mile Island that new operating licenses can be issued even though the design basis of new reactors may be inadequate to control the potential consequences of the estimated amount of hydrogen released into containment at Three Mile Island. We do not share such judgment; any system should presumptively be at least good enough to deal with accidents that have actually occurred.

Moreover, we are concerned by an NRC staff letter to licensees (September 5, 1980) that in effect, invited delay in the implementation of the Action Plan.

While accepting the Action Plan for what it is, subject to actual implementation, we still look forward to evidence of solution of the fundamental problems of leadership and responsibility. Unquestionably, an important step in this direction will be the selection and confirmation of a new Chairman for the Commission; it is therefore extremely important that the Executive Branch and the Senate come to agreement on a new Chairman as soon as possible. The Nuclear Regulatory Commission needs strong leadership on many policy matters. Policy decisions will tend to be postponed until the leadership issue is resolved, and further drift and indecision could have serious consequences for safety.

With limited resources at its disposal, the NRC is faced with the difficult task of establishing priorities and ranking safety issues to assure that the most important issues are addressed first. While the Action Plan does establish internal priorities, little effort has been made to interlace Action Plan recommendations with the list of "Unresolved Safety Issues" that have accumulated and gone unresolved over a long period of time prior to the accident at Three Mile Island. For example, the problem of Anticipated Transients Without Scram (ATWS) is not related to the TMI-2 accident and has remained an important unresolved safety issue for at least ten years.

There are a number of items in the Action Plan whose contribution to reactor safety is still questionable, both in magnitude and sign. An example is the reversals of policy with respect to shutting off reactor

coolant pumps (RCPs) in response to transients. The technical questions raised by this and other items need to be resolved in a deliberate and orderly manner. The RCP debate illustrates very clearly the hazards of regulatory overreaction when technical issues are not clearly resolved.

Another area in need of careful and continuing attention is the extent to which technical issues affect broader policy issues. The "Nuclear Data Link" proposal is an example of a proposed technical fix involving a serious policy issue that has not been carefully analyzed. The premise underlying the Data Link is that the availability of more real time data at headquarters in Bethesda will aid in crisis management. However, all studies of the TMI accident indicate that remote crisis management from Bethesda was at best ineffective, and at worst, dangerous. The NRC emergency response capability must be upgraded and pushed out and down to regional and on-site levels of responsibility.

A related issue is the need for better instrumentation to monitor critical plant parameters and to follow the course of an accident. The Nuclear Regulatory Commission has addressed this issue in Section II.F of the Action Plan and by issuance of the proposed Revision 2 to Regulatory Guide 1.97. Unfortunately, implementation of the relatively straightforward function of the Safety Parameter Display System (which has been before the Commission for more than five years) has become entangled in the Nuclear Data Link controversy with the prospect of further long delays. We believe that a careful consideration of priorities and relative costs and benefits would make a strong case for separating the two issues and moving to quick implementation of the Safety Parameter Display System.

Apart from hardware fixes, the operational issues set out in Chapter I of the Action Plan deserve special comment. All of the TMI studies have quite properly emphasized the urgent need to strengthen and upgrade operator training, technical competence, and nuclear plant management.

The Action Plan sets out a number of steps for the incremental upgrading of reactor operators, and there are indications that the industry and NRC have improved training and licensing requirements for operating personnel. However, the incremental upgrading of requirements will not solve the larger problems of utility operating competence. Operator competence is ultimately a reflection of the quality of the entire management structure. Management must see to it that a high level of technical competence prevails throughout the entire utility organization. How best to assess overall management competence and to stimulate changes through the regulatory process is a difficult issue that may not be capable of solution by conventional responses. It is an issue that needs much more attention by both industry and the NRC.

We commend the Commission for its commitment to develop safety standards to help answer the question of "how safe is safe enough." While the answer to that question must ultimately come from Congress through the political process, we believe that it is the Commission's responsibility to provide the technical research and economic data that will provide the basis for making such a judgment. Increasingly, the setting of regulatory priorities and the determination of their cost should be linked to quantitative safety standards based on sound analysis.

The Commission has made commendable progress in establishing the Office for Analysis and Evaluation of Operational Data (AEOD). Unquestionably a major deficiency in both the NRC and the industry which led to Three Mile Island was the inability to learn from past operational experience. We have reviewed the work plans of that office and find them an encouraging beginning. The AEOD evaluation of the June incident at Browns Ferry suggests the quality and depth of analysis that can be obtained by an office with technical expertise removed from the pressures of direct regulatory involvement. As this office develops, it will be important to assure that its voice is heard within the NRC and that its analysis will not be ignored in the regulatory process. It is still not clear to us that either the NRC or the industry has yet taken steps to assure that appropriate action will be taken when problems are identified and analyzed by the AEOD or by industry groups such as the Institute of Nuclear Power Operations and the Nuclear Safety Analysis Center.

Since TMI, there have been a number of Congressional proposals to create an independent body, modeled on the National Transportation Safety Board; to assess operating experience, to investigate accidents, and to oversee safety research. Any such body might well overlap the functions of both AEOD and the Advisory Committee on Reactor Safeguards. These proposals and related issues are treated as "study items" scattered throughout various parts of the Action Plan. The respective functions of these actual and proposed outside safety groups is a matter that we intend to study further.

We note with concern a legislative requirement set forth in Section 110 of the NRC Authorization Act requiring "a comprehensive plan for the systematic evaluation of all currently operating utilization facilities." Read literally, this could require many hundreds of staff-years of effort in redundant and unproductive work at specific reactor sites, manpower that might be better utilized in more carefully targeted areas such as generic safety issues, development of the Office for Analysis and Evaluation of Operational Data and implementation of the Action Plan. We urge the Commission to address this mandate in the spirit in which it was undoubtedly meant, not in a rigid and literal manner that could divert Commission resources from the more urgent tasks at hand.

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Finally, we express concern about the exceedingly slow pace in physical consolidation of the various NRC offices now dispersed in ten locations throughout both the District of Columbia and Maryland. The various study commissions attached great importance to achieving consolidation quickly, as do we. It is now nearly a year since those recommendations were made, and there has been no visible progress. Whatever the long-term solution, we believe it imperative to achieve an interim consolidation now.

In sum, the Action Plan is an adequate beginning, addressing near term items with specific guidelines and longer term requirements with little more than guideposts indicating an overall sense of direction. It cannot be viewed as a one-time solution or as a talisman for instant reform of the nuclear industry and its regulation. The larger issue of industry attitudes and regulatory leadership are still in the balance. We will continue to monitor the effectiveness of reform efforts and report to you regularly.

cc:  
Stuart Eizenstat  
James McIntyre  
Frank Press  
Eugene Eidenberg

Respectfully,



Bruce Babbitt  
Chairman

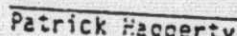


John Deutch  
Committee Member




Marvin Goldberger  
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Patrick Haggerty  
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Harold Lewis  
Committee Member

\*\*Due to a serious illness, Patrick Haggerty was not present when this letter was signed. He has, however, verbally approved of it.