

# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555

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December 21, 1979

The Honorable Toby Moffett, Chairman Subcommittee on Environment, Energy and Natural Resources Committee on Government Operations United States House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

During the Subcommittee's hearings on November 1, 1979, Mr. Drinan asked me what would happen to the nuclear industry and to NRC if all the Kemeny Commission recommendations -- or the major recommendations -- were enected into law by this Congress. Because the Kemeny Commission report had only been in our hands a very few days, I offered to supply an answer later after further consideration of the Kemeny Commission's findings and recommendations.

Let me begin my response by pointing out that the Nuclear Regulatory Commission agrees with most of the recommendations of the President's Commission and has taken, or is taking, action on most of them. Except for a limited number of instances, we can implement the recommendations without additional statutory authority. Consequently, the need for Congressional enactment of laws is limited. I don't envision our bringing to the Congress a substantial package of proposed legislation. I do anticipate, however, that we will propose a few statutory changes in response to the Kemeny Commission's recommendations that will enable us to provide increased assurance of adequate protection of the public health and safety.

I should also add that I believe the nuclear industry would be better off in the long run if the bulk of the recommendations of the President's Commission are implemented. Implementing the recommendations concerning nuclear power plant management, operator training, control rooms, emergency planning, etc. should lead to safer and more reliable operation and to a considerably improved sense of public confidence in the industry's safety. This would be a substantial "plus" for the industry and would more than compensate for the possible delays and increased costs that might be involved. In my view the added equipment and staffing requirements would not create an unreasonable financial burden to the industry.

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Our preliminary views and analyses of the recommendations of the President's Commission were forwarded to the Executive Office of the President on November 9, 1979 (Enclosure 2). Although this material does include discussion relevant to Mr. Drinan's question, it does not specifically address the question, "What would happen to the nuclear industry and to the NRC?" Instead, it concentrates on whether NRC does or does not agree with the recommendations of the President's Commission, our rationale for agreeing or disagreeing, and a discussion of what past, present and future actions have been taken or are to be taken.

I have gone through the Presidential Commission's recommendations and considered just what the effects of their implementation would be for us and for the nuclear industry. My personal views are summarized on the following pages (Enclosure 1). You will note that in a number of instances I have only provided rather general comments. This reflects primarily the fact that we are still developing our plans for acting on the recommendations. Until the details of all implementing actions are known, the net effect on NRC and the nuclear industry is not entirely clear.

Joseph M. Hendrie

#### Enclosures:

- 1. Effects of Implementing Presidential Commission's Recommendations on NRC and the Nuclear Industry
- 2. NUREG-0632

# EFFECTS OF IMPLEMENTING PRESIDENTIAL COMMISSION'S RECOMMENDATIONS ON NRC AND THE NUCLEAR INDUSTRY

#### A.1-A.3: Recommendations Concerning Agency Organization and Management

The President's Commission recommended that NRC be reorganized into the Executive Branch with a single administrator. The ultimate effect on NRC would be substantial, e.g. there would be no five-member Commission to make the agency's final decision in adjudicatory matters (licensing, rulemaking, etc.). The industry might find it easier to deal with a single administrator, although if he or she were to have ultimate licensing authority, ex parte considerations might tend to isolate the administrator from the nuclear industry.

One of the findings of the President's Commission noted that "unnecessarily stringent ex parte rules" have isolated the NRC Commissioners from the licensing process. Implementing the Presidential Commission's recommendation A.l could reduce the NRC Commissioners' isolation from the licensing process, with a minimal effect on the nuclear industry.

The President's Commission recommended a Presidentially appointed "Oversight Committee." It is not clear what effect an oversight committee would have on the nuclear industry. On the one hand, it might create another layer of review and consequently tend to prolong the licensing process. On the other hand, if the effect of an oversight committee would be to assure broader public support of NRC regulatory actions, then it might reduce the duration of licensing proceedings which would be beneficial to the nuclear industry.

The President's Commission made a number of recommendations to strengthen the role of the Advisory Committee on Reactor Safeguards (ACRS). The recommendation that the ACRS have the statutory right to intervene in hearings, if implemented, would detract from the present independence and objectivity of the ACRS and severely compromise the collegial nature of the advice and recommendations it provides NRC. The effect of removing the mandatory requirement for ACRS review of every reactor license application would be beneficial to NRC and the nuclear industry. Providing for ACRS intervention in hearings would not be beneficial to NRC or the nuclear industry. Granting ACRS the right to initiate rulemaking does not appear to offer any substantial benefits (or disbenefits) to NRC or the nuclear industry.

## A.4-A.8 Recommendations Concerning Agency's Substantive Mandate

The President's Commission recommended requiring NRC to establish and explain safety-cost trade-offs and to favor increased safety in making such trade-offs. NRC is developing for publication (as a draft) an explicit policy statement on safety philosophy and safety-cost trade-offs in NRC safety decisions. An explicit safety policy statement -- even if not embedded in Federal law -- would be beneficial to NRC and the nuclear industry.

The President's Commission recommended that statutes be reviewed to relieve NRC of any unnecessary responsibilities that are not germane to safety (including domestic safeguards). Eliminating the antitrust responsibility would not affect NRC's safety-related activities as personnel and subject matter are different. For the domestic nuclear industry, implementing the Presidential Commission's recommendation would fragment the licensing process -- i.e. an application for a nuclear power plant construction permit would have to deal with separate agencies for antitrust, environmental and safety matters in licensing as well as inspection and enforcement activities. Industry, the NRC and the ther involved agencies would encounter difficulties in coordinating and scheduing the different phases of the overall licensing process.

With respect to relieving the NRC of its nuclear export responsibilities, the majority of the NRC Commissioners believe it would not be appropriate at this time. If Congress chooses to remove this responsibility, NRC would have more time to devote to the safety of U.S. nuclear plants. The effect on the nuclear industry would depend on what agency picks up the responsibility for nuclear export licensing. We should note that because nuclear safety and safeguarding factors are involved in export decision-making, the agency taking over the responsibility would be required to have many of the same professional skiils as NRC now has.

The President's Commission recommended a number of improvements in NRC regulations and their implementation: upgrading the requirements for licensing reactor operators and supervisors, broadening the definition of "matters relating to safety," and requiring a systems engineering examination of overall plant design and performance. The effect on NRC of implementing these recommendations will be revision of priorities and substantial manpower burdens. The industry will be required to satisfy the new and revised requirements. Although additional manpower and expenditure will be involved, these will not, in my opinion, impose a large enough burden to alter basically the economics of nuclear power vis-a-vis other electrical energy sources.

The recommendation that NRC assure licensee competence to operate a nuclear power plant safely and to respond to accidents has already been acted upon. The effect on NRC is primarily to reorder priorities. The effect on industry is expected to be an increase in management attention and capabilities to assure that nuclear power plants are operated safely.

The President's Commission recommended locating new power plants remote from concentrations of population and considering the consequences of a range of possible accidents in siting determinations. The effect on implementing these recommendations on NRC will be minimal. The revised regulations, however, will limit the number of alternative sites available to some utilities. The effect of any decision we reach concerning existing reactors in more populated areas -- e.g. requiring design changes to extend the time available for protective action -- would be limited to a few specific utilities.

The President's Commission recommended requiring licensees to provide plans and design features for post-accident cleanup and recovery, including backfit of requirements to operating reactors. Depending on specific mitigating measures we may require in response to this recommendation, the effect on the industry may be an appreciable expenditure of resources for existing reactors and somewhat less for reactors under design review or in the initial stages of construction. The effect on NRC will be to increase manpower requirements.

The President's Commission recommended case-by-case NRC review of the need for implementing safety improvements (i.e. those recommended by the President's Commission as well as NRC and the industry), upgrading operator training, improving licensee management and emergency planning prior to issuance of any new construction permits or operating licenses. The effect on NRC will be mainly reordering of priorities and resources. The effect on the industry will be a delay in the issuance of construction permits and operating licenses.

#### A.9-A.11: Recommendations Concerning Agency Procedures

The President's Commission offered a number of recommendations for improvement or modification of NRC procedures. The general impact of implementing these would be to improve licensing procedures. Both NRC and the industry would be benefited. I should point out that limitations of NRC resources do not permit "full speed ahead" on all of these recommendations. However, we are scheduling our work to assure that those actions considered to have the greatest potential for increasing safety are accomplished first.

#### B. Recommendations to the Utility and Its Suppliers

The President's Commission noted that, because "merely meeting the requirements of a government regulation does not guarantee safety," the nuclear industry must "set and police its own standards of excellence to ensure the effective management and safe operation of nuclear power plants." Specific recommendations to the utilities and their suppliers were offered. The President's Commission also recommended that utility rate-making agencies "give explicit attention to the safety implication of rate-making when they consider costs based on 'safety-related' changes." The effect of implementation on industry should be to improve safety. Resource requirements for the industry may be substantial but would not constitute a major burden on the individual utilities.

### C. Recommendations for Operating Personnel Training

The President's Commission recommended establishing NRC-accredited training institutions for reactor operators and supervisors; requiring individual utilities to be responsible for training operators (graduates of accredited training institutions) in the specifics of operating a particular plant; providing for comprehensive ongoing training (integrated with operating experience and including simulator training) on a regular basis to maintain operators' level of knowledge; carrying out a R&D program on simulation and simulation systems to improve the level of realism in operator training and

to increase operator knowledge and diagnostic capability. We have not decided whether NRC accreditation of operator training institutions is appropriate. Our approach has been to upgrade the requirements for training instructors and the content of training courses and to increase our audit and licensing functions. The policies of the industry respecting operating personnel will be affected by the higher standards that are adopted. Because greater assurance of safe operation and effective operator response to emergencies should result, the net effect on the nuclear industry should be beneficial.

#### D. Recommendations Relating to Technical Assessment

The President's Commission made specific recommendations concerning improvements in control room design (type, arrangement, and display of information), the need to correct certain component design and maintenance inadequacies revealed in the TMI accident, imposition of a requirement for each plant to install instrumentation to characterize the safety status of the plant, and conduct of additional studies of accidents and related phenomena. Industry response to NRC staff recommendations that parallel those of the President's Commission has been favorable and we anticipate no difficulty in implementing the recommendations. The effect of implementation should be beneficial to the industry.

The President's Commission recommended close monitoring of TMI-2 cleanup and recovery. About two dozen NRC professionals are now at the TMI-2 site to monitor, audit and review the cleanup and recovery that is now underway. The experience gained in this operation should be valuable to NRC and to the industry.

The Presidential Commission's recommendation for a thorough investigation of accidents and abnormal events and their implications will be met by the NRC actions being undertaken in response to the Presidential Commission's recommendations A.ll and B.l.

### E. Recommendations for Worker and Public Health and Safety

The President's Commission expressed concern about the present uncertainties in scientific understanding of radiological effects on human health, the need for public health agency overview of NRC activities, and the shortcomings in State, local and licensee emergency preparedness. Specific recommendations were presented to address these concerns. NRC and nuclear industry will benefit from any improvements in our knowledge of the health effects of ionizing radiation and from more effective State and local emergency planning.

The President's Commission also recommended -- and we agree -- that an adequate supply of potassium iodide (a thyroid blocking radiation protection agent) be available for workers and the general public. We are considering requiring licensees to stockpile the agent and to require, as a condition of NRC concurrence in State emergency response plans, that States have adequate supplies available for the general public.

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#### F. Recommendations for Emergency Planning and Response

As recommended by the President's Commission, NRC has confirmed that the Federal Emergency Management Agency (FEMA) has the lead role for emergency planning at the Federal level. In addition, as recommended by the President's Commission, NRC and FEMA have agreed to a joint responsibility for concurring in State emergency plans prior to NRC issuance of operating licenses. The effects of the joint FEMA-NRC efforts are bound to be beneficial to NRC and the nuclear industry.

The President's Commission also recommended we upgrade the emergency plans in States where plants are already operating. The industry has been cooperating in the upgrading process, and an improved capability for responding to nuclear emergencies is being achieved.

With respect to the substance of emergency plans, the President's Commission made a number of specific recommendations. Implementation of these -- which is underway -- will improve the capabilities of NRC and the industry (as well as the State and local governments that may be involved) to respond effectively to nuclear emergencies.

The President's Commission recommended expanded research on medical means for protection against radiation. NRC will encourage the Department of Health and Human Services to support such research. The Commission's recommendation for further study of the human costs of mass evacuation is being implemented by NRC. NRC has underway a reexamination of Federal interagency agreements on emergency assistance and will revise them to assure clear delineation of responsibilities among the various support agencies, as recommended by the President's Commission.

One recommendation of the President's Commission concerns the need for a program to assure the public is informed about nuclear power, radiological hazards, and protective actions against radiation. We believe that a broad public information program would be more appropriately handled by other agencies -- e.g. the Federal Radiation Policy Council and the Federal Emergency Management Agency. 'icensees, as part of their emergency response preparation, are now required to keep the public informed on a continuing basis of the nature of radiological hazards and the protective actions which can be taken. The NRC requirement of licensees to conduct periodic emergency response tests and drills should also provide a means for informing the public.

### G. Recommendations Concerning the Public's Right to Information

The President's Commission recommended that the utility (NRC licensee), with NRC support, be responsible for informing news media of the status of the plant during an emergency and that a single agency act as State spokesman. We believe it would be more effective -- based on our TMI experience -- to have Federal, State and utility personnel operate out of a single press center so that, where the facts warrant, a unified view of the situation could be presented. Licensees are now required to identify offsite emergency control centers where utility, Federal, State and local officials can gather; a press center would be established at this location or nearby.

In addition, the President's Commission made a number of recommendations concerning the news media. NRC will urge professional societies (e.g. American Nuclear Society, Health Physics Society) to increase their public information efforts. The training program required to be developed by licensees for local officials may be extended to include local news media personnel.

We will incorporate in NRC guidance to States the Presidential Commission's recommendation that State emergency plans provide for creation of local broadcast networks for emergencies to supply timely and accurate information.

#### CONCLUSION

As I remarked at the beginning, we are in agreement with almost all the recommendations of the President's Commission. For those which we do not agree with, I should emphasize that we do agree with their objectives. During the months since the TMI accident, both NRC and industry have made substantial progress in taking actions that would not only make a similar accident highly unlikely but would also assure more effective protection of the public in the event a serious accident were to occur at any nuclear power plant. The President's Commission has provided valuable insights and recommendations. I believe that implementing the recommendations will improve the regulatory process and result in a higher level of safety for nuclear power plants.