FEBRUARY 10 1981

DISTRIBUTION:
Docket File
Docket No. 50-289

L PDR
NRC PDR
NSIC
ORB#4 Rdg
SWookey
RReid
TMI Correspondence File
BSnyder

TMI Site r/f
TMI SEP r/f
TMI PS r/f
RCapra

C. G. Bacon
2960 Hannah Avenue
Norristown, Pennsylvania 19401

Dear Mr. Bacon:

This letter is to acknowledge receipt of your recent letters to J. Collins, formerly of the TMI Program Office. In your correspondence, you commented upon the U.S. Navy's Nuclear Program and the "87 violations" at Three Mile Island Unit No. 1 (TMI-1) brought to your attention through the public media.

I am enclosing a copy of a fact sheet on the Nuclear Regulatory Commission which illustrates that the Commission's emphasis is on activities involving the commercial nuclear power industry.

With regard to the "87 violations", identified at TMI-1, it appears you are referring to items noted in the draft report of our review of the TMI-1 Control Room released on September 16, 1980. On December 22, 1980, the final report was issued as NUREG-0752, "Control Room Design Review Report for TMI-1". A copy of NUREG-0752, should be available for your review at the local public document room located at the State Library of Pennsylvania, Education Building, Government Publications Section, Commonwealth and Walnut Streets, Harrisburg, Pennsylvania.

As you may be aware, the resumption of operation of TMI-1 is the subject of a hearing by an Atomic Safety and Licensing Board (ASLB) of the NRC. That hearing started on October 15, 1980 in Harrisburg, Pennsylvania and is ongoing. The record on which the Commission will make a decision on resumption of operation of TMI-1 will include a recommendation from the ASLB.

Your comments and interest in these matters are appreciated.

Sincerely,
Original signed by
Robert W. Reid

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Licensing

8102300843

OFFICE	ORB#4:DL	ORB#4:DL (C)			
SURNAME	SWookey/cb	RReid			
DATE	2/5/81	2/5/81			

UNITED STATES
NUCLEAR REGULATORY COMMISSION
Office of Public Affairs
Washington, D.C. 20555

THE NUCLEAR REGULATORY COMMISSION

On October 11, 1974, President Ford signed into law the Energy Reorganization Act which abolished the Atomic Energy Commission and created two new Federal agencies -- the Energy Research and Development Administration (ERDA) and the independent Nuclear Regulatory Commission (NRC). The NRC, which took over the regulatory functions of the AEC, formally came into being on January 19, 1975. ERDA is now the Department of Energy.

The President, on signing the legislation, stated in part: "The highly technical nature of our nuclear facilities and the special potential hazards which are involved in the use of nuclear fuels fully warrant the creation of an independent and technically competent regulatory agency to assure adequate protection of public health and safety. NRC will be responsible for the licensing and regulation of the nuclear industry under the provisions of the Atomic Energy Act. This means that NRC will be fully empowered to see to it that reactors using nuclear materials will be properly and safely designed, constructed and operated to guarantee against hazards to the public from leakage or accident. NRC will also exercise strengthened authority to assure that the public is fully safeguarded from hazards arising from the storage, handling and transportation of nuclear materials being used in power reactors, hospitals, research laboratories or for any other purpose."

Under the law, the NRC also administers a program of regulatory research in the areas of reactor safety, fuel cycle, safeguards, and environment. Much of this research is conducted in facilities of the Department of Energy.

In addition, the NRC is responsible for licensing the export of nuclear reactors and the export and import of uranium and plutonium.

NRC ORGANIZATION AND FUNCTIONS

The Nuclear Regulatory Commission is headed by a five-member Commission appointed by the President and confirmed by the Senate for five-year terms. The Chairman of the Commission is John F. Ahearne. The other Commissioners are Peter A. Bradford, Victor Gilinsky, Joseph M. Hendrie, and ~~Richard T. Kennedy~~ (current vacancy).

The NRC has four basic functions:

Licensing - The Agency reviews and issues licenses for the construction and operation of nuclear power plants and other uses of nuclear materials, including medical, industrial, educational and research activities. Regulatory authority for some nuclear materials licensing has been transferred to about half the states under the NRC's Agreement States Program.

Inspection and Enforcement - The NRC conducts periodic inspection of nuclear plants and other licensees. Enforcement powers include issuance of violation notices, imposition of fines and license suspension, modification or revocation.

Standards Development - The NRC establishes regulations, standards and guidelines governing the various licensed uses of radioactive materials.

Regulatory Research - The NRC has an extensive research program in the areas of safety, safeguards and environmental assessment.

The Nuclear Regulatory Commission has offices in Bethesda, Maryland and Washington, D.C. In addition, there are five regional offices from which inspection activities are carried out. These are located in King of Prussia, Pennsylvania; Atlanta, Georgia; Glen Ellyn, Illinois; Arlington, Texas; and Walnut Creek, California.

The NRC has about 2,800 employees and budget of about $375 million.

Five operating offices carry out the NRC's major regulatory functions: Office of Nuclear Reactor Regulation, Office of Nuclear Material Safety and Safeguards, Office of Nuclear Regulatory Research, Office of Standards Development and Office of Inspection and Enforcement.

OFFICE OF NUCLEAR REACTOR REGULATION

This office evaluates applications for permits to build and licenses to operate nuclear reactors. Its review of applications emcompasses the safety, safeguards and environmental aspects of nuclear facilities. Many requirements are imposed to achieve these safety objectives. This includes a comprehensive quality assurance program for the design, construction, and operation of the plant; multiple safety systems and physical barriers to prevent the uncontrolled release of radioactivity; and extensive testing and inspection of plant equipment and systems.

Where approval has been granted in licensing reviews the office issues limited work authorizations (LWA), construction permits, and operating licenses.

The office also examines and licenses individual reactor operators and monitors and recommends improvements of reactor systems that are related to safety and environmental protection.

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

This office licenses and regulates fuel-cycle facilities, the transport and handling of nuclear materials, and the safeguarding of nuclear facilities and materials.

This responsibility includes the development of programs for protecting nuclear materials from diversion and nuclear facilities from sabotage.

Additionally, it is responsible for monitoring, testing and recommending improvement of nuclear facility systems that account for special nuclear materials. This office also licenses the uses of radioisotopes in industry, research and medicine in those states which have not assumed this authority under agreements with the NRC.

OFFICE OF NUCLEAR REGULATORY RESEARCH

The NRC's research program is administered by this office to serve as a basis for the NRC to confirm the safety, safeguards and environmental assessments made in the performance of its regulatory functions. This office works closely with the other four NRC operating offices in developing recommendations and determinations for research to be conducted in the fields of nuclear reactor safety, safeguards for nuclear materials and facilities, the nuclear fuel cycle, and environmental protection.

Research in progress for the purpose of establishing site, structural, and environmental information to be used in nuclear facility safety evaluations includes studies in seismology, geology, hydrology and meteorology. Projects are underway in such areas of natural phenomena as earthquakes and tornadoes.

NRC confirmatory assessment studies are conducted largely in national laboratories of the Department of Energy and by contractors in more than 20 states. One such program is the LOFT (Loss-of-Fluid Test) reactor facility at Idaho National Engineering Laboratory in Idaho Falls. LOFT is designed to provide additional data on the performance of an emergency core cooling system in a pressurized water reactor.

OFFICE OF STANDARDS DEVELOPMENT

This office develops regulations, criteria, guides, standards, and codes defining the siting, design, construction, operation, decommissioning, and safeguarding of nuclear reactors and other nuclear facilities, as well as the storage, processing, transporting, safeguarding and use of nuclear materials. This office identifies information that is required from an applicant for a license, provides models and methods for assessing levels of protection, and helps provide a basis for the standardization of nuclear power plants. The Commission has endorsed the concept of power plant standardization -- that is, reducing the nuclear of design changes made in each individual plant. Standardization would reduce paperwork for both the applicants and the NRC staff, resulting in advantages with respect to scheduling, construction and operation of nuclear power plants.

The office coordinates NRC staff participation in standards-related activities of the International Atomic Energy Agency and serves as a principal point of contact for the Commission with the American National Standards Institute and technical and professional societies on matters concerning nuclear standards.

OFFICE OF INSPECTION AND ENFORCEMENT

The NRC's inspection function is carried out by this office to assure that nuclear facilities and other NRC licensees comply with NRC requirements for health and safety, security of nuclear materials and facilities, and environmental protection. This is achieved by inspecting the quality assurance systems of licensees as well as conducting, on a sampling basis, an inspection of the licensed activities.

The office performs independent measurements of radioactivity in nuclear facility effluents to assure that the licensee's measurements are accurate and that discharges are maintained at levels that are as low as reasonably achievable, as required by NRC regulations.

The NRC is implementing a program of resident inspectors for operating nuclear power plants and many of those under construction. By the end of 1980 the NRC intends to have two or more resident inspectors assigned to operating power stations. Some fuel facilities are also staffed with resident inspectors. The resident inspectors will be assisted in their inspections by technical specialists based in the regional offices. These specialist inspections include such areas as environmental monitoring, emergency planning, radiation protection, security and inservice inspection of nuclear components.

The Office of Inspection and Enforcement also inspects the quality assurance programs of reactor manufacturers, architect-engineering firms and suppliers of major nuclear components for nuclear power plants.

NRC inspectors also check the regulatory compliance of other licensees, including hospital nuclear medicine programs, industrial applications, academic and research activities and nuclear material processing.

The Office of Inspection and Enforcement also investigates accidents and incidents at licensed facilities as well as compliants or allegations from licensee employees or members of the public concerning activities of NRC licensees.

When appropriate, this office carries out enforcement actions including notices of violations requiring corrective action, imposition of fines, or modifications, suspension or revocation of licenses.

INDEPENDENT LICENSING UNITS

Advisory Committee on Reactor Safeguards (ACRS) - This statutory body of 15 eminent scientists and engineers which reviews and makes recommendations to the Commission on all applications for construction and operation of nuclear power reactors and related nuclear safety matters.

Atomic Safety and Licensing Board Panel - Three-member licensing boards drawn from the safety and licensing panel -- made up of lawyers and others with expertise in various technical and environmental fields -- conduct public hearings on nuclear power plant applications.

Atomic Safety and Licensing Appeal Panel -- Three-member appeal boards selected from this panel review decisions of the licensing board.

THE NRC REACTOR LICENSING PROGRAM

The process for licensing a nuclear power plant -- or a fuel reprocessing plant -- requires extensive technical reviews and public proceedings.

A utility must first obtain a permit to construct a power reactor. Then after the facility is constructed, under NRC surveillance, the utility must obtain a license to operate it.

When a utility's construction application is docketed; the NRC takes the following actions before reaching a decision:

Environmental Review

An NRC staff evaluation of the potential environmental impact of the proposed nuclear plant and the suitability of the site is conducted in advance of, or in parallel with, the safety review.

This evaluation, required by the National Environmental Policy Act, considers the effects of construction and operation of the plant on the local environment and weighs the benefits to be gained against the possible risk to the environment. The review -- which takes into account comments by expert federal and state agencies and the public -- results in an NRC Final Environmental Statement and this statement may require changes to the plant design or operational mode.

Safety Review

The NRC staff conducts in depth safety review of the proposed design of the plant. Where design features do not meet NRC standards, changes by the applicant are required. The staff then prepares a Safety Evaluation Report which is made public.

While the staff reviews are going on, the Advisory Committee on Reactor Safeguards conducts an independent review of the application, including public meetings with the utility applicant and the NRC staff, and submits its recommendations, which are made public, to the Commission. The views of the ACRS are taken into account in a Supplementary Safety Evaluation report issued by the NRC staff. These rigorous examinations extend over a year or more. Modifications to the plant design may be necessary before the NRC staff is satisfied that the project can move on to a public hearing before an Atomic Safety and Licensing Board.

Public Participation

The law requires that a public hearing be held before a decision can be made to grant or deny a permit to build a nuclear power plant. The three-member Atomic Safety and Licensing Board conducting the proceeding may combine the safety and environmental matters or it may consider them in separate public hearings.

At the hearing, the utility applicant presents evidence in support of its proposed plant. The NRC staff offers the Safety Evaluation Report and/or the Final Environmental Statement as evidence. Interested members of the public that appear simply to make statements, or they may formally petition the board to intervene as full participants in the hearing. The board considers the evidence presented by all the parties and issues an initial decision. If favorable, the NRC issues a construction permit to the applicant. The board's decision is subject to review by an Atomic Safety and Licensing Appeal Board, whose decision is, in turn, reviewable by the NRC Commissioners.

Antitrust Review

Prior to or in parallel with other reviews, the NRC conducts a pre-licensing antitrust review of each application for a major nuclear facility in order to assure the proposed facility is in compliance with antitrust laws. Hearings are held when recommended by the U.S. Attorney General, or they may be held on the petition of an interested party.

Construction Surveillance

Nuclear power plants are inspected by NRC representatives during construction and preoperational testing. As indicated earlier, this largely involves inspection of the quality assurance program of the licensee.

Operating License Review

About two years before construction of a nuclear plant is completed, the utility submits an application for an operating license and the NRC again conducts a comprehensive safety review. A Safety Evaluation Report is prepared by the staff and the ACRS makes its independent review and report. An environmental statement also is issued.

A public hearing is not mandatory at this stage, but any person whose interest may be affected may petition the NRC to hold a hearing. If no hearing is requested, or granted, the NRC staff may issue an operating license after the facility has been inspected to be sure it has been built properly and is ready for fuel loading.

The LWA

For several years an average of nine to ten years has been required from the time a utility decides to build a nuclear power plant to the time the facility could be placed in operation. One step permitted by NRC regulations to help reduce that time is use of a limited work authorization (LWA). This authorization allows, in appropriate cases, limited site preparation work to be carried out at a reactor site prior to a decision on the construction permit. An LWA can be granted only after environmental impact and site suitability reviews have been completed by the NRC staff, and a licensing board has made favorable findings after a public hearing.