



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

June 21, 1993

MEMORANDUM FOR: The Chairman
Commissioner Rogers
Commissioner Curtiss
Commissioner Remick
Commissioner de Planque

FROM: Dennis K. Rathbun, Director
Office of Congressional Affairs

SUBJECT: DRAFT BILL ON 2.206 PETITIONS

Senator Lieberman plans to introduce a bill which would provide for judicial review of NRC decisions on petitions for enforcement actions, and for other purposes. The Clean Air and Nuclear Regulation Subcommittee staff has provided us with a draft of the bill. They would like NRC's comments included in the June 30, 1993 Authorization testimony.

By copy of this memorandum, the Office of the General Counsel is asked to prepare an analysis of the draft bill.

Attachment:
As stated

Contact: L. Portner, 504-1776

cc: OGC
EDO
SECY

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PDR COMMS NRCC
CORRESPONDENCE PDR

103d CONGRESS
1st Session

DRAFT

S.

IN THE SENATE OF THE UNITED STATES

MR. introduced the following bill; which was read
twice and referred to the Committee on

A BILL

To provide for judicial review of Nuclear Regulatory
Commission decisions on petitions for enforcement actions, and for
other purposes.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

1
2 SECTION 1. SHORT TITLE.

3 This Act may be referred to as the "Nuclear Enforcement
4 Accountability Act of 1993."

5 SEC. 2. ENFORCEMENT PETITIONS AND JUDICIAL REVIEW.

6 Section 189 of the Atomic Energy Act of 1954 (42 U.S.C.
7 2239) is amended by adding at the end the following new
8 subsection:

9 "d. ENFORCEMENT PETITIONS.--

10 "(1) IN GENERAL.--Any person may petition the Nuclear
11 Regulatory Commission to institute a proceeding to modify,
12 suspend, or revoke a license, or for such other action as
13 may be proper.

14 "(2) STANDARDS FOR GRANTING.--The Commission shall
15 grant any request under paragraph (1) if the petitioner
16 demonstrates material evidence reasonably indicating that--

17 (i) the holder of the license with respect to
18 which a request has been made under paragraph (1) is in
19 significant noncompliance with the terms of the
20 license, this chapter, or the Commission's regulations,

21 or

22 (ii) the activities of the licensee present a
23 substantial hazard to the public health and safety or
24 common defense and security.

25

Seems to say NRC must revoke license if that is requested by petitioner, if there is a significant noncompliance, regardless of safety significance.

DRAFT

1 "(3) JUDICIAL REVIEW.--Any Commission order denying a
2 request under this subsection shall be subject to judicial
3 review in accordance with chapter 158 of title 28, United
4 States Code, and chapter 7 of title 5, United States Code.".

5

06/21/93

B₁ 232
2.206



H

NUMBER OF PETITIONS FILED PER YEAR

1993-10

1992-28

1991-15

1990-8

1989-14

1988-12

1987-18

1986-32

1985-14

1984-34

1983-26

1982-21

1981-16

1980-17

1979-23

1978-8

1977-11

1976-14

1975-7

1974-5

TOTAL- 333

(17)

Updated June 24, 1993

NUMBER OF DIRECTOR'S DECISIONS BY YEAR

1993 - 13

1992 - 8

1991 - 6

1990 - 8

1989 - 9 17

1988 - 21

1987 - 21

1986 - 18

1985 - 20

1984 - 25

1983 - 19

1982 - 13

1981 - 23

1980 - 36

1979 - 24

1974 - 1978 - 70
(plus unpublished decisions)

TOTAL - 334

Updated June 24, 1993

I. **Summary of 2.206 Petitions Resulting in Regulatory Action Which Achieved, in Whole or in Part, Petitioners' Objectives**

Between 1974 and June 24, 1993, over 330 petitions have been filed pursuant to 10 C.F.R. § 2.206. Of these, slightly more than ten percent have been granted in whole or in part. Petitions have led to regulatory action including the issuance of a Notice of Violation and Proposed Imposition of Civil Penalty, or orders modifying, suspending or revoking licenses, or the initiation of further NRC inquiries into the safety issues raised in the petition. Even where the petition is denied, the petitioner may have an impact by triggering the NRC's review of a safety issue, or some other NRC action.

A recent and significant case in which a 2.206 petition resulted in regulatory action which achieved the petitioners' objective, at least in part, is **Yankee Rowe**. On June 4, 1991, the Union of Concerned Scientists and the New England Coalition on Nuclear Pollution filed a Petition for Emergency Enforcement Action and Request For Public Hearing with the Commission seeking the immediate shutdown of the Yankee Rowe Nuclear Power Plant, asserting that the Yankee Rowe reactor violates the Commission's requirements for pressure vessel integrity and that, therefore, the Commission cannot have reasonable assurance that the facility poses no undue risk to public health and safety. On June 25, 1991, the Director of the Office of Nuclear Reactor Regulation issued a letter to Petitioners denying the request for emergency relief; because the petition presented an enforcement question of sufficient public importance, however, the Commission concluded that it should make the decision on the safety of continued operation of Yankee Rowe. On July 31, 1991, the Commission issued a Memorandum and Order, CLI-91-11, in response to the Petition. The Commission determined that, while there is no safety or other regulatory requirement for an immediate plant shutdown, the soundest interpretation of the Pressurized Thermal Shock (PTS) regulation, 10 CFR 50.61, is that uncertainties such as those identified by the Staff should be resolved as soon as possible to move in the direction of the overall risk goal from a PTS event contemplated by the Commission when it adopted 10 CFR 50.61. The Commission also found that it was unable to determine at that time whether plant shutdown at any date much earlier than the end of the current cycle, cycle 21, would permit commencement of the testing programs needed to resolve the uncertainties; it instructed Licensee to inform the Commission if testing programs can be commenced at a time prior to the scheduled end of cycle 21. In keeping with the Commission's belief that any additional action that proves to be feasible to further increase the margins against vessel failure should be undertaken, the Commission instructed the Licensee to investigate such additional measures and ordered the Licensee to submit to the NRC on or before August 26, 1991, its evaluation of and its plans for modifications to its operating conditions that would provide additional margin against reactor vessel failure from a PTS challenge.

In another recent case, *Pacific Gas and Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), DD-90-3, 31 NRC 595 (1990), the petitioner, Northern

Updated June 24, 1993

California Power Agency (NCPA), filed petitions dated December 4, 1981 and August 1, 1984, and a filing dated March 19, 1985, clarifying these petitions, requesting the Director of the Office of Nuclear Reactor Regulation (NRR) to take certain remedial enforcement actions against Pacific Gas and Electric Company (PG&E) for allegedly violating certain antitrust license conditions. After considering the issues raised in these petitions, the Director of NRR determined that PG&E had violated certain of its Diablo Canyon antitrust license conditions, issued a Notice of Violation, and required that PG&E inform the NRC of the steps PG&E had taken and intends to take to comply with its licensed conditions. (The District Court of the Northern District of California had issued a ruling in connection with an action brought by the United States against PG&E that dealt with many of the same issues raised in the petitions. This ruling provided necessary remedial action that required PG&E to comply with some of the Diablo Canyon antitrust license conditions at issue.) PG&E filed its response September 28, 1990, and denied it had violated its license conditions. As a result, by a petition filed on November 30, 1990, NCPA requested pursuant to § 2.206 that the Commission take appropriate action to ensure compliance. Based on a settlement agreement between PG&E and NCPA and the NRC staff's conclusion that PG&E had satisfactorily responded to the Notice of Violation, NCPA withdrew its petition.

In another case, *General Electric Co.* (Wilmington, North Carolina, facility), DD-89-01, 29 NRC 325 (1989), Anthony Z. Roisman and Mozart G. Ratner, as counsel for Vera M. English (petitioner), filed a petition requesting that the NRC take appropriate action against General Electric Company (GE) for its deliberate retaliatory discharge of Mrs. English. The petition sought imposition of a civil penalty and imposition of a license condition requiring GE to fully compensate Mrs. English for her economic losses, medical expenses, and other expenses allegedly incurred in connection with GE's alleged discrimination. The Director of NRR granted the petitioner's request that enforcement action be taken against GE, and issued a Notice of Violation and Proposed Imposition of Civil Penalty. (However, he declined to impose the civil penalty requested by the petitioner in the amount of \$40,635,000 plus \$37,500 per day for every day after April 6, 1987, that GE did not take corrective action, and applied the guidance provided in the Enforcement Policy applicable at the time of the violation and set out in 10 C.F.R. Part 2, Appendix C, 49 *Fed. Reg.* 8583 (March 8, 1984) in assessing a civil penalty of \$20,000. The Director also declined to impose a license condition upon GE requiring GE to compensate Mrs. English for her alleged losses, stating that in Section 210 of the Energy Reorganization Act, Congress explicitly gave to the Department of Labor (DOL) the authority and responsibility to order individual compensation, and that the NRC lacked such authority.)

In addition to these examples, many other petitions have triggered regulatory action which achieved, at least in part, the petitioners' objectives. The following cases illustrate the type of regulatory action which has been taken in response to § 2.206 petitions:

A. Issuance of NOV

Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant Units 1 & 2), DD-83-17, 18 NRC 1289 (1983) (Petitioner's request that a license application be dismissed, construction permit be revoked or civil penalty be assessed was denied, but Director determined that a violation *had* occurred and Notice of Violation should be issued.)

Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), DD-85-9, 21 NRC 1759 (1985) (Petitioners' request that the Director find violations of NRC requirements was granted, but requests that show-cause proceedings be initiated and civil penalty of \$250,000 be assessed were denied. The Director instead proposed a Notice of Violation and a \$64,000 civil penalty.)

B. Issuance of Order Modifying, Suspending or Revoking Licenses

Cincinnati Gas & Electric Co. (W.H. Zimmer Nuclear Power Station), DD-83-2, 17 NRC 323 (1983) & CLI-82-33, 16 NRC 1489 (1982);

Consolidated Edison Co. of New York, Inc. (Indian Point, Units 1 and 2); *Power Authority of the State of New York* (Indian Point Unit 3), DD-80-5, 11 NRC 351 (1980).

C. Initiation of Further NRC Inquiries into Safety Issues Raised in Petitions

Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Station), DD-83-15, 18 NRC 738 (1983);

Rochester Gas & Electric Co. (R.E. Ginna Nuclear Power Plant), DD-82-3, 15 NRC 1348, 1349 (1982);

Dairyland Power Cooperative (LaCrosse Boiling Water Reactor), DD-80-9, 11 NRC 392, 402-03 (1980);

Catholic University of America, DD-80-8, 11 NRC 389 (1980);

Philadelphia Electric Co. (Limerick Nuclear Generating Station, Units 1 & 2), DD-79-16, 10 NRC 609, 610 (1979).

In two other cases, one of which involved Commission reversal of three staff denials under § 2.206, the NRC granted petitions asking for preparation of an environmental impact statement. See *Virginia Electric Power Co.* (Surry Nuclear Power Station, Units 1 & 2), CLI-80-4, 11 NRC 405 (1980); *Commonwealth Edison Co.* (Dresden Nuclear Power Station, Unit 1), DD-80-24, 11 NRC 951 (1980).

D. Initiation of Other NRC Action

Shipments of High Level Nuclear Power Plant Waste, DD-84-9, 19 NRC 1087 (1984) (Petition denied; however, NRC changed conditions under which certain shipping casks could be used for transport of spent reactor fuel, in response to a petition which had claimed that insufficient attention had been paid to the implications of an accident using such casks.)

GPU Nuclear Corp. (Three Mile Island Nuclear Station, Unit 1), DD-84-22, 20 NRC 1033 (1984) (Petition denied; however, NRC review largely substantiated petitioner's claim that licensee had serious deficiencies in its environmental qualification program for safety-related equipment.)

II. List of 2,206 Petitions Resulting in Regulatory Action, Which Achieved, in Whole or in Part, Petitioners' Objectives

1. On 6/25/92, Indian Orchard Citizens Council (IOCC) filed a petition against Interstate Nuclear Services requesting a number of actions relating to reduction in radiation levels, waste, use of streets and storage of waste. In DD-93-09 (5/7/93) the petition granted eight of requests. The petition was denied with respect to IOCC's requests to check homes in the area for radioactive contamination and possible illegal dumping of waste material.
2. On 7/21/92, NIRS filed a petition requesting immediate suspension of operating licenses pending a demonstration that facilities meet fire protection requirements due to use of Thermo-Lag fire barriers. In DD-93-03 (2/1/93) the petition, to the extent that it requested the Staff to study and review the matter and issue a generic letter was granted; the other requests were found to be without merit and were denied. In DD-93-11 (5/23/93) the remaining issue regarding shut down of certain facilities using Thermo-Lag fire barrier material was denied and not seen as a substantial health and safety risk.
3. On 11/27/91, NACE filed an emergency petition requesting immediate revocation of the operating license of Sequoyah Fuels Corporation (SFC) or in the alternative that the NRC withhold authorization to restart. In DD-92-03, 35 NRC 211 (1992), the petition was denied, except insofar as a Notice of Violation will be issued citing SFC for violating 10 CFR 40.9 and has decided to grant the Petition insofar as the staff will publish in the Federal Register, notice of all SFC's license amendment applications until the staff takes final action on the license renewal application.
4. On 6/4/91, UCS and NECNP filed a petition requesting the shutdown of Yankee Rowe based on allegations that the facility is operating in violation of NRC requirements for reactor pressure vessel integrity. In CLI-91-11 (7/31/91), the Commission issued a Memorandum and Order requiring the Licensee to submit to the NRC its evaluation of and its plan for modifications to its operating conditions that would provide additional margin against reactor vessel failure, and to submit its plan and a monthly progress report to resolve uncertainties in the chemical and metallurgical characteristics, and, in other respects, denied the petition.
5. On 7/14/89 and in supplements, Shoreham-Wading River Central School District, and on 7/26/89 and in supplements, Scientists and Engineers for Secure Energy, Inc., filed petitions to request issuance of an immediately effective order to licensee to cease defueling and destaffing of Shoreham Unit 1 and return to "status quo ante" pending consideration by the Commission. In DD-91-3 (5/15/91), the petition was granted to the extent that it requested NRC action to prevent the licensee from shipping certain fuel support components for burial, and was denied concerning its request that the Commission issue a NOV and Order the licensee to implement a remedial plan.
6. On 5/1/87, GAP filed a petition requesting suspension of further licensing of all facilities pending study and a report on the Chernobyl accident. In DD-87-21, 26 NRC 520 (1987), the

petition, to the extent that it requested the Staff to undertake a study and review, was granted; the other requests were found to be without merit and were denied.

7. On 4/6/87, Vera English filed a petition requesting that enforcement action be taken against the licensee of the Wilmington facility for illegal discrimination. In DD-89-01, 29 NRC 325 (1989), the petition was granted with respect to the NRC taking enforcement action against the licensee for discrimination against Mrs. English, a Notice of Violation and a civil penalty was issued; but the petition was denied with respect to the request that NRC impose a civil penalty in the amount stated and that the NRC impose a license condition upon the licensee to fully compensate Mrs. English.

8. On 3/13/86, the Commission in *Texas Utilities Electric Company*, (Comanche Peak Steam Electric Station, Unit 1), CLI-86-04, 23 NRC 113 (1986), referred a request from Citizens Association for Sound Energy (CASE) dated 1/31/86 that the Commission assess a civil penalty for unauthorized construction. On 8/8/88, CASE withdrew a portion of its request except its request for some type of escalated enforcement action. On 2/28/89, the NRC Staff issued a NOV for Severity Level III violation with no civil penalty proposed.

9. On 9/11/85, the Commission referred a petition filed by the Oil, Chemical & Atomic Workers International Union, AFL-CIO, dated 9/3/85, which requested that the Commission order an investigation of 20 specific allegations raised in the letter, require a formal hearing with notice prior to granting any future request to operate the Erwin facility, and hold a public hearing in the area to establish that reduced operations can be conducted at the facility without adversely affecting the public health, safety, and interest. In DD-86-03, 23 NRC 191 (1986), the Director determined that with the exception of petitioner's request for an investigation of the specific allegations raised in the petition, the petition should be denied. The Staff conducted an extensive investigation of these allegations.

10. On 6/27/84, Palmetto Alliance and on 9/27/84, GAP filed petitions for enforcement action against Duke Power Co. (Catawba) on the basis of violations of NRC regulations and alleged harassment and intimidation of quality control inspectors. In DD-85-09, 21 NRC 1759 (1985), the Director determined that a NOV and Proposed Imposition of Civil Penalty should be issued for the violation and that no further enforcement action was warranted.

11. On 8/1/84 and in supplements, Northern California Power Agency filed a petition requesting that the NRC take certain enforcement actions against PG&E (Diablo Canyon) for allegedly violating the antitrust license conditions. In DD-90-03, 31 NRC 595 (1990), the Director found that the licensee had violated certain antitrust conditions, determined that a NOV should be issued, required that the licensee provide information to the Staff within 30 days of its receipt to this Decision, and determined that no other enforcement action was necessary because the June 8, 1989 District Court Decision provided the necessary remedial action that required the licensee to comply with the antitrust license conditions.

12. On 6/29/84, Alabama Electric Cooperative, Inc., filed a petition requesting action to enforce the antitrust conditions for Farley Nuclear Plant. In DD-86-07, 23 NRC 875 (1986), the Director declined to initiate enforcement action on certain allegations but issued a NOV requiring the licensee to respond to the remaining alleged violations and to take timely steps to achieve compliance.

13. On 3/19/84, GAP and Citizens Association for Sound Energy, filed a petition requesting the NRC take certain actions with respect to alleged serious construction and documentation deficiencies at Comanche Peak. In DD-87-17, 26 NRC 323 (1987), the petition was granted with respect to the request for special NRC inspections of the facility but was denied with respect to suspending construction and initiating an independent management audit and independent design and construction verification program.

14. On 10/20/83, joint intervenors in the Diablo Canyon OL proceeding filed a petition requesting that the low-power license for Diablo Canyon Unit 1 should be revoked or at least remain suspended on the basis of the licensee's failure to report a 1977 audit of the QA program to the licensee's prime piping contractor. In DD-84-08, 19 NRC 924 (1984), the Director found that the failure to report the audit constituted a material false statement under the Atomic Energy Act but did not find revocation or suspension of the license to be an appropriate remedy for the reporting failure. On 8/20/84, the Commission issued an Order directing the Staff to issue a Severity Level III NOV, rather than the Staff proposed Level IV.

15. On 7/20/83, MASSPIRG filed a petition requesting that the NRC take action with respect to the state of emergency planning at the Pilgrim facility, specifically, to initiate the 4-month period specified by the Commission's regulations within which to correct the alleged deficiencies at the Pilgrim facility and consideration by the Commission as to whether the state of emergency preparedness in conjunction with the alleged poor safety record at the facility warrants immediate shutdown or operation of the facility at reduced power. In DD-84-05, 19 NRC 542 (1984), the Staff determined that the Evacuation Time Estimates should be reviewed by FEMA for potential bottlenecks to effective evacuation of the EPZ on the periphery of the EPZ; therefore, the Director deferred resolution of this issue until after FEMA submitted its response. In DD-84-15, 20 NRC 157 (1984), the Director denied the remainder of the petition based on FEMA's evaluation that traffic management issues have been adequately addressed by the Commonwealth of Massachusetts.

16. On 6/13/83, Lone Tree Council and GAP filed a petition requesting that the NRC take certain action with regard to the Midland project. In DD-83-16, 18 NRC 1123 (1983), the Director found that the petitioners' relief was satisfied by previous action of the Commission with respect to the hold points and determined that a management audit was not necessary at this time as a condition for going forward with the construction completion plan but that the Staff would continue to review information concerning the licensee's performance in other areas to determine whether an audit is required. The Director denied the remainder of the request. In DD-84-02, 19 NRC 478 (1984), the Director determined that an appraisal of the licensee's

management of the Midland project was required and required the licensee to submit to the Region III Administrator for review and approval a plan for an independent appraisal of site and corporate management organizations and functions.

17. On 5/9/83, the ASLB referred to the Staff a petition from Ohio Citizens for Responsible Energy (OCRE) requesting dismissal of the Perry license application on the basis that the Licensee had made material false statements in its application concerning the use of herbicides to control vegetation along transmission lines, revocation of its construction permit, or assessment of civil penalty. In DD-83-17, 18 NRC 1289 (1983), the Director determined that the licensee had made a material false statement, that the violation should be categorized as a Severity Level IV, issued a Notice of Violation requiring the licensee to respond and describe its corrective actions to prevent similar occurrences in the future, and denied petitioner's request for other enforcement actions.

18. On 4/8/83, Miller, Tupper, Flanagan and Sensible Maine Power filed a petition requesting an initiation of a proceeding to modify, suspend or revoke Maine Yankee's license based on FEMA's identification of significant deficiencies in emergency planning and preparedness. In DD-83-15, 18 NRC 738 (1983), the Director determined that the Staff has partially granted the relief sought by taking action to obtain correction of the deficiencies identified by FEMA, that petitioners' request that operation of the plant be suspended was denied, and that the issue of whether State Route 27 is an adequate evacuation route will be resolved pending FEMA's evaluation. In DD-85-06, 21 NRC 1547 (1985), the Director denied the remaining portion of petitioners' request.

19. On 8/4/82, UCS and NYPIRG filed a petition requesting immediate shutdown of Indian Point Units 2 and 3 because of deficiencies in emergency preparedness identified by FEMA in a letter to the NRC Staff dated 8/2/82. In DD-82-12, 16 NRC 1685 (1982), the Director denied the request. In CLI-82-38, 16 NRC 1698 (1982) and Commission Order dated 2/3/83 (unpublished), the Commission superseded DD-82-12 and determined that, even though no enforcement action was required at that time, the Commission would continue to monitor the progress made and asked FEMA to present the Commission monthly reports on the status of Rockland county planning and training on the plans being developed, the status of resolution of the bus driver issue in Westchester County, and any other emergency preparedness issues that arise as work continued.

20. On 8/20/82 and supplemented on 10/18/82, Miami Valley Power Project and GAP filed a petition requesting suspension of construction of Zimmer Station and argued that the licensee should be removed from any responsibility for reinspection of construction work. In CLI-82-33, 16 NRC 1489 (1982), the Commission issued an immediately effective order suspending licensee's safety-related construction activities, including rework of previously-identified deficient construction, and required the licensee to show cause why the suspension should not continue pending review and implementation of proposals to improve the licensee's management of the project, to verify the quality of construction work, and to ensure that any future construction conforms to the Commission's requirements. In DD-83-02, 17 NRC 323 (1983),

the Director determined that the Commission's order satisfied substantially all the requests for action and finds no basis for the argument that the licensee be removed from any responsibility for reinspection of construction work.

21. On 3/11/82, the Sierra Club filed a petition requesting that a review be conducted of matters pertaining to the ability of the licensee to safely operate the Ginna plant so as to protect the public health and safety in light of the steam generator tube rupture at the Ginna plant. In DD-82-03, 15 NRC 1348 (1982), the petition was granted insofar as it requested a review of various safety issues to ensure that necessary actions to protect public health and safety were taken prior to resumed operation of the reactor and denied the request for a formal order to require such a review and to prevent restart of the reactor.

22. By petition dated 3/19/79, Ms. Kay Drey requested the NRC to prepare an EIS on the proposed chemical decontamination of Dresden. By petition dated 9/20/79, Illinois Safe Energy Alliance requested public hearing on the decontamination based on the lack of assurance that the NRC would issue an EIS. By petition dated 3/13/80, Citizens for Better Environment and Prairie Alliance supported Ms. Drey's petition. In DD-80-24, 11 NRC 951 (1980), the Director determined that an EIS should be prepared for Dresden Unit 1 decontamination but determined that a public hearing was not necessary.

23. On 5/23/80, the Commission referred an undated petition by Save The Valley which alleged that the New Madrid fault zone extends in a northeasterly direction towards the Marble Hill site, which expressed concern over accidental releases of radioactive liquids, and which concerned construction practices at Marble Hill. In DD-80-27, 12 NRC 381 (1980), the Director of NRR found that no further action regarding site suitability issues was warranted. In a letter dated 3/18/81, the Director of IE determined that the actions requested in the petition concerning the construction practices at Marble Hill had essentially been taken through an Order dated 8/15/79 and a "Graduated Rescission of Order dated August 15, 1979," dated 5/15/80.

24. On 9/17/79, UCS filed a petition requesting the NRC to revoke the provisional operating license for Indian Point Station Unit 1, order the licensee to submit a plan to decommission Unit 1, and suspend operation of Units 2 and 3 pending resolution of various safety-related issues. In DD-80-05, 11 NRC 351 (1980), the petition was granted with respect to Unit 1 by issuing an Order to Show Cause why the operating license should not be revoked and why a decommission plan should not be submitted. The Director determined not to order the shutdown of Units 2 and 3 because he found that Units 2 and 3 both had been significantly modified to meet NRC safety and security requirements, that a NRC task force will determine what design changes should be made to further reduce the probability and/or consequences of a severe reactor accident, and issued a Confirmatory Order imposing interim measures to provide additional assurance of safe operation of these facilities.

25. On 3/19/79, the Appeal Board referred a petition from Save the Valley (STV) which requested that the safety hearing held in connection with the application for construction permits for the two-unit Marble Hill facility be reopened, and subsequently requested in additional letters

of 4/4/79 and 4/19/79 that certain other information be considered by the Director as a basis for either reopening the safety hearings or for issuance of an order to show cause to revoke or suspend the Marble Hill construction permits. By petition dated 6/29/79, and in supplements, Sassafras Audubon Society (SAS) requested that the Director suspend or revoke the construction permits for the Marble Hill Station and reopen safety hearings on that facility. In DD-79-10, 10 NRC 129 (1979), the Director determined that there was no adequate basis for instituting a proceeding to suspend or revoke the Marble Hill construction permits or to take any further action to supplement the record in the proceeding with respect to the matters raised by STV and thereby denied the request. By Order dated 8/15/79, a portion of the petitions had been granted to the extent that it suspended construction on the basis of alleged construction deficiencies until the Director has confirmed that reasonable assurance exists that safety-related construction activities will be conducted in accordance with NRC requirements. In DD-79-21, 10 NRC 717 (1979), the Director denied the SAS petition to suspend or revoke the Marble Hill construction permits or to reopen the safety hearings.

26. On 8/15/79, Badger Safe Energy Alliance filed a petition requesting revocation of the Tyrone construction permit because of licensees' announced decision to cancel the project. The Director on 6/16/80 granted the petition by issuance of a show cause order to revoke the construction permit.

27. On 4/27/79, and in a supplement dated 5/16/79, the Environmental Coalition on Nuclear Power (ECNP) requested that the Director institute public hearings prior to any alteration of the "experimental and operation status" of the TMI-2 reactor. In DD-80-16, 11 NRC 588 (198), the Director partially granted the petition because it found that the Commission had already taken action along the course requested by ECNP concerning the emergency action to prevent the unassessed release of contaminated water, and denied the remainder of the petitioner's request.

28. On 10/3/79, P. Kelly Fitzpatrick filed a petition requesting that the license issued to Catholic University for operation of a reactor be suspended, that inspection and investigation of alleged violations of the operating license be conducted, and that an order be issued to Catholic University to show cause why the license should not remain suspended pending a thorough review of the licensee's operations. In DD-80-08, 11 NRC 389 (1980), the petition was granted in part by conducting an investigation into the alleged safety violations and deficiencies but denied the request to suspend the operating license or issue a show cause order as to why its license should not remain suspended.

29. On 11/02/79, Critical Mass filed a petition requesting an investigation to determine if grounds exist to suspend or otherwise amend the operating licenses of all U.S. light water reactors which base their ECCS upon "faulty analytical codes" for fuel cladding performance under LOCA conditions. On 3/03/80, the Director granted the petition by investigating the significance for ECCS of faulty codes in analyzing fuel cladding performance under LOCA conditions.

30. Three petitions were filed involving the steam generator repair at the Surry Nuclear Power Station. They are from the North Anna Environmental Coalition (filed 12/29/78; denied in DD-79-01, 9 NRC 199 (1979)); the Environmental Policy Institute (filed 2/20/79, denied in DD-79-3, 9 NRC 577 (1979)); and the Potomac Alliance, Citizens Energy Forum, Inc., Truth in Power, Inc., and the Virginia Sunshine Alliance (filed 4/18/79, denied in DD-79-19, 10 NRC 625 (1979)). In CLI-80-04, 11 NRC 405 (1980), the Commission reviewed these three petitions, *sua sponte*, on the issue of the need for an EIS regarding the proposed repair and directed the Staff to expeditiously prepare and issue the EIS.

31. On 4/12/79, and in supplements, Frank Romano filed a petition requesting that the Commission investigate whether blasting at a quarry near Limerick had a deleterious effect on that site and requesting further investigation of alleged construction deficiencies at the site. In DD-79-16, 10 NRC 609 (1979), the Director granted the petition with respect to investigating the effects of blasting on the Limerick site, but denied the remainder of the petition.

32. On 5/21/79, Ms. Anne K. Morse filed a petition requesting the NRC to order suspension of the provisional license for LaCrosse BWR. In DD-80-09, 11 NRC 392 (1980), the Director determined that the petition did not provide an adequate basis to suspend the license at that time but the Staff supported petitioner's concern about liquefaction and issued an order to show cause to resolve that issue.

33. On 7/29/78, J. Honicker filed a petition regarding all fuel cycle licenses requesting the revocation of all licenses, the decommission and dismantling of all facilities, and the isolation of hazardous radioactive materials from the biosphere. On 8/4/81, the Commission denied the petition but invited the petitioner to participate in the ongoing proceeding to analyze the health effects of low-level radiation as related to current occupational exposure standards (46 FR 39573).

34. On 12/29/78, Citizens United for Responsible Energy filed a petition requesting a proceeding to suspend the license for the Duane Arnold facility pending modification of the license to include an augmented inservice inspection program of safe-end assemblies. On 3/5/79, the Director granted the petition by amending the technical specifications to require such a program.

35. On 1/4/78, the City of Cleveland filed a petition requesting the NRC to take enforcement action against the licensee for violations of antitrust license conditions for the Perry and Davis-Besse facilities. On 6/25/79, the Director granted the petitions by issuance of an Order enforcing antitrust license conditions.

36. On 2/6/76, NYPIRG filed a petition requesting that the Commission require the licensee to show cause why the Indian Point license should not be suspended until emergency planning deficiencies are corrected and why civil penalties should not be imposed for alleged

misrepresentation to the Commission. On 8/19/76, the Director granted the petition by requiring that licensees demonstrate compliance with emergency preparedness requirements for offsite participation in emergency drills and denied the remainder of the request.

37. On 8/25/75, T. Collins filed a petition requesting that Humbolt Bay's license be suspended or revoked because of poor site conditions for seismic safety. On 5/21/76, the Director granted the petition by issuance of an Order for Modification which prevented restart pending seismic re-evaluation.

38. In 1975, Business and Professional People for the Public Interest (BPI) filed a petition for Indian Point 1 and Dresden. On 6/23/76, the Director granted the petition in part by issuance of an Order to Dresden to require demonstration of compliance with IEEE-279. Indian Point had already been requested to make a similar demonstration and was shut down at the time the petition was filed.

39. On 1/29/75, D. Stewart, et al., filed a petition requesting and amendment to the Brunswick licenses to require a reevaluation of the plant's seismic safety. On 4/10/75, the Director granted the petition in part by issuance of a show cause order to require seismic monitoring and evaluation of seismic data.

COMMISSION REVIEW OF DIRECTOR'S DECISIONS UNDER 10 CFR § 2.206

Out of a total of approximately 334 Director's decisions which have been issued, the Commission has issued orders reversing, affirming, or otherwise commenting on the Director's decision in approximately 12 cases. The following cases have been formally reviewed by the Commission:

1. Consolidated Edison Co. (Indian Point Units 1-3), CLI-75-8, 2 NRC 173 (1975) (petition for Commission review denied).
2. Licensees Authorized to Possess or Transport Strategic Quantities of Special Nuclear Materials, CLI-77-3, 5 NRC 16 (1977) (declining action on petition by Director).
3. Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear 1), CLI-78-7, 7 NRC 429 (1978) (denying petitions to reverse Director's decision)
4. Consolidated Edison Co. (Indian Point Units 1-3), Commission Order (May 30, 1980) (unpublished) (establishing special investigatory proceeding after soliciting comment on DD-80-5, 11 NRC 351 (1980)), *see* LBP-83-68, 18 NRC 811, 831-36 (1983).
5. Virginia Electric Power Co. (Surry Nuclear Station, Units 1 and 2), CLI-80-4, 11 NRC 405 (1980), *reversing* DL-79-1, 9 NRC 199 (1979); DD-79-3, 9 NRC 577 (1979); and DD-79-19, 10 NRC 625 (1979).
6. Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-81-6, 13 NRC 443 (1981), *affirming* DD-81-3, 13 NRC 349 (1981).
7. Consolidated Edison Co. (Indian Point Units 2 and 3), CLI-82-38, 16 NRC 1698 (1982) and Commission Order (February 2, 1983) (unpublished) *superseding* DD-82-12, 16 NRC 1685 (1982).
8. Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Station), CLI-83-21, 18 NRC 157 (1983), *affirming* DD-83-3, 17 NRC 327 (1983).
9. Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Station, Unit 1), Commission Order (August 20, 1984) (unpublished), *modifying* DD-84-8, 19 NRC 924 (1984).
10. Cincinnati Gas and Electric Co. (W.H. Zimmer Nuclear Power Station), Commission Order (October 10, 1984) (unpublished), *vacating as moot* DD-83-19, 18 NRC 1461 (1983) and DD-84-3, 19 NRC 480 (1984).

11. General Public Utilities Nuclear Corporation (Three Mile Island Nuclear Station, Units 1 & 2; Oyster Creek Nuclear Generating Station), CLI-85-4, 21 NRC 561 (1985), *affirming* DD-85-1, 21 NRC 263 (1985).
12. Consumers Power Company (Midland Plant, Units 1 & 2), Commission Order (June 24, 1985) (unpublished) *affirming* DD-84-17, 20 NRC 226 (1984).
13. Yankee Atomic Electric Company (Yankee Rowe Nuclear Power Station), CLI-91-11 (July 31, 1991), Memorandum and Order requiring certain actions by the Licensee and, in other respects, denied the petition.

The Commission has reversed the Director in only 2 cases, namely:

1. Virginia Electric Power Co. (Surry Nuclear Station, Units 1 and 2), CLI-80-4, 11 NRC 405 (1980), *reversing* DD-79-1, 9 NRC 199 (1979), DD-79-3, 9 NRC 577 (1979), and DD-79-19, 10 NRC 625 (1979) (three petitions requesting same relief).
2. Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Unit 1), Commission Order (August 20, 1984), *modifying* DD-84-8, 19 NRC 924 (1984) (modifying determination of severity of violation but not ultimate sanction).

But the Commission's own "Practice and Procedure Digest" characterizes the "substantial health and safety" test as a "standard" for bringing enforcement actions. doesn't it?

Nothing in that Digest has the force and effect of law -- which is what Heckler v. Chaney requires to defeat the presumption against judicial review of agency enforcement decisions. The Digest is simply a research tool, like many other similar legal research materials.

[The Digest is introduced with a strong disclaimer: "Persons using this Digest are placed on notice that it may not be used as an authoritative citation . . . Persons using this Digest are also placed on notice that it is intended for use only as an initial research tool, that it may, and likely does, contain errors, including errors in analysis and interpretation of decisions, and that the user should not rely on the Digest analyses and interpretations . . ."]

Has not the Commission in its own prior decisions established a substantive standard -- whether "substantial health or safety issues have been raised" -- that governs 2.206 petitions?

No. In applying Heckler v. Chaney's presumption of unreviewability to NRC enforcement decisions the District of Columbia and the First Circuits¹ considered this exact argument, and rejected it for several reasons:

1. The presumption against judicial review of agency enforcement decisions can be defeated only when binding law, such as regulations or statutes, dictates when the agency must take enforcement action.

2. The "substantial health and safety" language in the NRC's published 2.206 decisions is guidance to the staff, not binding law.

3. The language merely establishes "'a flexible standard of review [for Commission review of staff actions] respectful of the agency's necessary discretion; it does not reflect an intent to restrict that discretion'" (Safe Energy, quoting Mass PIRG).

4. The language derives from a Commission decision (Consolidated Edison Co., 2 NRC 173 (1975)) issued during an era when: (a) there was a right to appeal staff 2.206 decisions to the Commission; and (b) courts would in turn review Commission decisions. Today there is no right to internal or external appeal.

¹ Safe Energy Coalition v. NRC, 866 F.2d 1473, 1479-80 (D.C.Cir. 1989); Massachusetts PIRG v. NRC, 852 F.2d 9, 11 (1st Cir. 1988).

Overview of NRC's 2.206 Process

The 2.206 process provides the public with a meaningful yet relatively informal way of raising issues at any time that the staff is obligated to then review and address. In accordance with that process, any member of the public may file a petition requesting that the NRC institute an enforcement proceeding to modify, suspend or revoke a license, or for such other action as may be proper.

Every petition is reviewed by the appropriate Office Director who must either initiate the requested proceeding or issue a formal decision fully addressing the issues raised and providing a basis for the decision.

The process provides a simple means for any member of the public to bring issues to the NRC's attention. The petitioner bears a minimal burden in filing a request. Essentially, the petitioner need only ask that some action be taken against a licensee, and identify the facts that the petitioner claims provide sufficient grounds for taking the proposed action. No legal-type showing of "standing" or "interest" is required to bring facts to the Commission's attention and initiate a staff evaluation of them. It is not even required that the petitioner specify that the petition is filed under Section 2.206.

The thoroughness of the Director's review is evident from the quality and depth of each Director's Decision. Director's Decisions consist of a thorough and detailed review of all issues raised in a 2.206 petition. That such effort is committed to each 2.206 petition evidences the high value placed on the 2.206 process as a vehicle to afford the public an opportunity to bring safety issues to the Commission's attention.

Although the filing of a petition does not, by itself, initiate a hearing, 2.206 petitions on occasion have resulted in hearings. E.g., Indian Point, DD-80-5; LaCrosse, DD-80-9.

Between 1974 and the present, over 330 petitions have been filed. Of these, slightly more than 10% have been granted, in whole or in part.

The fact that relatively few petitions have been granted reflects the Commission's experience that the large majority of issues raised in petitions previously were well-known to the Commission and had already been satisfactorily resolved and addressed in staff reports and evaluations. In many instances the action requested had already been taken and, thus, the formal request was mooted. E.g., Public Service Co. of Indiana, DD-80-27. Substantial safety issues are the rare exception, not the rule. In this context, the fact that relatively few 2.206 petitions identify significant safety issues, but rather have raised issues of which the NRC already was aware and for which appropriate action already had been

taken or was well underway, demonstrates that the NRC's regulation of the power reactor industry is working well.

Not all actions granting a petition will necessarily require the issuance of an order. For example, without issuing an order, the NRC staff may obtain a licensee's agreement not to restart its facility pending completion of certain safety reviews, a step that essentially satisfies the petitioner's request, or to take other appropriate measures to correct a problem. If an order is issued, it may trigger an agency proceeding in which the petitioner may intervene. (However, a formal hearing will usually result only when the licensee demands a hearing to challenge the proposed order.)

Even where a petition has been denied, the petitioner may have an impact in that the petition has triggered the NRC's review of a safety issue, or some other NRC action. E.g., Shipments of High Level Nuclear Power Plant Waste, DD-84-9.

In many cases, petitions have led to regulatory action, including the issuance of a Notice of Violation and Proposed Imposition of Civil Penalty; Orders modifying, suspending or revoking licenses; or the initiation of further NRC inquiries into the safety issues raised in the petition.

103d CONGRESS
1st Session

DRAFT

S.

IN THE SENATE OF THE UNITED STATES

MR. _____ introduced the following bill; which was read
twice and referred to the Committee on _____

A BILL

To provide for judicial review of Nuclear Regulatory
Commission decisions on petitions for enforcement actions, and for
other purposes.

*Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,*

1
2 SECTION 1. SHORT TITLE.

3 This Act may be referred to as the "Nuclear Enforcement
4 Accountability Act of 1993."

5 SEC. 2. ENFORCEMENT PETITIONS AND JUDICIAL REVIEW.

6 Section 189 of the Atomic Energy Act of 1954 (42 U.S.C.
7 2239) is amended by adding at the end the following new
8 subsection:

9 "d. ENFORCEMENT PETITIONS.--

10 "(1) IN GENERAL.--Any person may petition the Nuclear
11 Regulatory Commission to institute a proceeding to modify,
12 suspend, or revoke a license, or for such other action as
13 may be proper.

14 "(2) STANDARDS FOR GRANTING.--The Commission shall
15 grant any request under paragraph (1) if the petitioner
16 demonstrates material evidence reasonably indicating that--

17 (i) the holder of the license with respect to
18 which a request has been made under paragraph (1) is in
19 significant noncompliance with the terms of the
20 license, this chapter, or the Commission's regulations,
21 or

22 (ii) the activities of the licensee present a
23 substantial hazard to the public health and safety or
24 common defense and security.
25

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1 "(3) JUDICIAL REVIEW.--Any Commission order denying a
2 request under this subsection shall be subject to judicial
3 review in accordance with chapter 158 of title 28, United
4 States Code, and chapter 7 of title 5, United States Code.".

5

Safety Guard
Bk 2, Doc #30



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

February 16, 1989

The Honorable Lando W. Zech, Jr.
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Zech:

SUBJECT: FURTHER ACRS COMMENTS ON IMPLEMENTATION OF THE SAFETY GOAL
POLICY

During the 346th meeting of the Advisory Committee on Reactor Safeguards, February 9-11, 1989, and in meetings on October 6-7, December 15-16, 1988, and January 12-14, 1989, we continued our review of the NRC staff's plans for implementing the Safety Goal Policy. We had the benefit of a draft paper for Commission approval, "Implementation of Safety Goal Policy," dated January 17, 1989, and of presentations by a member of the staff. We had previously commented to you on this subject in our letters of May 13, 1987, and April 12, 1988, following a number of exchanges with the NRC staff, including several meetings with our Subcommittee on Safety Philosophy, Technology, and Criteria as well as with the full Committee.

Although we agree with the general direction of the staff's recommendations, we have substantive differences about a number of issues. We urge the Commission to implement the policy after considering our recommendations.

Background

The draft paper proposes guidelines for the NRC staff to use in implementing the Safety Goal Policy. These guidelines include the structure of an implementation plan, definitions, and quantitative objectives. The paper calls for these guidelines to be incorporated into the policy statement itself through an amendment. In addition, the paper proposes that potential averted on-site costs be used as an offset to licensee costs in cost-benefit analyses. And finally, the paper asks the Commission itself to consider whether the policy should be amended to clarify the relationship of the safety goal and the statutory standard of adequate protection.

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Before commenting specifically on the staff paper, an observation about the use of probabilistic risk assessment (PRA) and its relation to the safety goal is appropriate. Although it is frequently said that "the bottom line is the weakest part of PRA," the fact remains that the safety goal cannot be implemented without the bottom line. Without this bottom line and a safety goal to which it can be compared, either explicitly or implicitly, PRA becomes a never-ending search for outliers. Although it is satisfying to some engineers and analysts to identify "dominant" contributors to risk, especially those that can be eliminated readily, there is nothing necessarily less safe about a plant that has most of its risk embodied in one or two outlier sequences than a plant that has its risk distributed more or less uniformly over 20 sequences.

Structure of the Implementation Plan

The draft paper describes a structure similar to that suggested in our letter of May 13, 1987, but with some differences. We continue to prefer the structure we recommended, a hierarchical arrangement of five levels using the multiple goals in the policy statement of August 6, 1986.

The staff's current proposal is consistent with our recommendations for Levels One and Two. Level One is the pair of qualitative goals and Level Two is the two quantitative health objectives.


Our recommendation for Level Three would be the general performance guideline that large accidental releases should occur no more frequently than $1E-6$ per reactor-year. The staff's Level Three proposal is similar, but differs in the definition of "large release."

The staff proposal defines a large release as "a release that has a potential for causing an offsite early fatality." We are still not satisfied with this definition for two reasons. First, it can or could be considered as little more than the quantitative health objective in Level Two, but at a level ten times more conservative. Second, this considerable additional conservatism is not accompanied by a significant simplification. The use of the word "potential" in order to encompass the release at Chernobyl will require the use of Level 3 PRA results with a suitable prescription or selection of potential meteorology and population distribution or location. Although this would be possible for specific plants, it would require arbitrary assumptions if the safety goals are to be used to test the sufficiency of the Commission's regulations or to provide a basis for establishing design criteria for containments for future plants.

We continue to believe that a definition in terms of the release itself is preferable. It might be defined in terms of curies, leak,

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or release rate, or fraction of the core or containment inventory. In any case, it should be independent of the site characteristics and should provide some criteria against which the design or performance of containments can be tested. We urge you to request the staff to continue seeking a means to define a large release that is not significantly more conservative than the Level Two health objectives and that focuses the mitigative function on containment design characteristics independent of site or population characteristics.

Our recommendations for Level Four consisted of three specific performance objectives: (1) core melt probability, an expression of the effectiveness of a plant's prevention systems, (2) conditional probability of containment failure, an expression of the effectiveness of a plant's mitigation systems, and (3) an expression of how well a plant is operated. (We use here the term "prevention" to describe those activities and systems intended to keep the reactor core from melting, and "mitigation" to describe those activities and systems intended to keep away from the public fission products that would be released from a melted core.) Level Four proposed by the staff is significantly different from what we recommended. It would consist of only one of the three objectives we recommended, a limit on core damage frequency. This loses the balance between prevention and mitigation, one form of defense-in-depth, that is inherent in our inclusion of a containment performance objective. We believe this balance should be retained.

The staff proposal for Level Four also omits the ACRS recommendation for a quantification or objective statement of how well a plant is operated. We called this a "plant performance objective." We have not been able to develop a workable definition for this, nor has the staff. In light of this, we rely upon the alternative recommendation made in our letter of April 12, 1988: "If this cannot be done, a prominent caveat, e.g., a warning that PRA results do not tell the full story, should be made a part of the policy or of the implementation plan." We recommend that such a statement be made an explicit part of the plan.

In our letter of May 13, 1987, we recommended a quantitative objective of $1E-4$ per reactor-year for "core melt" as a part of the Level Four performance objectives. In our letter of April 12, 1988, we more carefully defined the event that should be associated with this quantitative objective as the "loss of adequate core cooling (core overheating beyond design-basis limits)." The staff proposal seems to agree with our recommendation. We caution, however, that comparisons of this objective with some of those proposed by others under the description of core melt probability can be misleading.

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We disagree with the staff's proposal to use $1E-5$ per reactor-year as the target for mean core damage frequency for future plants. This difference from the objective for existing plants introduces an arbitrary level of conservatism which conflicts with the criterion we suggested for linking the hierarchical levels of safety goal objectives; that is, that each subordinate level of the hierarchy should be consistent with the level above and should not be so conservative as to create a de facto new policy. Not only would the staff proposal introduce a major inconsistency with the Level Two and Three objectives, but it would result in loss of balance between prevention and mitigation because arguments could then be made that the higher levels of the safety goal hierarchy could be met readily without the need for accident mitigation systems such as containment buildings. The Commission's safety goal should be the same whether considering the adequacy of regulations for existing plants or for future designs, and whether for LWRs or other types of reactor plants.

Definition of "Adequate Protection"

The term "adequate protection" has importance in the legal areas of safety regulation. Although it is needed and used with apparent precision in legal instruments, its technical definition is not precise. In general, it is accepted as equivalent to the term "with no undue risk to public health and safety" often used in other contexts. Another term, "in full compliance with the regulations" is used as a surrogate, on occasion, for either of these.

We believe that the safety goal should play an important, but indirect, role in defining adequate protection. Ideally, compliance with the Commission's regulations is a suitable surrogate for defining adequate protection of the public. However, we believe that the adequacy of the regulations should be judged from the viewpoint of whether nuclear power plants, as a class, licensed under those regulations, meet the safety goals. It is our understanding, following discussions with the staff, that the staff proposes the safety goal to be a sort of aspirational objective which would be sought but not necessarily reached.

With the safety goal approach now proposed by the staff, a class of plants that meets existing regulations (therefore meeting a standard of adequate protection) would be obliged to make improvements up to the safety goal, if cost-benefit arguments so dictated. The implementation plan proposed earlier by the staff would have used the safety goal as the minimum standard (i.e., adequate protection) and cost-benefit arguments could have been used to justify further

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→ improvements, without other limits. We believe that neither of these approaches is a proper use of the Safety Goal Policy.

We believe that the proper use of the safety goals is embodied in two principles which we have previously recommended:

- (1) The safety goal is a definition of how safe is safe enough.
- (2) At the present time, the safety goal should be applied to judging the adequacy of regulations and regulatory practices, and not to make specific decisions about individual plants.

The Commission has taken a bold and progressive step in proclaiming the Safety Goal Policy. It is an attempt to place the regulation of safety in nuclear power plants in an appropriate context relative to other risks in society. It is imperfect, but it is as useful a step as has been taken by any industry or regulatory agency. Using concepts of cost-benefit analysis or, even worse, ALARA (as low as reasonably achievable), dilutes the achievement and effectiveness of the Safety Goal Policy. We believe that the safety goal is a good present standard for "how safe is safe enough." Further, as we have stated earlier, we believe that the safety goals should be used to judge the adequacy of the regulations from the standpoint of whether those regulations result in classes of nuclear power plants which can be and are operated in such a way as to meet the safety goals, and thus provide adequate protection to the public.

A wide community of safety experts and policy makers has concurred, after extended deliberation, in accepting the Safety Goal Policy as reasonable, based on present knowledge. It may be that future information about reactor risk or societal risk will cause a need to adjust the safety goal one way or another, or to make different implicit allowance for uncertainty. Until that happens, we believe that the safety goal should be accepted as an unambiguous working standard for the regulation of nuclear power, along the lines we have suggested.

Cost-Benefit Analysis

The staff paper proposes that cost-benefit analyses made to evaluate proposed plant safety improvements should use averted on-site costs as an offset to the plant costs entailed in making such improvements. We believe that this is appropriate in making cost-benefit assessments, although it inevitably adds uncertainty to the results. However, as discussed above and as we stated in our letter of April

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12, 1988, we believe cost-benefit analysis is not properly a part of safety goal implementation (in contrast to "backfit" implementation).

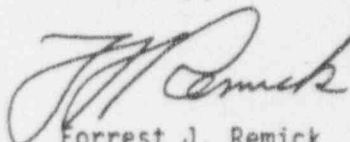
Incorporation of Guidelines Into the Policy

We concur with the staff proposal to incorporate certain of the implementation guidelines as amendments to the policy statement. We have no preferences or comments about the details of this, beyond the reminder that the safety goal is a policy statement, not a regulation.

Coherence Among Regulatory Policies

The Safety Goal Policy has been in existence for some time and has, in fact, been an influence in recent regulatory activities. We believe a clear implementation plan is necessary to ensure that it is applied comprehensively, consistently and unambiguously. Several major Commission decisions are presently on the horizon regarding, for example, the Severe Accident Policy, the issue of Mark I containment adequacy, certification of advanced reactor designs, and evaluation of plant operations. In each of these, the question "how safe is safe enough" must be answered, either implicitly or explicitly. The safety goal can and should bring greater objectivity, consistency and clarity to deliberations and decisions about these issues.

Sincerely,



Forrest J. Remick
Chairman

Reference

Draft Proposed Paper from V. Stello, Jr., Executive Director for Operations, to the Commissioners, Subject: Implementation of Safety Goal Policy (Predecisional) (received January 17, 1989).



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

February 16, 1989

The Honorable Lando W. Zech, Jr.
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Zech:

SUBJECT: FURTHER ACRS COMMENT ON PROPOSED RESOLUTION OF GENERIC ISSUE
99, "IMPROVED RELIABILITY OF RHR CAPABILITY IN PWRs"

During the 346th meeting of the Advisory Committee on Reactor Safeguards, February 9-11, 1989, we further considered the proposed resolution of Generic Issue (GI) 99, "Improved Reliability of RHR in PWRs," together with the staff's response to our comments in our report of September 14, 1988. During this meeting, we also had the benefit of presentations by the NRC staff and of the documents referenced.

This generic issue addresses concerns about the possible failure of core cooling during shutdown operations in PWR plants. Analyses have shown there is a significant risk of core damage from overheating due to the loss of RHR circulation from a number of possible causes. The leading cause of this risk, as indicated by both analysis and experience, is loss of core cooling as a result of errors made during so-called "mid-loop" operation. The staff issued a generic letter that identifies a number of actions licensees are advised to take to reduce the likelihood of such incidents. The generic letter also recommends that licensees develop certain appropriate procedures and equipment that will permit rapid closing of any containment openings in such emergencies so that, if core damage does occur, release of fission products from the containment will be minimized.

In our September 14 report, we expressed agreement with most of the recommendations of the staff's generic letter, but questioned whether the plan for emergency closure of containment openings had been sufficiently analyzed, given the many varieties of containment openings that exist in actual plants. In our recent discussions with staff members, we learned that they intend to conduct inspections in all plants for compliance with recommendations of the generic letter. These inspections will be carried out by the resident inspector staff at each plant and will be supplemented by more in-depth inspection conducted by specialists from the headquarters staff for selected plants.

We are particularly interested in the conclusions about the effectiveness of the proposed containment closure procedures that will be drawn as a result of these inspections. We want the staff to brief us within a few months, and we will be especially interested in information

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about the nature of the containment closures involved. For example, some closures are designed so that pressure within the containment will tend to compress closure seals. Other closures are designed so that pressure will tend to decompress and perhaps open gaps in containment seals. It is apparent that the proposed procedures for rapid installation of closures will be more effective in achieving containment for those with the former type of seal than with the latter.

A more general policy issue, which should be considered by the Commission rather than the staff, is apparent in the GI 99 resolution. The staff has presented estimates to us which show that the risk caused by loss of RHR cooling under shutdown conditions is a significant fraction of the total risk from reactor operation. Despite this, resolution of GI 99 is being carried out by informal means, through recommendations in a generic letter, rather than by more formal means, e.g., through rulemaking. We believe the staff's approach probably will be effective, and we have no quarrel with it. However, we question why more formal methods, ultimately more burdensome to licensees and staff, are used in resolution of other issues less important from the risk standpoint. There does not appear to be any well-defined policy direction from the Commission concerning which regulatory approach should be taken for a given circumstance.

We hope you will find these comments useful.

Sincerely,



Forrest J. Remick
Chairman

References:

1. U.S. Nuclear Regulatory Commission Generic Letter dated October 17, 1988, Subject: "Loss of Decay Heat Removal (Generic Letter No. 88-17) 10 CFR 50.54(f)"
2. U.S. Nuclear Regulatory Commission, NUREG/CR-5015, "Improved Reliability of Residual Heat Removal Capability in PWRs as Related to Resolution of Generic Issue 99," dated May 1988
3. Memorandum dated December 21, 1988 from V. Stello, Jr., Executive Director for Operations, NRC, to Raymond F. Fraley, ACRS, Subject: "341st ACRS Meeting (September 8-10, 1988) Follow-Up Items - Supplement"



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

February 15, 1989

The Honorable Lando W. Zech, Jr.
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Zech:

SUBJECT: FINAL RULE ON STANDARDIZATION AND LICENSING REFORM, 10 CFR
PART 52, "EARLY SITE PERMITS; STANDARD DESIGN CERTIFICATIONS;
AND COMBINED LICENSES FOR NUCLEAR POWER PLANTS"

During the 346th meeting of the Advisory Committee on Reactor Safeguards, February 9-11, 1989, we reviewed the draft final rule on Standardization and Licensing Reform, transmitted January 26, 1989, which would provide for early site permits, standard design certifications, and combined licenses for nuclear power plants. We had previously reviewed an incomplete draft final rule package on this subject during our 345th meeting on January 12-14, 1989. We also had the benefit of briefings by the NRC staff on the draft final rule during the 345th meeting and during a meeting of our Subcommittee on Improved LWRs on January 10, 1989, and on the draft final rule package during our 346th meeting. The ACRS has provided comments on this subject in reports of August 12, 1986, October 15, 1986, June 7, 1988, and January 19, 1989.

We offer the following comments and recommendations based on our review of the draft final rule and the Statement of Considerations.

Section 52.47 b(2)(i) of the draft final rule establishes the requirements for certification of a standard design which differs significantly from an "evolutionary" light water reactor design, or which utilizes simplified, inherent, passive, or other innovative means to accomplish its safety function. We have several concerns with the provisions of this section as written. We interpret this section to provide for the following:

- (1) Certification of a design may be granted without testing if the scope of the design is complete and the analysis of the performance and interdependence of the safety features is found acceptable. We recommend against providing for certification of a design solely on the basis of analysis. The staff indicates that our concerns can be handled by proper modification of the Statement of Considerations.
- (2) Certification may be granted for a design whose scope is less than complete if the testing of a prototype demonstrates that the noncertified portion of the plant cannot significantly affect safe

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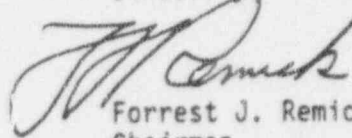
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operation of the plant. Our problem with this provision is that unless the design of the noncertified portion of the plant is well defined and considered, the potential adverse effects on safe operation of the plant from the noncertified portion may not be identified by testing of the prototype. We recommend against providing certifications for less than complete scope for these designs.

Our letter of January 19, 1989 on the incomplete final rule package included a recommendation for requiring the submittal of procurement specifications and construction and installation specifications as an appropriate indication of the expected scope and level of information required for effective review of an "essentially complete" design. Requirements for design and procurement type specifications did appear in the Standardization Policy Statement of September 15, 1987, but were not included in the draft final rule. We believe they should be.

It is noteworthy that the requirements which we recommend, appear in the Electric Power Research Institute report, "Advanced Light Water Reactor Utility Requirements Document" (June 1986) and in the Atomic Industrial Forum (AIF) report, "Standardization of Nuclear Power Plants in the U.S." (December 16, 1986). The AIF document also states that, "the degree of design detail necessary for providing an 'essentially complete' design will generally be that detail which is suitable for obtaining specific equipment or construction bids."

Sincerely,



Forrest J. Remick
Chairman

References:

1. Draft Final Rule (undated) for The Commissioners from William C. Parler, General Counsel, Subject: Rulemaking on Early Site Permits, Design Certifications, and Combined Licenses (received January 26, 1989)
2. Incomplete draft final rule package (undated) 10 CFR Part 52, Early Site Permits; Standard Design Certification; and Combined Licenses for Nuclear Power Reactors (received January 3, 1987)



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

February 16, 1989

The Honorable Lando W. Zech, Jr.
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Zech:

SUBJECT: PROPOSED RESOLUTION OF GENERIC ISSUES 70, "POWER OPERATED RELIEF VALVE AND BLOCK VALVE RELIABILITY," AND 94, "ADDITIONAL LOW-TEMPERATURE OVERPRESSURE PROTECTION FOR LWRs"

During the 346th meeting of the Advisory Committee on Reactor Safeguards, February 9-11, 1989, we reviewed the proposed consolidated resolution of Generic Issues 70 and 94, as described in the memorandum from E. Beckjord to E. Jordan, dated December 7, 1988. Our Subcommittee on Mechanical Components also considered this matter during a meeting on January 27, 1989. During these meetings, we had the benefit of discussions with representatives of the Office of Nuclear Regulatory Research and the Office of Nuclear Reactor Regulation, as well as with NRC staff consultants.

As a result of our review, we concur in the proposed resolution of Generic Issues 70 and 94, provided the following clarifications are added to the Plant Technical Specification Action Statements in Enclosures C-1, D-1, and E to the generic letter in the proposed resolution package.

- 1) When one or more block valves associated with power operated relief valves (PORVs) are closed because of excessive relief valve seat leakage, it should be required that electrical power be maintained to the block valves to ensure quick reopening capability from the control room. This requirement was discussed in the Staff's Regulatory Analysis (Section 5.2) but was not stated explicitly in the Modified Technical Specifications. We believe it should be.
- 2) In the Surveillance Requirements section, the staff should state that the reactor coolant system should be in hot shutdown rather than cold shutdown when performing an operability test on the block valves or PORVs. In the Regulatory Analysis the staff states that stroke testing of these valves should be performed only at cold shutdown. During our discussions with staff members, they agreed that hot shutdown is the correct requirement.

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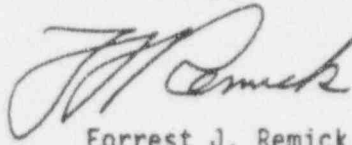
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- 3) The Surveillance Requirements section should also include the solenoid air control valves and check valves on associated air accumulators. The inservice testing requirement stated in the Staff Regulatory Analysis does include valves in PORV control systems. We believe that this statement should be modified to clearly specify the solenoid valves and the accumulator check valves in PORV control systems.

Additional comments by ACRS Members William Kerr, Harold W. Lewis and Paul G. Shewmon are presented below.

Sincerely,



Forrest J. Remick
Chairman

Additional Comments by ACRS Member William Kerr

Although intuitively I believe that improving the performance of power operated relief valves would decrease risk of reactor power plant operation, I do not believe the Staff's Regulatory Analysis demonstrated that this would occur. Nor do I believe it showed that what is proposed would improve the performance of relief valves.

Additional Comments by ACRS Members Harold W. Lewis and Paul G. Shewmon

We were told by the staff that studies show that these valves pose an insignificant risk, but that, for other reasons, that were not presented, they disagree with the analysis. That makes this an example of regulation for the sake of regulation with little impact on safety. As such, it is a bad example. We think that they have done no harm, but that is an inappropriate standard for the resolution of generic issues.

Reference:

Memorandum, with enclosures, dated December 7, 1988 from Eric S. Beckjord, Director, Office of Nuclear Regulatory Research, NRC, to Edward L. Jordan, Chairman, Committee to Review Generic Requirements, NRC, Subject: Request for CRGR Review of Proposed Resolutions of Generic Issue 70, "Power Operated Relief Valve and Block Valve Reliability" and Generic Issue 94, "Additional Low-Temperature Overpressure Protection for Light Water Reactors"



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The Honorable Lando W. Zech, Jr.
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Zech:

SUBJECT: PROPOSED POLICY STATEMENT ON ADDITIONAL APPLICATIONS OF
LEAK-BEFORE-BREAK TECHNOLOGY (SECY-88-325)

During the 346th meeting of the Advisory Committee on Reactor Safeguards, February 9-11, 1989, we discussed the scheduling of our review of the subject policy statement. Our discussion was precipitated by a request from Commissioner Roberts' office that the Committee's review of this topic be completed in a timely manner for consideration in the Commission's deliberations regarding the proposed policy statement.

Because of the time required to perform an adequate review of this issue, we will be unable to complete our review of this matter until our March 9-11, 1989 meeting.

Sincerely,

A handwritten signature in dark ink, appearing to read "Forrest J. Remick", is written over a horizontal line.

Forrest J. Remick
Chairman

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