May 28, 1987

For:

The Commissioners

From:

T. A. Rehm, Assistant for Operations, Office of the EDO

Subject:

WEEKLY INFORMATION REPORT - WEEK ENDING MAY 22, 1987

A summary of key events is included as a convenience to those Commissioners who may prefer a condensed version of this report.

Contents	Enclosure
Administration and Resources Management	Α
Nuclear Reactor Regulation	В
Nuclear Material Safety and Safeguards	С
Nuclear Regulatory Research	D
Governmental & Public Affairs	Ε
General Counsel	F*
Personne1	G*
Analysis and Evaluation of Operational Data	Н
Small & Disadvantaged Business Utilization & Civil Rights	I*
Special Projects	J*
Regional Offices	K*
CRGR Monthly Reports	L*
Executive Director for Operations	М
Items Addressed by the Commission	N
Meeting Notices	0
Proprietary or Other Sensitive Information (Not for external distribution)	Р

*No input this week.

T. A. Rehm, Assistant for Operations
Office of the Executive Director
for Operations

Contact: T. A. Rehm, EDO 492-7781

HIGHLIGHTS OF WEEKLY INFORMATION REPORT WEEK ENDING MAY 22, 1987

Diablo Canyon Nuclear Power Plant

There have been a number of unexpected events at Unit 1 during the refueling outage and subsequent to the recent Augmented Inspection Team (AIT) concerning mid-loop operation. These suggest that some of the lessons learned from the AIT are not being implemented effectively in the overall operation at Diablo Canyon. Examples which support this conclusion are:

- Inadequate clearance procedure resulting in 1300 gallons of RWST water in the Charging Pump Room.
- Indication of impending loss of RHR Pumps during drain down for installation of reactor vessel cover.
- Unauthorized stress relieving of pipe by maintenance personnel to remove offset.

In light of the AIT discussions with the licensee about using trial and error approaches rather than careful analysis and planning, these examples suggest that the licensee may have addressed the symptoms (the mid-loop operation) but has failed to fix the cause (use of careful analysis and procedures). The Region is following up.

Cracked Stiffening Rings on UF, Cylinders

On May 18, 1987, an order was issued to Sequoyah Fuels Corporation, Oklahoma City, OK, and Allied Corporation, Metropolis, IL, prohibiting the filling or heating of certain UF, cylinders manufactured by the W.H. Stewart Company. The order was issued because information was received from the manufacturer that the stiffening rings were fabricated from material which does not meet ANSI or ASME standards. Cracks had been observed in the stiffening rings on some of the cylinders. The order will remain in effect until the licensees have certified to the NRC that safety of the cylinders would not be compromised during in-plant operations and until the Department of Transportation (DOT) authorizes transport under a new rule to become effective June 30, 1987. A press release on this issue was distributed on May 20, 1987.

Update on International Safeguards at Turkey Point

A member of the Safeguards staff accompanied the IAEA inspectors at the Turkey Point 4 power reactor in Florida City, Florida, on May 21, 1987, to place four seals on the reactor head. The IAEA inspectors also removed the temporary surveillance camera from the reactor building and serviced the two cameras providing surveillance on the spent fuel bay. The IAEA had also originally intended to seal the equipment hatch and the missile shield. However, the facility operator informed us that the latter two locations will not be available for sealing at this time. This will result in a simple level of core containment until the IAEA's next regular inspection (July 16, 1987) when they plan to install seals on the equipment hatch to provide a backup level of containment.

OFFICE OF ADMINISTRATION AND RESOURCES MANAGEMENT

ADMINISTRATION OF THE FREEDOM OF INFORMATION ACT

STATUS OF REQUESTS - 1987

For 5-Day Period of May 15, 1987 - May 21, 1987

Initial	Appeal of
Request	Initial Decision
Received This Week 11 Completed This Week 15	2
Carryovers From 1986 170	53
Received In 1987 290	27
Granted In 1987 204	7
Denied In 1987 83	26
Pending 173	47

ACTIONS THIS WEEK

Received

NRC employee (87-280)	Requests copies of all records concerning the applicant selected under Vacancy Announcement 87-875-4.
Richard Ruth, (87-281)	Requests two categories of records regarding Metro Health Center, Erie, Pennsylvania.
Alan Kessler, Mesirov, Gelman, Jaffe, Cramer & Jamieson (87-282)	Requests 14 categories of records related to office space that is occupied by the NRC staff.
(An individual requesting information about himself) (87-283)	Requests records used by NRC in determining the results of his senior reactor operator examination.
Robert Lohman, Preserve Our Land (87-284)	Requests copies of Honeywell Inc.'s current licenses for facilities in New Brighton and Elk River, Minnesota.
Donald Vowell, Rainwater, Humble & Vowell (87-285)	Requests records relating to the case of a named individual v. EG&G Idaho, Inc., and Tennessee Valley Authority.

Received, Cont'd

R.B. Borsum, Babcock & Wilcox (87-286) Requests copies of specified Reactor Vessel Surveillance Capsule reports for Turkey Point 4, Zion 2, and DC Cook 1.

Mary Munson, Akin, Gump, Strauss, Hauer & Feld (87-287) Requests copies of all enforcement actions, responses, NRC's replies, and licenses related to the enforcement actions from 1982 to the present for 11 listed companies.

Leonard Trosten, LeBoeuf, Lamb, Leiby & MacRae (87-288) Requests five categories of records related to SECY-87-116, the May 7, 1987 letter from Senator Simpson to Chairman Zech, the December 31, 1986 amendment to 10 CFR 110, licenses ISNM-83-025 and ISNM-87-005, and the Comprehensive Anti-Apartheid Act of 1986.

Susan Lynd, TERA (87-289) Requests copies of Harold Denton's May 20, 1985 NRR Office Letter No. 34 regarding utility commitments and other records regarding enforceability of licensee commitments.

David Strouss, Thornton & Early (87-290) Requests copies of all records regarding an incident on or about March 23, 1986, at the Vermont Yankee nuclear power plant involving a named individual's exposure to radiation.

(An individual requesting information) (87-A-26-87-202)

APPEAL TO THE EDO for the release of one denied record regarding a named individual.

R.K. Buckles, NUS Corporation (87-A-27-87-129) APPEAL TO THE COMMISSION for the release of SECY-85-399, "Proposed Amendments to 10 CFR 21, 'Reporting of Defects and Noncompliance and 10 CFR 50.55(e), 'Reporting of Defects in Design and Construction'", and a Staff Requirements Memo dated October 20, 1986.

Granted

Steven Sholly, MHB Technical Associates (87-6) In response to a request for four categories of records related to the 1983 Seabrook Station Probabilistic Safety Study, made available 65 records. Informed the requester that additional records subject to this request are already available at the PDR. Also informed the requester that records subject to this request have been referred to another Federal agency.

E.F. Kurtz, Impell Corporation (87-181)

In response to a request for records containing calculations supporting the regulatory analysis included in NUREG-1211, particularly those performed under the guidance of NUREG/CR-3568, made available five records. Informed the requester that five additional records subject to this request are already available at the PDR.

Granted, Cont'd

Linda Bauman, Government Accountability Project (87 - 195)

In response to a request for records related to concerns of a named individual regarding TVA, informed the requester that the NRC located no agency records subject to this request.

Lynn Connor, Doc-Search Associates (87-221)

In response to a request for copies of PRAs for the following plants: Susquehanna 1, McGuire 1, Oyster Creek, Bellefonte 1, and GASSAR, informed the requester that the PRAs for the Susquehanna and Oyster Creek plants are already available at the PDR. Also informed the requester that there are no PRAs on file for McGuire. Bellefonte and GASSAR.

Gregory Palast, Union Associates (87 - 234)

In response to a request for records regarding the March 5, 1981 meeting or meetings between LILCO and NRC staff that fall within seven specified categories, informed the requester that the NRC located no agency records subject to this equest.

Ellyn Weiss. Harmon & Weiss (87 - 255)

In response to a request for copies of 1987 records (1) from the Vermont Yankee Nuclear Power Corp. to Region I regarding pumps in the residual heat removal system with NRC's responses, and (2) from Region I to NRC headquarters regarding residual heat removal pumps in Vermont Yankee or of the type used by Vermont Yankee, informed the requester that five records subject to this request are already available at the PDR.

·E.F. Kurtz, (87 - 275)

In response to a request for a list of all facilities Impell Corporation licensed under 10 CFR Parts 30, 40 and 70, made available one printout.

Denied

Steven Aftergood, Committee to Bridge the Gap (86-774)

In response to a request for two categories of records related to a suspected sabotage incident on May 14, 1986, at the Palo Verde nuclear power plant, made available 14 records. Informed the requester that additional records subject to this request are already available at the PDR. Also informed the requester that additional records subject to this request have been referred to another Federal agency. Denied one record in its entirety and portions of three records, disclosure of which would interfere with an enforcement proceeding and constitute an unwarranted invasion of personal privacy.

Denied, Cont'd

Linda Bauman, Government Accountability Project (87-A-21-87-93) In response to an APPEAL TO THE EDO for the release of two records denied in their entirety regarding a request for records related to the December 23, 1986 letter to Billie Garde from V. Stello concerning Rockbestos Cable, continued to deny these records that contain advice, opinions, and recommendations of the staff and which were prepared in the course of reaching a final agency decision.

WEEKLY INFORMATION REPORT DIVISION OF CONTRACTS WEEK ENDING MAY 22, 1987

IFB ISSUED

IFB No.: RS-ORM-87-233

Title: "Micrographic Services for Source Drawing Documents"

Description: Production of microfiche from source documents. Production capability of an estimated 750 microfiche per week of masters

of source documents is required.

Period of Performance: Two years

Sponsor: Office of Administration and Resources Management Status: IFB issued on May 19, 1987. Bids due on June 17, 1987.

RFP ISSUED

RFP No.: RS-AED-87-129

Title: "Emergency Response Data System Implementation"

Description: Finalize a design; procure, install, and test the hardware; and develop, install and test the software to produce a functional Emergency Response Data System installed at NRC Bethesda, Maryland facilities.

Period of Performance: Five years

Sponsor: Office for Analysis and Evaluation of Operational Data Status: RFP issued on May 12, 1987. Proposals due on June 15, 1987.

RFP No.: RS-OIE-87-128

Title: "Welding Technology and Codes Course"

Description: Provide technical training in welding technology and the applicable codes to enable NRC inspectors to conduct in-depth inspections of NRC licensed power reactor facilities. Includes revision of an existing course manual as well as presentation of the course.

Period of Performance: Five years

Sponsor: Office for Analysis and Evaluation of Operational Data

Status: Closing date has been extended to June 22, 1987.

PROPOSALS UNDER EVALUATION

RFP No.: RS-RES-87-069

Title: "Environmental Degradation of Overpack Materials"

Description: The contractor shall conduct confirmatory research on the corrosion behavior of metallic containers. This research is important in determining if the licensee meets the containment requirements stipulated in 10 CFR 60.

Period of Performance: Five years

Sponsor: Office of Nuclear Regulatory Research

Status: The competitive range has been established and negotiations are scheduled for the week of May 25, 1987.

MAY 22, 1987 ENCLOSURE A

PROPOSALS UNDER EVALUATION (cont'd)

RFP No.: RS-OIE-87-119

Title: "Technical Assistance in Developing and Implementing Program and Procedures for Reactors Requiring Special Inspection Resources"

Description: The contractor will provide technical assistance to NRC
Regional & Headquarters Staff in developing and implementing
programs and procedures for reactors with unusual problems
during design, construction or operation, including unplanned
outages.

Period of Performance: Three years

Sponsor: Office of Nuclear Reactor Regulation

Status: Best and Final offers received and forwarded to Source Evaluation Panel for review on May 20, 1987.

RFP No.: OIE-87-120 and 125

Title: "Specialized Technical Training"

Description: Provide technical assistance to the NRC in the implementation of identified needs and/or further development of programs to meet future needs for specialized technical training of NRC inspectors in the areas of Boiling Water Reactors and Pressurized Water Reactors.

Period of Performance: 36 months

Sponsor: Office of Nuclear Reactor Regulation

Status: Best and Final offers received and forwarded to Source Evaluation Panel for review on May 20, 1987.

CONTRACTS AWARDED

IFB No.: RS-ADM-87-205

Title: "Data Communications - Terminating Equipment"

Description: Contractor will provide modems to support communication connectivity between NRC's minicomputers, mainframe databases and terminals.

Period of Performance: Two years

Sponsor: Office of Administration & Resources Management

Status: Fixed price requirements type Contracts were awarded to Anderson Jacobson and General Data Comm, Inc., in the amounts of \$75,200.00 and \$52,264.00 respectively, effective May 21, 1987.

MAY 22, 1987 ENCLOSURE A

OFFICE OF NUCLEAR REACTOR REGULATION

ITEMS OF INTEREST

Week Ending May 22, 1987

Diablo Canyon Nuclear Power Plant

There have been a number of unexpected events at Unit 1 during the refueling outage and subsequent to the recent Augmented Inspection Team (AIT) concerning mid-loop operation. These suggest that some of the lessons learned from the AIT are not being implemented effectively in the overall operation at Diablo Canyon. Examples which support this conclusion are:

- Inadequate clearance procedure resulting in 1300 gallons of RWST water in the Charging Pump Room.
- Indication of impending loss of RHR Pumps during drain down for installation of reactor vessel cover.
- Unauthorized stress relieving of pipe by maintenance personnel to remove offset.

In light of the AIT discussions with the licensee about using trial and error approaches rather than careful analysis and planning, these examples suggest that the licensee may have addressed the symptoms (the mid-loop operation) but has failed to fix the cause (use of careful analysis and procedures). The Region is following up.

Fermi-2

A meeting, chaired by the Region III Administrator, was held with the licensee at the plant site on May 11, 1987, to discuss programmatic weaknesses found by a joint NRR/Region III survey of Fermi-2 maintenance activities the week of April 20, 1987. Weaknesses were found in the areas of preventive maintenance, staffing, spare parts control and tracking, and in the planning and scheduling of maintenance backlogs, similar to those which existed in late 1985 and which, in part, resulted in the issuance of a 10 CFR 50.54(f) letter to the licensee on December 24, 1985.

During a followup conference call with the Region III Administrator and the survey team members on May 13, 1987, it was agreed that an inspection team visit the plant to assess the safety-significance of the survey team findings. In the interim, the licensee's request to operate above 50% power will be granted by Region III, but that authorization to operate above 75% power (the next hold point in the Fermi-2 Startup Test Program) will be subject to the decision of the Restart Team in consideration of the maintenance inspection findings and determinations. The maintenance inspection team will comprise representatives from the initial survey team and the Project Manager.

Oyster Creek Nuclear Generating Station

During a controlled shutdown on April 24, 1987, a personnel error resulted in a degradation of containment operability. In particular, at normal operating pressure and temperature, 2 of 14 torus-to-drywell vacuum breakers were tied open to aid in deinerting the torus. With two valves open, the suppression feature of the containment was compromised.

As a result of this event, Region I conducted a special inspection and on May 8, issued a confirmatory action letter regarding this matter. A meeting was held on May 11, 1987 to discuss the licensee's corrective actions. Region I was satisfied with the short term corrective actions and the plant restarted on May 15, 1987. Oyster Creek achieved 91% power on the morning of May 19, 1987. However, due to an oil leak on the main feed pump, power has been reduced and the plant is presently at 60% power.

Seabrook, Unit No. 1

On May 1, 1987, the Atomic Safety and Licensing Appeal Board (ASLAB) granted the intervenors' (Seacoast Antipollution League, [SAPL], Town of Hampton, New Hampshire [TOH] and New England Coalition on Nuclear Pollution [NECNP]) appeal and ordered adjustments in the hearing schedule on the New Hampshire Radiological Emergency Response Plan (NHREP). The ASLAB ordered that the earliest the NHREP hearings on these intervenors' contentions may commence is in July 1987. Following the ASLAB decision, the off-site emergency planning Board has issued an order vacating its January 9, 1987 order on the hearing schedule and establishing a new hearing schedule for the NHREP that commences September 14, 1987.

In a recent separate action (ALAB-865), the ASLAB denied the intervenors' (NECNP, SAPL, TOH and Office of the Attorney General of Massachusetts) stay request of the onsite emergency and safety issues Licensing Board's March 25, 1987 partial initial decision authorizing the issuance of a license for low-power operation (up to five percent of rated power). However, the Commission stayed the Director of NRR from issuing such a license pending completion of Commission review of another Appeal Board decision (ALAB-853). The single issue on review of ALAB-853 was whether a low power license should be issued absent any emergency plan for that part of the emergency planning zone that lies in Massachuetts. In an additional action, the Commission, in an Order of May 14, 1986, allowed any party who would seek a stay from the Commission of low power operations at Seabrook based on those issues raised before the ASLAB in ALAB-865, to file its application with the Commission by May 30, 1987.

Maine Yankee

On May 8, 1987, Maine Yankee informed the staff that a black metallic cylinder 1/4 to 5/16 inches in diameter and approximately 4 inches long was found underneath the upender area in a locked screened area. The cylinder was highly radioactive (1000 rem).

Maine Yankee personnel have identified this cylinder as a piece of incore instrumentation (ICI). ICI's are typically approximately 15 feet long hollow cylinders 1/4 inch in diameter and when they are removed from the reactor they are cut into 5 foot lengths and put into the spent fuel pool. Those segments are very radioactive with readings on the order of 10,000 rem. In previous outages, ICI's were cut into 4 inch lengths before being put into the bucket. Thus, because of the lower reading (1000 rem vs 10,000 rem) and shorter length (4 inches vs 5 feet) this segment of ICI must have come from a previous outage.

It has been hypothesized by Maine Yankee that the 4 inch long ICI segment had been inadvertently dropped into the reactor cavity which was full of water during the reloading operations. After fuel reloading, the reactor cavity is drained including a small sump that is drained after the cavity itself is drained. Using a portable pump which is attached.

The licensee has further hypothesized that the ICI segment migrated into the sump drain line during the draining of the sump. It apparently stayed in that line for at least one fuel cycle. During the draining of the sump at this fuel cycle it was hypothesized that the operator released the pump hose, went out of the caged area and pulled the hose out. It is hypothesized that at that point, the piece of ICI dropped out of the hose where it was found later during a health physics survey.

Nine Mile Point Nuclear Station, Unit 2

It is expected that Nine Mile Point 2 will be brought critical on May 21, 1987. The low power license was issued on October 31, 1986 but because of leakage problems with the ball-type MSIVs the licensee replaced them with wye-pattern globe valves. License amendments related to the MSIVs were issued by NRR and construction deficiencies identified in the license were resolved by Region I. These actions cleared the way for initial criticality.

MAY 22, 1987 ENCLOSURE B

NRC TMI-2 CLEANUP PROJECT DIRECTORATE WEEKLY STATUS REPORT FOR MAY 18 - 22, 1987

1. DEFUELING

 Pick and place defueling continued. Two partial fuel assemblies C-8 and B-8 were removed using the core debris digger.

 Five canisters were loaded and three canisters, including one previously loaded were transferred to the spent fuel pool.

2. ENVIRONMENTAL MONITORING

- US Environmental Protection Agency (EPA) sample analysis results show that TMI site liquid effluents are in accordance with regulatory limits, NRC requirements, and the City of Lancaster Agreement.

TMI water effluents are sampled from the station (Units 1 and 2) discharge and analyzed by EPA. Gamma spectrum analyses of the seven daily composited samples for May 2 - 9, 1987 indicated no TMI-2

related radioactivity.

The water works for the City of Lancaster composited seven daily samples from May 3 - 9, 1987. EPA's gamma spectrum analysis of the composite sample showed no reactor related radioactivity.

3. DECONTAMINATION ACTIVITIES

- Decontamination efforts have been successfully completed in the Westinghouse Valve Room located on the 281' elevation of the Fuel Handling Building and in the Fuel Handling Building 305' elevation East Corridor.

Decontamination efforts have been successfully completed in the "A"

Diesel Generator Building basement and sump.

- Robot desludging in the Reactor Building basement continues. The dewatered sludge is being held in the modified spent resin storage tanks in the Auxiliary Building basement.

4. NRC EVALUATIONS IN PROGRESS

- Technical Specification Change Requests 52, 53 and 56.
- Solid Waste Facility Technical Evaluation Report.
 Heavy Load Safety Evaluation Report, Revision 3.

- Processed Water Disposition Proposal.

- Safety Evaluation Report for Use of Plasma Arc Cutting Torch.

- Pressurizer Defueling Safety Evaluation Report.

- Safety Evaluation Report for Defueling of the Core Support Assembly.

 Environmental Evaluation of the Post-Defueling Monitored Storage Proposal.

MAY 22, 1987 ENCLOSURE B

 Canister Handling and Preparation for Shipment Safety Evaluation Report, Revision 4.

Organization Plan Change Request 15.

Defueling Water Cleanup System Technical Evaluation Report Annual Update.

Defueling Canister Technical Evaluation Report Annual Update.

- Recovery Operations Plan Change Request 41.

5. PUBLIC MEETINGS

The next meeting of the Advisory Panel for the Decontamination of Three Mile Island Unit 2 will be held on June 10, 1987 from 7:00 - 10:00 PM at the Lancaster Council Chambers, Public Safety Building, 201 North Duke Street, Lancaster, PA.

At the meeting, GPU Nuclear will give the Panel a status report on the progress of the cleanup and will comment on the schedule for completing the remaining cleanup tasks. The Panel will discuss the timing for a final Commission decision on the disposal of the accident-generated water and will forward a recommendation to the Commission. Members of the public will be given the opportunity to address the Panel.

Persons desiring to speak before the Advisory Panel are asked to contact Mr. Thomas Smithgall at 2122 Marietta Avenue, Lancaster, PA 17603 (telephone 717-291-1041). Persons desiring to submit topics or questions for the Advisory Panel to consider are asked to contact the Chairman, Mayor Arthur Morris, 120 North Duke Street, Lancaster, PA 17602.

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Items of Interest

Week Ending May 22, 1987

Spent Fuel Storage

The Department of Energy's (DOE) Spent Fuel Technical Exchange Meeting was held at DOE's Germantown, Maryland, site on May 12-13, 1987. This annual technical review meeting covered recent progress made in dry spent fuel storage and rod consolidation technologies and licensing. This year's meeting also was supported by the Electric Power Research Institute and was specifically oriented toward informing utilities of developments with respect to these technologies.

Visitron Corporation

On May 20, 1987, NMSS staff met with representatives of the Visitron Corporation and their consultants to discuss the proposed plan to decontaminate the Lima, Ohio, facility. The staff has completed their review of the decontamination plan and will incorporate the plan into the license. The decontamination process is expected to begin in early June 1987. The licensee hopes to have the first building decontaminated by mid-September and the remainder of the site next year.

Update on International Safeguards at Turkey Point

A member of the Safeguards staff accompanied the IAEA inspectors at the Turkey Point 4 power reactor in Florida City, Florida, on May 21, 1987, to place four seals on the reactor head. The IAEA inspectors also removed the temporary surveillance camera from the reactor building and serviced the two cameras providing surveillance on the spent fuel bay. The IAEA had also originally intended to seal the equipment hatch and the missile shield. However, the facility operator informed us that the latter two locations will not be available for sealing at this time. This will result in a simple level of core containment until the IAEA's next regular inspection (July 16, 1987) when they plan to install seals on the equipment hatch to provide a backup level of containment.

MAY 22, 1987 ENCLOSURE C

Cracked Stiffening Rings on UF, Cylinders

On May 18, 1987, an order was issued to Sequoyah Fuels Corporation, Oklahoma City, OK, and Allied Corporation, Metropolis, IL, prohibiting the filling or heating of certain UF, cylinders manufactured by the W.H. Stewart Company. The order was issued because information was received from the manufacturer that the stiffening rings were fabricated from material which does not meet ANSI or ASME standards. Cracks had been observed in the stiffening rings on some of the cylinders. The order will remain in effect until the licensees have certified to the NRC that safety of the cylinders would not be compromised during in-plant operations and until the Department of Transportation (DOT) authorizes transport under a new rule to become effective June 30, 1987. A press release on this issue was distributed on May 20, 1987.

OFFICE OF NUCLEAR REGULATORY RESEARCH

Items of Interest

Week Ending May 22, 1987

Semi-Annual Program Partners Review Meeting on the Severe Accident Research Program

This five-day semi-annual program review meeting with our joint international program partners was held in Silver Spring on May 4-8, 1987. Thirty-two representatives of our foreign program partners were in attendance (including four foreign attachees at U.S. laboratories) representing Canada, the Federal Republic of Germany, Italy, Japan, the Republic of Korea, Spain, Sweden, the United Kingdom, the American Institute of Taiwan, and new partner country Switzerland. About ninety others from our research contractor laboratories, NRC, DOE, and EPRI attended part or all of the meeting. Our foreign partners are furnishing significant support for this program through both direct financial contributions and in-kind research contributions. The partners' technical input and technical discussions are also important to the success of the program.

The agenda, which covered only the new severe-accident research results obtained in the last six months, required all the time available in the five-day meeting. Technical highlights included:

- Results of the DF-4 test in the ACRR test reactor with a BWR control blade and channel box, the observed destruction of the channel box being a major NRC difference with IDCOR;
- New results from the DOE-Supported TMI-2 core examination;
- Significant advances in the modeling in the mechanistic MELPROG core-melt-progression code;
- Experiments and analysis of in-vessel natural circulation and its effects;
- Initial successful calculations with the new semi-mechanistic IFCI explosive and non-explosive rapid steam-generation module for MELPROG;
- New containment hydrogen results on the transition from deflagration to detonation;

MAY 22, 1987 ENCLOSURE D

- Results from the first two tests in the new large-scale SURTSEY test facility for high-pressure melt ejection (direct containment heating) research;
- Results of the large-scale SURC-4 core-melt-concrete interactions test with steel and Zircaloy in the melt;
- Initial results from the in-pile ST-1 experiment in ACRR on in-vessel fission-product release to resolve previous in-pile and out-of-pile differences;
- Results from the improved ORNL high-temperature out-of-pile experiment on fission-product release;
- New results on fission-product resuspension and chemical form;
- Accident management presentations and discussion on depressurization during PWR accidents to avoid the potential for high-pressure melt ejection and direct containment heating.

The next semi-annual program partners meeting will be held in the Washington area from October 19-23, 1987, the week before the LWR Safety Information Meeting.

NRU Severe Accident Melt Progression Test FLHT-5

The severe accident melt progression test, Full Length High Temperature-5 (FLHT-5), was successfully completed on May 14, 1987. In this test an assembly of ten fresh fuel rods and one H. B. Robinson rod, nominal 30 GWD/MT burnup, were nuclear heated in the National Reactor Universal (NRU) in Chalk River, Carada in a coolant boilaway experiment to measure cladding temperatures of about 2500K (greater than 4000°F). The nuclear heating level of 30 kW was then maintained for more than one hour.

Test FLHT-5 was the severest test in the series because its 30kW nuclear heating level was 30% higher and the more-than-60-minute power hold at elevated temperatures was 100% longer than the previous most severe test. FLHT-4. The primary intent of test FLHT-5 was to provide needed severe accident melt progression modeling data on:

- Relocation of fuel and cladding, and blockage of coolant flow channels as a severe accident progresses.
- 2. Evolution of hydrogen as a severe accident progresses.
- Release of the fuel rod inventory of fission products as a severe accident progresses.

Preliminary FLHT-5 test data show continuous ligh hydrogen evolution for about 40 minutes, with a gradual reduction thereafter. The test data also show modest blockage of the coolant flow when the cladding and fuel initially relocated, as in the previous most severe test, FLHT-4.

2D/3D

Under the 2D/3D International Loss-of-Coolant Accident (LOCA) Research Program, Kraftwerk Union (KWU) in the Federal Republic of German (FRG) conducted two downcomer countercurrent flow tests in the full scale Upper Plenum Test Facility (UPTF) at the NRC's request. The UPTF does not have a heated core, but the effect of the heated core is simulated by injecting steam and water appropriately. All four loops were blocked at the primary coolant pump locations, and one of the four cold legs was broken between the pump and the vessel. Subcooled Emergency Core Coolant (ECC) was injected into the 3 intact cold legs. Steam was supplied to the downcomer either from the core by injecting steam through the core simulator (Test Phase B) or from the lower plenum by letting the hot liquid flash as pressure goes down (Test Phase A). In both cases steam could go to the cold leg break only through the downcomer, and thus the upward steam flow was established in the downcomer before ECC entered the downcomer. A preliminary analysis of data shows that a strong asymmetry exists in the pattern of ECC penetration in the downcomer. ECC injected into the two cold legs farther away from the broken cold leg penetrated into the downcomer within several seconds while ECC injected into the cold leg close to the broken cold leg could not easily penetrate into the downcomer and most of it was carried away to the break by the countercurrently flowing steam. The water inventory in the downcomer did not increase much until near the end of blowdown. Based on the correlations developed from small-scale data the steam flow rates used in the above large-scale tests had been expected to prevent ECC penetration. Thus, preliminary indications from the first series of full scale ECC penetration tests show that current methods for predicting ECC penetration are more conservative than previously expected. This date should allow licensees to take more advantage of best estimate methods for ECCS analysis.

Revision to the ECCS Rule

The NRC is proposing to amend the requirements contained in 10 CFR Part 50.46, "Acceptance Criteria for Emergency Core Cooling Systems (ECCS) for Light Water Reactors" and in Appendix K to Part 50, "ECCS Evaluation Models." The proposed rule would allow licensees to use realistic evaluation models to determine ECCS performance during postulated loss-of-coolant accidents (LOCAs). In support of this rulemaking action, the NRC has recently published Draft NUREG-1230, "Compendium of ECCS Research for Realistic LOCA Analysis." This document contains a distillation of the ECCS research that, taken as a whole, is the technical basis for the rule change. The public comment period for this document will expire July 1, 1987.

Recently Issued Publication

Draft Regulatory Guide and Value/Impact Statement: Calculation of Radon Flux Attenuation by Earthen Uranium Mill Tailings Covers, Task WM 503-4.

Comments requested by July 24, 1987.

Contact: G. F.Birchard

(301) 443-7732

MAY 22, 1987 ENCLOSURE D

RES RULEMAKING HIGHLIGHTS

Criteria for an Extraordinary Nuclear Occurrence (10 CFR 140)

The final rule will revise the ENO criteria to eliminate the problems that were encountered in the Three Mile Island ENO determination. It is desirable to get revised criteria in place in the event they are needed.

A draft final rule package addressing the petition to modify these criteria has been reviewed by RES management. The rule package has been forwarded to appropriate NRC divisions for comment. The scheduled date for publication of the final rule has slipped from September 15, 1987, to November 30, 1987. This slippage has resulted from difficulties in resolving NRR comments and delay in the receipt of comments from OGC.

Safety Requirements for Industrial Radiographic Exposure Devices (10 CFR 34)

The proposed rule would amend the present regulations to establish performance standards for industrial radiography exposure devices. Overexposures of radiographers (and occasionally the general public) are more than double that of other radiation workers and have been a concern to the NRC for some time. Approximately 25-35 percent of the radiography overexposures are associated with equipment malfunction. The issue of safety requirements for these devices is a primary concern since the devices use relatively high intensity, high energy gamma-ray emitting sources with the potential for serious overexposures. Although a consensus standard for radiographic exposure devices was published in 1981 (American National Standard N432), it is not clear that all manufacturers are adopting the standard.

A draft rule package was dispatched for division review on December 19, 1986. To date, comments have been received from IE, ADM, OGC, AEOD, NRR, and NMSS. Meetings were held with NMSS staff on February 10 and March 4, 1987, to discuss NMSS comments. NMSS staff has recommended extensive revision prior to division concurrence. The scheduled date for publication of the final rule has slipped from December 31, 1987, to March 31, 1988. Additional time is required to address the recommendations of NMSS, NRR, and IE, as well as recommendations from manufacturers. In addition, other priority commitments (e.g., finalizing the dosimetry processor accreditation rule and developing supporting regulatory guidance) have limited the staff time available to work on this project.

OFFICE OF GOVERNMENTAL AND PUBLIC AFFAIRS Week Ending May 22, 1987

State, Local and Indian Tribe Programs Weekly Highlights - May 22, 1987

Conference of Radiation Control Program Directors, Inc. Annual Meeting

The Conference of Radiation Control Program Directors, Inc. (CRCPD) held its 19th Annual National Conference on Radiation Control May 18-21, 1987, in Boise, Idaho. Harold Denton made a presentation to the Conference on NRC activities in 1986, the April 12th reorganization, and the Soviet reactor program, including Chernobyl. Joel Lubenau, State, Local and Indian Tribe Programs (SLITP), State Agreements Program. informed the Conference of incidents involving NARM contaminated materials. The Conference was well attended by State and Federal government representatives, totalling approximately 250.

Office for Analysis and Evaluation of Operational Data Items of Interest Week Ending May 22, 1987

Trends and Patterns Analysis Branch

NUREG-0090, Vol. 9, No. 3 ("Report to Congress on Abnormal Occurrences: July-September, 1986") was forwarded to Congress and released for general distribution. The report states that for this reporting period there were four abnormal occurrences at the nuclear power plants licensed to operate. The events were (1) a differential pressure switch problem in safety systems at the LaSalle facility, (2) an abnormal cooldown and depressurization transient at Catawba Unit 2, (3) significant safeguards deficiencies at Wolf Creek and Fort St. Vrain, and (4) significant deficiencies in access controls at River Bend Station. There was one abnormal occurrence at the other NRC licensees; it involved a therapeutic medical misadministration. There was one abnormal occurrence reported by an Agreement State; it involved a therapeutic medical misadministration.

Reactor Operations Analysis Branch

Performance Indicator data and graphics incorporating first quarter CY87 plant performance have been compiled. An advance copy of the graphics has been provided to NRR for incorporation of selected plant data in the briefing books for senior managers for use at their forthcoming meeting.

Incident Response Branch

Chief, Incident Response Branch (IRB), and staff members provided a briefing and tour of the Operations Center on May 20, 1987 to Eric Beckjord, Director, RES, a new Executive Team Member.

IRB staff members met with officials from the State of Ohio and representatives from the Perry and Davis Besse plants on May 21, 1987 to discuss NRC plans for its emergency response data system and to give them a briefing and tour of the Operations Center. The utility company participants expressed an interest in being early on the schedule for implementation. The State participants expressed acceptance of the parameter list, but concern that their guidance was to implement a system to monitor the plants 24 hours/day, not just in emergencies.

The Operations Center was used on May 19-20, 1987, for Region III briefings of the Headquarters staff, about the mechanical failure of the head of an Eldorado 5 cobalt-60 teletherapy unit, which resulted in the death of a patient at Bartholomew County Hospital in Columbus Indiana.

An IRB staff member made a presentation on May 21, 1987 of NRC's Role and Protective Action Decision-Making at a workshop on the Federal Radiological Response Plan being held at the Federal Emergency Management Agency's (FEMA) Emergency Response Institute in Emmitsburg, Maryland.

MAY 22, 1987 ENCLOSURE H

Diagnostic Evaluation and Incident Investigation Branch

AEOD developed and implemented a 4-day training course (May 18-21, 1987) for new inspectors in AEOD and NRR. The course covered a range of topics that were based on the "Fundamentals of Inspection" course. The new draft "Inspector's Manual" was used for reference material. Supervisors from the Division of Operational Assessment in AEOD and the Division of Reactor Inspection and Safeguards in NRR served as instructors.

Preliminary Notifications

The following Preliminary Notifications were issued during the past week.

- a. PNO-I-87-41, Philadelphia Electric Company (Peach Bottom Atomic Power Station), Contractor Layoffs and News Media Interest.
- PNO-I-87-42A, Philadelphia Electric Company (Peach Bottom Atomic Power Station), Non-Licensed Operator Found Sleeping (Update).
- c. PNO-III-87-67, Toledo Edison Company (Davis-Besse Nuclear Plant), Possible Damage to Motor-Driven Feedwater Pump.
- d. PNO-III-87-68, Turmbull Memorial Hospital, Therapeutic Misadministration.
- e. PNO-III-87-69, Detroit Edison Company (Fermi 2), Main Reactor Feed Pump Failure.
- f. PNO-III-87-70, Lixi, Incorporated, Leaking I-125 Sealed Sources.
- g. PNO-III-87-71, Bartholomew County Hospital, Patient Crushed to Death.
- h. PNO-IV-87-27, Nebraska Public Power District (Cooper Nuclear Station), Reactor Shutdown in Excess of 48 Hours.

MAY 22, 1987 ENCLOSURE H

Office of Enforcement Week Ending May 22, 1987

The following Significant Enforcement Action was taken the week of May 18, 1987.

A Notice of Violation and Proposed Imposition of Civil Penalty in the amount of \$5,000 was issued to PTL-Inspectorate, Inc., Pittsburgh, Pennsylvania. This action was based on failure to maintain direct surveillance of a high radiation area at a temporary field site in Hannibal, Missouri, resulting in an individual entering the area while a radiographic source was exposed; allowing one individual at another field site in Bridgeville, Pennsylvania to perform certain duties of a radiographer's assistant without being certified; and allowing one individual at a Pittsburgh, Pennsylvania facility and three individuals at an Anchorage, Alaska facility to handle moisture-density gauges without either completing, or having the necessary documentation to verify completion of, the required training course prior to using the gauges.

Civil Penalties Paid the week of May 18, 1987.

- 1. Florida Power and Light Company (Turkey Point) paid the proposed penalty in the amount of \$75,000. The action was based on two separate NRC identified violations of the Physical Security Plan involving a security guard asleep on duty and an unescorted visitor in a vital area. (EA 87-40)
- 2. Duke Power Company (Catawba, Unit 2) paid the imposition of a civil penalty in the amount of \$50,000. The action was based on violations of NRC requirements associated with the June 27, 1986 depressurization event during a loss of control room test. (EA 86-147)
- 3. Cleveland Clinic Foundation, Cleveland, Ohio paid the proposed penalty in the amount of \$2,500. The action was based on the failure to make a timely notification to the NRC regarding a therapeutic misadministration and the failure to obtain approval of the Radioisotope Committee for physicians to use licensed material. (EA 87-42)
- 4. Niagara Mohawk Power Corporation (Nine Mile Point, Unit 1) paid the proposed penalty in the amount of \$50,000. The action was based on violations, which when evaluated collectively, indicated an underlying weakness in the control of licensed activities. (EA 87-45)

MAY 22, 1987 ENCLOSURE M

ITEMS ADDRESSED BY THE COMMISSION - WEEK ENDING MAY 22, 1987

- A. STAFF REQUIREMENTS AFFIRMATION/DISCUSSION AND VOTE, 3:30 P.M., WEDNESDAY, MAY 13, 1987, COMMISSIONERS'CONFERENCE ROOM, D.C. OFFICE (OPEN TO PUBLIC ATTENDANCE) Memo S. Chilk, SECY to H. Denton, GPA and V. Stello, EDO dated 5/21/87
 - I. SECY-87-104 Proposed Agreement Between the State of Illinois and U.S. Nuclear Regulatory Commission Pursuant to Section 274 of the Atomic Energy Act of 1954, As Amended

With respect to entering into an agreement with the State of Illinois (pursuant to Section 274 of the Atomic Energy Act, as amended), the Commission,* by a vote of 3-1,** with Chairman Zech and Commissioners Bernthal and Carr agreeing, approved an order, as modified by Commissioner Carr, providing for NRC retention of jurisdiction over Allied-Chemical Corporation, Metropolis, Illinois.

MAY 22, 1987 ENCLOSURE N

^{*} Commissioner Roberts did not participate.

** Section 201 of the Energy Reorganization Act, 42 U.S.C.

§5841, provides that action of the Commission shall be determined by a "majority vote of the members present." Commissioner Asselstine was not present when this item was affirmed.

Accordingly, the formal vote of the Commission was 3-0 in favor of the decision. Commissioner Asselstine, however, had previously indicated that he would disapprove this order and had he been present he would have affirmed his prior vote.

	DATE/TIME	DOCKET NUMBER	LOCATION	PURPOSE	APPLICANT/ ATTENDEES	NRR CONTACT
	5/27/87	50-272/ 311	Salem Site	To discuss final pre-implementa- tion audit of SPDS.	NRC/PSE&GCo.	D. C. Fischer
	5/27/87 8:00 a.m.	50-312	Room P-422 Phillips Building	To discuss related Installation of Emergency Feed Water Instrumentation and Control (EFIC) System for Rancho Seco.	NRC/Licensee	G. Kalman
	5/28/87	50-272/ 311	Salem Site	To discuss final pre-implementa- tion audit of SPDS.	NRC/PSE&GCo.	D. C. Fischer
	5/28/87 10:00 a.m.	50-458	Room P-114 Phillips Building	To review River Bend Station (RBS) plans on containment purge and containment venting.	NRC/GSU	S. M. Stern
	6/1/87 11:00 a.m.	50-327/ 3/28	Room 319 East West West Towers	The OSP staff will discuss with TVA reprensentatives, the status of licensing actons for Sequoyah units.	NRC/TVA	T. S. Rotella
ENCLOSURE	6/2/87 8:30 a.m.	50-423	Millstone 3 Site Waterford, CT	To discuss provisions for inservice testing program for pumps and valves for Millstone 3.	NRC/Utility/EG&G	R. L. Ferguson
SURE			of these meetings will	be made publicly available and plac	ed in the respective	docket file(s)

Copies of summaries of these meetings will be made publicly available and placed in the respective docket file(s) in the NRC and local public document rooms

A summary of these meeting notices can be obtained by calling 492-7424

7		DOCKET	LOCATION	PURPOSE	APPLICANT/ ATTENDEES	NRR CONTACT
	DATE/TIME	NUMBER	LOCATION	PORPOSE	THE TOTAL OF	
	6/2/87 9:00 a.m.	50-416	Grand Gulf Nuc. Sta. Port Gibson, MS	To discuss refueling outage 2 and licensing actions and to tour Grand Gulf Nuclear Station facility.	NRC/SERI	L. L. Kintner
	6/2/87 9:30 a.m.	00-675	Room 6110 MD Nat'l Bank Bldg.	To discuss the scope of PRA effort for the advanced CESSAR.	t NRC/CE	G. S. Vissing
	6/2/87 1:00 p.m.	50-445/ 446	Room 319 East-West-West Bldg.	To discuss plant specific analysi for steam generator tube rupture for Comanche Peak.	NRC/Applicant	A. Vietti-Cook
	6/3/87 8:30 a.m.	50-423	Millstone 3 Site Waterford, CT	To discuss provisions for inservice testing program for pumps and valves for Millstone 3.	NRC/Utility/EG&G	R. L. Ferguson
	6/3/87 8:30 a.m.	50-250/ 251	Room P-110 Phillips Building	To discuss proposed Technical Specifications relating to Special Test Exceptions and Refueling Operations.	NRC/FPL	D. G. McDonald
ENCL	6/4/87 8:30 a.m.	50-250/ 251	Room P-110 Phillips Building	To discuss proposed Technical Specifications relating to Special Test Exceptions and Refueling Operations.	NRC/FPL	D. G. McDonald

^{*} Copies of summaries of these meetings will be made publicly available and placed in the respective docket file(s) in the NRC and local public document rooms

A summary of these meeting notices can be obtained by calling 492-7424

DATE/TIME	NUMBER NUMBER	LOCATION	PURPOSE	APPLICANT/ ATTENDEES	NRR CONTACT
6/4/87 8:30 a.m.	50-425	Westinghouse Offices Bethesda, Maryland	To discuss the applicant's analysis of the steam generator snubber reduction and the leak-before-break methodology on the surge line.	NRC/SCoS/West.	M. A. Miller
6/4/87 1:30 p.m.	50-250/ 251	Room P-110 Phillips Building	To discuss proposed on-site power system upgrade.	NRC/FPL	D. G. McDonald
6/11/87 10:00 a.m.	50-219	Room 6507 MD Nat'l Bank Build.	To discuss the status of the Systematic Evaluation Program and the status of the drywell shell corrosion program.	NRC/GPUN	A. W. Dromerick
6/15/87 10:00 a.m.	50-458	Room P-114 Phillips Building	To review River Bend Station (RBS) plans to revise their emergency operating procedures.) NRC/GSU	S. M. Stern

Copies of summaries of these meetings will be made publicly available and placed in the respective docket file(s) in the NRC and local public document rooms

A summary of these meeting notices can be obtained by calling 492-7424

NMSS.MEETING NOTICES

DIVISION OF FUEL CYCLE, MEDICAL, ACADEMIC AND COMMERCIAL USE SAFETY

FOR WEEK ENDING May 22, 1987

DATE/TIME	DOCKET NUMBER	LOCATION	PURPOSE	ATTENDEES/ APPLICANT	NRC CONTACT
5/26-27/87		San Francisco, CA	To attend project meeting on dry storage reviews at Lawrence Livermore Lab.	J. Roberts, NRC M. Schwartz, LLNL C. Chou, LLNL	J. Roberts
5/27/87		9th F1. Conf. Willste Bldg Silver Spring, Md	Meeting with Mr. Bader, URENCO, and Mr. Merrick, FLOUR Corporation, regarding the engineering work/licen- sing process for uranium enrichment	H. Thompson R. Cunningham L. Rouse	
5/31-6/5/87		Albuquerque, NM	To attend (D. McCaughey) and to serve as faculty member (Bidinger) at University of New Mexico Short Course on Nuclear Criticality Safety	G. Bidinger, NRC D. McCaughey, NRC	G. Bidinger
6/2/87		New England Chapter Health Physics Society Burlington, MA	Speaker on the revision of Part 35	N. McElroy Society Members	N. McElroy
EA5/3-5/87		Toronto, Canada	Speaker on the revision of Part 35 at Annual Meeting of the Health Physics Society	M. McElroy	N. McElroy

NMSS MEETING NOTICES

DIVISION OF LOW-LEVEL WASTE MANAGEMENT AND DECOMMISSIONING

DATE/TIME	DOCKET NUMBER	LOCATION	PURPOSE	ATTENDEES/ APPLICANT	NRC CONTACT
6/1-4/87		Denver, CO	To attend NPC Reclamation Workshop.	M. Fliegei, S. Bilhorn, T. Johnson, J. Forstrom, K. Westbrook, M. Young (LLWM)	Johnson/ Bilhorn
6/3/87		Denver, CO	Meeting to discuss Riverton, WY, remedial action.	M. Fliegel, G. Gnugnoli (LLWM) R. Smith (URFO) J. Anderson (DOE/AL) W. Arthur (DOE/AL)	Gnugnoli
6/4/87 9:00 TENTATIVE		Willste, 7th floor conf room	Meeting with representatives of Layton and Associates (LA) to discuss recent IAEA meeting, low-level sites in California and possible contractual needs.	M. Knapp (LLWM) J. Greeves (LLWM) Dr. Clark (Presider Mr. Heim (VP LA)	Knapp nt LA)
6/8/87 8:00-12:00		Washington, DC	Attending AIF Conference and giving presentation on Low-Level Waste Organization and Policy.	M. Knapp (LLWM)	Knapp
6/8-11/87		Denver and Grand Junction, CO	Visit UMTRA Sites at Green River, UT; Slick Rock and Rifle, CO; URFO field office and USGS.	J. Starmer (LLWM) K. Westbrook (LLWM)	
6/11/87		West Valley, NY	Meeting at West Valley to discuss Part 61 Low-Level Waste Disposal Requirements.	M. Knapp (LLWM) P. Lohaus (LLWM) W. Bixby (DOE)	Lohaus

NMSS MEETING NOTICES DIVISION OF SAFEGUARDS

110111	TT	ME	
DATE/	-	FIE	

LOCATION

RII

NRC CONTACT

List of attendees Al Grella, SGOB will be provided by 6/1

DIVISION OF HIGH-LEVEL WASTE MANAGEMENT

Date	Location	Purpose	Attendees	Contact
June 29 - July 3	Embassy Square Suites 2000 N Stree, NW Washington, DC	Meetings to discuss various activities underway in HLW program, including NRC's approach to identification and resolution of issues, status of NRC rulemakings, and demonstration of the pilot program associated with the Licensing Support System	PAltomare ABender BChampion HLWM staff States Indian tribes DOE Federal agend	

RII MEETING NOTICE

DATE/TIME	DOCKET NUMBER	LOCATION	PURPOSE	ATTENDEES/ APPLICANT	NRC CONTACT
5/26/87 9:30 a.m.		Dothan, AL	Meeting with Pres. and CEO of the Farley Facility to discuss matters of mutual interest	Regional Administrator, J. M. Farley, P. McDonald, and three plant Directors	Grace
5/28/87 p.m.		Hartsville, SC	Presentation of Operator Certificates at Robinson	Licensee management and operators, and Regional Administrator	Grace
06/01/87 1:00 p.m.		RII Office	Enforcement Conference Duke Power Company	Licensee, Deputy Regional Administrator and Selected RII Staff Members	Ernst .
06/04/87		Crystal River, FL	Full Scale Emergency Exercise	Selected RII Staff Members	Ernst
06/05/87 1:00 p.m.		RII Office	Enforcement Conference Florida Power & Light Co. Turkey Point Facility	Same as above	Grace