NRC PDR

April 30, 1981

For: The Commissioners

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

Subject: WEEKLY INFORMATION REPORT - WEEK ENDING APRIL 24, 1981

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

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

*No input this week.

Contact:
T. A. Rehm, EDO
49-27781

8105050054

Summary of Weekly Information Report

Week Ending April 24, 1981

Regulatory Flexibility Agenda

The first semi-annual Regulatory Flexibility Agenda was issued for publication in the Federal Register. The Regulatory Flexibility Act requires the NRC to publish each April and October an agenda listing any rule NRC expects to propose or promulgate which is likely to have a significant economic impact on a substantial number of small entities.

Event V Orders

Twenty-seven Orders for Modification of License were issued to finalize the WASH-1400, Event V concern, "Primary Coolant System Pressure Isolation Valves." The Event V concern is resolved by periodic leak testing of the subject valves. The Orders will require this testing to be accomplished initially during the next refueling outage, and in some cases, will also require closing a motor operated valve until that outage as an interim measure.

Fort St. Vrain

On April 17, Fort St. Vrain started operation at 80 percent of rated power, supplying 265 MWe to the grid. Public Service Company of Colorado expects the plant to be 100 percent rated power in two to three weeks.

Indian Point 2

During Indian Point's outage (shutdown since October 17, 1980), a routine inspection of all steam generators was conducted and the generators were then secured. Subsequently, high activity was noticed in the secondary side of one of the loops and was found to be caused by a leak in the Steam Generator #23. The licensee is continuing to inspect additional tubes in that generator. Startup is projected for April 21.

TVA--Spent Fuel Program

NRC staff met with TVA and DOE personnel, where TVA presented its Spent Nuclear Fuel Management Program. TVA, with DOE encouragement, is examining a number of spent fuel storage technology options including rod compaction, dry cask storage, dry well storage, and air-cooled canyon storage. It is considering applying for demonstration storage of spent fuel in two casks of differing design at its Brown Ferry plant about November 1981.

Incident at Japanese Reactor

The Japanese Ministry of International Trade and Industry (MITI) announced on April 21 that a "large amount" of high-level radioactive waste water had spilled from a filter sludge storage tank inside the waste treatment facility at the Tsuruga nuclear power plant (a 357-MW BWR) on March 8, 1981. The water apparently flowed down a manhole in the building into a sewer line (which predated the building) and caused the radioactive contamination, which was discovered by the local government on April 16 in the sealed soil of the bay near the plant (about 225 miles west of Tokyo). The owner-operator of the plant did not report this spill to MITI as it, by law, was required to do, and official knowledge of it did not surface until April 19.

OFFICE OF ADMINISTRATION

Week Ending April 24, 1981

ADMINISTRATION OF THE FREEDOM OF INFORMATION ACT

STATUS OF REQUESTS

	Initial Request	Appeal of Initial Decision
Received	201	5
Granted	132	0
Denied	18	2
Pending	51	3

ACTIONS THIS WEEK

Received

(NRC employee)
(81-153)

Requests copies of his official T&A records from Pay Period No. 1 through the present.

Monica Andres,
Center for National
Security Studies
(81-154)

Referral from the Department of Energy of a document entitled "Agreement between ERDA and NRC for Planning, Preparedness and Response to Emergencies."

John Miglietta,
New York Public Interest
Research Group, Inc.
(81-155)

Requests all documents designed to aid the evaluation of emergency preparedness plans around commercial nuclear power plants.

Jeff Hinemaa,
The Equitable Life
Assurance Society of
the United States
(81-156)

Requests a list of personnel in NRC's Region V office, including name, GG level, salary, position, title and location.

Gerald R. Schultz,
Susquehanna Environmental
Advocates
(81-157)

Requests copies of all concrete testing reports for the containment buildings for Units I and II at Pennsylvania Power and Light's Susquehanna Steam Electric Station in the years 1974, 1975 and 1976.

Frank W. Brazitis
(81-158)

Requests all correspondence between the NRC and Isomedix, Inc. in Parsippany, New Jersey between August 1979 and May 1980.

CONTACT: J. M. Felton
492-7211

ENCLOSURE A

Received, Cont'd

Thomas J. Madden, Kaye, Scholer, Fierman, Hays and Handler (81-159)	Requests a copy of 13 listed documents.
Thomas J. Madden, Kaye, Scholer, Fierman, Hays and Handler (81-A-5-80-515)	APPEAL TO THE COMMISSION for 16 documents relating to specific interpretations regarding 10 CFR 1.64 and section 203 of the Energy Reorganization Act; documents regarding TMI-1 and TMI-2; internal reviews of listed B&W reports and documents; listed GAO reports; and documents concerning the Resident Inspector Program.

Granted

Peter J. Uzzi, Stanley L. Smith- Law Offices (81-86)	In response to a request for four categories of documents concerning measurement of radiation levels at San Onofre Nuclear Generating Station from January 1, 1975 to February 28, 1981, made available three documents. Informed the requester that additional documents subject to this request are already available at the Local Public Document Room in Mission Viejo, California.
Howard D. Criswell, Jr., Medical Devices Report (81-130)	In response to a request for a list of the 2,600 medical facilities holding NRC materials licenses as well as a list of medical facilities licensed by the 26 Agreement States, made available a list of medical facilities holding NRC materials licenses. Informed the requester that he will have to write to the individual States for a list of medical facilities licensed by them.
Ronald W. Slonaker, Ashcraft & Gerel (81-134)	In response to a request for documents pertaining to the January 3, 1961 explosion at the Stationary Low Power (SL-1) Reactor at Idaho Falls, Idaho, informed the requester these documents are already available at the PDR.
Glen Bonci (81-137)	In response to a request for radiation monitoring reports for 1979, 1980 and 1981, made available two documents. Informed the requester data for 1981 is not yet available.
Laurence S. Moss, Babson College (81-139)	In response to a request for a copy of NRC's Annual Report on the FOIA for 1980, made available a copy of this document.
Robert Alexander, Mockingbird Alliance (81-147)	In response to a request for a copy of nine listed documents and a copy of a report by the Office of Analysis and Evaluation of Operational Data regarding GE manufactured reactors suffering problems with breaks in the coolant system pipes, made available these documents.

Granted, Cont'd

C. Juliet Pittman, Sense Inc. (81-150)	In response to a request for a copy of contract No. NRC-04-81-186, informed the requester this document is already available at the PDR.
(NRC employee) (81-153)	Made available copies of his official T&A records from Pay Period No. 1 through the present.

Denied

(NRC employee) (81-A-2-81-29)	In response to an Appeal to the EDO for documentation used in the selection for Vacancy Announcement 80-4427, made available four documents. Denied portions of 11 documents, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

DIVISION OF CONTRACTS

Week Ending April 24, 1981

FINANCIAL ASSISTANCE

1. NRC-G-04-81-002
   Title - Aerospace - Electric Power Workshop Conference on Commercial Nuclear Power
   Description - Broad, Multidiscipline Workshop/Conference involving dialogue and transfer of technology between organizations involved in aerospace and nuclear-electrical power. Other sponsors for the workshop are: NASA, DOE and EPRI.
   Period of Performance - Fifteen months
   Sponsor - Office of Nuclear Regulatory Research
   Status - Grant awarded to the American Institute of Aeronautics and Astronautics in the amount of $20,000.00 effective April 1, 1981.

CONTRACTS CLOSED OUT

(All administrative action completed and final payment made)

Contract No.	Contractor	Closeout Date
NRC-02-79-044	Science Applications	4/15/81
NRC-03-79-156	Phoenix Corp.	4/22/81
NRC-17-79-452	System Safety, Inc.	4/22/81
NRC-04-78-224	Dr. David E. Dorfan	4/16/81
NRC-04-78-258	San Jose State Univ.	4/17/81
NRC-02-76-165	Westinghouse Electric	4/17/81
NRC-02-76-302	Dr. Krofcheck	4/23/81

DIVISION OF RULES AND RECORDS

OFFICE OF ADMINISTRATION

The Executive Director for Operations has issued for publication in the Federal Register the first semi-annual Regulatory Flexibility Agenda. The Regulatory Flexibility Act requires the NRC to publish each April and October an agenda listing any rule which the NRC expects to propose or promulgate which is likely to have a significant economic impact on a substantial number of small entities. ELD, IE, NRR, MPA, SP, AEOD had no items for inclusion in this agenda. IP, ADM, NMSS, and RES provided items for the agenda. A public announcement will be issued and, with a copy of the agenda, will be mailed to approximately 5,000 affected licensees and other interested persons.

ENCLOSURE A

TO: T. REHM - EDO - MNB 6209

FROM: R. BRADY - SEC - SS 020

DIVISION OF SECURITY

Week Ending April 24, 1981

Air Rights III Building

The alarm and access control systems are installed and functioning in the Air Rights Building.

National Archives and Record Service (NARS)

Based on the NRC Systematic Review Guidelines which were provided to NARS, they identified 19 documents which will have to be reviewed to determine whether or not continued protection under Executive Order 12065 is warranted. The NRC is in the process of obtaining these 19 documents for review.

Unclassifiable Fingerprints - Impact on NRC of FBI Procedures

OPM has informed us that the FBI has changed its procedures in conducting fingerprint checks and will no longer search illegible (unclassifiable) fingerprints against name indices of the FBI Identification Division.

Executive Order 10450, "Security Requirements for Government Employment," provides that the appointment of each civilian officer or employee in any government department or agency shall be subject to investigation, and the scope of the investigation shall in no event include less than a National Agency Check with written inquiries to appropriate law enforcement agencies and others, including a check of the FBI fingerprint files.

OPM has taken the position that the requirements of E.O. 10450 cannot be considered met, nor can the case be considered closed, until the fingerprint search is completed. Consequently, under this new procedure, the FBI will return same to the requesting office, such as NRC. The requesting office will then have to retake the prints and return them to OPM for resubmission to the FBI.

We have advised O&P that for Headquarters personnel, the FBI Latent Fingerprint Section offers a 3-hour course in Washington, every Wednesday morning, to train persons to take fingerprints. We have also advised Regional Office personnel that for individuals located outside the Washington, DC area, arrangements can be made with the Chief, Regional Investigation Division, at the nearest OPM regional office for such training. O&P is sending all clerks to this training course.

The Division of Security will continue to do everything possible to expedite the processing of NRC security clearances.

ENCLOSURE A

OFFICE OF NUCLEAR REACTOR REGULATION

WEEKLY HIGHLIGHTS - APRIL 24, 1981

EVENT V ORDERS

Twenty-seven Orders for Modification of License were issued to finalize the WASH-1400, Event V concern, "Primary Coolant System Pressure Isolation Valves." These Orders are being sent to thirty-four plants - 2 BWRs and 32 PWRs, including Three Mile Island Unit 1.

The Event V concern is resolved by periodic leak testing of the subject valves. The Orders will require this testing to be accomplished initially during the next refueling outage, and in some cases, will also require closing a motor operated valve until that outage as an interim measure.

FORT ST. VRAIN

On Friday, April 17, 1981, the Fort St. Vrain Nuclear Generating Station started operation at 80 percent of rated power supplying 265 MWe to the grid. Public Service Company of Colorado expects the plant to be at 100 percent rated power in two to three weeks.

INDIAN POINT 2

Indian Point 2 has been shutdown since October 17, 1980. During this outage, a routine inspection of all steam generators was conducted and the generators were then secured. Subsequently, high activity was noticed in the secondary side of one of the loops. On April 15, 1981, the cause of this activity was found to be a leak in the Steam Generator #23. At the request of the NRC, the licensee is continuing to inspect additional tubes in that generator. NRC approval of the results of the steam generator inspection is required by the licensee prior to startup, now projected for April 21, 1981.

MILLSTONE 1

The plant achieved criticality at 9:41 PM April 17, turbine on-line status on the 18th, and 15% rated power by 10:40 PM on the 19th when the resident inspector was informed by telephone that half the dry well pressure sensors that had been isolated for the containment integrated test remained in the isolated condition unintentionally. The valves were opened, when discovered in the closed position, and containment overpressure protection was thereby restored. The plant continues towards achieving rated power production. I&E is investigating.

ENCLOSURE B

MILLSTONE 1

The Millstone 1 turbine was tripped with the reactor at 30% power and high conductivity measurements (150 umho) in the main condenser hotwell water by the control room operator following a turbine "excessive vibration alarm". The simultaneous occurrence of high chlorides in the hotwell could be the result of condenser tube damage resulting from a broken turbine blade.

Other relevent information

- The isolation condenser had been declared inoperable prior to startup and therefore unavailable for heat removal following this incident.

- One Target Rock safety relief valve was opened manually to reduce primary coolant system pressure.

- One feedwater pump provided make up water from condensate storage tank (.06 umho).

- The primary coolant was cooled, using bleed and feed, from 520° to 320° F in one hour.

- The plant, at 7:00 AM April 21, 1981, is in shutdown cooling with coolant temperature less than 250°F.

SIGNIFICANT NRR MEETINGS

On April 28, 1981, to discuss the CE Analyses of LOFT L3-6.

On April 28, 1981, independent design review of the design to achieve and maintain cold shutdown at Midland.

On April 28, 1981, Representative of the CECO will report the status of the Co. evaluation of the NRC letter dated April 10, 1981 regarding safety concerns associated with pipe breaks in the BWR Scram discharge system.

ENCLOSURE B

NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of April 19-25, 1981

Plant Status

Core Cooling Mode: Heat transfer from the reactor coolant system (RCS) loops to reactor building ambient.

Available Core Cooling Modes: Long-term cooling "B" (once through steam generator-B); decay heat removal systems.

RCS Pressure Control Mode: Standby Pressure Control (SPC) System.

Backup Pressure Control Modes: Mini Decay Heat Removal (MDHR) System.
Decay Heat Removal (DHR) System.

Major Parameters (as of 0430, April 24, 1981) (approximate values)
Average Incore Thermocouples: 114°F
Maximum Incore Thermocouple: 143°F

RCS Loop Temperatures:

	A	B
Hot Leg	113°F	116°F
Cold Leg (1)	65°F	66°F
(2)	66°F	65°F

RCS Pressure: 99 psig

Reactor Building: Temperature: 61°F
Water level: Elevation 290.7 ft. (8.2 ft. from floor) via penetration 401 manometer
Pressure: -0.35 psig
Concentration: 2.65×10^{-5} uCi/cc (Krypton-85 (Kr-85)) (sample taken 4/20/81)

Effluent and Environmental (Radiological) Information

1. Liquid effluents from the TMI site released to the Susquehanna River after processing, were made within the regulatory limits and in accordance with NRC requirements and City of Lancaster Agreement dated February 27, 1980.

   During the period April 17, 1981, through April 23, 1981, the effluents contained no detectable radioactivity at the discharge point although individual effluent sources which originated within Unit 2 contained minute amounts of radioactivity. Calculations indicate that less than 1 millionth (0.000001) of a curie of Cs-137 was discharged. This represents less than 0.000001% of the permissable total liquid activity as specified in Technical Specifications for operational commercial reactors.

ENCLOSURE B

2. Environmental Protection Agency (EPA) Environmental Data. Results from EPA monitoring of the environment around the TMI site were as follows:

-- The EPA measured Kr-85 concentrations (pCi/m^3) at several environmental monitoring stations and reported the following results:

Location	April 10 - April 17, 1981 (pCi/m^3)
Goldsboro	22
Observation Center	24
Middletown	31
Yorkhaven	28

All of the above levels of Kr-85 are considered to be background levels.

-- No radiation above normally occurring background levels was detected in any of the samples collected from the EPA's air and gamma rate networks during the period from April 17, 1981, through April 21, 1981.

3. NRC Environmental Data. Results from NRC monitoring of the environment around the TMI site were as follows:

-- The following are the NRC air sample analytical results for the onsite continuous air sampler:

Sample	Period	I-131 (uCi/cc)	Cs-137 (uCi/cc)
HP-264	April 15, 1981 - April 22, 1981	*	*

*Sample results are not available due to a temporary outage of EPA counting equipment. EPA reported that the counting equipment will be restored to service by April 28, 1981. NRC air monitoring results will be reported in the next status report.

4. Licensee Radioactive Material and Radwaste Shipments. The following shipments were made:

-- On Monday, April 20, 1981, a 40 ml Unit 2 reactor coolant sample was sent to Babcock and Wilcox (B&W), Lynchburg, Virginia.

-- On Thursday, April 23, 1981, a 250 ml Unit 1 decay heat tank B sample was mailed to Teledyne Isotopes, Westwood, New Jersey.

-- On Thursday, April 23, 1981, one 4' x 4' EPICOR-II dewatered resin liner (liner DF-11) from Unit 2 was shipped to U.S. Ecology, Richland, Washington.

Major Events

1. Submerged Demineralizer System (SDS). Region I and TMI Program Office inspections of the SDS are continuing. Preparation of the Safety Evaluation Report (SER) by the TMI Program Office is in progress although some necessary information has not yet been received. The licensee has submitted a revised schedule for providing the needed information.

   The licensee is performing functional tests of the SDS components to verify that the equipment will operate as designed. The testing does not involve processing of contaminated water. The licensee has scheduled pumping 60,000 gallons of water (previously processed by EPICOR-II) into the fuel pool next week. The pool is being filled as the schedule of functional tests permits and is expected to be completely filled by the middle of May.

2. Reactor Building Entry and Purge. Entry 9 into the Unit 2 reactor building (RB) is scheduled for Thursday, April 30, 1981. A surface decontamination experiment, which was originally scheduled for the entry, was cancelled after pre-entry practice sessions indicated more time was needed for preparation for the experiment. The decontamination experiment has been rescheduled for entry 10, on May 14, 1981. During entry 9, a RB penetration will be modified with hose inlets in preparation for the decontamination experiment. A floating sump pump is also scheduled to be installed during entry 9.

   The RB purge system will be activated one day prior to the entry to reduce airborne activity in the RB to below the maximum permissible concentration (MPC). RB air samples indicate that 2.65×10^{-5} uCi/ml of Kr-85 are dispersed in the RB air. Kr-85 MPC for restricted areas is 1×10^{-5} uCi/ml.

3. EPICOR-II Resin Liner Shipment. The first EPICOR-II resin liner left the TMI site at 8:45 p.m., April 23, 1981. The EPICOR-II resin liner is destined for Hanford, Washington, for burial. The EPICOR-II System was used to process the 500,000 gallons (approximate) of contaminated water in the auxiliary building as a result of the March 28, 1979, accident. The system utilized a resin bed (ion exchange) process with the resin contained in 4' x 4' and 6' x 6' cylindrical liners.

   This is the first of 22 liners containing low levels of radioactivity that were approved by the Commission in March 1981, for shipment and low level waste disposal. The licensee plans to ship the remaining 21 liners to the burial site within the next 2-3 months.

   The licensee provided a vehicle and personnel to escort the shipment to the burial site for the complete trip. The NRC TMI Program Office personnel inspected the licensee's onsite shipping activities and escorted the shipment to I-83.

Meeting Held

On Tuesday, April 21, 1981, Lake Barrett met with area mothers to discuss various issues related to the decontamination of TMI Unit 2.

Future Meetings

1. On Tuesday, April 28, 1981, Lake Barrett will conduct a plant tour for area mothers.

2. On Thursday, April 30, 1981, Harold Denton and Lake Barrett will attend the annual convention of the Pennsylvania Osteopathic Medical Association to be held at the Host Farm in Lancaster. Mr. Denton will be addressing the convention at its opening session, following Governor Dick Thornburgh of Pennsylvania.

3. On Wednesday, May 13, 1981, Lake Barrett and Oliver Lynch will participate in a meeting with the Susquehanna Valley Alliance on the Programmatic Environmental Impact Statement. The meeting will be held at 7:30 p.m., in the Friends Meeting House in Lancaster at 110 Tulane Terrace.

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Items of Interest

Week Ending April 24, 1981

US/IAEA Safeguards Agreement

The second in a series of reports to be sent to the IAEA has been produced by NMMSS and is under review prior to submission to the IAEA. This report lists all of the inventory changes at the three selected facilities that occurred during the month of March 1981. The report will be submitted to the State Department for subsequent delivery to IAEA.

FES for Source and Byproduct License for Ogle Petroleum, Inc.

The final Environmental Impact Statement has been printed regarding the proposed issuance of a combined source and byproduct material license to Ogle Petroleum, Inc., to authorize commercial-scale uranium solution mining at Ogle's Bison Basin Project. The EPA notice of availability is to be published in the Federal Register on Friday, April 24, 1981.

Meeting with Tennessee Valley Authority

On April 21, 1981 NMSS, NRR and RES staff met with Tennessee Valley Authority and Department of Energy personnel. TVA presented its Spent Nuclear Fuel Management Program. TVA with DOE encouragement is examining a number of spent fuel storage technology options including rod compaction (both within the reactor basin and in independent spent fuel storage installations), dry cask storage, dry well (caisson) storage and air-cooled canyon storage. Dependent upon final TVA Board approval, TVA is considering applying for demonstration storage of spent fuel in two casks of differing design at its Browns Ferry nuclear plant about November 1981.

ENCLOSURE C

Meetings - Division of Fuel Cycle and Material Safety

1. Subject: Research Objectives for Heat Transfer from Spent Fuel Shipping Cask Program
   Date/Time: April 28 - 9:00
   Location: Willste Building, Room 592
   Attendees: J. Jackson (FC), Barry Bowman (LLL)

2. Subject: Interagency Agreement on West Valley Demonstration Project
   Date/Time: April 29, 9:00
   Location: DOE-Germantown
   Attendees: L. C. Rouse (FC), C. J. Haughney (FC), W. Ting (FC), R. Boyle (WM), Department of Energy reps

3. Subject: Invited paper entitled "Institutional Radioisotope Waste Disposal Methods Under Current Regulations" to be given at the Hotel Inter-Continental at the Seventh Annual Meeting of the Clinical Radioassay Society.
   Date/Time: April 29, 1:45
   Location: Miami, Florida
   Attendees: Lidia Roche-Farmer

4. Subject: Discussion of NFS efforts to process the available technical information that is needed to provide a basis for future decontamination and decommissioning of the West Valley facility.
   Date/Time: April 30, 10:20
   Location: Willste Building, 5th floor conference room
   Attendees: L. C. Rouse, C. J. Haughney, W. Ting, NMSS
   T. DeBoer, et al. NYSERDA, J. Clark, J. Duckworth, N. Newman, et al, NFS

5. Subject: Radiological Contingency Planning for Westinghouse-Columbia UO_2 Fuels Plant.
   Date/Time: April 29-30
   Location: Willste Building
   Attendees: F. D. Fisher, R. G. Page, NRC, Charles Sanders and another individual - Westinghouse-Columbia

6. Subject: NCRP Seminar on Control of Exposure from Ionizing Radiation in the Event of Accident or Attack
   Date/Time: April 27-29
   Location: Sheraton Inn, Reston, Virginia
   Attendees: R. G. Page

7. Subject: 13th Annual National Conference on Radiation Control
   Date/Time: May 4-6
   Location: Little Rock, Arkansas

ENCLOSURE C

Attendees: F. D. Fisher will participate in an emergency preparedness task force meeting - May 2.

R. G. Page and Ray Johnson (EPA) will discuss Federal Roles in Remedial Action for Contaminated Sites - May 5.

R. G. Page will discuss Emergency Planning for Onsite Response at Fuel Cycle and Materials Facilities - May 6.

Absences

Thomas F. Carter, Jr. - April 27 - May 1 (FEI Training Course in Charlottesville, VA)

ENCLOSURE C

Planned Meetings - Division of Safeguards

1. Subject: Advanced International Training Course on State Systems of Accounting for and Control of Nuclear Materials
   Date/Time: April 27 - May 12, 1981
   Location: Santa Fe, New Mexico, Richland, Washington
   Attendees: Kenneth E. Sanders, SGMD (Santa Fe, 4/27-5/1)
   International Trainees from Industry and Government

2. Subject: Meeting with B&W-Naval personnel concerning FNMC Plan modifications to allow recovery of scrap generated by another licensee
   Date/Time: April 27, 1981
   Location: Silver Spring, Md.
   Attendees: R. Cordani, B&W
   R. Erickson, SGML
   G. Gundersen, SGML

3. Subject: Meeting with NUSAC for the purpose of briefing them on the upcoming visit to B&W-Naval concerning the contract on the Advanced Materials Accountability Simulation Study (AMASS)
   Date: May 4, 1981
   Location: Silver Spring, Md.
   Attendees: R. Hawkins, F. Tingey, L. Weber, J. Komoroski, NUSAC, G. Gundersen, SGML
   M. Messinger, SGMI

4. Subject: NRC/DOE Liaison Board Meeting
   Date/Time: April 30, 1981, 10:00 a.m.
   Location: Willste Bldg., Silver Spring, Md.
   Attendees: L. Evans, SGRI
   P. Baker, SGTI
   DOE representatives

5. Subject: Presentation of two papers and participation in a panel discussion at the Advanced International Training Course on State Systems of Accounting for and Control of Nuclear Materials. Also during this week Mr. Smith will meet with a representative from the Republic of Korea to review and discuss the proposed final safeguards regulations for the Republic of Korea
   Date/Time: April 27-May 1, 1981
   Location: Santa Fe, New Mexico
   Attendees: C. N. Smith, SGML

ENCLOSURE C

Planned Meetings - Division of Waste Management

1. Subject: Characterization of Fractured and Jointed Rock
   Date: April 29, 1981
   Location: Willste Building
   Attendees: TerraTek representatives; High-Level Waste staff; J. Davis, RES

2. Subject: Issuance of new solution mining license
   Date: April 29, 1981
   Location: Willste Building
   Attendees: J. Linehan; H. Pettengill; Kerr-McGee personnel

3. Subject: 13th Annual National Conference of Radiation Control
   Date: May 4, 1981
   Location: Little Rock, Arkansas
   Attendee: R. Browning (speaker)

ENCLOSURE C

OFFICE OF INSPECTION AND ENFORCEMENT

Items of Interest

Week Ending April 24, 1981

1. The following Notification of Significant Enforcement Action was dispatched during the past week:

   a. EN-80-31B Boston Edison Company (Pilgrim Nuclear Power Station, Unit 1) - An Order Imposing Civil Penalties in the amount of $13,000 was issued to subject licensee on April 21, 1981. Previously, a Notice of Violation and a Notice of Proposed Imposition of Civil Penalties in the amount of $13,0000 was issued based on items of noncompliance regarding procedures for refueling and for the auxiliary electrical system. After consideration of the licensee's response, the IE staff concluded that the items of noncompliance did occur and no adequate reasons were given by the licensee for mitigation or remission of the proposed penalties.

2. Preliminary Notifications relating to the following actions were dispatched during the past week:

   a. PNO-I-81-50 Maine Yankee Nuclear Power Station - Violation of Containment - Inadvertent Release of Activity

   b. PNO-I-81-51 Millstone Nuclear Station, Unit 1 - Turbine Failure

   c. PNO-I-81-52 Oyster Creek Nuclear Generating Station - Condensate Storage Tank Liquid Spill

   d. PNO-I-81-53 Peach Bottom Unit 2 - Unscheduled Shutdown

   e. PNO-I-81-54 Beaver Valley Power Station, Unit 2 - Onsite Fatality

   f. PNO-I-81-55 Haddam Neck Plant - Inadvertent Transport of Contaminated Material Offsite

   g. PNO-II-81-29 Sequoyah Nuclear Plant - Injury of Personnel

   h. PNO-II-81-30 H. B. Robinson, Unit 2 - Contamination In Fossil Unit

   i. PNO-II-81-31 Turkey Point 3 - Damage to Main Generator

   j. PNO-III-81-40B Duane Arnold Energy Center - Possible Defects in Recirculation Piping and Thermal Sleeve Welds

   k. PNO-III-81-42 Monticello Plant - HPCIS Inoperable Due to Check Valve Failure

   l. PNO-IV-80-34F South Texas Project, Units 1&2 (Houston Lighting & Power Co.) - Update - Resumption of Currently Halted Construction at the South Texas Project, Units 1 & 2

ENCLOSURE D

m. PNO-V-81-22A General Atomic Company - Media Interest in Radioactive Material (Update)

n. PNO-V-81-23 Trojan Nuclear Plant - Unit Trip and Personnel Injury from Electrical Short in Motor Control Center

o. PNO-V-81-24 Rancho Seco Nuclear Power Plant - Uncontrolled Discharge of Reactor Coolant

p. PNS-III-81-07 Commonwealth Edison Company - Suspicious Fire

q. PNS-III-81-07A Commonwealth Edison Company - Suspected Arson

3. The following IE Information Notices were issued:

a. IE Information Notice 81-15, "Degradation of Automatic ECCS Actuation Capability by Isolation of Instrument Lines", was issued to all nuclear power reactor facilities holding an operating license or construction permit on April 22, 1981.

b. IE Information Notice 81-16, "Control Rod Drive System Malfunctions", was issued on April 23, 1981, to all boiling water reactor facilities holding a power reactor operating license or a construction permit.

OFFICE OF NUCLEAR REGULATORY RESEARCH

IMPORTANT EVENTS FOR THE WEEK ENDING APRIL 24, 1981

Experimental Programs Branch

1. Semiscale

A slight reordering of task completion dates has been accomplished on RELAP5 to provide ATWS calculational support to NRR (April 2, 1981, Check to Sullivan request). There is no FY 1981 cost impact.

Test S-UT-5, a 2-1/2 percent cold leg break with UHI activation, was completed on April 8, 1981, as anticipated. No core heatup was observed. Test S-UT-6 (5 percent cold leg break without UHI) was successfully conducted on April 16, 1981, as planned. The last test of the small-break series, S-UT-7, is planned for this week. This will be a 5 percent break with UHI. We are evaluating requests to test an ORNL vessel liquid level device and to provide ORNL with noise signature information pertinent to off design conditions. We will comply with these requests, if they do not cause a significant impact on the Semiscale program.

EG&G, DOE and NRC have essentially agreed on the FY 1982 test program, and EG&G has initiated detailed program planning.

Several meetings with NRR, vendors, utility representatives, EG&G and RES are scheduled:

(1) Westinghouse calculation of LOFT L3-6, Westinghouse office, Bethesda, April 24; and

(2) Combustion Engineering calculation of LOFT L3-6, CE Conference Room, Triangle Towers, Bethesda, 9:45 A.M.

We are providing technical support to NRR in these meetings.

2. LOFT

Results of April 15, 1981 Test - The first multiple-failure test to be run in LOFT, L9-1, was run in tandem with a test of recovery procedures from an overpressurization accident, L3-3. A third test, involving inventory boiloff to partial core uncovery, intended to follow the first two tests, could not be run because plant conditions at the end of L3-3 were not as expected.

ENCLOSURE E

The multiple-failure test involved a loss of all feedwater and delayed scram from full power. This emptied the steam generator within 100 seconds and initiated an expansion of the primary coolant inventory. Until the pressurizer filled, the primary system pressure was controlled by pressurizer spray. Subsequently, as heatup continued, the pressure rose to about 2360 psi, where the PORV opened. By cycling open and closed, the PORV, which is modeled after those used in large PWRS and sized to give the same relative flow rate, maintained the system pressure between 2360 and 2340 psi.

Recovery was then initiated by locking open the PORV, as prescribed for commercial plants in this condition. This caused the pressure to drop rapidly until the upper plenum saturated, and then more slowly, as the flow through the PORV changed from liquid to liquid-steam. After this uncovery procedure was demonstrated, the PORV was closed and the steam generator refilled. This caused another rapid decrease in primary system pressure and secondary side feed and bleed maintained the pressure decrease.

In summary, all operating and test procedures were correctly followed, the pressure relief systems operated as expected and the overpressurization recovery procedures worked well. However, the heat losses from the primary system were considerably greater than predicted, and related to this, coolant inventory loss was not as great as predicted. Since LOFT heat losses are generally well understood and quantified, analysts are considering test specific phenomena to resolve this discrepancy. Results of the test will be fully analyzed to draw conclusions concerning recovery procedures and code predictive capabilities.

Preparations for Upcoming LOFT Tests - Preparations are now being made in parallel for the next two sets of tests, two PWR cooldown accident simulations in August, and the first intermediate break with core uncovery in September. In accordance with 10 CFR 50 Appendix J, a containment leak test will be performed in June.

Fuel Behavior Branch

1. NRU LOCA Heatup and Clad Balloon Test

This is the first of a series of clad ballooning tests designed to assess post-accident coolability of ballooned fuel rods. These rods were heated to about 1145K (1600°F) indicated peak clad temperature at a rate of 8K/sec (15°F/sec). The ballooned regions were from 10cm to 20cm (4in to 8in) long and they appeared to touch one another, indicating circumferential strains of about 30%. The initial look at the 12-rod pressurized cruciform from NRU clad ballooning test MT-1 in the test canal showed all four of the facing rods and at least one of the rods underneath to be ballooned and ruptured near rod mid plane. A preliminary look at the rod quench data shows little if any difference in "post-accident" rod cooldown rates for the ballooned fuel rods in this test and the corresponding unpressurized unballooned fuel rods in the companion October thermal hydraulics test (# 110). Both tests were run at the same simulated decay heat (1.8 KW/M), the same reflood rate (5cm/sec; 2in/sec), and the same reflood delay time (30 seconds). These test conditions are parametric, but fall comfortably within the envelope of anticipated reflood rates and delay times and show sustained cluster coolability. Detailed visual examination of the ballooned fuel rods and comparison of the experimental data with pretest predictions will be resumed in a few weeks.

2. Technical Bases Report on Fission Product Releases (NUREG-0772)

The Information Paper (SECY-81-240) was officially sent to the Commission on April 15, 1981.

A meeting is being held at Headquarters, April 21 and 22, 1981, with 0772 Chapter Leaders to discuss and resolve final disposition of peer review comments and related revisions to the final draft.

3. Fuel Testing Task Force

The first meeting of the task force was held at Headquarters on April 16 and 17, 1981. Presentations and discussions focused on objectives of the task force, RES needs in relation to rulemaking, current and planned RES programs in severe fuel damage, timing of information and program approach. The next meeting is scheduled for Headquarters on April 30 and May 1 with emphasis on matching up needs, timing, and program and outline of the task force report.

Member State Comments on IAEA Draft Safety Guide

SG-S11B - Design Basis Tropical Cyclone

By letter dated April 21, 1981 from Joseph D. Lafleur, Jr. to Frank Cunningham of the Department of State, Membe State comments are being transmitted to the IAEA on draft safety guide, SG-S11B. We are recommending that SG-S11B be approved for IAEA publication.

SG-S11B recommends procedures that might be followed to satisfy the objectives and minimum requirements of the IAEA Code of Practice on Safety in Nuclear Power Plant Siting. SG-S11B discusses general characteristics of tropical cyclones, with particular emphasis on the pressure and wind structures of such storms in the light of available data. General methods are given for the evaluation of the relevant parameters of a Probable Maximum Tropical Cyclone (PMTC). These can be used as inputs in deriving a design basis surge and a design basis wind for use in developing an adequate design capability for a nuclear power plant to withstand such storms. The contents of SG-S11B are generally comparable with NRC regulatory guidance and the NRC Standard Review Plan with regard to the determination of the design basis events, related to such storms, to be considered in the design of nuclear power plant structures, components and systems. The principle difference between IAEA Safety Guide SG-S11B and U. S. regulatory guidance is that the IAEA guide is much broader than the U.S. guidance, because the IAEA guide includes information applicable over the global range of meteorological and climatological conditions. This guide recognizes that there are several acceptable approaches to the problem of acquiring and evaluating information concerning tropical cyclones, some of which are not currently used in the U.S. but which represent comparable levels of safety. It does not conflict with U.S. policy and practice.

The guide adequately supplements the IAEA Code of Practice on Safety in Nuclear Power Plant Siting with acceptable procedures for determining the design basis tropical cyclone that should be considered in the design of nuclear power plants to assure an adequate capability of the plant to withstand such conditions.

Contact: I. C. Roberts

Publication Issued During the Week of April 20-24, 1981

Draft Regulatory Guide and Value/Impact Statement: Standard Format and Content of Site Characterization Reports for High-Level-Waste Geologic Repositories, Task GS-027-4. Comments requested by June 30, 1981. Contact: S. Brocoum

ITEMS OF INTEREST
OFFICE OF INTERNATIONAL PROGRAMS
WEEK ENDING APRIL 24, 1981

Renewal of NRC-BMFT Safety Research Arrangement

IP this week received Executive Branch clearance on the acceptability of the proposed text of the NRC-FRG Ministry for Science and Technology (BMFT) reactor safety research agreement. BMFT State Secretary Hans Haunschild is being designated to sign this agreement for Germany during his visit to NRC next week (April 30). A paper is en route to the Commission giving background information on the negotiations and requesting that the Chairman be designated to sign the agreement for the U.S.

U.S. Process Control System Export for Argentina's Heavy Water Plant

Foxboro Corporation has been requested by Sulzer Brothers in Switzerland to provide a process control system valued at approximately 2.5 to 3.5 million dollars for use in the heavy water plant to be built by Sulzer Brothers in Argentina. The requests will be processed under DOE's authority as a Part 810 case. According to DOE sources, the equipment is standard "off-the-shelf" and with widespread foreign availability. Preliminary Executive Branch views are to recommend approval of this request. DOE's request for NRC's views on this case are expected shortly, after which the staff will prepare a Commission action paper.

US/IAEA Safeguards Agreement

On Thursday the Safeguards Agreement Working Group, consisting of staff from State, ACDA, DOE, and NRC (IP, NMSS, and ELD) met to discuss the status of implementation of the US/IAEA Safeguards Agreement. Among the topics discussed were the IAEA's plans for conducting ad hoc inspections at the three licensed facilities selected to date, the status of facility attachment preparation, the Suspension Protocol for the US/IAEA/Japan Trilateral Safeguards Agreement, and classification guidelines for documents which the IAEA provides to the U.S.

U.S. Action Plan to Upgrade IAEA Safeguards

On April 21 representatives of IP attended a meeting of the Action Plan Working Group with representatives of NMSS, State, ACDA, and DOE. The group reached agreement on a partial list of actions which will be undertaken or endorsed by the group for the remainder of CY 1981. The group is expected to complete its list of items at its next meeting on May 19.

Proposed Extension (Fourth) of the Tokai-Mura Agreement

IP has been advised informally that the Department of State is presently negotiating with the Japanese government on arrangements for another extension of the Tokai-Mura agreement. DOE plans to forward the request for interagency review as soon as tentative agreement has been reached with the Japanese government as to the scope of this extension.

Page 2 deleted from PDR copy.

ENCLOSURE G

Foreign Visitors (continued)

On Wednesday, Dr. Germar Dominguez, Industrial and Energy Attache of the Spanish Embassy, met with L. Brown and R. Kornasiewicz of RES Division of Health, Siting and Environment, and B. Zalcman of the IE Division of Emergency Preparedness to discuss the development of meteorological regulatory guides.

On Thursday, a 15-member Japanese delegation from the Thermal and Nuclear Power Engineering Society (TANPES), headed by Dr. Yasumasa Togo of the University of Tokyo, met with S. Hanauer, Director, and J. Kramer, Deputy Director, of the NRR Division of Human Factors Safety, and with R. DiSalvo and J. Jenkins of the RES Division of Facility Operations to discuss the training and qualification of reactor operators and supervisory personnel in the U.S. and Japan.

On Thursday, Ambassador Roger Kirk, U.S. Resident Representative to the IAEA, met with Chairman Hendrie, Commissioners Gilinsky, Ahearne, and Bradford, and with IP Director J. R. Shea and IP A/D for Exports/Imports and International Safeguards for a general consultation on IAEA matters.

On Thursday, Dr. A. E. Green, Head of the Safety and Reliability Directorate of the U.K. Atomic Energy Authority, met with R. Bernero, F. Rowsome, and W. Vesely of the RES Division of Risk Analysis, G. Sege of OPE, and A. Lakner and R. Silver of NRR to discuss (1) risk and reliability analysis, (2) reliability standards, and (3) current data collection and analysis activities.

On Friday, Dr. A. VonGadow of the German Federal Ministry of Interior (BMI), Dr. W. Ullich of the Society for Reactor Safety (GRS), and Dr. Klaus Mueller of the Ottobrunn Commercial Facility, met with S. Ramos, B. Weiss, B. Zalcman, and E. Williams of the IE Division of Emergency Preparedness, A. Hintz and M. Jamgochian of the RES Division of Facility Operations, and R. P. Grill of the RES Division of Health, Siting and Environment, to discuss (1) siting policy with reference to emergency planning and (2) emergency-remote monitoring supervision of nuclear power plants.

OFFICE OF STATE PROGRAMS

ITEMS OF INTEREST

WEEK ENDING APRIL 24, 1981

The U. S. Department of Justice has filed a suit in the U. S. District Court, Eastern District of Washington, on April 13, 1981, seeking a declaration that the Radioactive Waste Storage and Transportation Act of 1980 of the State of Washington (Initiative Measure No. 383) is unconstitutional. The Act prohibits certain storage of out-of-State generated wastes in Washington after July 1, 1981. The suit is based on claims of violation of the Supremacy, War Powers, Property and Commerce clauses of the U. S. Constitution.

The House of the Washington Legislature has completed the Washington Legislative action on SB 4182 on April 17, 1981 and submitted it to Governor Spellman for signature. It adopts the Northwest Interstate Compact on Low Level Waste Management. The compact was previously enacted by Idaho. When signed by Governor Spellman of Washington, it will be initially effective and is expected to be sent to Congress for approval in the near future. (See report for weeks ending 4/10 and 4/17 for additional info.)

The draft updating of the suggested State Radiation Control Act has been circulated for information and comment to NMSS, IE, ELD, Southern States Energy Board, Western Interstate Energy Board, State Planning Council on Radioactive Waste Management, National Governors' Association and all Directors of State Radiation Control Programs.

Bill Menczer, RSLO, Region III, and Bob Trojanowski, RSLO, Region II, were in Cincinnati, Ohio on April 22 and 23, 1981 meeting with representatives of the Regional Advisory Committees, Regions IV and V, the States of Ohio and Kentucky, Cincinnati Gas & Electric, and Stone & Webster to discuss arrangements for the Zimmer Station emergency exercise. The exercise scenario, RAC observer locations, and future required actions were decided and agreed upon. It is estimated that a consolidated exercise of the emergency plans for Zimmer will take place in late July, 1981.

Jim Montgomery, RSLO, Region IV, met on April 22 with staff of the Council of Energy Resource Tribes (CERT) to discuss the establishment of a more effective liaison between NRC and CERT who represents 25 Indian Tribes in the United States. He also met that day with State and FEMA officials to discuss scenario development for the Fort St. Vrain emergency exercise now scheduled for sometime in August, 1981.

Mr. Montgomery attended a meeting on April 23 in Salt Lake City, Utah with the States of California, Arizona, Nevada, New Mexico, Colorado, Utah and Wyoming, to discuss the formation of a low-level radioactive waste disposal compact.

ENCLOSURE H

On April 24 and 25, 1981, Robert Trojanowski, RSLO, Region II, attended a low level waste management meeting in Orlando, Florida. This meeting was hosted by the Southern States Energy Board and the attendees included representatives of States in the Southeast. The purpose of this meeting was to provide the States an opportunity to review a draft low level waste compact which will serve as the basis for the formulation of a Regional State Compact.

OSP review of the Kentucky Agreement program will be made during the week of April 27, 1981.

OFFICE OF MANAGEMENT AND PROGRAM ANALYSIS

Items of Interest

WEEK ENDING APRIL 24, 1981

Congressional Correspondence

Completed calculations on cost of licensing reviews at NRC in response to a question from Rep. Vento (Udall's subcommittee).

Publications

(1) Completed development of overtime reports for Branch and Division managers.

(2) Distributed "Construction Status Report", NUREG-0030, dated April 1981.

(3) Distributed NUREG/CR-1881, "Statistical Analysis of Power Capability Factors Through 1979" by R. G. Easterling, Sandia Corporation.

ENCLOSURE I

OFFICE FOR ANALYSIS AND EVALUATION OF OPERATIONAL DATA

ITEMS OF INTEREST

WEEK ENDING APRIL 24, 1981

Case Study on Breaks Associated with BWR Scram Discharge Volume Piping

Commissioner Bradford was provided a briefing on the technical issues and safety concerns described in the case study. Further investigations into the environmental conditions, effects, and potential consequences to the RPS, PCIS, and ECCS as a result of a postulated break in the SDV system were continued. Information was provided to RES for their independent analysis of the reactor system response to a postulated SDV break. AEOD will be in attendance at the GE-NRR meeting on this subject scheduled for April 28, 1981.

ENCLOSURE K

ITEMS APPROVED BY THE COMMISSION - WEEK ENDING APRIL 24, 1981

A. SECY-81-69 - RECONSIDERATION OF ALTERNATIVE APPROACHES TO NRC'S PRESENT PRACTICES IN TREATMENT OF NEED FOR POWER AND ENERGY CONSERVATION. Memo SECY to Dircks, dtd 4/20/81. (Revised)

This is to advise you that the Commission (with all Commissioners approving, except as noted below) has approved the following in regard to SECY-81-69:

1) As a matter of policy the Commission endorses placing substantial reliance on State assessments of need for power, energy conservation, and alternative energy source analyses to fulfill NRC's NEPA responsibilities. The staff should develop procedures to solicit State and FERC input for the licensing EIS and for testimony before licensing boards.

2) Rulemaking should be initiated to preclude, in the absence of very significant new information, the reconsideration at the OL stage of need for power and energy alternatives.

Commissioner Bradford wants public comments as to the correct threshold when the need for power and energy alternatives should be considered at the OL stage. He does not endorse "very significant new information" as the right alternative at this time.

B. STAFF REQUIREMENTS - BRIEFING BY IE ON STATUS OF EMERGENCY PREPAREDNESS IN NEW YORK STATE, 11:00 A.M., WEDNESDAY, APRIL 22, 1981, COMMISSIONERS' CONFERENCE ROOM, D.C. OFFICE (OPEN TO PUBLIC ATTENDANCE). Memo for the Record fm SECY, dtd 4/22/81.

The Commission was briefed by staff on the status of emergency preparedness in New York state; the deficiencies contained in the FEMA letter of April 6, 1981; and the meeting held in New York on April 15, 1981.

There were no requests made or requirements placed on staff at the meeting.

The Commission noted a letter was being prepared by staff for dispatch to all New York state utilities, stating that the deficiencies identified by FEMA must be resolved within 120 days.

C. SECY-81-188 - EMERGENCY PREPAREDNESS. Memo SECY to Dircks, dtd 4/22/81.

This is to advise you that the Commission (with all Commissioners approving) has approved the changes to page 2-11 of NUREG-0737 as provided in Enclosure 3 of the subject paper.

The Office of Inspection and Enforcement was informed of this action by telephone on April 22, 1981.

D. SECY-81-238 - NRC PROCEDURES FOR HANDLING NSA INTELLIGENCE INFORMATION. Memo SECY to Dircks, dtd 4/23/81.

This is to advise you that the Commission (with all Commissioners approving) has approved the continuation of the NRC procedures for handling NSA intelligence information with the modifications recommended in the subject paper.

With respect to attendance at Executive Branch briefings, Chairman Hendrie and Commissioner Ahearne voted for Option A. Commissioner Gilinsky voted for Option C. Commissioner Bradford stated that he preferred Option C but could accept the other options. In the absence of a majority vote for any option, the status quo is maintained (Option A).

The Office of International Programs was informed of this action by telephone on April 23, 1981.