

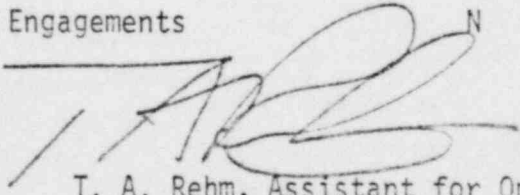
PDR

May 21, 1980

For: The Commissioners  
From: T. A. Rehm, Assistant for Operations, Office of the EDO  
Subject: WEEKLY INFORMATION REPORT - WEEK ENDING MAY 16, 1980

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

<u>Contents</u>	<u>Enclosure</u>
Administration	A
Nuclear Reactor Regulation	B
Standards Development	C
Nuclear Material Safety and Safeguards	D
Inspection and Enforcement	E
Nuclear Regulatory Research	F
Executive Legal Director	G
International Programs	H
State Programs	I
Management and Program Analysis	J
Controller	K
Analysis and Evaluation of Operational Data	L
Items Approved by the Commission	M*
Calendar of Speaking Engagements	N



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

\*Deleted from Commissioners and PDR copy.

Contact:  
 T. A. Rehm  
 27781

8006110 393

## Summary of Weekly Information Report

Week Ending May 16, 1980

### Shippingport LWBR

NRR staff provided comments to Admiral Rickover on its review of the proposed Shippingport LWBR extended operation. ACRS considered and reported favorably on the proposed operation.

### Recently Published Fictional Book

A book was recently published that provides a fictional account of an unmitigated, ATWS-induced reactor meltdown. It is entitled the Dorset Disaster, written by Alexander Sidar III and published by Grosset and Dunlap. Mr. Sidar talked to Dr. Mattson of NRR and members of his staff in early 1979 regarding NUREG-0460 and other staff reports on ATWS. The book makes considerable use of the technical facts gleaned from those discussions.

### Millstone Unit 2

At 4:40 pm on May 8, 1980, Millstone Unit 2 began a shutdown as a result of the licensee declaring the Service Water System inoperable. Northeast Nuclear Energy is modifying the system and the NRC staff will keep abreast of this problem.

### Radiation Policy Council Meeting

At the first meeting of the Radiation Policy Council on May 14, 1980, the principal topics raised were related to procedural issues on the functioning of the Council. Four immediate interagency working groups are planned to be formed to prepare issue papers for Council consideration on high priority issues. The groups are 1) Occupational Exposure Regulations, 2) Controllability of Naturally Occurring Radioactivity (Radon), 3) Low-Level Radioactive Waste from Medical and Research Institutions, and 4) Compilation of Directory of Federal Radiation Activities and Responsibilities.

### FY 1980 Travel

The OMB staff has informed us that as a result of the EDO's travel appeal letter, of May 1, 1980, an additional \$625K is being added to NRC's travel ceiling.

OFFICE OF ADMINISTRATION

Week Ending May 16, 1980

ADMINISTRATION OF THE FREEDOM OF INFORMATION ACT

STATUS OF REQUESTS

	<u>Initial Request</u>	<u>Appeal of Initial Decision</u>
Received	338	22
Granted	235	5
Denied	55	10
Pending	48	7

ACTIONS THIS WEEK

Received

Evelyn P. Davis,  
General Services Life  
Insurance Company  
(80-249) Requests the names, grades, and offices of all employees in Region IV.

John E. McKeever,  
Attorney-At-Law  
(80-250) Requests a copy of 21 listed documents.

(NRC employee)  
(80-251) Requests information on him in the Office of the Inspector and Auditor and information on any charges made against him.

Debra D. McDonald,  
Nuclear Pharmacy, Inc.  
(80-252) Requests a copy of all applications for radioactive materials licensure and copies of the actual radioactive materials licenses issued to Pharmaco-Nuclear.

Mike Tappan  
(80-253) Requests a copy of three listed documents.

(An individual requesting  
information about himself)  
(80-254) Requests information on his Reactor Operator License exam results.

David White,  
Virginia Public Interest  
Research Group, Inc.  
(80-255) Requests a copy of WASH-740, WASH-1250, NUREG-0660 (Draft 3) and NUREG-0460.

Alletta d'A. Belin,  
Center for Law in  
the Public Interest  
(80-256) Requests, on behalf of David Eric Pesonen, all documents on him relating to nuclear power plants that were being planned in Bodega Bay and Mendocino, California.

CONTACT: J. M. Felton  
492-7211

ENCLOSURE A . . .

Received, Cont'd

Charles W. Elliott  
(80-257)

Requests a copy of Ronald G. Clary's memorandum of November 4, 1977 and the Review Group Report on Safety Issues Raised by Ronald G. Clary Concerning Regulatory Reviews of Package Designs for Radioactive Materials.

J. C. Snell,  
NTEU Vice-President  
(80-258)

Requests the vacancy announcement, position and grade either offered or accepted for 80 listed Nuclear Reactor Regulation employees.

Robert A. Cunningham  
(80-259)

Requests access to WASH-740.

Earl R. Mettler,  
Attorney-At-Law  
(80-260)

Requests a copy of a study done by Lucius Pitkin in 1971 and 1972 of radiation levels in areas near uranium mills in the western United States and a copy of a study done in 1979 of radiation levels in the Shiprock, NM area.

Sandra R. Kiggins,  
Westinghouse Electric  
Corporation  
(80-261)

Requests a copy of 57 listed documents.

(NRC employee)  
(80-262)

Requests information on him in the Office of the Inspector and Auditor and information on any charges made against him.

Michael Givel  
(80-263)

Requests 22 categories of information relating to Crystal River Unit 3.

Granted

Marilyn Shineflug  
(80-186)

In response to a request for several categories of documents regarding emergency measures which can be taken to protect the public in the event of a nuclear accident, as especially related to the Zion plant, made available 14 documents.

George DuVall  
(80-233)

In response to a request for nine categories of document regarding the Washington Public Power Supply Systems Nuclear Project, Number 2 (WPN-2), made available seven documents.

David F. Power  
(80-239)

In response to a request for various copies of the NRC "Weekly Information Report", informed the requester his request has been referred to the PDR for the reproduction of the requested records.

Granted, Cont'd

Debra D. McDonald,  
Nuclear Pharmacy, Inc.  
(80-241)

In response to a request for copies of the application for licensure and actual license issued to Pharmatopes, Inc., made available this information.

Laura J. Rayburn,  
Employment/Sex Discrimination  
Clinic, Georgetown University  
Law Center  
(80-245)

In response to a request for a copy of the S.F. 50 and S.F. 52 (with appropriate Privacy Act deletions made) utilized in the filling of the vacancy for the position of Director of Operations and Personnel, made available this information.

Robert Goldsmith,  
Citizens for a Better  
Environment  
(80-246)

In response to a request for 10 categories of documents relating to the proposed decontamination of Dresden Unit 1, made available two documents and informed the requester other records subject to this request are already located at the PDR.

(An individual requesting  
information about himself)  
(80-254)

Made available information on his Reactor Operator License exam results.

Charles W. Elliott  
(80-257)

Made available a copy of Ronald G. Clary's memorandum of November 4, 1977 and the Review Group Report on Safety Issues Raised by Ronald G. Clary Concerning Regulatory Reviews of Package Designs for Radioactive Materials.

Denied

Thomas B. Cochran,  
Natural Resources  
Defense Council, Inc.  
(80-138)

In response to a request for information pertaining to the Nuclear Fuel Services of Erwin, TN from January 17, 1980, made available five documents. Denied portions of five documents containing commercial or financial (proprietary) information and classified information.



DIVISION OF CONTRACTS

Week Ending May 16, 1980

PENDING COMPETITIVE REQUIREMENTS

1. RFP RS-OSD-80-005  
Title - Three Statistical Tasks for Nuclear Material Accountability  
Description - This project is intended to explore methods of improving nuclear material accountability. The following three methods will be examined: 1) statistical analysis of cumulative inventory difference and cumulative shipper-receiver difference data, 2) resolution of shipper-receiver differences, and 3) statistical inference for the controllable unit approach.  
Period of Performance - One year  
Sponsor - Office of Standards Development  
Status - Solicitation being developed
  
2. RFP RS-OSD-80-012  
Title - Information Needs for Safe Characterization Plans  
Description - The intent of this project is to examine exploration techniques so that safe exploration and characterization will maximize the potential for detecting bug disqualifying features of the site before construction is begun. The information would be used both to provide guidance to the DOE in selecting sites and preparing its site characterization program, and to assist the NRC in its review of the DOE's plans for site exploration.  
Period of Performance - One year  
Sponsor - Office of Standards Development  
Status - RFP being developed.
  
3. RFP RS-OSD-80-019  
Title - Evaluation of Geotechnical Surveillance Techniques for Monitoring High-Level Waste Repository Performance  
Description - This project is designed to provide recommendations for geological and geotechnical monitoring systems for geologic repositories for high-level nuclear waste. The contractor shall make the recommendations on the basis of an analysis of what data is necessary to assure that the performance of the repository is monitored and an analysis of the state-of-the-art for obtaining that data.  
Period of Performance - One year  
Sponsor - Office of Standards Development  
Status - RFP being developed

ENCLOSURE A

## 4. RFP RES-80-190

Title - Benchmarking of Computer Codes used in Structural Design of Nuclear Power Plants

Description - The goal of this research project is to develop computer programs which can be used by the NRC staff to assess the adequacy of computer codes used by license applicants and licensees. The areas of interest are: dynamic analyses, especially those for seismic and impactive loads, design of containments, and design of seismic Category I structures, systems and components.

Period of Performance - Two years

Sponsor - Office of Nuclear Regulatory Research

Status - Solicitation being prepared. Is to be issued on or about June 9, 1980.

#### RFP'S ISSUED

## RFP RS-OSD-80-016

Title - Disease Incidence Rates from Occupational Exposure to Hazardous Substances

Description - Compile from the existing published literature and knowledgeable opinion the occupational disease incidence rates from hazardous substances in the workplace in such a way that these incidence rates can be compared to the cancer incidence rates for workers exposed to radiation.

Period of Performance - One year

Sponsor - Office of Standards Development

Status - RFP issued April 22, 1980. Proposals due May 21, 1980.

#### PROPOSALS UNDER EVALUATION

## 1. RFP RS-OSD-80-001

Title - Study of the Parameters that Affect NDA Measurement Response and the Development of Design Specifications to Minimize their Effect

Description - The contractor is to identify all of the parameters which might degrade NDA measurement reliability, survey NRC licensed facilities to identify NDA measurement problems, visit various NDA laboratories to confirm NDA parameters identified, recommend experiments for verification of parameters identified and conduct experiments to verify methods to reduce, eliminate or control adverse effects identified.

Period of Performance - Thirty months

Sponsor - Office of Standards Development

Status - Proposals under evaluation. Competitive range to be established by May 21, 1980.

2. RFP RS-OSD-80-004  
 Title - Security Force Effectiveness  
 Description - Identify various management, supervisory, and organizational techniques which could improve security force effectiveness. Using the techniques identified, develop a framework specifying the relationships between the effectiveness of security force characteristics of concern and the management techniques that bear on them.  
 Period of Performance - Ten months  
 Sponsor - Office of Standards Development  
 Status - Proposals under evaluation. Competitive range to be established by May 20, 1980.
  
3. RFP RS-OSP-80-302  
 Title - Medical Use of Radionuclides for State Regulatory Personnel  
 Description - The training course will acquaint the student with both the routine and special uses of radionuclides in medical diagnosis, therapy and research.  
 Period of Performance - One year  
 Sponsor - Office of State Programs  
 Status - Proposals under evaluation.
  
4. RFP RS-OSP-80-304  
 Title - Safety aspects of Industrial Radiography for State Regulatory Personnel  
 Description - The training course shall acquaint the student with industrial radiography operations and the importance of radiation safety as it relates to those operations.  
 Period of Performance - One year  
 Sponsor - Office of State Programs  
 Status - Proposals under evaluation
  
5. RFP-RS-NRR-80-101  
 Title - Advanced Reactor Accident Delineation and Assessment  
 Description - This project will provide technical assistance to the NRC in the areas of safety and licensing associated with advanced reactor concepts.  
 Period of Performance - Three years  
 Sponsor - Office of Nuclear Reactor Regulation  
 Status - Individual conflict of interest discovered in revised proposals. Issue in process of being resolved.

CONTRACTS AWARDED

NRC-03-80-117  
 Title - Study of Requirements for Operator Licensing  
 Description - The project will result in the development of recommendations for improvement in the selection and training of nuclear power plant personnel.  
 Period of Performance - Five and one-half months  
 Sponsor - Office of Nuclear Reactor Regulation  
 Status - Contract awarded to Analysis and Technology, Inc., North Stonington, Conn., on May 12, 1980 at a total cost-plus-fixed-fee of \$99,740.



DIVISION OF SECURITY  
ITEMS OF INTEREST

WEEK ENDING MAY 16, 1980

Revision of NRC Manual Chapter 2101, "NRC Security Program," Appendix Part IV, "Official Use Only" has been prepared in draft incorporating the procedures presently set forth in Bulletin 2101-14 "Protection of Limited Official Use Information" and with certain changes in the substance. Proposed revision has been furnished to the Department of State for comment prior to circulation to Directors, Headquarters Offices and Division for comment or concurrence.

Eleven members of the Division of Security staff attended an Organization Development/Team Building meeting at Harpers Ferry, West Virginia on May 11, 12 and 13, 1980. The meeting was led by Mr. Bill Van Orman, an instructor with the Federal Executive Institute. Individual and team characteristics and leadership styles were analyzed and discussed.

ENCLOSURE A

OFFICE OF NUCLEAR REACTOR REGULATION

WEEKLY ITEMS OF INTEREST  
(Week Ending May 19, 1980)

Quad Cities

The Quad Cities plant superintendent is scheduled for trial in Federal court beginning June 16, 1980, in connection with criminal charges involving the plant security. The Government has been ordered to produce all written documents pertaining to NRC approval of the Quad Cities Security Plan. NMSS has the action.

The plant superintendent is continuing to perform in his normal capacity. The licensee had not made known any intended future course of action.

Shippingport LWBR

The NRR staff completed its review of the proposed Shippingport LWBR extended operation. Comments were provided to Admiral Rickover by letter dated April 30, 1980. ACRS considered and reported favorably on the proposed operation by letter dated May 1, 1980.

Essex Corporation

NRR has issued a letter to Essex Corporation directing it to stop all work under Contract No. NRC-04-79-209 immediately. This action was taken as a result of our discovery of apparent conflicts of interest. Essex had been reviewing licensee's control rooms for human factors and developing review guidelines and acceptance criteria. The conflicts or apparent conflicts arose out of Essex's subsequently contracting with several licensees to perform human factors reviews of their control rooms. Some of these contracts were with the same licensees whose control rooms Essex had previously reviewed for the NRC. We are developing plans to use other outside experts for this work.

ENCLOSURE B

### The Dorset Disaster

A book was published in the past few days that provides a fictional account of an unmitigated, ATWS-induced reactor meltdown. It is entitled "The Dorset Disaster," written by Alexander Sidar III and published by Grosset and Dunlap. The jacket describes the style of the book as follows:

"The Dorset Disaster is a highly authentic chronology of a runaway nuclear accident and the first days of its horrifying consequences. It is the first book to document fully what will happen if and when a reactor releases lethal doses of radiation. Set in rustic hills of Dorset, Connecticut, only fourteen miles from the New York State border, the scenario is riveting in its detail. It is a frightening, but quite realistic assessment of the risks we take.

"Within minutes of the reactor breakdown huge amounts of nuclear radiation begin to drift over southwestern Connecticut. Within forty-eight hours thousands are contaminated and millions are in shock. The inevitable panic, the chaos of evacuation and the hideous results of radiation are played against the objective reports from military, political and journalistic sources. The nuclear catastrophe at the Dorset plant--whether sabotage or accident--will have dire consequences not only for those areas immediately affected by the radiation but also for the economic and political future of the nation.

"The narrative is based on the best scientific projections available and interviews and documents from numerous experts, including the staff of the Nuclear Regulatory Commission and the Union of Concerned Scientists. The story is written as "fiction" and is complete with photographs, specially commissioned maps, diagrams and news articles. Scenes of courageous people and stories of resourcefulness give the book the immediacy of today's headlines."

Mr. Sidar talked to Dr. Mattson of NRR and members of his staff in early 1979 regarding NUREG-0460 and other staff reports on ATWS. The book makes considerable use of the technical facts gleaned from those discussions. Others acknowledged in the book are Herbert Kouts of BNL, Bob Pollard of UCS, Messrs. Bridenbaugh, Hubbard, Minor and Dr. Richard Webb.

### Millstone Unit 2

At 4:40 p.m. on May 8, 1980, Millstone Unit 2 began a shutdown as a result of the licensee declaring the Service Water System inoperable. Northeast Nuclear Energy Company (NNECO) discovered that 12 pipe supports for this system have safety factors less than two. This discovery was the result of the continuing pipe support review required by IE Bulletin 79-02. The design error resulted from the architectural engineer (Bechtel) using the OBE instead of the DBE in the seismic analysis for this system.

NNECO is modifying the Service Water System by adding pipe supports to reduce stresses to acceptable limits. The staff will keep abreast of this problem.

STATUS OF SHUTDOWN PLANTS  
(May 14, 1980)

		<u>Restart Date</u>
Arkansas 1	Maintenance	6/5/80
Beaver Valley	Refueling/Turbine Repairs	7/22/80
Brunswick 2	Refueling	Unknown
Cooper	Refueling	5/26/80
Crystal River 3	Refueling	6/1-15/80
Davis-Besse 1	Refueling	Unknown
Dresden 1	Chemical Cleaning	1981
Dresden 2	Maintenance	5/17/80
Fitzpatrick	Refueling	7/7/80
Fort Calhoun	Refueling	Unknown
GINNA	Refueling	5/21/80
Haddam Neck	Refueling	7/4/80
Hatch 1	Scram Recovery	5/14/80
Hatch 2	Maintenance	5/14/80
Humboldt Bay	Seismic Evaluation.	Unknown
Indian Point 1	ECCS	Unknown
Kewaunee	Refueling	6/21/80
Millstone 2	Seismic Modification	5/28/80
Monticello	Recirc. Pump Seal Repair	Unknown
Oconee 2	Refueling	6/14/80
Oyster Creek	Refueling	5/27/80
Palisades	Refueling	5/21/80
Peach Bottom 2	Refueling	7/10/80
Pilgrim 1	Refueling	5/14/80
Point Beach 2	Refueling	5/14/80
St. Lucie 1	Refueling, Maintenance	5/14/80
San Onofre	Refueling	5/31/80
Sequoyah	Startup Testing	August 1980
Surry 2	Refueling	Unknown
Three Mile Island 1	Order	Unknown
Three Mile Island 2	Accident	Unknown
Trojan	Refueling	6/4/80
Turkey Point 4	SG inspection	6/11/80
Yankee Rowe	Turbine Repair	October 1980
Zion 2	Refueling	6/14/80

ENCLOSURE B

# NRC TMI PROGRAM OFFICE WEEKLY STATUS REPORT

Week of: May 10-17, 1980

## Plant Status

Core Cooling Mode: Cyclic natural circulation in the "A" reactor coolant system (RCS) loop via the "A" once through steam generator (OTSG), steaming to the main condenser, and RCS loop-A and B cyclic natural circulation to reactor building ambient.

Available Core Cooling Modes: OTSG "B" to the main condenser; long term cooling "B" (OTSG-B); decay heat removal.

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

Backup Pressure Control Mode: Makeup system in conjunction with letdown flow (Emergency use only due to suspected leaks in the seal injection system).

Major Parameters (As of 0400, May 16, 1980) (approximate values)

Average Incore Thermocouples: 156°F

Maximum Incore Thermocouple: 192°F

RCS Loop Temperatures:

	A	B
Hot Leg	150°F	153°F
Cold Leg (1)	79°F	104°F
(2)	80°F	119°F

RCS Pressure: 80 psig (Heise)  
92 psig (DVM - controlling)

Pressurizer Temperature: 142°F

Reactor Building: Temperature: 79°F  
Pressure: -.83 psig (Heise)  
Water level: Elevation 290.5 ft. (8.0 ft. from floor) via decay heat system  
Elevation 290.6 ft. via penetration 401 manometer

## Environmental & Effluent Information

1. Liquid effluents from TMI-1 released to the Susquehanna River, after processing, were within the limits specified in Technical Specifications.
2. No liquid effluents were discharged from TMI-2.
3. Results from EPA monitoring of the environment around the TMI site were:
  - EPA environmental stations registered background levels for air particulate and water samples.



- Gas/Air (Kr-85) sample results during the period May 2 through May 9, 1980, were: Goldsboro - 23 pCi/m<sup>3</sup>, TMI Observation Center - 44 pCi/m<sup>3</sup>, Middletown - 22 pCi/m<sup>3</sup>, and Bainbridge - 26 pCi/m<sup>3</sup>. The EPA states that the Kr-85 background concentration in the vicinity of TMI to be between 20 and 40 pCi/m<sup>3</sup>. The air samples collected at the TMI Observation Center showed a slight increase (=4 pCi/m<sup>3</sup>) in Kr-85 concentration. This increase could be attributed to outgassing during the processing of water in the plant.
- Instantaneous direct radiation readings showed no levels above natural background being detected at any of the EPA monitoring locations during the period May 12 through May 15, 1980.

#### 4. NRC Environmental Data

- The West Screen House continuous air sample (HP-216) for the sampling period May 7 through May 15, 1980, has been delivered to the EPA Coordination Center for analysis.
- Results of the environmental TLD measurements for the period March 18 to April 30, 1980, indicate no gamma levels above natural background. Fifty-eight TLD's registered doses ranging from 0.09 mR/day to 0.18 mR/day. Average dose was 0.13 mR/day. These dose rates are consistent with natural background radiation in the TMI area.
- The licensee provided the following monthly inventory of Kr-85 releases for 1980: January - 80 Ci, February - 80 Ci, March - 63 Ci and April - 69. Total through April - 292 Ci Kr-85.

#### 5. Radioactive material and Radwaste shipments offsite were as follows:

- On Monday, May 12, 1980, a Unit 1 WECST sample was sent to Teledyne Isotopes, Westwood, New Jersey, for analysis.
- On Monday, May 12, 1980, a Unit 2 reactor coolant sample was sent to the Babcock and Wilcox (B&W) facility, Lynchburg, Virginia, for chemical and radiochemical analysis.
- On Tuesday, May 13, 1980, a Unit 2 sample smear and tape strip from make-up filter 5A housing were packaged and sent to B&W Research Center, Lynchburg, Virginia, for analysis.
- On Wednesday, May 14, 1980, Unit 2 gas samples, particulate and charcoal filters, and H-3 and C-14 samplers were sent to EG&G, Inc., Idaho Falls, Idaho, for analysis.
- On Wednesday, May 14, 1980, an EPICOR II Effluent Sample was sent to SAI, Rockville, Maryland, for analysis.
- Two Unit 2 waste shipments, LSA boxes and LSA 55 gallon drums, are on hold pending further licensee evaluation of the isotopic content of the compacted and uncompact waste.

6. EPICOR II Processing Status: (auxiliary building approximate quantities)

Amount processed this week:	25,000 gallons
Amount processed to date:	280,000 gallons
Amount to be processed:	166,000 gallons

Major Activities (Past and Present)

1. Reactor Coolant System (RCS) Pressure Reduction. On April 15, 1980, RCS pressure was reduced from 300 psig to 190 psig. The pressure was further reduced to 135 psig on April 29, 1980. The pressure was reduced to 90 psig on May 9, 1980. The primary system responded predictably to the pressure reductions. Pressurizer heaters have been turned off and the pressurizer cooled to primary system temperature. Both A and B loops continue to "burp" periodically in cyclic natural circulation.

2. Decay Heat Removal System Valves DH-V-1 and DH-V-171. The NRC TMI Program Office Staff has not yet approved the licensee's procedure to open Decay Heat System Valves DH-V-1 and DH-V-171. Approval to open the valves is contingent upon the formulation of procedures to address potential problems following the valve opening. Met-Ed will attempt to open DH-V-1 first. Attempts to open DH-V-171 will be initiated only if it has been determined that DH-V-1 failed to open. The two valves provide a parallel path from the RCS to the Mini Decay Heat Removal System.

3. Reactor Building Entry The first entry into the Unit-2 reactor building is scheduled for 5:00 p.m. on May 20, 1980. The Mine Safety and Appliances Company (MSA) Model 401 breathing devices will be used by the entry team in lieu of the Bio Pak 60P. The stay time inside the reactor building has been decreased to 15 minutes to provide a safety factor due to the duration of the air supply. Entry team members used the MSA breathing units in tests involving stressful physical activity to verify the duration of the air supply. Both members of the entry team were able to use the breathing units for a period exceeding 30 minutes.

Purging of the air lock in preparation for the entry will commence at 8:00 a.m. on Monday, May 19, 1980. The licensee estimates that less than 10 mCi of Kr-85 will be released during this purging operation. Following the entry into the Unit-2 reactor building the licensee estimates that approximately 25 Ci of Kr-85 will be released when the two man entry team makes their egress from the reactor building and air lock. The TMI Program Office staff will be monitoring these activities.

4. Long Term Spent Resin Storage Facility Forty-four of the sixty spent resin storage cells in the A Long Term Waste Storage Module are filled with spent resin liners. Cement was poured around the cells in the B module on Wednesday, May 14, 1980. The B module is scheduled for completion on August 5, 1980. Based on the current

liner generation rate and the B module construction schedule, it does not appear that EPICOR II operations will be interrupted for lack of spent resin storage space.

To increase the storage capacity of the A module, the licensee intends to commence stacking 4 x 4 liners, two per storage cell. The storage cells are limited to a maximum curie content of 200 curies per cell. Based on this restriction, the licensee has calculated that the 27 cells currently housing single 4 x 4 liners can be consolidated by stacking to provide 10 additional spaces. Additionally, at least 10 more storage cells will become available after liners generated by Unit 1 are shipped off site.

The licensee is preparing a report which addresses the projected liner generation rates by the EPICOR II and the submerged demineralizer system versus the spent resin storage capacity. Currently, plans exist for a total of six, 60 cell capacity storage modules.

5. Union of Concerned Scientists (UCS) Report on Containment Venting  
A joint press conference with UCS and Governor Thornburgh was held on May 14, 1980, to release the UCS report and recommendations. The recommendation can be summarized as follows:

- a. "UCS has concluded that direct radiation induced health effects from exposure to Kr-85, even from the Met-Ed/NRC proposed venting, would be absent."
- b. UCS recommends against implementation of the existing Met-Ed/NRC venting because of the psychological stress and documented magnitude of present levels of stress in the population living around the plant.
- c. Two modified venting schemes should be considered:
  - (1) "Installing an incinerator to heat the krypton prior to release..., dispersing it over a wider area."
  - (2) "Channelling the gas...into the air before release by using a coated nylon tube held aloft by a tethered, unmanned balloon..."
- d. NRC should review the cryogenic and selective absorption options to see if they can be implemented within a year.

Governor Thornburgh will release his recommendations on May 16, 1980.

Meetings Held with Public Officials and Interested Groups

1. May 12, 1980, J. Collins participated in the graduation ceremony for the Community Monitoring Program held at the Penn State Capitol Campus.
2. On May 13, 1980, the Atomic Safety and Licensing Board conducted hearings concerning the Restart of TMI-1 at the Federal Building in Harrisburg.
3. On May 14, 1980, T. Elsasser and G. Sanborn attended Governor Thornburgh's press conference which was held to discuss the UCS report to the governor on krypton venting.
4. On May 16, 1980, T. Elsasser attended Governor Thornburgh's press conference. The press conference was held to present the Commonwealth's reply to the Environmental Assessment.

Future Meetings

1. On June 9, 1980, J. Collins will meet with the Pennsylvania Arson Association in Lancaster to discuss clean-up operations at TMI-2.
2. J. Collins will present an invited paper entitled, "NRC Involvement During the TMI Accident" at the 1980 Annual Meeting of the American Nuclear Society, June 8-13, 1980, in Las Vegas, Nevada.



OFFICE OF STANDARDS DEVELOPMENT

IMPORTANT EVENTS FOR THE WEEK ENDING MAY 16, 1980

1. Radiation Policy Council Meeting (May 14, 1980): At the first meeting of the Radiation Policy Council on May 14, 1980, the principal topics raised were related to procedural issues on the functioning of the Council. A main issue was mechanisms to ensure full and substantive public input into Council activities. Various alternatives including regional public meetings to solicit input, and public participation on the Council were discussed. Public membership could modify the Council's status to a government advisory group rather than an interagency body. This, together with difficulties in selecting representative public members from the various "publics" (labor, industry, public interest groups), made this alternative less operable than other alternatives. Although no vote was taken, the approach which may be adopted would involve regional public meetings to solicit input on agenda topics, a full public record of Council meetings, and public attendance at meetings, as well as the more formal solicitation of written comments and suggestions for agenda items.

A working group will be convened to prepare an agenda of priority topics for Council consideration. NRC will be represented on this group.

Immediate interagency working groups are planned to be formed to prepare issue papers for Council consideration on high priority issues. NRC is to be represented on all four groups. Participation in the fourth of these groups should require little more than providing already compiled information, but the first three may involve considerable staff effort.

1. Occupational Exposure Regulations-(Occupational Safety and Health Administration - DOL, Chair)  
Members: Commerce, Energy, Defense, Health and Human Services (HEW), Transportation, Veteran's Administration, NRC
2. Controllability of Naturally Occurring Radioactivity (Radon)  
(Environmental Protection Agency, Chair)(Emphasis on radon is explicit, other topics later)  
Members: Housing and Urban Development, Energy, Commerce, Justice, Interior, Health and Human Services (HEW), and NRC
3. Low-Level Radioactive Waste from Medical and Research Institutions  
(Health and Human Services, Chair)  
Members: Defense, Energy, Federal Emergency Management Agency, EPA, National Science Foundation, Transportation, NRC
4. Compilation of Directory of Federal Radiation Activities and Responsibilities  
(Chair to be selected)  
Members: All Council members and National Aeronautics and Space Administration

The occupational exposure group may help accelerate the schedule for the joint EPA/NRC/OSHA public hearings on occupational radiation standards. The second and third working groups are related to priority issues that we have submitted to the Council: (1) regulation of naturally-occurring and accelerator-



produced radioactive materials, NARM, and (2) the definition of low levels of radioactivity and doses which represent insignificant levels for unrestricted release or use of materials and exemption from regulation, so-called de minimis levels. However, these working groups will address these topics narrowly and not broadly as we had proposed.

[Contact: Robert Minogue (443-5936)]

2. On May 12 staff members from SD, RES, and NRR attended a presentation at U.S. Coast Guard Headquarters of the paper, "Research Work Performed on Unconfined Hydrocarbon Air Mixture Explosions in Western Europe: An Overview," by Dipl.-Ing. Georg Johannsohn, Bremer Gesellschaft Fur Sicherheitsforschung Und Entwicklung m.b.H. This programmatic review briefly discussed research on unconfined vapor cloud explosions underway or planned in the Federal Republic of Germany, Great Britain, France, Norway, and the Netherlands. Part of this research is concerned with the effects of unconfined vapor cloud explosions on nuclear power plants. Also under study are hazards to nuclear power plants from tactical weapons, including nuclear weapons, as a consideration in the evaluation of underground siting. Motivation for consideration of the effect of vapor cloud explosions on nuclear power plants arises from concern about transportation accidents, colocation of chemical works and power plants in heavily industrialized areas of limited extent, from the possible use of nuclear reactor heat as the primary energy source for coal gasification.

[Contact: N. A. Eisenberg (443-5946)]

3. NRC staff was invited to a meeting on May 15, 1980 of the Department of Interior, Fish and Wildlife Service (DOI/F&WS) to discuss the use by F&WS and other Federal agencies of the 1980 version of Habitat Evaluation Procedures (HEP-80). Representatives of SD, OELD and NRR attended.

Use of these procedures will be required of all Federal "Action Agencies" by regulations under the Fish and Wildlife Coordination Act (FWCA) which are scheduled to be final by April 1981. Although the applicability of this to NRC has never been resolved, NRC is listed as an "Action Agency" in present drafts of the regulations and the published material distributed at the meeting contained a "Policies Established" section which states: "HEP-80 will be utilized on ... projects licensed by the Federal Energy Regulatory Commission (FERC) and the Nuclear Regulatory Commission (NRC) in which planning starts begin after May 1980."

NRR is considering reviewing HEP-80 to determine if its use in licensing assessments would be of value and what impacts, if any, such use would have on the review process. OELD/SD will continue, on a time available basis, to discuss the need for developing a MOU with the F&WS on the FWCA.

For further information contact R. Grill, EPSB, 443-5966.

Publications Issued During the Week of May 12-16, 1980

Reg. Guide 1.84, Rev. 16 - Design and Fabrication Code Case Acceptability  
ASME Section III Division 1 [Issued to reflect comments]

Reg. Guide 1.85, Rev. 16 - Materials Code Case Acceptability  
ASME Section III Division 1 [Issued to reflect comments]

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Items of Interest

Week Ending May 16, 1980

International Safeguards

Representatives from the Safeguards Division participated in an inter-agency meeting chaired by the State Department on May 14, 1980 to review the status of the activities necessary to put the US/IAEA Safeguards Agreement into force and identify those which could result in significant delays.

In anticipation of early Senate action, the update of the eligible facility listing, the resolution of outstanding security and classification issues, and the finalization of the reporting forms and their instructions need to be completed in a timely manner.

NRC's Materials Licensing Policies and Procedures

On May 5-7, 1980, members of the Material Licensing Branch, NMSS, briefed Mrs. Patricia Zuniga of the Mexican National Nuclear Safety and Safeguards Commission on NRC's materials licensing policies and procedures and its experience with certain types of licenses (e.g., megacurie pool irradiators).

Meeting of Officers of the American Society of Therapeutic Radiologists (ASTR).

On May 5, 1980, a member of the Division of Fuel Cycle and Material Safety attended a meeting in New York City of officers of the American Society of Therapeutic Radiologists (ASTR). Dr. Walker discussed (a) NRC's plan to issue an order requiring installation of a radiation monitor in each teletherapy room, (b) the revision of NRC's model ALARA program for medical licensees and (c) the final misadministration rule. The ASTR representatives thought that having a radiation monitor in each teletherapy room was a good idea. Although they had certain objections to the original model ALARA program, they were somewhat pleased to learn NRC had revised the model program after discussions with members of the medical community. The ASTR representatives were most upset with the misadministration rule, which they see as an unwarranted intrusion into the physician-patient relationship.

NFS-West Valley and AFR Fuel Storage Briefings

Fuel Cycle staff members briefed Chairman Ahearne on the status of the NFS-West Valley site and recent DOE actions related to proposed away-from-reactor (AFR) spent fuel storage. The NFS briefing covered DOE initiatives in response to the congressional directive in the DOE FY 80 appropriations bill and staff actions on continued safety assessment of the NFS high level liquid waste storage system. The discussion on AFR spent fuel storage focused on recent DOE studies carried out in response to congressional requests.

ENCLOSURE D

- n. PNO-III-80-90 Davis-Besse Unit 1 - Unplanned Airborne Radioactivity Release
  - o. PNO-III-80-91 Zion Unit 2 - Loss of Refueling Cavity Water to the Containment
  - p. PNO-III-80-92 Davis-Besse Unit 1 - Craftsmen Union Jurisdictional Strike
  - q. PNO-III-80-93 Monticello - Recovery From a Shutdown Longer Than 2 Days
  - r. PNO-IV-80-21, -21A, & -21B Arkansas Nuclear One, Unit 1 - Reactor Coolant Pump Seal Failure
3. The following IE Bulletins were issued:
- a. IE Bulletin 80-12, "Decay Heat Removal System Operability," was issued on May 9, 1980 to each pressurized water reactor with an operating license.
  - b. IE Bulletin 80-13, "Cracking in Core Spray Spargers," was issued on May 12, 1980 to all boiling water reactors with an operating license.
4. The following IE Circulars were issued:
- a. IE Circular 80-11, "Emergency Diesel Generator Lube Oil Cooler Failures," was issued on May 13, 1980 to all power reactor facilities with an operating license or construction permit.
  - b. IE Circular 80-12, "Valve-Shaft-To-Actuator Key May Fall Out of Place When Mounted Below Horizontal Axis," was issued on May 14, 1980 to all power reactor facilities with an operating license or construction permit.
5. The following IE Information Notice was issued:
- a. IE Information Notice 80-21, "Anchorage and Support of Safety-Related Electrical Equipment," was issued on May 16, 1980 to all power reactors with an operating license or construction permit.

OFFICE OF NUCLEAR REGULATORY RESEARCH

Important Items - Week Ending May 16, 1980

Signing of Studsvik DEMO-RAMP-II Project Agreement

The Studsvik DEMO-RAMP-II Project Agreement, signed on behalf of the NRC by the Executive Director for Operations, in a joint international safety research program directed to the study of the pellet/cladding interaction (PCI) failure mechanism in fuel rods under power transient conditions. The proposed tests, to be performed on irradiated BWR fuel rods in the Studsvik test reactor, will provide needed data for evaluating analytical models used by NRC in regard to the issue of PCI failures associated with DBA- or ATWS-related power ramps:

Execution of Cooperative Agreement With the Power Reactor and Nuclear Fuel Development Corporation of Japan (PNC) For SIMMER Code Calculations of Fast Reactor Accidents

A narrow-scoped agreement covering SIMMER Code calculations of the mechanical energy generated in a MONJU hypothetical core disruptive accident has been signed between NRC and PNC. The three calculation cases included under the agreement represent an extension of the scope of work on SIMMER Code applications, which the NRC is currently sponsoring at LASL as part of its SIMMER Code Development Program. This agreement, which extends to the end of September 1980, calls for a financial contribution by PNC to NRC to cover the full incremental costs involved in the performance of the three specified calculations.



OFFICE OF THE EXECUTIVE LEGAL DIRECTOR

ITEMS OF INTEREST

WEEK ENDING MAY 16, 1980

Douglas Point Nuclear Generating Station, Units 1 and 2

On May 14, 1980, the Potomac Electric Power Company, the applicant, informed the ASLB that it was withdrawing its application for early site review and that it was appropriate for the ASLB to terminate this proceeding.

Three Mile Island Nuclear Station, Unit No. 1

On May 16, 1980, the Commission issued a Memorandum and Order in response to a petition of the Consumer Advocate of Pennsylvania for financial assistance to intervenors. The Commission declined funding in light of advice received from the Comptroller General and its reading of the legislative history associated with FY 1980 appropriation legislation. Accordingly, for FY 1980 the Commission reversed its earlier position, set forth in the August 9, 1979 "Order and Notice of Hearing," that it would consider providing financial assistance to parties.

Edlow International Company

On May 16, 1980, the Commission issued a Memorandum and Order (CLI-80-18) in which it found that license applications to export materials and components to India for use in the Tarapur Atomic Power Station did not meet the criteria for issuance set forth in the Atomic Energy Act. Accordingly, the Commission referred the license applications to the President.

Three Mile Island Nuclear Station, Unit No. 1

On May 16, 1980, the Commission issued a Memorandum and Order (CLI-80-16) in which it dealt with two certified questions from the ASLB. The Commission ruled: 1) the provisions of 10 CFR 50.44 should not be waived or exceptions made in this proceeding where there has been a prima facie showing made under 10 CFR § 2.758 that hydrogen gas generation during the TMI-2 accident was well in excess of the amount required under 10 CFR 50.44 as a design basis for the post-accident combustion gas control system for TMI-1; and 2) post-accident hydrogen gas control could be an issue in this proceeding where post-accident hydrogen gas control was perceived to be a serious problem and was in fact a problem during the TMI-2 accident.

ENCLOSURE G

ITEMS OF INTEREST  
OFFICE OF INTERNATIONAL PROGRAMS  
WEEK ENDING MAY 16, 1980

INTERNATIONAL COOPERATION

NEA Special Meeting on Siting

The OECD Nuclear Energy Agency has formally announced a special meeting on June 10 and 11 in Paris on the subject of nuclear power plant siting. The meeting, which will be held in conjunction with the regular meeting of the CSNI Sub-Committee on Licensing, is in response to the great interest among European and Japanese authorities in the prospective revision of U.S. siting policy and practice. The meeting is expected to provide an opportunity for a review of the fundamental issues underlying the licensing of power reactor sites. Presentations will be made by attendees from the FRG, Italy, Japan, and the U.S., followed by in-depth discussions of the rationale underlying siting policies with regard to the overall nuclear safety approach in OECD countries.

In connection with the meeting, the NEA Secretariat, at the request of the NRC staff, has requested member countries to provide information on the population density and distribution around existing and potential nuclear power plant sites.

NRC-British H&SE Exchange Arrangement

IP this week received for consideration a revised version of the NRC-U.K. Health and Safety Executive information exchange renewal Arrangement. Among other changes suggested and questions raised, the British have asked what exactly is covered by the non-proliferation language NRC has adopted in its international agreements (per SECY 79-95A). The staff has requested guidance from the Executive Branch in responding since this has never been specified.

Foreign Assignees

- Mr. Edilberto Cabalfin, from the Philippine Atomic Energy Commission, arrived at NRC on May 15th to begin a six-month assignment in the Radiological Branch of NRR.
- EDO has issued the official invitation letter inviting David C. Y. Huang, from the Taiwan Atomic Energy Council, to a six-month assignment with the NRR/TMI Program Office.

Foreign Visitors to NRC

On Monday, Mr. Alf Larsson, Head of the Waste Management Division of the Swedish Nuclear Inspectorate (SKI), met with J. B. Martin of WM/NMSS to discuss issues of mutual concern.

On Wednesday and Friday, Ambassador Roger Kirk, U.S. Resident Representative to the IAEA, met with Chairman Ahearne, Commissioners Collinsky, Hendrie, and Bradford, and J. R. Shea and J. B. Devine of IP to discuss current nuclear topics.

\* Foreign Reports

---

\* Deleted from PDR copy.

EXPORT/IMPORT AND INTERNATIONAL SAFEGUARDSExport License Application for Two Reactors to Taiwan

IP has received an export license application from Westinghouse Electric Corporation for two power reactors to Taiwan (Units 7 and 8). An information paper is being prepared and will be forwarded to the Commission early next week. General Electric Company, on March 10, had submitted an application for export of the same reactors.

Revisions to 10 CFR Part 810

IP is reviewing a proposed rule to revise DOE's 10 CFR Part 810 regulations "Unclassified Activities in Foreign Atomic Energy Programs." The amended regulations will, inter alia, reflect changes made by the NNPA to Section 57b of the Atomic Energy Act and incorporate the additional criteria mandated by the NNPA to govern the export of sensitive nuclear technology for peaceful purposes.

Physical Security and SafeguardsInteragency Meeting Regarding the US/IAEA Safeguards Agreement

IP staff attended a meeting on May 15 at the State Department with representatives from NMSS, DOE, State and ACDA to identify and discuss issues that need to be addressed in connection with the "U.S. offer." The principal focus was the need to come to agreement on the form and content of the eligible facility list that is required to be provided to the IAEA as part of the agreement commitment. NRC staff (Safeguards Implementation Group/SAIG) plans to meet on the matter on May 19, with a followup meeting with the interagency group scheduled for May 22.

OFFICE OF STATE PROGRAMS

ITEMS OF INTEREST

WEEK ENDING MAY 16, 1980

Program Development

Frank Young, NRC liaison with the Office of Coastal Zone Management, met at OCZM Tuesday with representatives of other Federal agencies to review the Connecticut CZM program.

12th Annual National Radiation Control Conference

The Conference of Radiation Control Program Directors, Inc., will hold its 12th annual national meeting from May 18 to May 22 at the Galt House in Louisville, Kentucky. More than 300 representatives of Federal, State, and local radiation control agencies, professional organizations, industry, and others concerned with the use and control of radiation are expected to attend.

The program will cover all aspects of radiation control but will concentrate on problems of low-level waste, emergency planning and preparedness, and radiation control in medical radiology facilities. Highlighting the opening session on Sunday, May 18, will be a keynote address by Dr. Margaret N. Maxey, Assistant Director, Energy Research Institute, Columbia, South Carolina, and a talk on the recently established Radiation Policy Council by Carl R. Gerber, Director of the Radiation Policy Council Staff. Professor Cora Marrett of the University of Wisconsin, a member of the Kemeny Commission, will give a talk on May 22 on the Commission's report. NRC staff members scheduled to speak at the Conference are: Wayne Kerr (SP), Roger Mattson (NRR), and Shelly Schwartz (SP/FEMA).

Transportation Surveillance Program

The State of Maryland has signed a contract with NRC and DOT to undertake the monitoring of the transportation of radioactive materials within its borders. Negotiations are being concluded for a similar contract with the State of Nevada. (Other States currently under contract are: Florida, Georgia, Illinois, Michigan, South Carolina, and Washington.)



OFFICE OF MANAGEMENT AND PROGRAM ANALYSIS

Items of Interest

WEEK ENDING MAY 16, 1980

Abnormal Occurrence Report

Sent to Director for coordination the Commission paper and report to Congress on abnormal occurrences between January and March 1980.

Information for Commissioner Gilinsky

With the cooperation of several other offices, prepared backgrounder for Mr. Gilinsky's trip to New York City.

Office of the Controller

Items of Interest

Week Ending May 16, 1980

FY 1980 Reprogramming

Written approval was received from the Udall Committee. It is expected that the Hart Committee will respond by early next week.

FY 1980 Supplemental

The Senate Appropriations Subcommittee mark up is now scheduled for next week.

FY 1981 Budget

The House Appropriations Committee plans to mark up the last week of May.

FY 1980 Travel

The OMB staff has informed us that as a result of the EDO's travel appeal letter, of May 1, 1980, an additional \$625K is being added to NRC's travel ceiling.

OFFICE FOR ANALYSIS AND EVALUATION OF OPERATIONAL DATA

ITEMS OF INTEREST

WEEK ENDING MAY 16, 1980

Discussions were held on May 8 at the Nuclear Safety Analysis Center (NSAC), Palo Alto, California, regarding the development of a formal agreement for cooperation between NSAC, INPO, and the NRC in the collection, analysis, and feedback of reactor operational experience. A draft of such an agreement was proposed and is now being reviewed by NSAC and INPO. If the comments resulting from these reviews indicate that a meaningful formal agreement can be achieved, it is anticipated that the agreement will be finalized near the end of June 1980.

CALENDAR OF SPEAKING ENGAGEMENTS

May 21 G. D. Calkins, SD, will speak on the "NRC Decommissioning Program" at an Atomic Industrial Forum Symposium in San Francisco, California.