

November 2, 2000

For: The Commissioners  
 From: John W. Craig, Assistant for Operations, Office of the EDO  
 Subject: SECY-00-0215 WEEKLY INFORMATION REPORT - WEEK ENDING OCTOBER 27, 2000

**Contents**

- Nuclear Reactor Regulation
- Nuclear Material Safety and Safeguards
- Nuclear Regulatory Research
- Incident Response Operations
- General Counsel
- Administration
- Chief Information Officer
- Chief Financial Officer
- Human Resources
- Small Business & Civil Rights
- Enforcement
- State and Tribal Programs
- Public Affairs
- International Programs
- Office of the Secretary
- Region I
- Region II
- Region III
- Region IV
- Executive Director for Operations
- Congressional Affairs
- \*No input this week

**Enclosure**

- A
- B
- C
- D
- E\*
- F
- G
- H\*
- I\*
- J\*
- K
- L\*
- M
- N
- O
- P\*
- P
- P
- P
- Q\*
- R\*

**/RA/**

John W. Craig  
 Assistant for Operations, OEDO

Contact: T. Bergman, OEDO

**WEEKLY INFORMATION REPORT - WEEK ENDING OCTOBER 27, 2000**

The Weekly Information Report is compiled by the Office of the EDO and includes highlights of Headquarters and Regional Office activities.

Contact: T. Bergman, OEDO by E-mail: tab@nrc.gov.

**ENCLOSURE A**

Office of Nuclear Reactor Regulation  
 Items of Interest  
 Week Ending October 27, 2000

**Reactor Oversight Process Initial Implementation Evaluation Panel**

On October 2, 2000, the staff published a notice in the Federal Register announcing the establishment of the Reactor Oversight Process Initial Implementation Evaluation Panel (IIEP). The IIEP has been formed in response to Commission direction in the Staff Requirements Memorandum from SECY-00-049, "Results of the Revised Reactor Oversight Process Pilot Program." The IIEP will function as a cross-disciplinary oversight group to independently monitor and evaluate the results of the first year of initial implementation of the Reactor Oversight Process. On October 17, 2000, the staff filed the IIEP charter with the General Services Administration's Committee Management Secretariat, Library of Congress, and U.S. Nuclear

Regulatory Commission's (NRC's) Congressional oversight committees, including the Subcommittee on Energy and Power and the Subcommittee on Clean Air, Wetlands, Private Property and Nuclear Safety.

The first meeting of the IIEP is scheduled for November 1-2, 2000. A Federal Register Notice and NRC Press Release announcing the first meeting was issued on October 18, 2000.

Loren Plisco, Director, Division of Reactor Projects, Region II, will serve as the IIEP Chairman and John Monninger, Technical Assistant, Office of Nuclear Reactor Regulation (NRR), will serve as the designated Federal Officer. The remaining panel members include:

A. Randolph Blough - NRC, Region I  
R. William Borchardt - NRC, Office of Enforcement  
Kenneth Brockman - NRC, Region IV  
Steve Floyd - Nuclear Energy Institute  
David Garchow - PSEG Nuclear LLC  
Richard Hill - Southern Nuclear Operating Company  
Rod Krich - Commonwealth Edison Company  
Robert Laurie - California Energy Commission  
David Lochbaum - Union of Concerned Scientists  
James Moorman, III - NRC, Region IV, Senior Resident Inspector  
Steven Reynolds - NRC, Region III  
A. Edward Scherer - Southern California Edison Company  
James Setser - Georgia Department of Natural Resources  
James Trapp - NRC, Region I, Senior Reactor Analyst

### **NRC Regulatory Issue Summary 2000-18, Guidance on Managing Quality Assurance Records in Electronic Media Dated October 23, 2000**

The NRC issued this regulatory issue summary (RIS) to provide guidance on managing quality assurance (QA) records in electronic media. This RIS does not supersede or revise existing guidance or abrogate the guidance in Regulatory Guide (RG) 1.88, Revision 2, or RG 1.28, Revision 3. It does not provide guidance on submitting electronic records to the NRC as required by Section 50.4(c) of Title 10 of the *Code of Federal Regulations* (10 CFR 50.4(c)).

The guidance in this RIS is intended to provide, for those licensees with QA programs, a way to satisfy the requirements for the maintenance of QA records. However, the guidance can also be applied to the record keeping and maintenance requirements present in other parts of the regulations that specify that storing records in the form of electronic media is acceptable.

This RIS does not create any new or changed NRC requirements or staff positions, and it requires no specific action or written response. Any action on the part of addressees to use electronic media for managing QA records is strictly voluntary.

### **NRC Regulatory Issue Summary 2000-19, Partial Release of Reactor Site for Unrestricted Use Before NRC Approval of the License Termination Plan Dated October 24, 2000**

The NRC issued this [regulatory issue summary](#) to inform addressees of (1) pending rulemaking action to standardize the process for allowing a licensee of an operating facility, or a facility which has entered into decommissioning, to release part of its reactor facility or site for unrestricted use before receiving NRC approval of its license termination plan (LTP) ("partial site release") and (2) the staff's plans for handling requests for partial site releases until rulemaking on the subject can be completed.

### **The National Organization of Test, Research and Training Reactors Annual Meeting**

The National Organization of Test, Research and Training Reactors held its annual meeting from October 18 through 20, 2000 at North Carolina State University. The meeting was attended by approximately 120 non-power reactor licensees, contractors and industry representatives. On October 18, the NRC staff presented operator licensing results and issues, license transfer requirements, the allegation program, enforcement program changes, 10 CFR 50.59 changes, the incident investigation program, and transportation requirements for non-power reactors. Additional topics included the University of Texas reflector accumulation of hydrogen gas, and an unplanned radiation field event and a failure to remove fuel to allow replacement of a control rod event at the University of Missouri-Columbia. Following the staff's plenary presentations, breakout sessions were conducted to facilitate further discussions on all topics.

### **Reactor Oversight Process**

On October 17-19, 2000, a Senior Reactor Analyst Counterpart Meeting was held in Region III. NRR's Inspection Program Branch (IIPB) staff attended the meeting which included a welcome by the Regional Administrator, presentations and discussions from Probabilistic Safety Assessment Branch (SPSB) risk analysts, exchange of information and experiences, identification of issues needing further work and discussion of good practices for potential inclusion into the program guidance.

IIPB staff participated in an international meeting on Safety Performance Indicators co-sponsored by the Nuclear Energy Agency (NEA) and the International Atomic Energy Agency (IAEA) in Madrid, Spain, from October 17 through 19, 2000. There were 22 presentations on the use of Performance Indicators by various regulatory and industry organizations from around the

world. These presentations demonstrated a variety of approaches to the subject. On the last day of the meeting, the Chief of the IIPB chaired a round table discussion on the possibility of establishing international cooperation in the development of an international set of indicators appropriate for use by regulatory bodies. There was sufficient interest in this concept that NEA and IAEA will continue ongoing efforts to develop the concept further.

The Chief of IIPB participated in the 20th meeting of the Committee on Nuclear Regulatory Activities (CNRA) Working Group on Inspection Practices (WGIP) in Madrid, Spain on October 16-17, 2000. The purpose of WGIP is to provide a forum for exchange of information related to inspection practices and development of commendable practices for consideration by its member organizations.

### **Public Meeting with NEI on the Maintenance Rule**

On Tuesday, October 24, 2000, the Division of Inspection Program Management (DIPM) hosted a public meeting in One White Flint North, NRC Headquarters, Rockville, Maryland, with the Nuclear Energy Institute (NEI). The purpose of the meeting was to discuss issues regarding the revised [10 CFR 50.65](#), the maintenance rule. The focus of the meeting was on implementation of the new paragraph (a)(4). Discussions touched on the agenda for NEI's Maintenance Rule Workshop scheduled for November 30 - December 1, 2000, the continuing difficulties with the various definitions of unavailability, and DIPM's (a)(4) Rollout Plan. The staff presented the "Simplified 50.65(a)(4) Oversight" flowchart, which is part of the current draft of the reactor oversight program's inspection procedure IP71111.13, "Maintenance Risk Assessment and Emergent Work Control." Issues relating to the relationship between (a)(4)-required risk assessments and [10 CFR 50.59](#) reviews were also discussed.

### **Unicom and PECO Merged to Form Exelon**

On October 20, 2000, Unicom Corporation and PECO Energy Company merged to form Exelon Corporation. The NRC approval was issued on October 5 and the final regulatory approval needed, from the Securities & Exchange Commission, was received on October 19, 2000. Exelon is now the parent company of Commonwealth Edison and PECO Energy (which owns half of AmerGen) and is therefore the largest U.S. nuclear generating company, with 17 operating units, 4 decommissioned units, and partial ownership of 2 units. Corbin McNeil, the CEO of PECO is now CEO of Exelon. Oliver Kingsley, the CNO of Commonwealth Edison's Nuclear Generation Group has obtained the added responsibility of being the CNO of PECO Energy. The transfer of the licenses from ComEd and PECO to Exelon is expected in January 2001.

### **Grand Gulf Nuclear Station (GGNS)**

A public meeting was held at NRC headquarters in Rockville, Maryland on Tuesday, October 24, 2000, between the NRC staff and Grand Gulf Nuclear Station (GGNS) personnel. The meeting was held at the request of the licensee to continue discussions with the staff on the proposed testing of Kaowool fire barrier material used at the GGNS facility to meet regulatory requirements for protection of post-fire safe shutdown equipment. This meeting was held as a follow-up to a previous meeting, held on September 21, 2000, during which GGNS presented a general outline of its proposed test program, including factors determining test duration, data evaluation methodology, and exceptions to testing criteria specified in [Generic Letter \(GL\) 86-10, Supplement 1](#). GGNS had requested these meetings to provide the opportunity for discussion of their test plan with the staff, and to gain the staff's input and general agreement with the testing protocol and objectives of the effort.

The GGNS plan for resolution of the Kaowool issue includes a proposed full scale fire test designed to determine the actual fire resistance rating of the Kaowool fire barrier configurations specifically used at the GGNS facility. During the October 24, 2000 meeting, GGNS personnel provided a detailed description of the criteria for selection of bounding test configurations for Kaowool material used as fire barriers outside the primary containment. The presentation included photographs of the as-installed fire barriers at GGNS, and discussions with the staff of each Kaowool configuration that has been selected for the full scale fire test. The test for Kaowool configurations used as fire barriers outside containment is currently scheduled for early December 2000.

GGNS also presented the general approach that will be taken to qualify Kaowool materials installed as radiant energy shields inside the primary containment structure. This effort, although similar in approach to qualification of Kaowool installations outside containment, is expected to require a separate full scale fire test tentatively scheduled for the first quarter of 2001.

GGNS emphasized that compensatory measures, consisting of hourly fire watches and remote cameras, as required by the GGNS Fire Protection Program for inoperable fire barriers including the radiant energy shields inside containment, have been established and will remain in effect until the Kaowool fire barrier issue has been resolved.

### **Conference Call with FEMA on EP at Decommissioning Plants**

On October 11, 2000, NRR staff participated in a telephone conference call with the Federal Emergency Management Agency ([FEMA \*\*EXIT\*\*](#)) to continue discussions on emergency preparedness (EP) requirements at decommissioning nuclear power plants. During the discussion, FEMA indicated they were inclined to agree with the NRC staff position that preplanned EP would probably not make much difference in the overall effectiveness of the emergency response to an earthquake of such magnitude to rupture a spent fuel pool. FEMA also agreed that 10 to 12 hours should be adequate to make necessary notifications, formulate protective action recommendations and initiate an evacuation for an event such as the cask drop. FEMA stated that it is also reasonable to assume that a licensee, through the existing Federal Radiological Emergency Response Plan with NRC acting as Lead, could obtain the full benefits of our nations resources and assets to respond to and mitigate a spent fuel drain down accident within 36 hours of the event initiation. Overall, FEMA made a strong statement that it believes some level of offsite EP with associated training and drills will still need to be maintained as long as the zirc fire scenario is possible.

Office of Nuclear Material Safety and Safeguards  
Items of Interest  
Week Ending October 27, 2000

### **Preliminary Safety Evaluation Report and Certificate of Compliance Transmitted to Holtec for HI-STAR Amendment 2**

On October 20, 2000, the NRC transmitted a copy of the preliminary Safety Evaluation Report (SER) and Certificate of Compliance (CoC) Amendment 2 to the HI-STAR 100 Cask System to Holtec for review and identification of any inaccuracies and omissions. The amendment application was submitted on August 4, 2000, and will give cask users more flexibility in designing and constructing the cask storage pads. Specifically it will allow the Dresden Nuclear Power Station to use an existing cask pad that does not meet the existing CoC compressive strength requirements. After the NRC finalizes the SER and CoC, Amendment 2 to the HI-STAR cask system will proceed with rulemaking following the completion of Amendment 1, which is currently in rulemaking.

### **Meeting with Holtec on Amendment 1 to HI-STORM 100**

The Nuclear Regulatory Commission staff met with Holtec to discuss Amendment 1 to the HI-STORM 100 Cask System. The amendment request includes a number of new multi-purpose canister basket designs to accommodate higher density fuel loading (32 pressurized water reactor assemblies), damaged fuel and fuel debris, approval for non-fuel hardware, expanded fuel parameters, a new HI-STORM 100 overpack which will be shorter to allow easier access through some existing reactor facility doors, a high-seismic cask design, revised or streamlined cask pad technical specifications, approval to store high burn-up fuel up to 68,200 MWD/MTU, approval for convection credit in the thermal analysis, and approval for regionalized fuel loading credit in the shielding analysis.

### **Nuclear Regulatory Commission Approves NAC-UMS Cask Design**

The Nuclear Regulatory Commission published in the Federal Register a final rule adding the NAC Universal Storage System (NAC-UMS) cask design to the list of approved spent fuel storage casks (65 FR [EXIT](#) 62581; October 19, 2000). This amendment allows the holders of power reactor operating licenses to store spent fuel in this approved cask system under a general license.

### **Staff Participates in First Meeting of Barnwell Blue Ribbon Panel**

On October 20, 2000, a Division of Waste Management staff member participated in the first meeting of a panel formed by the state of South Carolina to review the Environmental Radiological Performance Verification (ERPv) of the Barnwell site. The purpose of the ERPv, which was prepared by Chem-Nuclear Systems, is to demonstrate that concentrations of radionuclides which may be released to the general environment will not result in an annual dose exceeding the [10 CFR Part 61](#) performance objectives (e.g., 25 mrem per year whole body dose). The purpose of the first meeting was to tour the Barnwell facility and to receive an overview of the ERPv. The panel consists of eight members with backgrounds in hydrology, health physics, risk assessment, geology, and environmental engineering. Final comments from the panel are to be sent to the South Carolina Department of Health and Environmental Control in mid-January.

### **Department of Energy Holds Fourth Annual Radioactive Waste Tank Closure Workshop**

On October 17-18, 2000, staff from the Division of Waste Management (DWM) attended the Fourth Annual Department of Energy (DOE [EXIT](#)) Radioactive Waste Tank Closure Workshop. These workshops are held every year to discuss the status of tank closure activities at five DOE sites, share experiences, and address specific technical, programmatic, and regulatory issues regarding tank closure. This year's workshop was held at the West Valley Demonstration Project. Attendees included DOE and contractor personnel, state and federal regulators, stakeholders, tribal group representatives, and the National Academy of Sciences. DWM staff participated in the discussions and presented a summary of the Nuclear Regulatory Commission review of the DOE-Savannah River methodology for determining that residual tank wastes are incidental.

### **Agency for Toxic Substances and Disease Registry Agrees to Conduct a Public Health Assessment of the Molycorp Facility in Washington, Pennsylvania**

In August 1999, the Agency for Toxic Substances and Disease Registry (ATSDR) received a petition for a public health assessment for the Molycorp facility in Washington, Pennsylvania (a Site Decommissioning Management Plan site). In a letter to the Pennsylvania Department of Environmental Protection (PADEP) dated October 4, 2000, ATSDR informed PADEP that ATSDR had completed its review of the petition and had determined that the petition meets ATSDR's criteria for conducting public health activities. ATSDR will conduct the petitioned public health assessment of the Molycorp facility and the associated community health concerns. ATSDR plans to release the document to the public in Spring 2001.

### **Staff Attends Meeting with Molycorp Concerning Removal of Above-Ground Waste**

On July 14, 2000, Molycorp submitted the final portion of its decommissioning plan (DP) for its Washington, Pennsylvania, facility (a Site Decommissioning Management Plan site). This DP proposed the disposal of all radioactive waste resulting from decommissioning in an on site disposal cell. On September 15, 2000, Molycorp informed the staff of its revised plans to

dispose of all above-ground waste at Envirocare. Waste removal will begin in November 2000 and is expected to be completed by January 2001. In a letter to Molycorp dated September 18, 2000, the staff informed Molycorp that such disposal was within the current conditions of the license. On October 20, 2000, Molycorp held a meeting to brief elected officials on the details of the waste removal operations. Staff from the Division of Waste Management and Region I observed. Other attendees included staff of the Pennsylvania Department of Environmental Protection, Canton Township officials and their legal counsel, the Washington County Planning Commission, a staff member of Congressman Mascara's office, and a newspaper reporter. A tour of the site followed the briefing.

### **State of Nevada Presentations to Advisory Committee on Nuclear Waste**

On October 18, 2000, staff from the Division of Waste Management (DWM) and the Center for Nuclear Waste Regulatory Analyses (Center) observed the state of Nevada's presentations to the Advisory Committee on Nuclear Waste on the waste package and drip shield materials being considered by the Department of Energy for the proposed high-level waste repository at Yucca Mountain, Nevada. The consultants to the state of Nevada presented data relating to the presence of natural lead and mercury in the Yucca Mountain region. In addition, the consultants presented their data from preliminary stress corrosion cracking (SCC) and corrosion tests of Alloy 22, the proposed material for the outer container of the waste package. These tests examined the effect of trace elements (e.g., Pb, Hg, As, and S) in acid and caustic environments using autoclave systems at temperatures above 150°C. Further, the consultants addressed potential problems of Alloy 22 based on experience in the nuclear power industry with the SCC of Alloy 600. The consultants emphasized the absence of a solid database for predicting the behavior of Alloy 22. Additionally, the consultant's handouts included a limited review of the existing data for Titanium Grade 7, the proposed material for the drip shield. The state of Nevada plans to conduct additional testing of these materials, and the DWM and Center staff will review the data presented during the state of Nevada's presentations.

### **Staff Visits BWX Technologies to Assess Groundwater Monitoring**

On October 23-24, 2000, staff from the Division of Waste Management and Region II toured the BWX Technologies facilities in Lynchburg, Virginia, to review the placement and final construction of the five wells recently installed to monitor for possible groundwater contamination from the leaking spent fuel pool transfer canal. Only three of the five wells yielded water. No contamination attributable to the leak has been found in the soils or water from any of the wells. The staff is still reviewing information provided by BWX Technologies to assess the adequacy of the placement of the wells.

### **Meeting with Department of Energy on Planned Shutdown of Portsmouth**

On October 24, 2000, the Division of Fuel Cycle Safety and Safeguards staff met with the DOE's Oak Ridge Operations Office staff to discuss DOE's recent announcement to maintain the Portsmouth Gaseous Diffusion Plant in cold standby after the U.S. Enrichment Corporation (USEC) ceases uranium enrichment operations in June 2001. DOE plans to access the \$725 million in the Privatization Fund to maintain Portsmouth in cold standby for 5 years, develop gas centrifuge enrichment capability, and take care of other liabilities, such as maintaining a portion of USEC's power contract and providing heating for the shutdown portions of the cascade. After June 2001, some of the cascade cells will be maintained in standby condition so that these cells could be restarted to produce up to 3 million SWU (separative work units). This is about one third of Portsmouth's current capacity. Following cessation of enrichment operations at Portsmouth and USEC transfer to DOE, DOE plans to initiate decontamination and decommissioning (D&D) of the currently shut down portion of the cascade. This task, other D&D tasks, and development of a demonstration gas centrifuge facility at Portsmouth will provide continued employment for a large portion of the current Portsmouth staff until 2005.

### **Envirocare of Utah - Public Meeting**

On October 25, 2000, a public meeting was convened at Envirocare's request. In addition, staff of the NRC, Envirocare, the state of Utah staff, and the Environmental Protection Agency were in attendance. Discussion included, in addition to routine licensing issues: (1) status of Envirocare's requests for approval to dispose of (a) formerly utilized sites remedial action program materials originating from Wayne and Maywood, New Jersey, and (b) "unimportant quantities of source material" [40.13(a)]; (2) the licensee's October 19, 2000, submittal and request for NRC approval of an alternative groundwater monitoring plan; (3) an update of the status of items discussed in the December 1999 NRC/Envirocare Management Review at Tooele, Utah; and (4) a request for the status of NRC's processing of additional recently-submitted license amendment requests.

---

ENCLOSURE C

Office of Nuclear Regulatory Research  
Items of Interest  
Week Ending October 27, 2000

### **28th Water Reactor Safety Information Meeting**

The 28th Water Reactor Safety Information Meeting (WRSM) was held at the Bethesda Marriott Hotel on October 23-25, 2000, attended by about 340 individuals, including about 220 external stakeholders and 120 NRC staff members. WRSM 2000 was an international gathering of researchers, regulators, and utility representatives from the U.S. and foreign countries. The meeting was structured to provide a forum to facilitate open dialogue and specific discussions on a wide range of nuclear safety research issues, from both domestic and foreign perspectives.

This WRSM had three themes: (1) to recognize regulatory research projects and initiatives in the 25 years since the Reactor Safety Study, with their results, that have contributed to risk assessment tools and methods that we use today and are continuing to develop to support regulatory decisions, (2) to present and discuss research projects and initiatives intended to improve knowledge of operating experience and response to emerging issues, and (3) to discuss research projects and initiatives that are aimed at making NRC decisions more realistic, eliminating gaps in knowledge, and reducing the level of uncertainty.

The nine technical sessions were on risk-informed regulation, dry cask storage and transportation of spent fuel, high burn-up fuel, pressurized water reactor sump blockage and containment coatings degradation, digital instrumentation and control, thermal hydraulic and severe accident analysis for reactors and spent fuel, integrity of the reactor coolant pressure boundary, reactor decommissioning, and regulatory effectiveness.

The speeches "The Role of Research in a Changing Environment" by Chairman Richard Meserve, "Research's Role in Regulation" by Commissioner Greta Joy Dicus, and "Future Challenges Facing the NRC's Research Program" by Commissioner Jeffrey S. Merrifield are on the NRC web site at <http://www.nrc.gov/OPA/gmo/speeches.htm>.

The proceedings of the WRSM will be published and posted to the WRSM web site, <http://www.bnl.gov/wsrn/>. The transactions, or abstracts, for the meeting are presently posted at the site. They have been published as NUREG/CP-0171.

### **OECD RPV Lower Head Failure Experiments at Sandia National Laboratories**

The lower head of the reactor pressure vessel (RPV) can be subject to significant thermal and pressure loads in the late phases of core melting during a severe accident. An understanding of the mode, timing, and size of lower head failure (LHF) is important in evaluating the consequences of a severe accident, because LHF defines the initial conditions for many of the subsequent challenges to containment integrity. LHF tests are being conducted at Sandia National Laboratories (SNL) under the auspices of the Nuclear Energy Agency's Organization for Economic Cooperation and Development (OECD/NEA). This program extends and builds on the completed NRC LHF program, but at more prototypic conditions (i.e., large temperature gradient across the vessel wall). This program will include a total of five tests and both experimental and analytical work; it is estimated to end in 2002.

The second test, OLHF-2, was run, this time successfully, on October 23, 2000. This test was performed on a 1/5-scale RPV lower head (0.91 m diameter), typical of RPVs. The purpose of this test was to examine the creep failure at large through-the-wall temperature difference  $>150^{\circ}\text{K}$ . This experiment was conducted at an internal pressure of 5.29 MPa (i.e., RCS equivalent pressure of 2 Mpa, about half that of the OLHF-1 test) with the vessel uniformly heated. The preliminary results reveal that the vessel creep initiated at approximately 170 minutes into the experiment when the vessel inner wall was about  $1250^{\circ}\text{K}$  ( $\sim 900^{\circ}\text{K}$  on the outer surface), and at  $\sim 270$  minutes the vessel failed near the bottom at an inner wall temperature of  $\sim 1800^{\circ}\text{K}$  ( $\sim 1350^{\circ}\text{K}$  on the outer surface). The overall vertical displacement at the vessel bottom was  $\sim 11$  cm, and the failure size was about 18 cm by 3 cm. A photograph of the failure site of the test vessel immediately after the test is shown below. Experimental data from these experiments will be used to assess and validate analytical models of RPV lower head failure.

Upon completion of this program, the staff will be in a good position to assess the reliability of a RPV to mitigate severe accidents and, hence, will have a better estimate of risk to support risk-informed regulatory initiatives.



### **NUREG on High-Pressure Safety Injection System Reliability**

The Operating Experience Risk Analysis Branch of the Division of Risk Analysis and Application has issued Volume 9 of NUREG/CR-5500, "High-Pressure Safety Injection System Reliability, 1987-1997." The study is part of an ongoing evaluation of the reliability of risk-significant systems. Using data obtained from licensee event reports (LERs), the study provides an estimate of the unreliability of the high-pressure injection (HPI) system for pressurized water reactors.

Based on 1987-1997 operating experience data, there were no failures of the entire HPI system in 224 unplanned system demands. The arithmetic average of HPI system unreliability calculated using the operating experience for 72 pressurized water reactors is  $4.5 \times 10^{-4}$ . In comparison, the average HPI system unreliability calculated using data extracted from Individual Plant Examinations (IPEs) performed by the licensees is  $5.8 \times 10^{-4}$ . The unreliabilities of the individual plants vary by a factor of approximately 50, from  $6.0 \times 10^{-5}$  to about  $3.5 \times 10^{-3}$ . This variability reflects the diversity found in HPI system designs rather than a difference in performance among plants.

The dominant contributor to HPI unavailability is common cause failures (CCFs). Failures in HPI mini-flow lines, hardware failures attributed to procedural and design flaws affecting redundant pump trains, gas binding, failed motor-operated valves (MOV) affecting injection headers, and failures of level transmitters for the suction source were the dominant CCFs. For some plants with both high-head and intermediate-head HPI trains, IPE based unreliability estimates are significantly less than the unreliability estimates based on operating experience. The failure probability of the RWST suction segment in the IPEs for these plants may be underestimated.

The frequency of unplanned HPI demands and the number of reported failure events in the HPI-related components have shown a statistically significant downward trend from 1987 to 1997.

---

ENCLOSURE D

Incident Response Operations  
Items of Interest  
Week Ending October 27, 2000

### **NRC/FEMA Scheduling Conference**

The Regional NRC/FEMA Annual Scheduling Conference (FEMA Regions I, II, III) was held October 23-25 in Annapolis, Maryland. Attendees included NRC HQ Incident Response Operations staff, NRC Region I staff, FEMA HQ and Regions I, II, and III staff, State Emergency Response Personnel, and industry representatives. While the primary focus of the meeting was the exercise scheduling activities, several speakers gave presentations on their area of response surrounding the Indian Point steam generator tube failure event of February 2000. Each presenter who spoke on the IP2 event stressed that communication with the public and public officials was critical. The site representative added that even communications that were not required by procedure were critical to public confidence. A presentation was given by NRC staff on lessons learned by NRC in the post plume phase exercise participation. In other presentations, FEMA detailed the proposed changes in their exercise evaluation process and gave the status of the current pilot program to evaluate the proposed changes to the evaluation process. FEMA was careful to point out that this is still under the pilot program and the changes in evaluation process were not final.

### **Preliminary Notifications**

1. PNO-I-00-034, Mercy Hospital/South Pittsburgh Cancer Center, DEPLETED URANIUM SETS OFF ALARM AT SCRAP YARD.
2. PNO-II-00-045, Florida Power and Light Co. (Turkey Point Unit 4), UNUSUAL EVENT DUE TO LOSS OF OFFSITE POWER.
3. PNO-II-00-046, Newell Recycling, SOURCE FOUND IN SCRAP METAL.
4. PNO-III-00-037, Soil and Materials Engineers, Inc., STOLEN MOISTURE-DENSITY GAUGE.
5. PNO-III-00-038, Southeast Missouri State University, POTENTIAL OVEREXPOSURE.
6. PNO-III-00-039, Nuclear Management Company, LLC (Point Beach Unit 1), POINT BEACH UNIT 1 MANUALLY SHUT DOWN DUE TO UNDERWATER DIVER COMMUNICATION PROBLEM.

---

ENCLOSURE F

Office of Administration  
Items of Interest  
Week Ending October 27, 2000

### **Acquisition Training**

On October 26, 2000, the Division of Contracts and Property Management conducted its Acquisition for Certification and Training Program module, "Acquisition for Supervisors and Managers of Project Managers." This workshop familiarizes participants with the principles of the acquisition process with an emphasis on policies and procedures managers need to know.

On October 26, 2000, the Division of Contracts and Property Management presented its Acquisition Certification and Training Program module, "Contract Administration." This is a mandatory all day training module workshop. The module focuses on monitoring contractor performance, spending controls, modifying contracts and agreements and remedying contractual problems. Each participant will receive a course manual that will serve as a reference tool for project managers in performing

their day-to-day responsibilities.

### **New Dosimetry Technology (Parts 34, 36, and 39)**

A document that amends the regulations concerning radiological safety was published in the Federal Register on October 24, 2000 (65 FR 637509). The direct final rule allows licensees to use any type of personnel dosimeter that requires processing to determine the radiation dose if the processor of the dosimeter is accredited to process this type of dosimeter under the National Voluntary Laboratory Accreditation Program. The direct final rule becomes effective January 8, 2001.

The companion proposed rule for this action was published in the Federal Register on October 24, 2000 (65 FR 63753). The comment period for this action closes November 24, 2000.

### **Reporting Requirements for Nuclear Power Reactors and Independent Spent Fuel Storage Installations and Power Reactor Sites (Parts 50 and 72)**

A final rule that amends the event reporting requirements for nuclear power reactors was published in the Federal Register on October 25, 2000 (65 FR 63769). The final rule reduces or eliminates the unnecessary reporting burden associated with events of little or no safety significance and better aligns event reporting requirements with type of information the NRC needs to carry out its safety mission. The final rule becomes effective January 23, 2001.

---

[ENCLOSURE G](#)

Chief Information Officer  
Items of Interest  
Week Ending October 27, 2000

### **Freedom of Information and Privacy Act Requests received during the 5-Day Period of October 20, 2000 through October 26, 2000:**

NUREG/BRs, four identified publications.	(FOIA/PA-2001-0021)
San Onofre power plant, decommissioning and dry cask storage, supporting/opposing documents re NRC position as stated in 10/02/00 letter to G. R. Mills.	(FOIA/PA-2001-0022)
Site assessment, Bert Avenue/Harvard Avenue, Newburgh Heights, OH (McGean-Rohco Site, Chemtron Corp.).	(FOIA/PA-2001-0023)
Waterford power plant, inspection report no. 1999-22.	(FOIA/PA-2001-0024)
LaSalle power plant, inspection report nos. 1999-19 and 1999-21.	(FOIA/PA-2001-0025)
Perry power plant, inspection report nos. 1999-14 and 1999-15.	(FOIA/PA-2001-0026)
Contract, NRC-33-96-194, Sytel, with all modifications.	(FOIA/PA-2001-0027)
Named individual, Sandia National Laboratory, 1999 concerns.	(FOIA/PA-2001-0028)

---

[ENCLOSURE K](#)

Office of Enforcement  
Items of Interest  
Week Ending October 27, 2000

### **Discrimination Task Group Public Meetings**

The Discrimination Task Group held public meetings with external stakeholders on October 5, 2000 in the Region III offices in Lisle, IL and on October 19, 2000 in Paducah, KY. Meeting summaries outlining the issues discussed will be placed on the OE web site for review. Additionally, members of the group attended a NRC Region III/American Nuclear Society workshop on October 3-4, 2000 where discrimination matters were a topic. On October 5, 2000, the group also held a meeting with internal stakeholders in the Region III office. Subsequent public meetings are scheduled for November 1, 2000 in Waterford, CT and an internal meeting with Region I staff is scheduled for November 2, 2000.

---

[ENCLOSURE M](#)

Office of Public Affairs  
Items of Interest  
Week Ending October 27, 2000

### **Media Interest**

There was media and public concern about the Environment News Service article alleging that NRC was developing plans to allow utilities to market radiologically contaminated soil to golf courses, playgrounds, and other commercial entities.

There was some environmental group and trade press interest in the crack in the hot leg weld at the Summer plant in South Carolina.

<b>Press Releases</b>	
<b>Headquarters:</b>	
<u>00-166</u>	ACRS Subcommittee to Meet in Rockville, Maryland, on November 1 to Discuss Safety Research Program
<u>00-167</u>	ACRS Subcommittee on Plant Systems to Meet in Rockville, Maryland, on October 31
<u>00-168</u>	NRC Advisory Committee on Reactor Safeguards to Meet on Steam Generator Tube Integrity, Other Issues in Rockville, MD, November 2-4
<u>00-169</u>	NRC Schedules Decommissioning Workshop November 8-9 in Maryland
<u>00-170</u>	NRC Names Graham M. Leitch to Advisory Committee on Reactor Safeguards
<u>00-171</u>	ACRS Subcommittee on Materials and Metallurgy to Meet in Rockville, Maryland, on November 16
<b>Regions:</b>	
<u>I-00-73</u>	NRC Chairman Richard A. Meserve to Hold News Briefing Following Visit to Salem and Hope Creek Nuclear Plants on October 27
<u>I-00-74</u>	Note to Editors: NRC to Meet With Con Ed on IP2 Improvement Efforts
<u>I-00-75</u>	NRC to Hold Public Workshop in Waterford, Conn., on Handling of Discrimination Complaints
<u>II-00-59</u>	NRC Bars Former Puerto Rico Company Employees From NRC-Licensed Activities and Cites Company
<u>II-00-60</u>	NRC to Hold Public Meeting in Atlanta on November 16 on Implementation of New Reactor Oversight Program
<u>III-00-58</u>	NRC Names New Senior Resident Inspector at the Paducah Gaseous Diffusion Plant
<u>III-00-59</u>	NRC to Meet With Plant Officials on October 30 to Discuss D.C. Cook Unit 1 Restart Activities

ENCLOSURE N

Office of International Programs  
Items of Interest  
Week Ending October 27, 2000

### **Visit of Vladimir Asmolov to Commissioners**

Dr. Vladimir Asmolov, Director For Research and Development of the Russian Research Center (RRC, known also as the Kurchatov Institute) met on October 24, 2000, with Chairman Meserve and Commissioners Dicus, Diaz, and Merrifield. He also met with the EDO and with the management officials in RES. Dr. Asmolov was in the U.S. to participate in the Water Reactor Safety Meeting. Dr. Asmolov has long been associated with the NRC both as a member of the Joint Coordinating Committee on Civilian Nuclear Reactor Safety and as RRC program director for research work on severe accidents performed for NRC. Topics of discussion included the value of international cooperation in nuclear safety research in the face of declining research budgets worldwide, the characteristics of risk-informed regulatory decision-making, and the future of the Russian regulator.

### **Visit of Adolph Birkhofer, Germany**

Adolph Birkhofer, Managing Director of the Company for Reactor Safety (GRS) of Germany met with the Chairman and other Commissioners on October 24. Dr. Birkhofer participated in the Reactor Safety Study panel at the WRSM on the previous day. Dr. Birkhofer briefed the Commissioners on the GRS safety assessment at the Temelin reactor, the safety climate in Russia and the general nuclear situation in Germany. Additionally, there were discussions on occupational exposure limits, the collective dose approach, future activities of NEA and the dwindling nuclear manpower pool. In turn the Commissioners reported on the technical approach and status of life extension in the U.S.

### **Visit of Michel Livolant, France**

Michel Livolant, Director of the Institute for Protection and Nuclear Safety (IPSN) of France, met with the Chairman, Commissioner Dicus and EDO Travers on October 24. Dr. Livolant was a panel member at the WRSM session on the Future Role of Nuclear Power and the Need for Nuclear Regulatory Research. In his meetings, Dr. Livolant explained the anticipated change to IPSN next year, the completion of the assessment of leukemia incidence at La Hague, and the continuing need for safety research expertise. Chairman Meserve raised the question of possible future cooperation for advanced reactors with France.

## North Korea - Interagency Meeting on Issues Related to 10 CFR Part 810 Authorization

On October 25, OIP staff attended an interagency meeting chaired by DOE on issues related to a 10 CFR Part 810 authorization to Combustion Engineering to export nuclear power reactor technology to North Korea. The authorization, issued in 1995, limits exports of technology to North Korea to "only that necessary for the licensing and safe operation of the reactors and not technology enabling the design or manufacture of nuclear reactor components or fuel." At the current stage of planning for the North Korea project, Combustion Engineering advises that the technology needed by the North Korean authorities may exceed the limitations of this Part 810 authorization. The participants at the meeting agreed that a revised or new Part 810 authorization is almost certainly needed, particularly with respect to the information needed by the North Korean regulatory authority to ensure the safe operation of the planned nuclear power plants. DOE staff will now consult with senior management to confirm the judgment that the existing authorization is inadequate and will then formally request interagency views, including NRC's, on any new or revised Part 810 request for North Korea.

## IAEA

The EDO has agreed to support up to four IRRT (International Regulatory Review Team) missions of the IAEA in 2001, and has sent out a call to NRR, NMSS, RES and the Regions for consideration of staff to participate. The first will be to Mexico in January, followed by Lithuania and Czech Republic in the 2nd and 3rd quarters. Possible other missions would be to Ukraine and Switzerland. Details of specific capabilities of the reviewers will be forwarded next week.

## Proposed Additional Export of HEU to Canada

On October 24, 2000, Transnuclear, Inc. applied for an NRC license to export 10 kg of highly enriched uranium (HEU) in two shipments of 5 kg each to Canada to continue production of medical isotopes in the NRU reactor through June 2002.

Earlier this year, the NRC issued a license (XSNMO3060) authorizing the export of targets containing HEU in the form of UO<sub>2</sub> for use in the MAPLE reactors in Canada. As part of the documentation regarding the new request, the applicant explained that the additional export license is necessary because Atomic Energy of Canada Limited (AECL) has encountered a delay in operating the MAPLE reactors and the associated New Processing Facility (NPF).

In accordance with standard practice, Office of International Programs (OIP) has forwarded the license application to the Executive Branch for review, and has prepared a notice for publication in the Federal Register. NRC's formal review and evaluation will be conducted after the Executive Branch provides its analysis and recommendation to the Commission.

ENCLOSURE O

Office of the Secretary  
Items of Interest  
Week Ending October 27, 2000

Document Released to Public	Date	Subject
<b>Decision Documents</b>		
1. <a href="#">SECY-00-0168</a>	8/3/00	Publication of Final Regulatory Guide on Criterion for Triggering a Review Under 10 CFR 50.80 for Non-Owner Operator Service Companies
<a href="#">SRM on 00-0168</a>	10/24/00	(same)
<a href="#">Commission Voting Record on 00-0168</a>	10/24/00	(same)
2. <a href="#">SECY-00-0118</a>	5/31/00	Final Rules - 10 CFR Part 35, "Medical Use of Byproduct Material" and 10 CFR Part 20, "Standards for Protection Against Radiation"
<b>Negative Consent Documents</b>		
1. <a href="#">SRM on SECY-00-0162</a>	10/27/00	Staff Requirements - SECY-00-0162 - Addressing PRA Quality in Risk-Informed Activities
<b>Information Papers</b>		
1. <a href="#">SECY-00-0209</a>	10/23/00	SECY-00-0209 Weekly Information Report - Week Ending October 13, 2000
<b>Memoranda</b>		
1. <a href="#">M001023</a>	10/23/00	Staff Requirements-Affirmation Session: I. SECY-00-0118-Final Rules - 10 CFR Part 35, "Medical Use of Byproduct Material" and 10 CFR Part 20, "Standards for Protection Against Radiation"

## Commission Correspondence

1. Letter to Congress dated October 19, 2000, provides status of fee collection activities for fiscal year 2000.

2. Letter to Congress dated October 16, 2000, provides the August monthly report on the status of licensing and regulatory duties.
3. Letter to the Honorable Adlah "Foncie" Donastorg, Jr., Chairman, Committee on Planning and Environmental Protection, Legislature of the Virgin Islands, dated October 16, 2000, provides update on NRC activities concerning the inappropriate firing of depleted uranium ammunition on the Naval Range on Vieques Island, Puerto Rico.

#### **Federal Register Notices Issued**

1. Application for a License to Import Radioactive Material (Starmet CMI).
2. First Energy Operating Company; Perry Nuclear Power Plant; Docket No. 50-440-CivP; Establishment of Atomic Safety and Licensing Board.

---

ENCLOSURE P

Region II  
Items of Interest  
Week Ending October 27, 2000

#### **South Carolina Electric and Gas - V. C. Summer**

On October 25, 2000, Region II and the Office of Nuclear Reactor Regulation held a public meeting with representatives from the V. C. Summer nuclear power facility. The purpose of the meeting was to discuss the licensee's follow up to a crack in the weld area of the reactor coolant system, hot leg pipe. The crack was discovered on October 12. The licensee discussed the initial evaluation of the extent of the crack, the potential root causes, and repair plans.

An NRC Special Inspection Team continues to review the licensee follow up activities in accordance with a charter, issued on October 19.

#### **Region II - Reactor Oversight Program Lessons Learned Meeting**

On October 26, 2000, the Division of Reactor Safety (DRS) conducted a lessons learned meeting on the Reactor Oversight Program. Participants included the DRS inspectors, DRS managers and two individuals from the Office of Nuclear Reactor Regulation, Inspection Program Branch. The results of the meeting included the identification of key areas in the inspection program where certain changes are needed to improve focus on risk significant licensee activities and to improve efficiency.

---

ENCLOSURE P

Region III  
Items of Interest  
Week Ending October 27, 2000

#### **The Inspector General Visits Region III**

The Inspector General, Deputy Inspector General, Assistant Inspector General for Audits, the Assistant Inspector General for Investigations, and the General Counsel to the Inspector General visited the Region III office on Tuesday, October 24, for their annual meeting with the Regional Administrator and staff members.

#### **Region III Staff Participates in Fermi Emergency Exercise**

On Wednesday, October 24, 2000, about 20 Region III staff members participated in a plume phase exercise involving the Fermi Nuclear Power Plant. The plant is located in Newport, Michigan. Residents and a base team in the regional office participated in the half-day exercise.

---

ENCLOSURE P

Region IV  
Items of Interest  
Week Ending October 27, 2000

#### **Region IV Regional Administrator Visit to the River Bend Station**

On October 27, 2000, the Regional Administrator visited the River Bend Station to meet with the senior resident inspector and tour the facility. The Regional Administrator also met with the Vice President Operations, Entergy Operations Inc., the General Manager of Plant Operations for the River Bend Station, and other members of their management staff, to discuss general topics of interest.