



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 6, 2006

Docket No. 05000245

License No. DPR-21

J. Allan Price
Site Vice President
Dominion Nuclear Connecticut
Millstone Power Station Unit 1
c/o Mr. D. W. Dobson, Supervisor -
Station Nuclear Licensing
Rope Ferry Road
Waterford, CT 06385

SUBJECT: INSPECTION 05000245/2006009, DOMINION NUCLEAR CONNECTICUT,
MILLSTONE POWER STATION UNIT 1, WATERFORD, CONNECTICUT

Dear Mr. Price:

On March 13-15, 2006, Robert Prince of this office conducted an inspection of your Millstone Unit 1 nuclear reactor facility at Waterford, Connecticut. The inspection was an examination of your activities related to the maintenance of Unit 1 in a SAFSTOR status. The inspection consisted of observations by the inspector, interviews with personnel, and a selected examination of representative records. The findings of the inspection were discussed with members of your on March 15, 2006.

Within the scope of this inspection, no violations were identified. Activities associated with maintaining Unit 1 in a safe condition to ensure the safe storage of spent fuel were effectively implemented.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room of from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at <http://www/nrc.gov/reading-rm/adams.html> (The Public Electronic Reading Room).

No reply to this letter is required. Your appreciated your cooperation with us during this inspection.

Sincerely,

/RA/

Marie Miller, Chief
Decommissioning Branch
Division of Nuclear Materials Safety

J. Price

2

Enclosure:

1. Inspection Report No. 05000245/2006009

cc:

State of Connecticut

J. Price

3

Distribution:

S. Collins, RI

M. Dapas, RI

D. Screnci, RI

N. Sheehan, RI

G. Pangburn, RI

P. Henderson, RI

D. Holland, NMSS

NRC Resident Inspector

DOCUMENT NAME: E:\Filenet\ML061000559.wpd

SISP Review Complete: RPrince

After declaring this document "An Official Agency Record" it will be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	<input checked="" type="checkbox"/> N	DNMS/RI	<input type="checkbox"/>	DNMS/RI	<input type="checkbox"/>	<input type="checkbox"/>
NAME	RPrince		MMiller				
DATE	4/6/06		4/6/06				

OFFICIAL RECORD COPY

EXECUTIVE SUMMARY

Dominion Nuclear Connecticut
NRC Inspection Report No. 05000245/2006009

The inspection included aspects of licensee operations and plant support activities associated with the maintenance of Unit 1 while in a SAFSTOR status. The report covers announced inspections by a regional inspector. No violations were identified.

Operations and Decommissioning

The licensee maintained an effective spent fuel pool (SFP) safety program. Equipment important for the safe storage of spent fuel was adequately maintained. Equipment operational parameters important to the safe storage of spent fuel were monitored in accordance with approved procedures and maintained within established acceptance criteria.

The licensee effectively utilized the established corrective action program to self-identify and resolve issues to maintain the safe storage of Unit 1 spent fuel. Condition reports (CR) were appropriately prioritized and implementation of corrective actions tracked in accordance with approved procedures.

Maintenance and Surveillance

The licensee has maintained systems and components in an operable and reliable status. Adequate controls and measures have been established to plan, schedule, and perform Unit 1 work activities. The Preventative Maintenance (PM) program is effectively utilized to maintain equipment reliability and revised based upon operational history and feedback obtained from performance of routine plant rounds.

Occupational Exposure Controls

The licensee provided adequate controls to limit exposures of workers to external sources of radiation. Posting and labeling of radioactive materials and radiation areas continues to meet regulatory requirements. Radiological controls and dose estimates associated with Unit 1 tasks were effective to achieve dose goals.

Enclosure

REPORT DETAILS

I. Operations and Decommissioning Status

1.1 Spent Fuel Pool Safety

a. Inspection Scope (60801 and 71801)

The inspector reviewed the condition and operational status of equipment and components important to the safe storage of spent fuel. The inspection consisted of tours of plant areas, visual observation of plant equipment, review of surveillance records, and interviews with cognizant personnel. The inspector reviewed selected records of Operator logs for the first quarter of 2006, associated with Unit 1 systems and components important to the safe storage of spent fuel.

b. Observations and Findings

Personnel who are responsible for shift supervision and for performing routine Unit 1 surveillance rounds were knowledgeable of the importance of system parameters such as spent fuel pool temperature and water level, spent fuel pool cooling flow rates, and decay heat removal system flow rates, associated with maintaining safe storage of spent fuel. The inspector noted that system and equipment operational parameters were maintained within established acceptance criteria. No adverse trends in system or component performance were identified.

The inspector toured the facility and verified that components and equipment important to the safe storage of spent fuel were operable and adequately maintained. Cognizant personnel were knowledgeable of the status of Unit 1 equipment and those components important to maintaining safe status of Unit 1. The inspector visually observed several telltale leak detection stations during the tour and noted there was no indication of active spent fuel pool (SFP) leakage. The telltale leak detection system collects any leakage through the SFP stainless steel liner and routes the leakage to one of the various telltale stations for visual observation. Based on discussions with cognizant personnel no leakage from the Unit 1 SFP has been experienced. Material condition of plant equipment and building areas was adequate. No safety concerns were identified.

c. Conclusions

The licensee maintained an effective SFP safety program. Equipment important for the safe storage of spent fuel was adequately maintained. Equipment operational parameters important to the safe storage of spent fuel were monitored in accordance with approved procedures and maintained within established acceptance criteria.

1.2 Self Assessment, Auditing, and Corrective Action Program

a. Inspection Scope (40801)

The licensee's program for identifying, resolving, and preventing issues that degrade safety or the quality of decommissioning activities was evaluated. The inspection evaluated the licensee's corrective action program through interviews with cognizant personnel and a review of Unit 1 condition reports (CRs) since the last inspection for safety-related issues.

b. Observations and Findings

Selected CRs were reviewed to evaluate the licensee's effectiveness in identifying appropriate corrective actions and the implementation of associated corrective actions. The inspector discussed the tracking, current status, and closure of selected corrective actions with cognizant personnel. The inspector noted that the priority for closure of CRs and implementation of corrective actions was adequate and determined primarily by the safety significance of a given CR. Responsible personnel were knowledgeable of the status of corrective actions for selected CRs and concurred with corrective action implementation schedules. The inspector noted that the threshold for identification of issues entered into the licensee's corrective action program was adequate. There were no adverse trends or generic concerns.

c. Conclusions

The licensee effectively utilized the established corrective action program to self-identify and resolve issues to maintain the safe storage of Unit 1 spent fuel. CRs were appropriately prioritized and implementation of corrective actions tracked in accordance with approved procedures.

II. **Maintenance and Surveillance**

a. Inspection Scope (62801)

The inspector reviewed licensee programs associated with the maintenance of plant systems and components. The inspection consisted of review of documentation and field observations. The inspector discussed the status, reliability, and operational history of Unit 1 components with cognizant personnel.

b. Observations and Findings

The inspector toured plant areas and noted that systems and components were operable and available for service. The inspector reviewed a completed work package for the annual inspection of the 1A SFP cooling pump, performed in March of 2005. Appropriate acceptance criteria was specified in the work package. No concerns or issues were identified during the performance of the annual pump inspection. The

inspector reviewed a work package for an upcoming scheduled work activity associated with the annual inspection of the SFP cooling pumps. Work package documentation was complete, with the governing procedure included in the work package. Appropriate acceptance criteria were provided in the work package.

Regarding the planning and scheduling of Unit 1 activities, work activities were developed and planned work packages were determined by the importance of a given activity to support safe storage of spent fuel. Work control procedures contain appropriate procedural and acceptance criteria. The inspector noted that work schedules were routinely developed and communicated to appropriate Unit 1 work organizations and supervisory personnel. No safety concerns were identified.

The licensee has developed a preventative maintenance (PM) program for components and equipment important for maintaining the safe storage of spent fuel. The intent of the PM program is to ensure long-term reliability of Unit 1 systems and to minimize component out of service time. The inspector noted that the licensee had developed several additional PM packages since the last inspection and revised other PM packages based on operational experience. Information obtained during plant equipment operator (PEO) rounds is utilized in the development of PM packages and determining the frequency of PM performance.

c. Conclusions

The licensee has maintained systems and components in an operable and reliable status. Adequate controls and measures have been established to plan, schedule, and perform Unit 1 work activities. The PM program is effectively utilized to maintain equipment reliability and revised based upon operational history and feedback obtained from performance of routine plant rounds.

III. Occupational Exposure Controls

a. Inspection Scope (83750)

The inspector reviewed the licensee's program associated with the monitoring and control of radiation exposure to employees and to determine the adequacy of the licensee's radiation protection program. The inspection consisted of interviews with cognizant personnel, review of radiological survey records, and field observations of radiological postings.

b. Observations and Findings

Radiological survey maps and related information maintained at the Unit 1 Radiological Control Area (RCA) access point were current. Radiological zone classifications were noted by means of a color coded system that facilitated interpretation of survey data. The inspector noted that the posted survey data was of high quality. The inspector noted during tours of the Unit 1 RCA that the number and extent of contaminated areas

had been reduced significantly since the last inspection. These efforts facilitate personnel access to plant areas when performing routine activities and operator tours.

Cognizant personnel provided a summary of Unit 1 dose totals for 2005. The Unit 1 dose total for 2005 was approximately 890 mrem with the majority of exposure attributable to routine activities and tasks related to mold abatement. The inspector noted that appropriate exposure controls were established and methods to track and trend dose performance were commensurate with the radiological significance of the tasks. The exposure total for 2006 as of March 14 was 99 mrem. Based on review of radiological work activities and current year dose totals no concerns or issues were identified.

The inspector reviewed a design modification package to modify the existing fuel transfer canal shield blocks. This design modification will allow the shield blocks to be installed between the existing transfer canal gates. The placement of these shield blocks will eliminate the need for administrative controls or other measures to be employed in the eventuality that spent fuel needs to be stored within close proximity of the inner transfer canal gate. Calculations performed by the licensee concluded that high radiation levels could be encountered on the operating floor of the reactor building (the 108' elevation) if spent fuel was stored adjacent to the inner transfer canal gate and additional shielding was not provided. The inspector noted that the modification of the shield blocks and placement of the blocks in the transfer canal would eliminate the need to restrict placement of spent fuel in certain storage rack cells adjacent to the inner gate.

c. Conclusions

The licensee provided adequate controls to limit exposures of workers to external sources of radiation. Posting and labeling of radioactive materials and radiation areas continues to meet regulatory requirements. Radiological controls and dose estimates associated with Unit 1 tasks were effective to achieve dose goals.

IV. Exit Meeting

The inspector presented the inspection results to Mr. Robert Griffin and Mr Richard MacManus and members of your staff during an exit meeting on March 15, 2006. The licensee acknowledged the findings presented by the inspector. The licensee did not identify any documents or processes reviewed by the inspector as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

*Jim Beaupre, Site Engineering
Will Chestnutt, Unit 2, Shift Manager
*Eric Dean, Reactor Engineer
*Don Delcore, Health Physics Supervisor
John Doroski, Site Engineer
*Dave Dvorak, Unit 1 Site Services
Brian Eckenrode, Unit 2, PEO
Bill Gooreman, I&C Supervisor
*Robert Griffin, Acting Director, Nuclear Station Operations and Maintenance
*Brian Krauth, Senior Analyst, Licensing
*Jim Kunze, Unit 2, Operations Manager
*J. Eric Lane, Manager, Radiation Protection and Chemistry
Jack Lemke, Planning and Scheduling, Unit 1
*Richard MacManus, Director, Nuclear Engineering
*Dan Meekhoff, Manager, Nuclear Site Services
Frank Perry, ALARA Engineer, Radiation Protection
Tom Quinley, Site Engineer

*Denotes attendance at the onsite exit meeting held on March 16, 2006.

INSPECTION PROCEDURES USED

40801 Self Assessment and Corrective Action
60801 Spent Fuel Pool Safety at Permanently Shutdown Reactors
62801 Maintenance and Surveillance at PSD Reactors
71801 Decommissioning Performance and Status Reviews at PSD Reactors
83750 Occupational Radiation Exposure

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LISTS OF ACRONYMS USED

CR	Condition Report
PEO	Plant Equipment Operator
PM	Preventative Maintenance
RCA	Radiological Controlled Area
SFP	Spent Fuel Pool