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June 27, 2007

Mr. Roland Lickus
State and Government Affairs for Region III
Nuclear Regulatory Commission
2443 Warrensville Road
Lisle, IL 60605-4351

Dear Mr. Lickus

This letter requests review and evaluation of JIOP 07-02. This report covers an NRC inspection of Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems at the Davis-Besse Nuclear Power Station on January 22-26, 2007. Mr. Robert Leidy was the URSB's designated observer for this inspection. This report is submitted to the NRC in accordance with the URSB/NRC Protocol. We appreciate your comments and evaluation of this report.

Sincerely,

CAROL A. O'CLAIRE
Radiological Branch Chief

CAO/rh

RECEIVED JUL 06 2007

Mission Statement

"to save lives, reduce injuries and economic loss, to administer Ohio's motor vehicle laws and to preserve the safety and well being of all citizens with the most cost-effective and service-oriented methods available."

HSS

**UTILITY RADIOLOGICAL SAFETY BOARD (URSB) AND
NUCLEAR REGULATORY COMMISSION (NRC)
JOINT INSPECTION OBSERVATION PROGRAM (JIOP) REPORT**

REPORT NUMBER: JIOP 07-02

REFERENCE TO: NRC inspection Report 0500346/2007002
Conducted by: John Cassidy and Tony Go

LICENSEE: First Energy Nuclear Operating Company
5501 North State Route 2
Oak Harbor, Ohio 43449

FACILITY: Davis-Besse Nuclear Power Station (DBNPS)

DATES OF INSPECTION: January 22nd through the 26th 2007

OBSERVING URSB AGENCY: Ohio Department of Health
Bureau of Radiation Protection
Division of Prevention

URSB OBSERVER: Robert Leidy, Health Physicist III

OBJECTIVE: To observe the NRC Inspection of Radioactive
Gaseous and Liquid Effluent Treatment and
Monitoring Systems

AREAS OBSERVED:

1. Review of Radiological Effluent Release Reports
2. Walk-down of major components of gaseous and liquid release systems.
3. Records review to include identification and resolution of problems.

JIOP INSPECTION REPORT 2007002

I. Definition

This Utility Radiological Safety Board (URSB) inspection observation report is used only to report observations of NRC inspections at the Davis-Besse Nuclear Power Station (DBNPS), Perry Nuclear Power Plant (PNPP), and the Beaver Valley Power Station (BVPS). These observations are solely of the URSB and its designated observer. These observations do not constitute, audit, verify or solely for the use of the URSB. According to NRC protocol, this URSB report will not be released to the public prior to NRC issuance of the respective inspection report.

II. Introduction

The radiation protection inspection activities were observed on behalf of the URSB under the Joint Inspection Observation Program (JIOP) agreement with the NRC by the Ohio Department of Health (ODH). Robert Leidy observed this inspection as the ODH designated representative.

The NRC entrance meeting was conducted on January 22, 2007. The NRC team members were as follows:

John G. Cassidy, Health Physicist
Tony Go, Health Physicist

During the week of January 22, 2007, the NCR conducted an inspection of the following items;

1. Review of Radiological Effluent Release Reports
 - a. Review of Radiological Effluent Release reports and verify implementation and changes
 - b. Determine if anomalous results were reported and resolved
 - c. Review licensee self assessments, audits and licensee event reports
 - d. Review the Updated Final Safety Analysis Report (UFSAR) description for all radioactive waste systems
2. Walk-Down of Major Components of Gaseous and Liquid Release Systems
 - a. Walk down the major components of gaseous and liquid release systems
 - b. Observe the routine processing and release of radioactive waste
 - c. Review changes made by licensee
3. Records Review
 - a. Monthly, quarterly and annual dose calculations

- b. Air cleaning system surveillance test results
- c. Instrument calibration and quality control records
- d. Identification and resolution of problems

III. AREAS OF INSPECTIONS AND FINDINGS

1. **Review of Radiological Effluent Release Reports**

- a. Review of Radiological Effluent Release reports and verify implementation and changes

ODH observed the Inspectors as they reviewed all Radiological Effluent Release Report(s) issued since the previous inspection to verify that the program was implemented as described in the Radiological Environmental Technical Specifications/Offsite Dose Calculation Manual (RETS/ODCM). ODH observed the Inspectors as they reviewed the report for significant changes to the ODCM and to radioactive waste system design and operation to determine whether changes to the ODCM were made in accordance with Regulatory Guide 1.109 and NUREG-0133 and were technically justified and documented. The Inspectors verified that the technical and/or 10 CFR 50.59 reviews were performed when required.

No findings of significance were identified by the NRC Inspectors.

- b. Determine if anomalous results were reported and resolved

ODH observed the Inspectors as they determined if anomalous results reported in the current Radiological Effluent Release Report were entered in the licensee's corrective action program and adequately resolved.

No findings of significance were identified by the NRC Inspectors.

- c. Review licensee self assessments, audits and licensee event reports

ODH observed the Inspectors as they reviewed the RETS/ODCM to identify the effluent radiation monitoring systems and its flow measurement devices. They also reviewed licensee self assessments, audits and licensee event reports.

No findings of significance were identified by the NRC Inspectors.

- d. Review the Updated Final Safety Analysis Report (UFSAR) description for all radioactive waste systems

ODH observed the Inspectors as they reviewed the Updated Final Safety Analysis Report (UFSAR) description for all radioactive waste systems.

No findings of significance were identified by the NRC inspectors

2. Walk-Down of Major Components of Gaseous and Liquid Release Systems

a. Walk down the major components of gaseous and liquid release systems

ODH accompanied the Inspector, Go Tony, as he performed a walk-down of the major components of the gaseous and liquid release systems (e.g., radiation and flow monitors, demineralizers and filters, tanks and vessels) to observe current system configuration with respect to the description in the Final Safety Analysis Report, ongoing activities and equipment material inspection. For the walk-down we were joined by the facilities Gaseous, Liquid & HVAC Radiation Monitors System Engineer, George Chung and John Otermat, Radioactive Areas HVAC System Engineer.

No findings of significance were identified by the NCR Inspector

b. Observe the routine processing and release of radioactive waste

ODH accompanied Tony Go on a walk-down while John Cassidy performed this portion of the inspection. The inspector, Tony Go, indicated the observation of routine processing of radioactive liquid waste was to verify that appropriate treatment equipment is used and that radioactive liquid waste is processed in accordance with procedure requirements. There was optimism that direct observation of a release of radioactive gaseous effluent would occur during the week but this did not happen. Instead the inspector reviewed radioactive gaseous effluent release permits, including the projected doses to members of the public.

No findings of significance were identified by the NRC Inspector

c. Review changes made by licensee

ODH observed the Inspectors as they reviewed changes made by the licensee to the ODCM as well as to the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection. A significant change (factor of 5) to dose values reported in the Radiological Effluent Release Report from the previous report was identified. Upon further investigation it was determined the increase in dose was due to the facilities extended outage.

No findings of significance were identified by the NRC inspectors

3. **Records Review**

a. Monthly, quarterly and annual dose calculations

ODH observed the Inspectors as they reviewed a selection of monthly, quarterly and annual dose calculations to ensure that the licensee had properly calculated the offsite dose from radiological effluent releases and to determine if any annual TS/ODCM (ie., Appendix 1 to 10 CFR Part 50 values) were exceeded.

No findings of significance were identified by the NRC Inspectors

b. Air cleaning system surveillance test results

ODH observed the Inspectors as they reviewed air cleaning system test results and the licensee's specific methodology to ensure that the system was operating within the licensee's acceptance criteria. ODH observed the Inspectors as they reviewed surveillance test results and methodology the licensee uses to determine the stack and vent flow rates.

No findings of significance were identified by the NRC Inspectors

c. Instrument calibration and quality control records

ODH observed the Inspectors as they reviewed records of instrument calibrations performed since their last inspection for each point of discharge effluent radiation monitor and flow measurement device. ODH also observed the Inspectors as they reviewed the current effluent radiation monitor alarm setpoint value for agreement with RETS/ODCM. ODH observed the Inspectors as they reviewed calibration records of radiation measurement instrumentation associated with effluent monitoring and release activities and quality control records for the radiation measurement instruments.

No findings of significance were identified by the NRC Inspectors

d. Identification and resolution of problems

ODH observed as the Inspectors reviewed the licensee's self assessments, audits License Event Reports, and Special Reports related to the radioactive effluent treatment and monitoring program to determine if identified problems are entered into the corrective action program for resolution. Emphasis was placed on ensuring problems are identified, characterized, prioritized, entered into a corrective action and resolved.

No findings of significance were identified by the NRC Inspectors

IV. CONCLUSIONS

The exit meeting was led by Tony Go who summarized the inspection was without findings. John Cassidy suggested the lab may want to go back in their history to determine why they switched from utilizing de-mineralized water to domestic water many years ago. He felt the lab may want to re-visit this and possibly switch back because of the different results that can occur due to using domestic water.

An area of interest was the new requirement for licensee's to monitor groundwater for radiological contamination. This sample was not evaluated for compliance at this time but was discussed and made known that it will need to be evaluated either on-site or possibly by desk review by years end. The licensee has contracted a Hydro-geologist who has done an evaluation of the property but at the time of inspection decisions as to where monitoring wells will be placed had not been made.

There were no observations of unsafe work habits during the inspection.

All participating DBNPS staff and NRC inspectors were very cooperative and informative during the interview and inspection process. ODH followed NRC protocol throughout the inspection process and was extended every courtesy by the NRC inspectors and the DBNPS staff.

The official inspection results will be addressed in the NRC Inspection report number 0500346/2007002 by Tony Go.