# U.S. NUCLEAR REGULATORY COMMISSION

# **REGION III**

Docket No: License No:	50-346 NPF-3
Report No:	50-346/98010(DRS)
Licensee:	Centerior Service Company
Facility:	Davis-Besse Nuclear Power Station
Location:	5503 N. State Route 2 Oak Harbor, OH 42449
Dates:	June 8-11, 1998
Inspectors:	Wayne Slawinski, Senior Radiation Specialist Nirodh Shah, Radiation Specialist
Approved By:	Gary Shear, Chief, Plant Support Branch 2 Division of Reactor Safety

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# EXECUTIVE SUMMARY

# Davis-Besse Nuclear Power station NRC Inspection Report 50-346/98010

This was a routine inspection of the solid radioactive waste management and transportation program, the radiological effluent monitoring and control program and the maintenance program for the station emergency and control room emergency ventilation systems. This inspection also verified that observed equipment was maintained as described in the Updated Safety Analysis Report (USAR), and that the solid, liquid and gaseous waste programs were conducted in accordance with the Process Control Program (PCP) and Offsite Dose Calculation Manual (ODCM). In these areas, one violation of NRC requirements was identified, and the following conclusions were formed:

### Plant Support

- Radiological effluent releases were well controlled and effluent monitoring was conducted consistent with the ODCM and USAR. The total released activity and associated dose remained low and were well below regulatory limits. One recurrent problem was identified with documentation errors in the ODCM and effluent release reports (Section R1.1).
- The solid waste processing systems were as described in the USAR. The PCP was consistent with the waste streams described in the USAR and was implemented by knowledgeable staff in accordance with station procedure. However, a weakness was identified with the development of the PCP, concerning the frequency that dewatered wet wastes were sampled and verified to ensure that regulatory limits for free standing liquid were met, and that all pertinent 10 CFR 61.56 requirements were addressed (Section R1.2).
- The radioactive waste (radwaste) packaging and transportation program was technically sound and program oversight was good. Radwaste shipments were appropriately classified, manifests were completed in accordance with regulatory requirements, and training was provided for personnel involved in packaging and shipping. A scaling factor program for classifying waste streams was applied consistent with regulatory guidance; however, program implementation was not governed by station procedure to ensure its consistent application (Section R1.3)
- The effluent process radiation monitors were operable and well maintained. One poor practice was identified concerning a lack of review of Instrument and Control technicians in the performance of monitor calibrations (Section R2.1).
- The station and control room emergency ventilation systems were maintained in good condition and associated air filtration/adsorption tests and surveillances were performed as required. System engineers maintained good oversight and closely tracked system maintenance activities and performance history (Section R2.2).

- Radioactive material and radwaste storage containers were maintained in good physical condition, were properly labeled, and storage areas were posted and controlled in accordance with regulatory requirements. A radioactive materials management inventory system adequately tracked material movement at the site (Section R2.3).
- Audit and surveillance activities conducted by the licensee were adequate to assess the radiological effluent monitoring and control program, the ODCM and the packaging and transport of radwaste. However, a violation was identified concerning the failure to audit the PCP and the implementation of procedures for processing radwastes as required by Technical Specification (Section R7.1).

# **Report Details**

# IV. Plant Support

# R1 Radiological Protection and Chemistry (RP&C) Controls

# R1.1 Gaseous and Liquid Effluent Monitoring and Control

### a. Inspection Scope (IP 84750)

The inspectors reviewed the licensee's program for monitoring and controlling gaseous and liquid effluent release. Specifically, the inspectors reviewed effluent release packages and effluent control procedures, reviewed the Offsite Dose Calculation Manual (ODCM), interviewed chemistry and radiation protection (RP) staff, and performed liquid and gaseous radwaste system walkdowns.

### b. Observations and Findings

Walkdowns of the effluent release pathways were performed to verify that they were as described in the Updated Safety Analysis Report (USAR) and ODCM. Liquid releases were conducted primarily on a batch basis from either of two Clean Waste Monitor Tanks, the Miscellaneous Liquid Waste Monitor Tank or the Detergent Waste Drain Tank. Gaseous releases were either continuous through the station vent stack, or batch released through one of three Waste Gas Decay Tanks (WGDTs) or through containment purge. The inspectors observed that the source tanks for liquid batch releases were well maintained and that selective inputs to the station vent stack were as described in the USAR.

Owing to past radioactive contamination of the secondary side, a potential existed for activity to be released from the storm sewer drain and turbine building sump effluent. The inspectors verified that these pathways were monitored by the licensee and that identified radioactivity was reported in the Annual Effluent Release Report.

After a resin breakthrough, occurring on April 10, 1998 (see inspection report no. 50-346/98007), the licensee had measured increased fission and activation product activity in liquid releases. Through May 1998, about 1.45E-1 curies (Ci) of these products were released compared to a total of 7.06E-3 Ci in 1997. The resin breakthrough also increased the volume of liquid effluent released from 349,955 gallons in 1998 to date, compared to 460,000 gallons total for 1997. However, the overall activity released and associated doses continued to be low and were well controlled by the licensee.

In 1997, a total of 7.4E-3 Ci and 4.5 Ci (both excluding tritium) were released through liquid and gaseous pathways, respectively, compared to 1.45E-1 Ci and 2.59 Ci through May 1998. The associated doses for both the 1997 and 1998 release data were well below regulatory limits. The inspectors verified that doses were determined consistent

with the methodology in NRC Regulatory Guide 1.109 and, through independent calculation, that the associated dose from a May 15, 1998, liquid and a May 10, 1998, gaseous batch release were correct.

The inspectors identified several errors in the ODCM and 1997 Annual Effluent Release Report. These errors were minor in nature and were attributed to personal error during the review and/or data entry process. For example, Table 20 in the 1997 effluent report incorrectly stated that 4.26F6 Ci (versus 4.26E-6 Ci) of dissolved and entrained gases were released in liquid effluents in the third quarter. Similar problems had been identified through station audits and surveillances since 1997, indicating that this was a recurrent problem. This was acknowledged by the licensee and corrective actions were planned.

# c. Conclusions

Effluent releases were well controlled and effluent monitoring was conducted consistent with the ODCM and USAR. The total released activity and associated doses remained low and were well below regulatory limits. One recurrent problem was identified with documentation errors in the ODCM and effluent release reports.

# R1.2 Radioactive Waste (Radwaste) Processing

#### a. Inspection Scope (IP 86750)

The inspectors reviewed the solid radwaste management program including the process control program (PCP), and associated implementing procedures for the processing of radwaste for disposal at a low level waste burial site.

# b. Observations and Findings

The solid radwaste processing program remained as described in the USAR. The waste products handled by the solid radwaste systems include bead-type resins, filter cartridges and filter media, powdered resins and solid dry active waste (DAW). Spent resins from primary systems were transferred from the spent resin storage tank (SRST) and along with filter media and higher activity secondary resins, were dewatered in high integrity containers (HICs) and shipped to a licensed low level waste burial site. Secondary resins with concentrations less than one microcurie/cubic centimeter were also dewatered, but typically transferred in metal containers to a licensed vendor for processing and subsequent disposal. The waste solidification and evaporation systems originally installed at the plant were no longer used, and have been abandoned in place.

The licensee developed a PCP to provide assurance that the processing of wet radwaste will result in a waste form that meets the requirements of both 10 CFR 61.56 and the low level waste disposal site licenses. The PCP was consistent with the waste processing program described in the USAR and adequately addressed the 10 CFR 61.56 limits for free standing liquid in the final waste form. However, the PCP did not address other requirements in 10 CFR 61.56, such as those related to the generation of

harmful fumes or void spaces within the processed waste form. While some 10 CFR 61.56 criteria other than the free standing water limits were addressed, to a limited, extent in a wet waste dewatering procedure, RP management agreed that the PCP should be expanded to address all pertinent requirements, and planned to address this matter through a revision to the PCP.

In 1997, the licensee developed a wet waste dewatering procedure and a companion verification procedure for the sluicing and dewatering of primary resins, secondary system resins, filters and other media in vendor supplied HICs. Prior to procedure development, dewatering was accomplished using separate vendor dewatering instructions for each type HIC used. According to the licensee, the vendor instructions were not clear and consistent, despite the fact that the dewatering processes for different HICs were nearly identical. The dewatering procedures developed by the licensee were reviewed by the inspectors and were clear, concise and included appropriate precautionary steps in accordance with vendor manuals. Inspector discussions with licensee staff involved in dewatering activities revealed that the staff was well versed in the dewatering procedure and the that the process was implemented appropriately.

The PCP specified that the dewatering process be verified to ensure that the final waste form meets the free standing liquid requirements for at least one representative test specimen from 10% of the batches of each type of wet radwaste that is processed. Although the one in ten batch test criteria was consistent with industry standards and testing was completed in accordance with the PCP, it was not always appropriate for the licensee's operations because dewatering activities occurred infrequently. Specifically, only eight liners of wet waste were dewatered and shipped to a burial site since the last verification was conducted in 1994. Moreover, changes to the dewatering hardware were made since the dewatering process was last verified, which could have affected the amount of free standing liquid in the final waste product. The failure to verify the efficacy of the dewatering process at intervals that better coincided with waste processing activities and after changes to process systems or procedures, was a weakness in the development of the PCP. Radiation protection management planned to evaluate and address these concerns through a revision to the PCP.

# c. <u>Conclusions</u>

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The solid waste processing systems were as described in the USAR. The PCP was consistent with the waste streams described in the USAR and was implemented by knowledgeable staff in accordance with station procedure. However, the PCP was not sufficiently developed to address all pertinent 10 CFR 61.56 requirements, nor did the PCP adequately establish a dewatering verification program that provided an early indicator of processing problems.

# R1.3 Radwaste Packaging and Transportation

# a. Inspection Scope (IP 86750)

The inspectors reviewed the licensee's radwaste packaging and transportation program for compliance with NRC, Department of Transportation (DOT) and waste burial site requirements. The review included interviews of plant staff and review of implementing procedures and records of past shipments. The inspectors also reviewed the licensee's program for determining waste stream scaling factors, and independently verified that recent waste shipments were properly classified.

#### b. Observations and Findings

The inspectors verified that the licensee maintained current copies of NRC and DOT regulations, burial site and waste processor licenses, and that the shipping coordinator was knowledgeable of their content. The shipping coordinator provided oversight of the radioactive material shipment program and ensured by direct involvement that all aspects of the program were implemented in accordance with regulatory requirements and station procedure. Additionally, the inspectors verified that staff involved in preparing radwaste shipments had completed training commensurate with their duties.

Procedure DB-HP-01500, Shipping Radioactive Material, was reviewed and contained appropriate guidance for determining waste classification and the proper shipping name based on radiological criteria, and included guidance regarding packaging, labeling, marking and other shipment criteria. The licensee used a vendor supplied computer program (i.e. RADMAN) to classify waste pursuant to 10 CFR 61.55, to determine reportable quantity (RQ) values, and to generate shipping papers. The inspectors selectively verified that the computer program data base contained correct RQ values, and that waste concentration information for determining waste classification was consistent with 10 CFR Part 61 requirements.

Three shipments of radwaste were made to licensed burial sites through June 8, 1998, and consisted of two shipments of dewatered filter media and one DAW shipment. The inspectors independently verified that these shipments were correctly classified, that package labeling and marking was satisfactory, that results of package and transport vehicle surveys satisfied DOT requirements, and that independent verification surveys were performed by the licensee for each shipment, as required by a recent procedural revision. Four radwaste shipments were made to burial sites in 1997, comprised of quantities and kinds of radioactive material similar to those shipped to burial sites in 1998. No shipments of irradiated hardware took place in 1997 or 1998 to date. The inspectors also verified that the licensee prepared shipping papers consistent with the regulations, and that the shipments were tracked and logged as required.

Scaling factors for 10 CFR Part 61 waste characterization analyses were generated consistent with the NRC Branch Technica! Position for waste classification and waste form. These factors were reevaluated by the licensee at intervals ranging from one to two years, depending on the waste stream, and after significant changes in reactor

water chemistry that could potentially affect the waste stream classification. However, the scaling factor program was not addressed by procedure to ensure its consistent application, and its implementation was based primarily on the judgement of certain RP staff. Radiation protection management had recognized that the scaling factor process should be formalized, and was currently drafting a procedure.

### c. <u>Conclusions</u>

The radwaste packaging and transportation program was technically sound and program oversight was good. Radwaste shipments reviewed by the inspectors were appropriately classified, manifests were completed in accordance with regulatory requirements, and training for personnel involved in packaging and shipping was good. A scaling factor program for classifying waste streams was developed and applied consistent with regulatory guidance; however, program implementation was not governed by station procedure to ensure its consistent application.

# R2 Status Of RP&C Facilities and Equipment

# R2.1 Effluent Radiation Monitors

### a. Inspection Scope (IP 84750)

The inspectors evaluated the operability of the process effluent radiation monitors through a review of maintenance and calibration records and procedures, walkdowns of the monitors and interviews with personnel. The specific monitors reviewed included the Waste Gas Effluent Monitors (nos. 1822A and B), the Clean Radwaste Effluent Monitors (nos. 1770A and B), the Station Vent Normal Discharge and Accident Monitors (nos. 4598AA, AB, BA and BA) and the Storm Sewer Outlet Monitor (no. 4686).

### b. Observations and Findings

Effluent monitors were observed to be operable, in good condition and in locations consistent with the USAR and/or ODCM. Monitor alarm set points were reviewed annually by the RP group and were determined using ODCM guidance. Through independent calculation, the inspectors verified that selective set points were appropriate for the source term pathway and background radiation levels.

The inspectors verified that the 18-month channel calibration records for the above listed monitors had been performed as required. These calibrations were performed by Instrument and Control (I&C) technicians using radioactive sources and electronic pulse equipment. Although the I&C technicians received periodic training by the RP group in the use of the radioactive sources, the RP group had not reviewed the actual performance of the calibration. This was considered a poor practice and was discussed with the RP group, who acknowledged the observation and planned to evaluate the concern.

Inspector review of maintenance records and discussion with the system engineer revealed no recurrent operability problems with the monitors. The inspectors verified that confirmatory sampling was performed in accordance with the ODCM, when a monitor was inoperable. Additionally, the inspectors confirmed that the lower limits of detection (LLDs) for the chemistry sample analysis instrumentation were appropriate.

#### c. <u>Conclusions</u>

The effluent process radiation monitors were operable and well maintained. The RP group had not reviewed the performance of monitor calibrations by I&C technicians which was considered a poor practice acknowledged by the RP group.

# R2.2 Station Emergency and Control Room Emergency Ventilation Systems

### a. Inspection Scope (IP 84750)

The inspectors reviewed the operability and maintenance of the station emergency and control room emergency ventilation systems. The inspection consisted of system walkdowns, review of system test, surveillance and maintenance records, and interviews with the respective system engineers.

# b. Observations and Findings

Emergency ventilation systems were well maintained with no observed problems in either the high efficiency particulate air (HEPA) filter banks or the charcoal filter beds. System operability tests were performed at the Technical Specification required frequency and test results were trended by the system engineers. The inspectors reviewed these results and noted good system performance. During walkdowns, the inspectors also verified that the systems were as described in the USAR.

The inspectors verified that dioctyl phthalate and methyl iodide tests for the HEPA filters and charcoal banks, respectively, were performed at the required frequency and in accordance with industry standards. These results were also trended and a review of test results identified no problems.

System engineers were aware of maintenance activities and had instituted maintenance requests for deficiencies identified during periodic walkdowns. Historical maintenance results since January 1997, showed no recurrent operability issues with either system. System engineering notebooks were appropriately maintained and periodically reviewed by station management. Other necessary documentation, such as vendor manuals and industry events, were also well maintained.

#### c. <u>Conclusions</u>

The station emergency and control room emergency ventilation systems were observed in good condition and associated tests and surveillances were performed as required. System engineers maintained good oversight of these systems and closely tracked maintenance activities and performance history.

# R2.3 Storage of Radioactive Material

### a. Inspection Scope (IP 86750)

The inspectors conducted walkdowns of selected radioactive material storage areas, performed independent radiation measurements, and reviewed radioactive materials management inventory information.

### b. Observations and Findings

The licensee developed a radioactive materials management inventory system, to track the location of material throughout the site. The inventory was updated regularly and reflected the description of the material, its location, and custodian. Tags affixed to individual storage containers coincided with the material management list, and were noted to adequately describe the materials stored within.

Radioactive material located in open (non-storage cell) areas of the low level radioactive waste building (LLRWB) and in the north pad (outdoor) storage area was consistently labeled, and the areas posted and access controlled by the RP organization. Posting adequacy was confirmed for selected containers through independent inspector radiation surveys. Storage areas were observed to be in good condition and there were no signs of leakage or corrosion from the materials being stored. The physical condition of containers stored in outdoor areas was likewise good. The licensee was in the process of updating the inventory to reflect radioactive materials transferred to the LLRWB inventory since completion of the refueling outage in May 1998. Walkdowns of the auxiliary building disclosed no problems with radioactive material or radwaste storage containers or storage areas.

### c. Conclusions

Radwaste and radioactive material storage containers were maintained in good physical condition, were properly labeled, and storage areas were posted and controlled in accordance with regulatory requirements. A radioactive materials management inventory system adequately tracked material movement at the site.

# R7 Quality Assurance in RP&C Activities

# R7.1 Audits and Appraisals

### a. Inspection Scope (IP 86750)

The inspectors reviewed the audit and appraisal program implemented by the licensee's quality assurance (QA) and quality control (QC) organizations, relative to the processing, packaging and transport of radwaste, the PCP, and radiological effluent

monitoring and control. The inspectors discussed the audit program with QA and QC management and staff, and reviewed audit reports and surveillance packages generated since 1996.

# b. Observations and Findings

The licensee's QA group conducted annual audits of the RP program that included radiological effluent monitoring, the ODCM and aspects of the radwaste program. The QA/QC organization also conducted periodic surveillances of radwaste packaging and shipping activities. However, the audit and surveillance activities conducted since 1996 had not encompassed the PCP, to ensure it was adequately developed and that waste streams were properly processed to meet the waste characteristics required by 10 CFR 61.56. Specifically, annual audits of the radwaste program conducted in 1996, 1997 and 1998, focussed on the material condition of radioactive material storage areas, inventory control, and posting and labeling of areas and containers. Similarly, while two QA surveillances conducted in 1996 and two QC surveillances conducted in 1997. verified that radwaste shipment manifests were completed properly and that packages were marked, labeled and blocked/braced for shipment, the surveillances did not review the implementation of the PCP or procedures for processing radwaste. The QA/QC organization initially believed that annual audits and periodic surveillances of radwaste activities included the PCP and waste processing activities. However, the licensee was unable to demonstrate that the PCP and waste processing activities were audited since 1996, and subsequently realized that these areas were not included in the audit and surveillance program.

Technical Specification 6.5.2.8 required that audits of facility activities be performed under the cognizance of the Company Nuclear Review Board and encompass, in part, the PCP and the implementation of procedures for processing of radwastes at least once per 24 months. The failure to audit the PCP and the implementation of procedures for processing radwaste within at least the 24 months preceding the inspection, is a violation of Technical Specification 6.5.2.8 (Violation No. 50-346/98010-01).

While the annual audits did not include the PCP as required, audits effectively assessed the effluent monitoring program, the ODCM and the controls for the storage of radioactive material. Audits of these program areas were relatively thorough and of sufficient depth to assess the area reviewed. The 1997 audit identified problems with inconsistent documentation of isotopic analyses for effluent releases, a problem with the application of dose conversion factors in the ODCM, and a problem with the development of the ODCM for quantifying primary to secondary system leakage. These problems were verified to be adequately corrected and closed during the licensee's follow up audit in 1998.

Audits were also conducted of offsite waste processing vendors. Specifically, a 1996 Nuclear Procurement Issues Committee (NUPIC) audit of a waste processor whose services were routinely used by the licensee, identified no problems that impacted the licensee's use of the vendor's products or services. The licensee plans to lead a NUPIC audit of another waste processor later in 1998.

# c. Conclusions

Audit and surveillance activities conducted by the licensee were adequate to assess the radiological effluent monitoring and control program, the ODCM and the packaging and transport of radwaste. However, a violation was identified concerning the failure to audit the PCP and the implementation of procedures for processing radwastes as required by Technical Specifications.

# V. Management Meetings

# XI Exit Meeting Summary

The inspectors presented the preliminary inspection findings to members of licensee management on June 11, 1998. On June 16, 1998, the inspectors discussed the violation concerning the audit program in separate telephone conversations with the Manager of Quality Assessment and a representative of the station's Regulatory Affairs staff. The licensee acknowledged the findings presented and did not identify any of the documents reviewed as proprietary.

### PARTIAL LIST OF PERSONS CONTACTED

M. Beier, Manager, Quality Assurance

L. Bonker, Supervisor, ALARA Services

L. Bowyer, Supervisor, Radwaste Operations

R. Coad, Superintendent, Radiation Protection

R. Edwards, Chemistry Technician

D. Eschelman, Manager, Operations

J. Feckley, Supervisor, Radiation Operations

A. Garza, Senior Radiation Protection Technician

B. Geddes, Senior Health Physicist

G. Gillespie, Superintendent, Chemistry

J. Kalmbach, Health Physicist, ALARA Services

W. Klippstein, Supervisor, Surveillances and Analysis

C. Kraemer, Engineering/Licensing, Regulatory Affairs

J. Lash, Plant Manager

D. Lockwood, Supervisor, Regulatory Affairs

R.Martin, Senior Radiation Protection Technician

J. Michaelis, Manager, Maintenance

J. Rogers, Manager, Plant Engineering

R. Scott, Manager, Radiation Protection

H. Stevens, Manager, Nuclear Safety and Inspections

L. Worley, Director, Nuclear Assurance

# INSPECTION PROCEDURES USED

IP 84750 Radioactive Waste Treatment, and Effluent and Environmental Monitoring

IP 86750 Solid Radioactive Waste Management and Transportation of Radioactive Materials

# ITEMS OPENED AND CLOSED

Opened

50-346/98010-01 VIO

Failure to audit the Process Control Program and radioactive waste processing activities at required intervals.

Closed

None

# LIST OF ACRONYMS USED

Ci	Curie
DAW	Dry Active Waste
DOT	Department of Transportation
HEPA	High Efficiency Particulate Air
HIC	High Integrity Container
1&C	Instrument and Control
LLD	Lower Limit of Detection
LLRWB	Low Level Radioactive Waste Building
NUPIC	Nuclear Procurement Issues Committee
ODCM	Offsite Dose Calculation Manual
PCP	Process Control Program
QA	Quality Assurance
QC	Quality Control
Radwaste	Radioactive Waste
RP	Radiation Protection
RQ	Reportable Quantity
USAR	Updated Safety Analysis Report
WGDT	Waste Gas Decay Tank

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# PARTIAL LIST OF DOCUMENTS REVIEWED

Updated Safety Analysis Report (USAR) Sections:

- 6.2.3 Containment Vessel Air Purification and Cleanup Systems
- 9.4 Air Conditioning, Heating, Cooling and Ventilation Systems
- 11.2 Liquid Waste System

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- 11.3 Gaseous Waste System
- 11.4 Process and Effluent Radiological Monitoring Systems
- 11.5 Solid Waste System

# Station Procedure Nos:

RPA I 007	Liquid Release/Contaminated Water Management Guidance
RPA I 012-11	Recommendation of Radioactive Liquid and Gaseous Effluent Releases for Approval
DB-HP-10000 (rev. 4)	Radiation Monitor Set point Control
DB-OP-03011 (rev. 2)	Radioactive Batch Liquid Releases
DB-OP-03012 (rev. 2)	Radioactive Gaseous Batch Release
DB-MI-03404 (rov. 0)	Channel Calibration of 72C-1SR1822B, Waste Gas System Outlet Radiation Monitor
DB-MI-03401 (rev. 0)	Channel Calibration of RE 1770A&B, RE 1878A&B, RE 4686 Liquid Process Monitors and RE 1822A Waste Gas System Outlet Radiation Monitors
DB-HP-01502 (rev.1)	Dewatering of Filter Media
DB-HP-03002 (rev.2)	Dewatering Verification
DB-HP-01500 (rev.1)	Shipping Radioactive Material
DB-HP-01510 (rev.2)	Solid Radioactive Waste Processing and Handling
QA-QC-00530 (rev. 0)	Inspection of Radioactive Material Packaging and Shipping

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### Calibration and Test Records

Channel Calibration of RE-1878B Liquid Process Outlet Radiation Monitor, dated 9/2/97 Channel Calibration of RE-1878A Liquid Process Outlet Radiation Monitor, dated 4/3/98 Channel Calibration of RE-1822A Waste Gas System Outlet Radiation Monitor, dated 12/29/97 Channel Calibration of RE-1822B Waste Gas System Outlet Radiation Monitor, dated 8/12/97 Channel Calibration of RE-1822B Waste Gas System Outlet Radiation Monitor, dated 8/12/97 Channel Calibration of RE-1770A Liquid Process Radiation Monitor, dated 10/3/97 Channel Calibration of RE-1770B Liquid Process Radiation Monitor, dated 8/1/97 Channel Calibration of RE-1770B Liquid Process Radiation Monitor, dated 8/1/97 Channel Calibration of RE-4686, Storm Sewer Outlet Radiation Monitor, dated 7/17/97 Emergency Ventilation System Train 1, 18 month Special Test, dated 1/29/97 Emergency Ventilation System Train 2, 18 month Special Test, dated 2/7/97 Control Room Emergency Ventilation System Train 1, 18 month Special Test, dated 1/29/97 Control Room Emergency Ventilation System Train 2, 18 month Special Test, dated 2/7/97 Miscellaneous Offsite Dose Calculation Manual (rev. 11), dated 9/5/97

1997 Davis Besse Annual Environmental and Effluent Release Report

Quality Assurance, Radiation Protection Annual Audit Reports for 1996 (SR-96-RPRWP-01), 1997 (SR-97-RPRWP-01), and Draft Report for 1998 (SR-98-RPRWP-01)

Quality Assurance Surveillance Reports No. SR-96-RPRWP-02 and SR-96-RPRWP-03 Quality Control Surveillance Reports No. 97-IR-RW0001 and 97-IR-RW0002 Miscellaneous Waste Monitor Tank batch release package (release no. 2431), dated 5/17/98 #1 Waste Gas Decay Tank batch release package (release no. 425), dated 5/10/98 Radiation Monitor Set point Manual Process Control Program (rev. 5)