

April 19, 2001

Mr. Gary Van Middlesworth  
Site Vice-President  
Duane Arnold Energy Center  
Nuclear Management Company, LLC  
3277 DAEC Road  
Palo, IA 52324

SUBJECT: DUANE ARNOLD ENERGY CENTER  
NRC INSPECTION REPORT 50-331/01-02(DRP)

Dear Mr. Van Middlesworth:

On April 1, 2001, the NRC completed an inspection at your Duane Arnold Energy Center facility. The enclosed report documents the inspection findings which were discussed on March 30 and April 2, 2001, with Mr. R. Anderson and other members of your staff.

The inspection examined activities conducted under your license as they relate to reactor safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings of significance were identified.

In accordance with 10 CFR 2.790 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 or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Bruce L. Burgess, Chief  
Projects Branch 2  
Division of Reactor Projects

Docket No. 50-331  
License No. DPR-49

Enclosure: Inspection Report 50-331/01-02(DRP)

See Attached Distribution

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cc w/encl: E. Protsch, Executive Vice President -  
Energy Delivery, Alliant;  
President, IES Utilities, Inc.  
Robert G. Anderson, Plant Manager  
K. Peveler, Manager, Regulatory Performance  
State Liaison Officer  
Chairperson, Iowa Utilities Board  
The Honorable Charles W. Larson, Jr.  
Iowa State Representative

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-331  
License No: DPR-49

Report No: 50-331/01-02(DRP)

Licensee: Alliant, IES Utilities Inc.

Facility: Duane Arnold Energy Center

Location: 3277 DAEC Road  
Palo, Iowa 52324-9785

Dates: February 5 through April 1, 2001

Inspectors: P. Prescott, Senior Resident Inspector  
M. Kurth, Resident Inspector  
D. Nelson, Radiation Specialist  
R. Winter, Reactor Engineer  
G. Pirtle, Physical Security Inspector

Approved by: Bruce L. Burgess, Chief  
Projects Branch 2  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000331-01-02, on 02/05-04/01/2001, IES Utilities, Inc, Duane Arnold Energy Center, Unit 1. Safety eval, equip alignment, fire protection, maint rule, maint risk assessment, op evals, op workarounds, plant mods, post maint testing, surv testing, gas/liquid effluent, access control to rad areas, and security plan changes.

This report covers routine resident inspection activities, a regional engineering inspection, a regional security inspection, and a regional radiation safety inspection. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609 "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

No findings of significance were identified.

## Report Details

### Summary of Plant Status

The licensee operated the plant at or near full power the entire inspection period. The only departures from full licensed power were to perform control rod adjustments, which required downpowers of short duration to approximately 95 percent reactor power.

## **1. REACTOR SAFETY**

### **Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity**

#### 1R02 Evaluations of Changes, Tests, or Experiments

##### .1 Review of Evaluations and Screenings for Changes, Tests, or Experiments

###### a. Inspection Scope

The inspector reviewed 10 safety evaluations performed pursuant to Federal Regulations 10 CFR 50.59. The safety evaluations were related to temporary and permanent plant modifications, set-point changes, procedure changes, potential conditions adverse to quality, and changes to the licensee's updated safety analysis report. The inspector confirmed that the safety evaluations were thorough and that prior NRC approval was obtained when appropriate. The inspector also reviewed 13 safety evaluation screenings, where the licensee had determined that a 10 CFR 50.59 safety evaluation was not necessary. In regard to the changes reviewed where no 10 CFR 50.59 safety evaluation was performed, the inspector reviewed the changes to verify that they did not meet the threshold requiring a 10 CFR 50.59 safety evaluation. These safety evaluations and screenings were chosen based on risk significance of samples from the different cornerstones. Documents reviewed during the inspection are listed at the end of the report.

###### b. Findings

No findings of significance were identified.

##### .2 Identification and Resolution of Problems

###### a. Inspection Scope

The inspector reviewed the licensee's Action Requests concerning 10 CFR 50.59 safety evaluations and screenings to verify that the licensee had an appropriate threshold for identifying issues. The inspector evaluated the effectiveness of the corrective actions for the identified issues. Documents reviewed during the inspection are listed at the end of the report.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

The inspectors performed a partial walkdown of accessible portions of the following systems listed below to verify system operability. Items reviewed in the inspectors' walkdown included the following: verification of the correct valve position of all the valves in the primary system flowpath using the system piping and instrumentation drawings (P&IDs) and system mechanical checklist; verification of breaker alignments using the system electrical checklist; observation of instrumentation valve configurations and appropriate meter indications; verification of lubrication and cooling of major components by direct observation of the components; observation of proper installation of hangers and supports during the walkdown; and verification of operational status of support systems by direct observation of various parameters. Control room switch positions for the system were observed. The inspectors also evaluated other conditions such as adequacy of housekeeping, the absence of ignition sources, and proper component labeling. The walkdowns were performed while maintenance was being conducted on the corresponding train. The following systems were selected for a walkdown:

- "B" Residual heat removal service water system
- "B" Standby filter unit system
- Reactor core isolation cooling system

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors walked down the following risk significant areas looking for any fire protection degraded conditions. Open fire protection impairment requests were reviewed to prioritize the plant area fire plan (AFP) zones inspected and discussions were conducted with the fire protection program engineer. During the walkdowns, emphasis was placed on the following items: control of transient combustibles and ignition sources; area material condition; operational lineup and operational effectiveness of the fire protection systems, equipment, and features; and the material condition and operational status of fire barriers used to prevent fire damage or fire propagation.

In particular, the inspectors verified that all observed transient combustibles were being controlled in accordance with the licensee's administrative control procedures. In addition, the inspectors observed the physical condition of fire detection devices, such as overhead sprinklers, and verified that any observed deficiencies did not impact the operational effectiveness of the system. Included in the observations were the following items: the physical condition of portable fire fighting equipment, such as fire extinguishers, to verify that the equipment was located appropriately and that access to the extinguishers was unobstructed; the verification that fire hoses were installed at their designated locations and the physical condition of the hoses was satisfactory and access unobstructed; and the verification of the physical condition of passive fire protection features such as fire doors, ventilation system fire dampers, fire barriers, and fire zone penetration seals to ensure that the items were properly installed and in good physical condition. The areas inspected were:

- Reactor building lay-down area (standby liquid control system), Elevation 833
- South turbine building basement condensate pump area
- Reactor building lay-down area, corridor and waste tank area, and spent resin tank room

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the maintenance rule requirements for the systems or components listed below. Documentation reviewed in performance of the inspection is also listed below. The systems or components were selected based upon recent performance problems and the risk significance classification of the systems in the maintenance rule program. The inspectors independently verified the licensee's implementation of the maintenance rule for these systems by verifying that these systems were properly scoped within the maintenance rule in accordance with 10 CFR 50.65; that all failed structures, systems, or components (SSCs) were properly categorized and classified as (a)(1) or (a)(2) in accordance with 10 CFR 50.65; the appropriateness of performance criteria for SSCs classified as (a)(2); and the appropriateness of goals and corrective actions for SSCs classified as (a)(1). The inspectors also verified that issues were identified at an appropriate threshold and entered in the corrective action program. The following systems were reviewed:

- Control rod drive system
- Reactor protection system
- Post accident sampling system



- Instrument air system
- Feedwater system

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk, scheduling, configuration control, performance of planned maintenance and emergent work activities, and the risk assessment of scheduled maintenance activities associated with work week 9 on the reactor core isolation cooling system and work week 12 for the high pressure coolant injection system. Also, work week 13 was reviewed for planned work on the Cardox system, and work activities including divers in the intake structure. In addition, emergent work activities associated with the emergency service water system were reviewed. The inspectors verified that scheduled and emergent work activities were adequately managed. This included observation of the licensee's program for conducting maintenance risk safety assessments and verification of the licensee's planning, risk management tools, and the assessment and management of online risk. The inspectors also evaluated those licensee actions to address increased online risk during these periods, such as establishing compensatory actions, minimizing the duration of the activity, obtaining appropriate management approval, and informing appropriate plant staff, were accomplished when online risk was increased due to maintenance on risk-significant SSCs. Finally, portions of the maintenance activities were observed to ensure proper management oversight and return to service of the SSCs in a timely manner.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the technical adequacy of operability evaluations to ensure that the system operability was properly justified and the system remained available, such that no unrecognized increase in risk occurred. The following operability evaluations were reviewed:

- Action Request (AR) 23955, "Rod Worth Minimizer Error Message"
- AR 24018, "250 VDC Battery 1D4 Cell #19, Showing Signs of Copper Contamination"

- AR 23839, "Core Spray and Residual Heat Removal Inservice Testing Requirements Being Met"

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (OWAs)

a. Inspection Scope

The inspectors reviewed operator workarounds to identify any potential effect on the function of mitigating systems, or the operators' ability to respond to an event and implement abnormal and emergency operating procedures.

The following OWAs were reviewed during the inspection period:

- AR 21778, "Main Generator Auto Voltage Regulator Caused MVAR [Motor Volts Ampere Reactive] Transient"
- AR 19430, "Replace the Existing Hydrogen Analyzers with New Units Manufactured by Panametrics"

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds - Cumulative Effects Assessment

a. Inspection Scope

The inspectors reviewed the cumulative effects of all documented operator workarounds on reliability, availability, and potential for mis-operation of a system; the potential for increasing initiating event frequency or impact on multiple mitigating systems; and the ability of operators to respond in a correct and timely manner to plant transients and accidents.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed Engineered Maintenance Actions (EMAs) A45334 and A45334, associated with the modification to remove the emergency service water check valves to the standby gas treatment system trains instrument air compressors, 1K-3 and 1K-4. The inspectors reviewed the EMA documentation, including the supportive drawings, and appropriate sections of the Updated Final Safety Analysis Report (UFSAR). The work order associated with the EMA was reviewed. Post maintenance test data was reviewed following the modifications. The inspectors also reviewed AR 19276, documenting findings that the associated EMAs were incorrectly designated as not affecting the inservice test program.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors observed the post-maintenance tests and reviewed test data for the following activities:

- Preventive Work Order (PWO) 1115330, "Calibrate 'B' Standby Gas Treatment System Flow Indicator FIC5828B"
- PWO 1115966, "Calibrate HPCI Turbine Exhaust Line Drain Pot High Level Switch LS2219"

The inspectors verified that the post-maintenance tests observed demonstrated that the systems and components were capable of performing their intended safety function. Included in the review were the applicable sections of Technical Specifications (TS), the UFSAR, and applicable plant procedures.

The licensee corrected a self-revealing return to service error while performing post-maintenance testing for PWO 1115966. Following the completion of the tests, the inspectors verified that the test equipment was removed and that the equipment was returned to a condition in which it could perform its safety function.

b. Findings

No findings of significance were identified.

## 1R22 Surveillance Testing

### a. Inspection Scope

The inspectors observed surveillance testing on risk-significant equipment, verified that the SSCs selected were capable of performing their intended safety function and verified that the surveillance tests satisfied the requirements contained in TS, the UFSAR, and licensee procedures. During surveillance testing observations, the inspectors verified the following items: the test was adequate to demonstrate operational readiness consistent with the design and licensing basis documents; the testing acceptance criteria were clear; the impact of the testing had been properly characterized during the pre-job briefing; the test was performed as written and all testing prerequisites were satisfied; and that the test data was complete, appropriately verified, and met the requirements of the testing procedure. Following the completion of the test, the inspectors verified that the test equipment was removed and that the equipment was returned to a condition in which it could perform its safety function.

The following surveillance testing activities were observed:

- Surveillance Test Procedure (STP) 3.1.7-01, "Standby Liquid Control System's Pump Operability Test," Revision 3
- STP NS540002, "Emergency Service Water Operability Test," Revision 5

### b. Findings

No findings of significance were identified.

## 2. **RADIATION SAFETY**

### **Cornerstones: Occupational Radiation Safety and Public Radiation Safety**

## 2OS1 Access Control to Radiologically Significant Areas

### .1 Plant Walkdowns and Radiological Boundary Verifications

#### a. Inspection Scope

The inspector conducted walkdowns of the radiologically controlled area (RCA) to verify the adequacy of radiological boundaries and postings. Specifically, the inspector walked down several radiologically significant work area boundaries (high and locked high radiation areas) in the Turbine, Reactor, and Radwaste Buildings.

#### b. Findings

No findings of significance were identified.

## 2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

### .1 Offsite Dose Assessment Manual (ODAM)

#### a. Inspection Scope

The inspector reviewed the 1999 Annual Radioactive Material Release Report to verify that the effluent program was implemented as described in the UFSAR and the ODA. The inspector reviewed the report for significant changes to the ODA and to the design and operation of the radioactive waste system.

#### b. Findings

No findings of significance were identified.

### .2 Gaseous and Liquid Release Systems Walkdowns

#### a. Inspection Scope

The inspector performed walkdowns of the major components of the gaseous and liquid release systems (e.g., radiation and flow monitors, demineralizers and filters, tanks, and vessels) to verify that the current system configuration was as described in the UFSAR and the ODA and to observe ongoing activities and equipment material condition.

#### b. Findings

No findings of significance were identified.

### .3 Gaseous and Liquid Releases

#### a. Inspection Scope

There were no liquid releases during the inspection period. The inspector did review radioactive gaseous release records to verify that appropriate treatment equipment was used and that the radioactive gaseous effluents were processed and released in accordance with ODA requirements. The inspector also observed the collection of a pretreatment offgas sample and the collection of particulate and iodine samples from the K2 Turbine Building Kaman effluent monitor to verify that the samples had been collected in compliance with station procedures.

#### b. Findings

No findings of significance were identified.

.4 Changes to the Offsite Dose Assessment Manual

a. Inspection Scope

The inspector reviewed changes made by the licensee to the ODAM as well as to the liquid or gaseous radioactive waste system design, procedures, or operation since the last inspection. The inspector reviewed the 1999 and 2000 changes to the ODAM (minor, administrative changes), to confirm that the changes had been documented and evaluated in accordance with the requirements of the ODAM and the Technical Specifications.

b. Findings

No findings of significance were identified.

.5 Dose Calculations

a. Inspection Scope

The inspector reviewed the 1999 dose calculations and a selection of year 2000 monthly dose calculations to ensure that the licensee had properly calculated the offsite dose from radiological effluent releases and to determine if any annual Technical Specifications or ODAM (i.e., Appendix I to 10 CFR Part 50 values) limits were exceeded.

b. Findings

No findings of significance were identified.

.6 Air Cleaning Systems

a. Inspection Scope

The inspector reviewed year 2001 Ventilation Filter Testing Program (VFTP) test results to ensure that the tests were conducted in compliance with station procedures and that the test results were within the licensee's acceptance criteria.

b. Findings

No findings of significance were identified.

.7 Effluent Monitor Calibrations

a. Inspection Scope

The inspector reviewed records of instrument calibrations performed since the last inspection for each point of discharge effluent radiation monitor. The inspector also reviewed any completed system modifications and the current effluent radiation monitor alarm setpoint value for agreement with ODAM requirements.

b. Findings

No findings of significance were identified.

.8 Counting Room Instrument Calibrations and Quality Control

a. Inspection Scope

The inspector reviewed records of instrument calibrations, and daily and monthly source check records (quality control) performed since the last inspection for the chemistry counting room instrumentation associated with effluent monitoring and release activities. The inspector conducted the review to look for indications of degraded instrument performance.

b. Findings

No findings of significance were identified.

.9 Interlaboratory Comparison Program

a. Inspection Scope

The inspector reviewed the results of the years 1999 and 2000 interlaboratory comparison program to verify the quality of radioactive effluent sample analyses performed by the licensee. The inspector reviewed the licensee's quality control evaluation of the interlaboratory comparison test and associated corrective actions for any deficiencies identified.

b. Findings

No findings of significance were identified.

.10 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed years 1998, 1999, and 2000 Quality Assurance Department assessment reports to evaluate the effectiveness of the self-assessment process to identify, characterize, and prioritize problems and verified that previous radiological instrumentation related issues were adequately addressed. The inspector also reviewed all years 1999 and 2000 Action Requests that addressed radioactive treatment and monitoring program deficiencies. The review was conducted to verify that the licensee had effectively implemented the corrective action program.

### **3. SAFEGUARDS**

#### **Cornerstone: Physical Protection**

##### **3PP4 Security Plan Changes**

###### **a. Inspection Scope**

The inspector reviewed Revision 43 of the Duane Arnold Energy Center Physical Security Plan which was submitted by licensee letter, dated March 7, 2001, to verify that the change did not decrease the effectiveness of the security plan. The security plan was submitted in accordance with 10 CFR 50.54(p).

###### **b. Findings**

No findings of significance were identified.

### **4. OTHER ACTIVITIES**

##### **4OA6 Meetings**

###### **.1 Regional Exit Meeting**

The inspectors presented the results for region-based inspections in the engineering and radiation safety areas (Sections 1R02, 2OS1, and 2PS1) to Mr. R. Anderson and other members of licensee management on March 30, 2001. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

###### **.2 Resident Exit Meeting**

The inspectors presented the inspection results to Mr. R. Anderson and other members of licensee management on April 2, 2001. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.



## KEY POINTS OF CONTACT

### Licensee

R. Anderson, Plant Manager  
W. Simmons, Maintenance Superintendent  
D. Curtland, Operations Manager  
R. Hite, Manager, Radiation Protection  
J. Bjorseth, Manager, Engineering  
K. Peveler, Manager, Regulatory Performance  
G. Van Middlesworth, Site General Manager  
D. Wilson, Vice President Nuclear  
B. Rowland, Security Manager  
K. Huber, Systems Engineering Manager  
C. Bock, Systems Engineer  
B. Murrel, Supervisor, Regulatory Communications  
H. Giorgio, Radiation Protection Manager  
L. Kriege, Chemistry Supervisor  
B. Rowland, Security Manager

## LIST OF ACRONYMS USED

ADAMS	Agency Documents Access and Management System
AFP	Area Fire Plan
AR	Action Request
CFR	Code of Federal Regulations
DAEC	Duane Arnold Energy Center
DRP	Division of Reactor Projects
ECP	Engineered Change Package
EMA	Engineering Maintenance Action
HPCI	High Pressure Coolant Injection
IR	Inspection Report
NRC	Nuclear Regulatory Commission
ODAM	Offsite Dose Assessment Manual
OI	Operating Instruction
OWA	Operator Workaround
P&IDs	Piping and Instrumentation Drawings
PWO	Preventive Maintenance Order
PWR	Procedure Work Request
RCA	Radiologically Controlled Area
RHR	Residual Heat Removal
SEAR	Safety Evaluation Applicability Review
SSCs	Structure, System, or Components
STP	Surveillance Test Procedure
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
VFTP	Ventilation Filter Testing Program

## LIST OF DOCUMENTS REVIEWED

### Area Fire Plans

Volume II, Fire Brigade Organization, AFP-11, Revision 22  
Volume II, Fire Brigade Organization, AFP-16, Revision 23  
Volume II, Fire Brigade Organization, AFP-7, Revision 22

### Procedures and Related Documents

ACP 103.2	Safety Evaluation Applicability Review Process, July 12, 2000
ACP 103.3	Safety Evaluation Process, January 11, 1999
PCP 1.2	DEAC Chemistry Quality Assurance Program, Revision 15
PCP 2.6	Offgas Pretreatment and Posttreatment Sampling, Revision 8
PCP 2.8	Collection and Analysis of Particulate and Iodine Filters from the Gaseous Effluent Monitors, Revision 11
PCP 7.2	Nuclear Data Spectroscopy System Calibration, Revision 7
PCP 7.3	Nuclear Data Spectroscopy System Operation, Revision 19
PCP 7.4	Nuclear Measurements Corporation Proportional Counter, Revision 16
PCP 7.5	Tennelec Low Background Counter Model LB 1000, Revision 5
PCP 10.4	Accumulation of Offsite Dose Calculation Data, Revision 0
STP 3.1.7-01	Standby Liquid Control System's Pump Operability Test, Revision 3
STP 3.6.4.3-03	Standby Gas Treatment System HEPA and Charcoal Filter Efficiency Tests, Revision 6
STP 3.7.4-02	Main Control Room Ventilation Standby Filter Unit Test, Revision 3
STP NS540002	Emergency Service Water Operability Test, Revision 5
STP NS790201	Offgas Post Treatment Radiation Monitor Calibration, Revision 4
STP NS790303	RHRWS/ESW Rupture Disc Radiation Monitor Calibration, Revision 4
STP NS791005	K2 Turbine Building Kaman Calibration, Revision 4
STP NS791009	K6 Reactor Building Kaman Calibration, Revision 3
STP NS791013	K10 Off Gas Stack Kaman Calibration, Revision 2
STP NS791016	Kaman Monitor Inop, Revision 0
STP NS791101	Extended Range Effluent Radiation Monitors, Revision 4
P&ID M-146	Service Water System Pumphouse, Revision 66
P&ID M-151	Control Building and Technical Support Center Air Flow Diagram, Revision 20
P&ID M-125	Reactor Core Isolation Cooling System (Water Side), Revision 33
P&ID M-124	Reactor Core Isolation Cooling System (Steam Side), Revision 47
OI 150	Reactor Core Isolation Cooling System, Revision 40
OI 152	High Pressure Coolant Injection System, Revision 47
OI 170	Standby Gas Treatment System, Revision 36
OI 416	Residual Heat Removal Service Water System, Revision 23
OI 730	Control Building HVAC System, Revision 49

### Safety Evaluations

96-0117 LPCI Check Valves, December 8, 1998  
99-014 RWCU Return Isolation Valve Close Stroke Time Limit, Revision 0  
99-029 Install Jumper on Recirc Runback Discharge Valve, May 21, 1999  
99-033 Suppression Pool Spray and Drywell Spray Systems not dependant upon the RHR SW, Revision 1  
99-041 RHR Pump Seal Water Coolers not Required at DAEC, August 31, 1999  
99-049 Instrument AC Upgrade, March 21, 2000  
99-051 Reload 16 (with GE-12 fuel ), October 22, 1999  
00-003 Add Backflush System to Sample Line of Radwaste Collector Tank 1T-70, March 14, 2000  
00-006 Transient Blocking Diode for 1D45 Inverter Input, 120 V Uninterruptible Power February 29, 2000  
01-001 Temp Mod, Remove Interlock Between MO4151 and CV1379 and CV4126, January 5, 2001

### Safety Evaluation Applicability Review (SEAR)

ECP 1617 Mechanical Snubber Replacement Modification, Revision 0, July 2, 1999  
EMA 110794 Replace Agastat Time Delay Relay with Manufacturer's Recommended Replacement, Revision 0, June 11, 1999  
EMA A39202 Test Valves to answer Generic Letter 96-06, Revision 0, November 17, 1998  
DDC-3716 Revise Station Battery Margin Calculations Cal-E92-07, Cal-E92-08, and Cal-E92-09 per AR 971171, March 11, 1999  
DDC-4086 Issue the Study of the Electrical Power Distribution System for the DAEC Power Uprate Project, December 21, 2000  
DDC-3890 RHR Pump Seal water did not Require Cooling, February 25, 2000  
PWR 13340 (OI 672), October 8, 2000  
PWR 11625 (3.0.0-01), March 12, 2000  
PWR ACP-99-07-06 (ACP 114.5), July 8, 1999

### Temporary Modification Permits

98-078 Ultrasonic Feedwater Flow, December 17, 1998  
99-049 Electrically Backseat MO 1169, July 20, 1999  
00-037 Yokogawa Recorder on Battery Voltage, August 1, 2000

### Action Requests

10443, 10447, 14047, 16083, 16085, 16125, 16349, 16609, 17087, 18021, 18466, 18466, 19204, 19276, 19430, 19480, 19530, 19530, 19718, 20097, 20423, 20610, 20761, 21778, 22001, 22002, 22444, 22531, 22539 23459, 23498, 23839, 23955, 24018, 24484

### QA Assessments

Radioactive Effluents Surveillance Test Procedures, First Quarter, 1998  
ODAM Technical Requirements and Implementing Procedures, Third Quarter, 1999  
Implementation of the Radiological Effluent Control Program, Fourth Quarter, 1999  
Off-site Dose Assessment Manual Assessment, Second Quarter, 2000  
Kaman Monitor 10 Alarm Setpoint STP, Third Quarter, 2000

### Calibration Records

Offgas Post Treatment Calibration, February 5, 2001  
RHR Rupture Disk Rad Monitor, October 23, 2000  
K2 Turbine Building Kaman, January 22, 2001  
K6 Reactor Building Kaman, October 10, 2000  
K1 Turbine Building Accident Range Monitor, March 14, 2001  
K10 Off Gas Stack Kaman, March 27, 2000

### Performance Criteria Documents

Control Rod Drive, Revision 1  
Reactor Protection System and Neutron Monitoring System, Revision 1  
Post Accident Sampling System, Revision 0  
Instrument Air System, Revision 1

### Other Documents

1999 Annual Radioactive Materials Release Report  
Results of Radiochemistry Cross Check Program Quarterly Reports, 1999 and 2000  
Standby Gas Treatment System HEPA and Charcoal Filter Efficiency Tests, February 1, 2000  
Main Control Room Ventilation Standby Filter Unit Test, February 1, 2000  
Radioiodine Penetration and Retention Test Report, January 19, 2001  
Maintenance Rule Memorandum A-351, November /December 2000 Maintenance Rule  
Monitoring and Status Report  
Temporary Document Change: OI-515, October 30, 2000

### Technical Specifications

TS 3.6.4.3, Standby Gas Treatment System  
TS 3.5, Emergency Core Cooling Systems and Reactor Core Isolation Cooling System  
TS 5.5.7, Ventilation Filter Testing Program

### Updated Final Safety Analysis Report

UFSAR Section 6.5.3.3, Standby Gas Treatment System  
UFSAR Section 6.3.2.2.1, High Pressure Coolant Injection System