

September 18, 2003

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

SUBJECT: DUANE ARNOLD ENERGY CENTER  
NRC EVALUATIONS OF CHANGES, EXPERIMENTS, OR TESTS AND  
PERMANENT PLANT MODIFICATIONS INSPECTION  
REPORT 50-331/03-09(DRS)

Dear Mr. Peifer:

On August 29, 2003, the U.S. Nuclear Regulatory Commission (NRC) completed a routine baseline inspection at your Duane Arnold Energy Center. The enclosed report documents the inspection findings, which were discussed on August 29, 2003, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Specifically, this inspection focused on the baseline biennial inspections for evaluations of changes, tests, or experiments (10 CFR 50.59) and permanent plant modifications. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, 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, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component

M. Peifer

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of 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).

Sincerely,

**/RA/**

Julio F. Lara, Chief  
Electrical Engineering Branch  
Division of Reactor Safety

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

Enclosure: Inspection Report 50-331/03-09(DRS)  
w/Attachment: Supplemental Information

cc w/encl: E. Protsch, Executive Vice President -  
Energy Delivery, Alliant;  
President, IES Utilities, Inc.  
J. Cowan, Chief Nuclear Officer  
J. Forbes, Senior Vice President  
J. Bjorseth, Plant Manager  
S. Catron, Manager, Regulatory Affairs  
J. Rogoff, Esquire General Counsel  
B. Lacy, Nuclear Asset Manager  
D. McGhee, Iowa Department of Commerce  
Chairman, Linn County Board of Supervisors  
State Liaison Officer  
Chairperson, Iowa Utilities Board  
The Honorable Charles W. Larson, Jr.  
Iowa State Representative

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State Liaison Officer  
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Iowa State Representative

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| NAME   | GHausman:tr |   | BBurgess | JLara    |  |  |
| DATE   | 09/18/03    |   | 09/18/03 | 09/18/03 |  |  |

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-331

License No: DPR-49

Report No: 50-331/03-09(DRS)

Licensee: Alliant, IES Utilities, Inc.

Facility: Duane Arnold Energy Center

Location: 3277 DAEC Road  
Palo, Iowa 52324-9785

Dates: August 25, 2003 through August 29, 2003

Inspectors: G. Hausman, Senior Reactor Inspector, Lead  
T. Bilik, Reactor Inspector  
D. Schrum, Reactor Inspector  
J. Panchison, Mechanical Engineering Contractor

Approved by: Julio F. Lara, Chief  
Electrical Engineering Branch  
Division of Reactor Safety

Enclosure

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## SUMMARY OF FINDINGS

IR 05000331/2003-009(DRS); IES Utilities, Inc.; 08/25/03 - 08/29/03; Duane Arnold Energy Center; Routine Baseline Inspection Report.

This report covers a five day period of announced baseline inspection on evaluations of changes, tests, or experiments and permanent plant modifications. The inspection was conducted by Region III inspectors and an engineering contractor. No findings of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

### A. Inspector-Identified and Self-Revealed Findings

#### **Cornerstone: Initiating Events**

No findings of significance were identified.

#### **Cornerstone: Mitigating Systems**

No findings of significance were identified.

#### **Cornerstone: Barrier Integrity**

No findings of significance were identified.

### B. Licensee-Identified Violations

No findings of significance were identified.

## REPORT DETAILS

### Summary of Plant Status

Unit 1 operated at or near full power throughout the inspection period.

#### **1. REACTOR SAFETY**

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

#### 1R02 Evaluations of Changes, Tests, or Experiments (71111.02)

##### .1 Review of 50.59 Evaluations and Screenings

###### a. Inspection Scope

The inspectors reviewed 10 evaluations performed pursuant to 10 CFR 50.59. The evaluations related to permanent plant modifications, setpoint changes, procedure changes, conditions adverse to quality, and changes to the updated final safety analysis report. The inspectors confirmed that the evaluations were thorough and that prior NRC approval was obtained as appropriate. The inspectors also reviewed 19 screenings where the licensee had determined that a 10 CFR 50.59 evaluation was not necessary. In regard to the changes reviewed where no 10 CFR 50.59 evaluation was performed, the inspectors verified that the changes did not meet the threshold to require a 10 CFR 50.59 evaluation. These evaluations and screenings were chosen based on risk significance of samples from the different cornerstones.

###### b. Findings

No findings of significance were identified.

#### 1R17 Permanent Plant Modifications (71111.17)

##### .1 Review of Recent Modifications

###### a. Inspection Scope

The inspectors reviewed 10 permanent plant modifications that were installed in the last two years. The modifications were chosen based upon their affecting systems that had high probabilistic risk analysis (PRA) significance in the licensee's Individual Plant Evaluation (IPE) or high maintenance rule safety significance. The inspectors reviewed the modifications to verify that the completed design changes were in accordance with the specified design requirements and the licensing bases and to confirm that the changes did not affect any systems' safety function. Design and post-modification testing aspects were verified to ensure the functionality of the modification, its associated system, and any support systems. The inspectors also verified that the modifications performed did not place the plant in an increased risk configuration.



b. Findings

No findings of significance were identified.

**4. OTHER ACTIVITIES (OA)**

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Condition Reports

a. Inspection Scope

The inspectors reviewed a selected sample of condition reports associated with Duane Arnold Energy Center's permanent plant modifications and concerning 10 CFR 50.59 evaluations and screenings. The inspectors reviewed these issues to verify an appropriate threshold for identifying issues and to evaluate the effectiveness of corrective actions. In addition, condition reports written on issues identified during the inspection were reviewed to verify adequate problem identification and incorporation of the problem into the corrective action system. The specific corrective action documents that were sampled and reviewed by the team are listed in the attachment to this report.

b. Findings

No findings of significance were identified.

4OA6 Meetings

.1 Exit Meeting

The inspectors presented the inspection results to Mr. Peifer and other members of licensee management at the conclusion of the inspection on August 29, 2003. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

.2 Interim Exit Meetings

No interim exits were conducted.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licensee

T. Anderson, Maintenance  
J. Bjorseth, Plant Manger  
C. Bleau, Design Engineering (Electrical/I&C Team Supervisor)  
D. Brigl, Systems Engineering  
S. Catron, Regulatory Affairs Manager  
E. Christopher, Program Engineering  
P. Collingsworth, Systems Engineering  
D. Curtland, Engineering Director  
S. Haller, Systems Engineering Manager  
R. Harter, Performance Improvement Manager  
B. Hopkins, Program Engineering  
D. Miller, Employee Concerns Manager  
K. Morgan, Nuclear Assessment Manager  
B. Murrell, Regulatory Affairs/Licensing  
A. Nebola, Training  
M. Peifer, Site Vice President  
J. Probst, Program Engineering  
W. Simmons, Maintenance Manager  
J. Stutzman, Training  
L. Swenzinski, Regulatory Affairs/Licensing  
M. Wood, Design Engineering (Mechanical Team Supervisor)

#### Nuclear Regulatory Commission

S. Caudill, Resident Inspector  
D. Hills, Region III Mechanical Engineering Branch Chief  
G. Wilson, Senior Resident Inspector

**LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

None.

Closed

None.

Discussed

None.

## LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

### CALCULATIONS

| <u>Document Number</u> | <u>Title or Description</u>      | <u>Revision or Date</u> |
|------------------------|----------------------------------|-------------------------|
| CAL-VC8-009            | Drywell Cooling Load Calculation | 0                       |
| MC-25E                 | Develop FW System Curve          | January 12, 1974        |

### CORRECTIVE ACTION DOCUMENTS GENERATED DURING THE INSPECTION

| <u>Document Number</u> | <u>Title or Description</u>                                                                                                                | <u>Revision or Date</u> |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| CAP 028802             | 10CFR50.59 Safety Evaluation 99-041, RHR Pump Seal Water Coolers Not Required at DAEC, Should Be Reviewed for Possible Revision            | August 27, 2003         |
| CAP 028847             | 50.59 Screening Records Were Not Stand Alone Documents                                                                                     | August 28, 2003         |
| CAP 028848             | OI-416, Section 10 May Need Precaution Statement                                                                                           | August 28, 2003         |
| CAP 028849             | The Corrective Action Program's Method of Links and Daughter Documents Made it Very Difficult to Assess What Activities Had Been Completed | August 28, 2003         |
| CAP 028851             | Evaluate Replacement of KY4201 and KY4202                                                                                                  | August 29, 2003         |

### CORRECTIVE ACTION DOCUMENTS GENERATED PRIOR TO INSPECTION

| <u>Document Number</u> | <u>Title or Description</u>                                                                                                                   | <u>Revision or Date</u> |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| AR 3025                | RHR SW Strainer High dp                                                                                                                       | August 6, 2002          |
| CAP 011318             | UFSAR Change Requests for Plant Modifications                                                                                                 | August 13, 2001         |
| CAP 011327             | NRC Inspection Found Overlap of ECP Scopes                                                                                                    | August 16, 2001         |
| CAP 011328             | ESW Flow to RHR Pump Seal Coolers                                                                                                             | August 16, 2001         |
| CAP 011329             | SE for Removal of HPCI/RCIC Auto Open Logic                                                                                                   | December 14, 2002       |
| CAP 011330             | Inadequate Engineering Evaluations Identified for the Majority of Field Variances Written for ECP 1622 and ECP 1604                           | August 16, 2001         |
| CAP 011464             | Reactor Building Sump Maintenance Rule<br>10 CFR 50.59                                                                                        | August 29, 2001         |
| CAP 011468             | Form an Engineering Team to Identify Design Basis Calculations, Modifications, and Programs That Pertain to RHR, RHR SW, ESW, and EDG Systems | August 24, 2001         |
| CAP 011478             | Review of Revised 50.59 Process Implementation                                                                                                | September 4, 2001       |
| CAP 012068             | Inadequate Followup Action for 10 CFR 50.59 Evaluation 01-023                                                                                 | November 14, 2001       |

**CORRECTIVE ACTION DOCUMENTS GENERATED PRIOR TO INSPECTION**

| <u>Document Number</u> | <u>Title or Description</u>                                                                            | <u>Revision or Date</u> |
|------------------------|--------------------------------------------------------------------------------------------------------|-------------------------|
| CAP 012462             | 10 CFR 50.59 Evaluation 01-026 (spTP 202 PUP Power Ascension Testing) Requires Revision                | January 10, 2002        |
| CAP 013469             | Insure That 10CFR50.59 Screening and a 10 CFR 50.59 Evaluation Are Completed                           | May 20, 2002            |
| CAP 014503             | Temporary Modification 02-059 Did Not Address the Seismic Qualification of a Jumper Cable Installation | October 1, 2002         |
| CAP 014525             | Error in Developing Temporary Modification 02-061 Delayed Exit from a Core Spray LCO                   | October 4, 2002         |
| CAP 014710             | Inadequate 10 CFR 50.59 Screening to Change Modes of Closed Operation in the Prerequisites             | November 14, 2002       |
| CAP 020061             | RHRSW Strainer High dp While Running A and C RHRSW Pumps                                               | August 6, 2002          |
| CAP 025226             | Administrative Clarification on 50.59 Screen Questions w/Pre-existing NRC SER                          | January 16, 2003        |
| CAP 025315             | Using 10 CFR 50.59 Screenings Written for EMAs/DDCs for Procedure Changes                              | January 28, 2003        |
| CAP 026474             | DCF Approved by Owner and OSS (OI 149) Without a 10 CFR 50.59 Screening                                | March 28, 2003          |
| CAP 027142             | Focused Area Self-Assessment of 10 CFR 50.59 Process                                                   | April 22, 2003          |
| CAP 027189             | 10 CFR 50.59 Screening Course Exam Administered with Invalid Exam Questions                            | April 24, 2003          |
| CAP 027440             | AOV Reliability Improvement Mod to Install Flexible Air Lines at Valve                                 | May 16, 2003            |
| CAP 027457             | Trend of Improperly Performed Mods to the DAEC                                                         | May 17, 2003            |
| CAP 027594             | No Show for 10 CFR 50.59 Screening Class (60030)                                                       | May 28, 2003            |
| CAP 028265             | Applicability of 10 CFR 50.59 and NMC/DAEC Supply Chain Procedures                                     | July 17, 2003           |

**DRAWINGS**

| <u>Document Number</u> | <u>Title or Description</u> | <u>Revision or Date</u> |
|------------------------|-----------------------------|-------------------------|
| BECH-M129              | River Water Supply System   | July 14, 2003           |

**EVALUATIONS**

| <u>Document Number</u> | <u>Title or Description</u>                                                                                                                                                  | <u>Revision or Date</u> |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| SE 97-113              | Install Flush Connections on the Piping to and from the Reactor Building Equipment Drain Sump Heat Exchanger and Install an Isolation Valve on the Drain Line from this Unit | March 17, 1998          |

## **EVALUATIONS**

| <b><u>Document Number</u></b> | <b><u>Title or Description</u></b>                                                                                                             | <b><u>Revision or Date</u></b> |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| SE 98-014                     | UFSAR Change Request 98-122 revised the RWCU System Supply Isolation Valves MO2700 & MO2701 Design Closure Times from 20 Seconds to 22 Seconds | December 18, 1998              |
| SE 98-075                     | BECH-M133 Updated to Remove HS3301A From the Control Circuit of 1P048                                                                          | July 31, 1998                  |
| SE 99-041                     | ESW to RHR Pump Seal Coolers                                                                                                                   | January 1, 1900                |
| SE 99-058                     | SE for Extending Fire Pump LCO Time                                                                                                            | December 21, 1999              |
| SE 01-025                     | ECP 1628, Reactor Building Vent Shaft and Control Building Air Intake Radiation Monitor Replacement                                            | November 20, 2001              |
| SE 01-026                     | Cycle 18 Power Ascension Test to 1790 Mw <sub>t</sub>                                                                                          | January 29, 2002               |
| SE 02-001                     | Revise Qual SC-100 & SC-101, EQ Documentation                                                                                                  | May 28, 2002                   |
| SE 02-002                     | Operation at 100 percent Power with RHRSW Strainer Bypassed                                                                                    | August 10, 2002                |
| SE 03-001                     | River H <sub>2</sub> O Supply Valves, Safety Related Seismic Boundary (V-29-42 & 43 to Become Normally Open)                                   | June 17, 2003                  |

## **MODIFICATIONS**

| <b><u>Document Number</u></b> | <b><u>Title or Description</u></b>                                                                                                    | <b><u>Revision or Date</u></b> |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| ECP 1616                      | MO2046 & MO1947 Control Logic Modification                                                                                            | April 24, 2000                 |
| ECP 1640                      | Circulating Water Pumps                                                                                                               |                                |
| ECP 1648                      | Replace Reactor Building Vent Shaft/Control Building Air Intake Radiation Monitoring System with Digital Radiation Monitoring System  | November 28, 2001              |
| ECP 1650                      | Drywell Cooler Replacement                                                                                                            | April 25, 2003                 |
| ECP 1661                      | Install Oil Lie off of Compressor 1K003                                                                                               |                                |
| EMA A36191                    | Add a Connection with an Isolation Valve to the Inlet Line from the Reactor Building Equipment Drain Sump to the 1E033 Heat Exchanger | April 21, 2000                 |
| EMA A45051                    | Decommission the Relative Humidity Indication Instrument Loops for the a SBT Train                                                    | July 30, 2001                  |
| EMA A45791                    | Replace 64D10 Ground Replay with Magnacraft                                                                                           |                                |
| EMA A53462                    | Provide Permanent Power Supply to the Heat Tracing on the off Gas after Filter Vent Line                                              | October 24, 2002               |
| EMA A57819                    | Butterfly Valve Installed Will Provide Better Sealing than the Sluice Gate Being Replaced                                             | June 5, 2002                   |

## **PROCEDURES**

| <b><u>Document Number</u></b> | <b><u>Title or Description</u></b>             | <b><u>Revision or Date</u></b> |
|-------------------------------|------------------------------------------------|--------------------------------|
| ACP 103.0                     | Design Control Program                         | 14                             |
| ACP 103.2                     | Safety Evaluation Applicability Review Process | 14                             |
| ACP 103.2                     | 10 CFR 50.59 Screening Process                 | 19                             |
| ACP 103.3                     | Safety Evaluation Process                      | 10                             |

## PROCEDURES

| <u>Document Number</u> | <u>Title or Description</u>                                  | <u>Revision or Date</u> |
|------------------------|--------------------------------------------------------------|-------------------------|
| ACP 103.3              | 10 CFR 50.59 Evaluation Process                              | 16                      |
| ACP 109.0              | Engineering Change Packages                                  | 28                      |
| ACP 109.1              | Engineered Maintenance Action                                | 26                      |
| ACP 1203.07            | External Design Interfaces                                   | 6                       |
| ACP 1203.11            | Design Input Requirements                                    | 12                      |
| ACP 1203.21            | Engineering Calculations                                     | 13                      |
| ACP 1203.23            | Engineering Drawings/Documents                               | 15                      |
| ACP 1203.25            | Engineering Specifications                                   | 5                       |
| ACP 1203.26            | Engineering Acceptance Requirements                          | 8                       |
| ACP 1203.31            | Design Verification                                          | 10                      |
| ACP 1203.32            | Second Level Review and Acceptance of Procured Modifications | 9                       |
| ACP 1203.42            | Field Variances                                              | 10                      |
| ACP 1203.43            | Field Change Notice                                          | 9                       |
| ACP 1203.45            | ECP Closure Activities                                       | 18                      |
| ACP 1203.50            | Engineering Programs/Checklists                              | 0                       |
| ACP 1203.51            | R Stamp Applicability                                        | 1                       |
| ACP 1203.52            | Assessment of Potential Impact on EOPs/SAGs                  | 0                       |
| ACP 1203.53            | Fire Protection                                              | 4                       |
| ACP 1203.54            | ALARA Design Considerations                                  | 1                       |
| ACP 1203.55            | Control of Heavy Loads Analysis                              | 1                       |
| ACP 1203.56            | Environmental Qualification Assessment                       | 3                       |
| ACP 1203.57            | Inservice Inspection Checklist                               | 0                       |
| ACP 1203.58            | Human Factors Considerations                                 | 1                       |
| ACP 1203.59            | Power System Configuration and Analysis                      | 2                       |
| ACP 1203.60            | Masonry Wall Analysis                                        | 0                       |
| ACP 1203.61            | Inservice Testing Checklist                                  | 0                       |
| ACP 1203.62            | Setpoint Control                                             | 3                       |
| ACP 1203.63            | PRA Design Change Notification                               | 0                       |
| ACP 1203.64            | Regulatory Guide (Reg Guide) 1.97                            | 0                       |
| ACP 1203.66            | Station Blackout Applicability                               | 0                       |
| ACP 1203.80            | Capacitor Replacement Evaluation                             | 1                       |
| ACP 1203.81            | Abandoned in Place Equipment                                 | 0                       |
| OI-416                 | Operating Instruction - RHR Service Water System             | 31                      |

## REFERENCES

| <u>Document Number</u> | <u>Title or Description</u>                                                                                                                                                                                        | <u>Revision or Date</u> |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| -----                  | System Importance Ranking Results and Important Human Actions from the DAEC Living PRA Training Summary Printout by Course from 01/01/1990 Through 08/21/2003 for Course: PST1.14, Perf/Rev 10 CFR 50.59 Screening | June 2001               |
| -----                  |                                                                                                                                                                                                                    | August 22, 2003         |

## REFERENCES

| <u>Document Number</u>       | <u>Title or Description</u>                                                                                                                                       | <u>Revision or Date</u> |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| -----                        | Training Summary Printout by Course from<br>01/01/1990 Through 08/21/2003 for<br>Course: PST9.27, Perf/Verify 10 CFR 50.59 Eval                                   | August 22, 2003         |
| Amendment No. 243            | DAEC - Issuance of Amendment Regarding<br>Extended Power Uprate (TAC No. MB0543)                                                                                  | November 6, 2001        |
| CENPD-397-P                  | Improved Flow Measurement Accuracy Using<br>Crossflow Ultrasonic Flow Measurement<br>Technology January 2000 (Proprietary Information)                            | 1                       |
| GE-NE-A22-00100-<br>23-01-R2 | Project Task Report Duane Arnold Energy Center<br>Asset Enhancement Program<br>Task T0400: Containment System Response<br>December 2002 (Proprietary Information) | January 2, 1900         |
| NG-00-1900                   | DAEC Docket No: 50-331 Op. License No: DPR-49<br>Technical Specification Change Request<br>(TSCR-042): Extended Power Uprate                                      | November 16, 2000       |

## SCREENINGS

| <u>Document Number</u> | <u>Title or Description</u>                                                                                                                                                                                                                                            | <u>Revision or Date</u> |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 4                      | Change APRM Flow Biased Setpoints for Power<br>Uprate per EMA A52240                                                                                                                                                                                                   | December 4, 2001        |
| 33                     | Revise Document APED-A61-089, SBO Compliance<br>Assessments & Issue APED-A61-091 to Incorporate<br>Power Uprate Analysis Results into the SBO<br>Program Documentation                                                                                                 | August 8, 2001          |
| 83                     | Add Air Assist to CV2851-O in the Closing Direction<br>to Increase the Closing Force Applied to CV2851                                                                                                                                                                 | October 25, 2001        |
| 84                     | Add Air Assist to CV2850-O in the Closing Direction<br>to Increase the Closing Force Applied to CV2850                                                                                                                                                                 | October 25, 2001        |
| 229                    | Change Terminology in the UFSAR Associated with<br>10CFR50.59 to be Consistent with the Revised Rule                                                                                                                                                                   | September 25, 2001      |
| 243                    | Trip of Main Turbine on Loss of 125 Vdc                                                                                                                                                                                                                                | September 30, 2001      |
| 284                    | Revise ACP 103.1 for PUP, Clarification of 50.59<br>Screening Applicability, and SLO Safety Limit<br>MCPR                                                                                                                                                              | November 20, 2001       |
| 385                    | Revise Stroke Times for CV2315 in STP 3.5.1-05,<br>3.5.1-06386                                                                                                                                                                                                         | October 22, 2001        |
| 484                    | Added Steps to Start/stop RHR Pump Room<br>Cooling Units, Modified Steps Changing RHR<br>Injection Points During SDC and Added Subsection<br>to Return System to Original Injection Point. Added<br>Information That Total FPC Flow May Be Increased<br>up to 2400 gpm | November 9, 2001        |
| 496                    | Revise BECH-M175 to Change Max dp Across the<br>Outside Air Intake Filter from 1.8 in Wg to 2.0 in Wg                                                                                                                                                                  | November 14, 2001       |



## SCREENINGS

| <u>Document Number</u> | <u>Title or Description</u>                                                                                                                     | <u>Revision or Date</u> |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 532                    | Change Feedpump Low Pressure Suction Trip Setpoints from 250 psi to 225 psi                                                                     | November 20, 2001       |
| 598                    | Change Required As Left Diesel Cooler dp to Greater Than or Equal to 69.3 Inches of Water                                                       | December 12, 2001       |
| 605                    | Cancel STPs, Revision 16 of the Offsite Dose Assessment Manual, No Longer Has a Requirement to Do Surveillances on the 1T-269 Level Instruments | December 13, 2001       |
| 649                    | Allow For Operation of Three RBCCW Pumps in All Reactor Modes                                                                                   | December 27, 2001       |
| 1685                   | Revision to IPOI-3                                                                                                                              | October 2, 2002         |
| 1839                   | Adds P&LS for Pump Flows and Strainer Venting. Also Changes SW Flow Rates for Pump Protection                                                   | November 16, 2002       |
| 2012                   | Install 0.109 Orifices in the P Port of the FASV's for Main Steam Valves                                                                        | January 15, 2003        |
| 2159                   | Address Issues Identified During NRC Inspection on Smoke in Control Room                                                                        | February 16, 2003       |
| 2514                   | Drywell Cooling Trends Indicate That All Drywell Coolers May Not Be Needed (Isolation of Non-essential Coolers)                                 | May 27, 2003            |

## LIST OF ACRONYMS USED

|       |                                                   |
|-------|---------------------------------------------------|
| ACP   | Administrative Control Procedure                  |
| ADAMS | Agency-Wide Document Access and Management System |
| ALARA | As Low As is Reasonably Achievable                |
| AOV   | Air Operated Valve                                |
| APED  | Administrative Procedure Engineering Directive    |
| APRM  | Average Power Range Monitor                       |
| AR    | Action Request                                    |
| BECH  | Bechtel                                           |
| CAP   | Corrective Action Program                         |
| CFR   | Code of Federal Regulations                       |
| CV    | Control Valve                                     |
| DAEC  | Duane Arnold Energy Center                        |
| DPR   | Demonstration Power Reactor                       |
| DRS   | Division of Reactor Safety                        |
| ECP   | Engineering Change Package                        |
| DCF   | Document Change Form                              |
| DDC   | Design Document Change                            |
| EDG   | Emergency Diesel Generator                        |
| EMA   | Engineered Maintenance Action                     |
| EOP   | Emergency Operating Procedure                     |
| ESW   | Essential Service Water                           |
| FASV  | Fast Acting Solenoid Valve                        |
| FPC   | Fuel Pool Cooling                                 |
| FW    | Feedwater                                         |
| gpm   | gallons per minute                                |
| gov   | Government                                        |
| HPCI  | High-Pressure Coolant Injection                   |
| HS    | Hand Switch                                       |
| html  | Hypertext Markup Language                         |
| http  | Hypertext Transfer Protocol                       |
| I&C   | Instrumentation and Control                       |
| IMC   | Inspection Manual Chapter                         |
| IPE   | Individual Plant Evaluation                       |
| IR    | Inspection Report                                 |
| LCO   | Limiting Condition of Operation                   |
| LLC   | Limited Liability Company                         |
| MCPR  | Minimum Critical Power Ratio                      |
| NMC   | Nuclear Management Company, LLC                   |
| NRC   | Nuclear Regulatory Commission                     |
| NRR   | Office of Nuclear Reactor Regulation              |
| NUREG | NRC Technical Report Designation                  |
| OA    | Other Activities                                  |
| OSS   | Operations Shift Supervisor                       |
| PARS  | Publically Available Records System               |
| PRA   | Probabilistic Risk Assessment                     |

## LIST OF ACRONYMS USED

|       |                                        |
|-------|----------------------------------------|
| PUP   | Power Uprate                           |
| RBCCW | Reactor Building Closed Cooling Water  |
| RHR   | Residual Heat Removal                  |
| RHRSW | Residual Heat Removal Service Water    |
| RCIC  | Reactor Core Isolation Cooling         |
| RWCU  | Reactor Water Clean-Up                 |
| SAG   | Severe Accident Guideline              |
| SBGT  | Standby Gas Treatment                  |
| SBO   | Station Black Out                      |
| SDC   | Shutdown Cooling                       |
| SDP   | Significance Determination Process     |
| SE    | Safety Evaluation                      |
| SER   | Safety Evaluation Report               |
| SLO   | Single-Loop Operation                  |
| STPs  | Surveillance Test Procedures           |
| SW    | Service Water                          |
| TSCR  | Technical Specification Change Request |
| UFSAR | Updated Final Safety Analysis Report   |
| V     | Valve or Volt                          |
| wpd   | WordPerfect Document                   |
| www   | World Wide Web                         |