

May 18, 2000

Mr. Michael T. Coyle
Vice President
Clinton Power Station
AmerGen Energy Company, LLC
Mail Code V-275
P. O. Box 678
Clinton, IL 61727

SUBJECT: NRC EMERGENCY PREPAREDNESS INSPECTION REPORT
50-461/2000009(DRS)

Dear Mr. Coyle:

On April 28, 2000, the NRC completed a baseline inspection at your Clinton Power Station. The results of this inspection were discussed on April 28, 2000, with you and members of your staff. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under your license as they relate to emergency preparedness and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel. Specifically, this inspection focused on performance during your biennial emergency preparedness exercise and your staff's capability to self-assess your participants' performance. In addition, we reviewed your staff's evaluation of the performance indicators for the Emergency Preparedness Cornerstone.

Based on the results of this inspection, the NRC did not identify any issues which were categorized as being of risk significance.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Electronic Reading Room (PERR) link at the NRC homepage, <http://www/nrc.gov/NRC/ADAMS/index.html>.

M. Coyle

-2-

We will gladly discuss any question you have concerning this inspection.

Sincerely,

/RA/

Steven A. Reynolds, Deputy Director
Division of Reactor Safety

Docket No. 50-461
License No. NPF-62

Enclosure: Inspection Report 50-461/2000009(DRS)

cc w/encl: P. Hinnenkamp, Plant Manager
M. Reandeu, Director - Licensing
G. Rainey, Chief Nuclear Officer
E. Wrigley, Manager-Quality Assurance
M. Aguilar, Assistant Attorney General
G. Stramback, Regulatory Licensing
Services Project Manager
General Electric Company
Chairman, DeWitt County Board
State Liaison Officer
Chairman, Illinois Commerce Commission
W. Curtis, FEMA, Region V

M. Coyle

-2-

We will gladly discuss any question you have concerning this inspection.

Sincerely,

/RA/

Steven A. Reynolds, Deputy Director
Division of Reactor Safety

Docket No. 50-461
License No. NPF-62

Enclosure: Inspection Report 50-461/2000009(DRS)

cc w/encl: P. Hinnenkamp, Plant Manager
M. Reandeau, Director - Licensing
G. Rainey, Chief Nuclear Officer
E. Wrigley, Manager-Quality Assurance
M. Aguilar, Assistant Attorney General
G. Stramback, Regulatory Licensing
Services Project Manager
General Electric Company
Chairman, DeWitt County Board
State Liaison Officer
Chairman, Illinois Commerce Commission
W. Curtis, FEMA, Region V

ADAMS Distribution:

WES
JBH1 (Project Mgr.)
J. Caldwell, RIII w/encl
B. Clayton, RIII w/encl
SRI Clinton w/encl
DRP w/encl
DRS w/encl
RIII PRR w/encl
PUBLIC IE-35 w/encl
Docket File w/encl
GREENS
RIII_IRTS
DOCDESK
JRK1
BAH3

DOCUMENT NAME: G:DRS\CLI2000009 DRS.WPD

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RIII	RIII	RIII	RIII
NAME	TPloski:jp	WSlawinski	TKozak	SReynolds
DATE	05/10/00	05/17 /00	05/18 /00	05/18/00

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-461
License No: NPF-62

Report No: 50-461/2000009(DRS)

Licensee: AmerGen Energy Company, LLC

Facility: Clinton Power Station

Location: Route 54 West
Clinton, IL 61727

Dates: April 24-28, 2000

Inspectors: T. Ploski, Senior Emergency Preparedness Inspector
J. Foster, Emergency Response Coordinator
D. Funk, Emergency Preparedness Inspector
P. Louden, Senior Resident Inspector
C. Brown, Resident Inspector

Approved by: W. Slawinski, Acting Chief, Plant Support Branch
Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

- | Reactor Safety | Radiation Safety | Safeguards |
|---|---|---|
| <ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness | <ul style="list-style-type: none">● Occupational● Public | <ul style="list-style-type: none">● Physical Protection |

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

SUMMARY OF FINDINGS

Clinton Power Station NRC Inspection Report 50-461/2000009(DRS)

The report covers a one week period of announced inspection by regional emergency preparedness inspectors and resident inspectors. This inspection focused on the Reactor Safety, Emergency Preparedness Cornerstone, and included the following: evaluation of licensee staff's capability to assess plant participants' performance during the biennial emergency preparedness exercise; and review of the three performance indicators associated with emergency preparedness.

REACTOR SAFETY

Cornerstone: Emergency Preparedness

- There were no findings identified and documented during this inspection (Section 1EP1 and Section 4OA1).

Performance Indicators Verification

- Alert and Notification System, Drill & Exercise Participation, and Drill & Exercise performance indicators: The inspectors verified that the licensee had acceptably gathered information and reported these three performance indicators, which were in the green band, with the following minor exception.

The inspectors identified a discrepancy with the licensee's initial assessment of the Drill and Exercise Performance (DEP) indicator related to the number of performance opportunities associated with a General Emergency declaration during a drill or an exercise. The licensee initially assumed that only three performance opportunities would exist rather than four as provided in NEI 99-02, but later recognized that they had misinterpreted the guidance. This did not affect the DEP performance indicator which was in the green band (Section 4OA1).

Report Details

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP1 Drill, Exercise, and Actual Events

a. Inspection Scope

The inspectors reviewed the 2000 exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan. The scenario included a fire, multiple equipment failures, and a radiological release. The inspectors verified that these simulated problems provided an acceptable framework to support demonstration of the licensee's capabilities to implement its emergency plan.

The inspectors evaluated exercise performance, focusing on the risk-significant activities of emergency classification, notification, and protective action recommendations, as well as implementation of accident mitigation strategies in the following emergency response facilities:

- Main Control Room Simulator (MCRS)
- Technical Support Center (TSC)
- Operations Support Center (OSC)
- Emergency Operations Facility (EOF)

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interface with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the Clinton Power Station's emergency plan.

The inspectors attended post-exercise critiques in each of the above facilities to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators to better understand the licensee's refined assessments of exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and related assessments. Several items were acceptably clarified. The inspectors also attended licensee exercise evaluators' subsequent presentation of self-identified performance strengths and concerns to plant management.

b. Observations and Findings

There were no findings identified and documented relating to the licensee's exercise scenario or critique process.

4 OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors verified the licensee's system for identifying data used to determine the values for the three PIs for the EP Cornerstone, specifically the Alert and Notification System (ANS), Emergency Response Organization (ERO) Drill Participation, and Drill and Exercise Performance (DEP). Procedures for PI data gathering and assessment were reviewed and discussed with the licensee. A sample of documents were reviewed that related to the raw data associated with each PI.

b. Observations and Findings

There were no findings identified and documented during this inspection.

Several acceptable differences were identified related to the licensee's interpretation of the guidance in the Nuclear Energy Institute (NEI) 99-02 document on the identification of key ERO members. This guidance indicated that the senior EOF decision maker and the senior OSC manager were key ERO members. In contrast, the licensee identified the EOF's Emergency Manager and the EOF Director as key EOF positions. Besides the OSC Supervisor, the licensee identified the OSC's Emergency Team Coordinator and Assistant Emergency Team Coordinator as key OSC positions.

The inspectors identified a discrepancy with the licensee's initial assessments of the DEP indicator with respect to the number of opportunities associated with a General Emergency declaration during a drill or an exercise. The NEI 99-02 guidance indicated that the following four performance opportunities existed: emergency classification; associated notification of State officials; offsite Protective Action Recommendation (PAR) development; and communication of this PAR to State officials. In contrast, the licensee initially assumed that only three performance opportunities existed, since one notification message would typically be used to simultaneously inform State officials of the General Emergency declaration and the associated PAR. However, the licensee acknowledged that they had misinterpreted the guidance and recognized that four performance opportunities existed. This discrepancy did not affect the DEP indicator previously reported by the licensee, which was within the green band.

The licensee acknowledged that the procedure for assessing ANS test results lacked sufficient guidance for determining whether a siren's performance during periodic testing would be considered as unacceptable under certain conditions. The licensee planned to revise the procedure to address the matter.

4OA6 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. M. Coyle and other members of licensee management at the conclusion of the inspection on April 28, 2000. The licensee acknowledged the findings presented and did not identify any information discussed as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

G. Baker, Manager, Nuclear Support
R. Bedford, Exercise Controller
R. Campbell, Supervisor, Health Physics
W. Carsky, Director, Equipment Performance Improvement
M. Coyle, Vice President
K. Evans, Senior Emergency Planner
J. Forman, Licensing Engineer
W. Green, Radiological Project Specialist
W. Helenthal, Emergency Planning Specialist
C. Huttes, Communications Specialist
C. Kelley, Maintenance Planner
W. Maguire, Director, Operations
D. Miller, Chief Radiological Scientist
M. Moore, Manager, Work Management
S. O'Reiley, Emergency Planning Specialist
B. Paulson, Supervisor, Communications and Public Affairs
J. Ramanuja, Supervisor, Radiological Support
R. Schenck, Manager, Maintenance
R. Serocke, Radiological Staff Engineer
D. Smith, Director, Security and Emergency Planning
P. Walsch, Manager
E. Wrigley, Manager, Quality Assurance
W. Yarosz, Supervisor, Emergency Planning

Illinois Emergency Services and Disaster Agency

M. Strain, DeWitt County Coordinator

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None.

Closed

None.

Discussed

None.

LIST OF ACRONYMS USED

ANS	Alert and Notification System
AP	Administrative Procedure
CFR	Code of Federal Regulations
CPS	Clinton Power Station
DEP	Drill and Exercise Performance
DRS	Division of Reactor Safety
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
MCRS	Main Control Room Simulator
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OA	Other Activities
OSC	Operations Support Center
PAR	Protective Action Recommendation
PERR	Public Electronic Reading Room
PI	Performance Indicator
TI	Temporary Instruction
TSC	Technical Support Center

INSPECTION PROCEDURES USED

71114	Reactor Safety-Emergency Preparedness
71114.01	Exercise Evaluation
71151	Performance Indicator Verification
TI 2515/144	Performance Indicator Data Collecting and Reporting Process Review

LIST OF DOCUMENTS REVIEWED

Miscellaneous

CPS-PI-EP01, Revision 0, "Drill and Exercise Performance"
CPS-PI-EP02, Revision 0, "ERO Drill Participation"
CPS-PI-EP03, Revision 0, "Alert and Notification System Reliability"
ANS Monthly Test Report Summaries for 1999
Folder 99-009, Records of "TSC/OSC/EOF Drill" conducted March 8, 1999
Folder 99-018, Records of "EOF/JPIC/Headquarters Support Center Drill" conducted July 22, 1999
Folder 99-019, Records of "TSC/OSC/MCRS Drill" conducted July 30, 1999
Folder 99-022, Records of "TSC/OSC Drill" conducted August 27, 1999
Folder 99-029, Records of "TSC/OSC/MCRS Drill" conducted October 25, 1999
Folder 99-030, Records of "TSC/OSC/EOF Drill" conducted October 29, 1999
Folder 99-031, Records of "EOF/JPIC Drill" conducted November 17, 1999
Folder EP-1175, Records of "Communicator Drills" conducted August 23 - December 3, 1999
Folder 2000-003, Records of "Dress Rehearsal" conducted March 23, 2000

Condition Reports (CR)

1-98-11-285; 1-99-01-014; 1-99-01-102; 1-99-02-084; 1-99-03-217; 1-99-03-218; 1-99-03-219;
1-99-03-222; 1-99-03-422; 1-99-04-070; 1-99-07-164; 1-99-11-033; 1-99-11-064; 1-99-11-075;
1-99-12-044; 1-99-12-045

Procedures

AP-03, Revision 4, "Emergency Records Retention"
AP-04, Revision 5, "Emergency Drills and Exercises"
AP-07, Revision 6, "Alert and Notification System"
EC-01, Revision 6, "Clinton Power Station Emergency Response Organization and Staffing"
EC-02, Revision 6, "Emergency Classifications"
EC-03, Revision 5, "Notification of Unusual Event"
EC-04, Revision 4, "Alert"
EC-05, Revision 4, "Site Area Emergency"
EC-06, Revision 4, "General Emergency"
EC-07, Revision 11, "Emergency Plan Notifications"
EC-09, Revision 5, "Security During an Emergency"
EC-12, Revision 7, "Emergency Teams"
FE-01, Revision 6, "TSC Operations"
FE-02, Revision 6, "OSC Operations"
FE-03, Revision 5, "EOF Operations"
FE-05, Revision 11, "Emergency Equipment and Supplies"
FE-06, Revision 4, "Emergency Communications and Equipment"
RA-02, Revision 4, "Protective Action Recommendations"
RA-16, Revision 5, "Computerized Radiological Dose Assessment"