Mr. Oliver D. Kingsley, President and Chief Nuclear Officer Exelon Nuclear Exelon Generation Company, LLC 4300 Winfield Road Warrenville, IL 60555

SUBJECT: CLINTON POWER STATION

NRC INSPECTION REPORT 50-461/01-08(DRP)

Dear Mr. Kingsley:

On June 30, 2001, the NRC completed a safety inspection at your Clinton Power Station. The enclosed report presents the results of that inspection. The results of this inspection were discussed on June 29 with Mr. M. Pacilio and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspector reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection focused on routine reactor operations, and on evaluations of changes, tests, or experiments.

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,

Original signed by Thomas Kozak for

Laura Collins, Acting Chief Projects Branch 4 Division of Reactor Projects

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

Enclosure: Inspection Report No. 50-461/01-08(DRP)

See Attached Distribution

cc w/encl: J. Heffley, Vice President

W. Bohlke, Senior Vice President

Nuclear Services

J. Cotton, Senior Vice President -

Operations Support

M. Pacilio, Plant Manager

R. Krich, Director - Licensing

J. Skolds, Chief Operating Officer

C. Crane, Senior Vice President -

Mid-West Regional Operating Group

J. Benjamin, Vice President - Licensing

And Regulatory Affairs

H. Stanley, Operations Vice President

R. Helfrich, Senior Counsel, Nuclear

Mid-West Regional Operating Group

W. Illiff, Regulatory Assurance Manager (Acting)

Document Control Desk-Licensing
Illinois Department of Nuclear Safety

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

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

Report No: 50-461/01-08(DRP)

Licensee: AmerGen Energy Company, LLC

Facility: Clinton Power Station

Location: Route 54 West

Clinton, IL 61727

Dates: May 20 through June 30, 2001

Inspectors: P. L. Louden, Senior Resident Inspector

C. E. Brown, Resident Inspector R. A. Winter, Reactor Engineer

D. E. Zemel, Illinois Department of Nuclear Safety

Approved by: Laura Collins, Acting Chief

Reactor Projects Branch 4 Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000461-01-08, on 05/20/01-06/30/2001, AmerGen Energy Company LLC, Clinton Power Station; integrated inspection report.

This report covers a 6 week routine inspection and a baseline changes, tests, or experiments inspection. The inspections were conducted by resident and a regional specialist inspector. No findings of significance were identified during this inspection. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). 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. Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violations.

A. <u>Inspector Identified Findings</u>

No findings of significance were identified.

B. <u>Licensee Identified Findings</u>

No findings of significance were identified.

Report Details

Summary of Plant Status

The plant operated at essentially100 percent power throughout most of the inspection period. On May 25, the reactor was shut down to repair components on the steam bypass and pressure regulation system. The reactor was restarted and placed on the electrical distribution grid on May 28.

1. Reactor Safety

1R01 Adverse Weather (71111.01)

a. <u>Inspection Scope</u>

The inspectors verified that plant design features and procedures protected plant mitigating systems from adverse weather effects attributable to summertime weather such as tornadoes, severe thunderstorms and high winds. Licensee procedure checklists and summer readiness action item lists were reviewed for completeness and the inspectors conducted a detailed walk down of all areas vulnerable to the effects of adverse weather.

b. <u>Findings</u>

No findings of significance were identified.

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

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

a. <u>Inspection Scope</u>

The inspectors reviewed 11 safety evaluations performed pursuant to Federal Regulations 10 CFR Part 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 inspectors confirmed that the safety evaluations were thorough and that prior NRC approval was obtained when appropriate. The inspectors also reviewed 11 safety evaluation screenings, where the licensee had determined that a 10 CFR Part 50.59 safety evaluation was not necessary. In regard to the changes reviewed where no 10 CFR Part 50.59 safety evaluation was performed, the inspectors reviewed the changes to verify that a 10 CFR Part 50.59 safety evaluation was not required. 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. <u>Findings</u>

No findings of significance were identified.

.2 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed the licensee's condition reports (CRs) concerning 10 CFR Part 50.59 safety evaluations and screenings to verify that the licensee had an appropriate threshold for identifying issues. The inspectors 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.

1R05 <u>Fire Protection (71111.05)</u>

a. Inspection Scope

The inspectors reviewed portions of the licensee's Fire Protection Evaluation Report (FPER) and the Updated Safety Analysis Report (USAR) to verify consistency in the documented analysis with installed fire protection equipment at the station. To assess the control of transient combustibles and ignition sources, the material and operational condition of fire-protection systems and equipment, and the status of fire barriers, the inspectors conducted walk downs of the following risk significant areas:

- Shutdown Service Water pump rooms
- Main Control Room complex areas (includes technical and operational support centers)

b. Findings

No findings of significance were identified.

1R12 <u>Maintenance Rule Implementation (71111.12)</u>

a. Inspection Scope

The inspectors reviewed the effectiveness of the licensee's maintenance efforts in implementing the maintenance rule (MR) requirements, including a review of scoping, goal-setting, performance monitoring, current equipment performance problems, and short-term and long-term corrective actions. These systems were selected based on their designation as risk significant under the MR, or their being in the increased monitoring (MR category (a)(1)) group. The systems were:

Standby Liquid Control MR (a)(1) status issues and performance

Rod Control and Information System evaluation and performance activities

b. <u>Findings</u>

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation (71111.13)

a. <u>Inspection Scope</u>

The inspectors observed the licensee's risk assessment processes and the considerations used to plan and schedule maintenance activities on safety-related structures, systems, and components to ensure that maintenance risk and emergent work contingencies had been identified and resolved. The inspectors assessed the effectiveness of risk management activities for the following work activities or work weeks:

- Risk review for installing sync-check relay into Div-III switchgear
- Reviewed risk for cycling SX 96A valve and receiving an indeterminate post cycle position indication concurrent with the SX 87A valve which failed local leak rate testing
- Reviewed the risk associated with the online adjusting of cooling water to ALTEREX main generator exciter cooling coils

b. <u>Findings</u>

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed the following operability determinations and evaluations affecting mitigating systems to ensure that operability was properly justified and the component or system remained available such that no unrecognized risk increase had occurred associated with the following CR:

 Reviewed operability determination 2-01-05-271-OD, Operability of Containment Isolation valves 1B21-FO10A&B for the effectiveness of soft seat material in pressure and temperature transients.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed and observed portions of the following post-maintenance testing (PMT) activities involving risk significant equipment to ensure that the activities were adequate to verify system operability and functional capability:

- PMT on Div-I control room ventilation system hydra-motors and damper testing
- PMT on Div-III emergency diesel generator sync-check relay installation

b. <u>Findings</u>

No findings of significance were identified.

1R20 Refueling and Outage Activities (71111.20)

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's preparation activities to shut down the reactor in order to accomplish repairs to the steam bypass and pressure regulation system. The inspectors evaluated these outage activities to ensure that risk was considered in developing outage schedules; that the administrative risk reduction methodologies developed to control plant configuration were adhered to; that mitigation strategies were developed for losses of key safety functions; and that Technical Specification requirements were adhered to.

b. Findings

No findings of significance were identified.

1R22 <u>Surveillance Testing (71111.22)</u>

a. Inspection Scope

The inspectors observed portions of the following surveillance tests to verify that risk significant systems and equipment were capable of performing their intended safety functions and assessed their operational readiness:

- Div-I EDG monthly operability surveillance including EDG heat exchanger flow and pressure performance testing
- Div-I SX pump operability surveillance
- Div-II RHR pump room cooler (1VY05S) and heat exchanger room cooler (1VY06S) surveillance

b. Findings

No findings of significance were identified.

6. Other Activities

OA1 Performance Indicator Verification (71151)

a. <u>Inspection Scope</u>

The inspectors verified the licensee's data for the High Pressure Core Spray system and Residual Heat Removal safety system unavailability hours performance indicator (PI). The inspectors reviewed: (1) Operator Logs and Daily Plant Status Reports for information related to the indicator, and (2) Condition Reports related to system equipment issues. The inspectors also verified that the licensee's data met the guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 0.

b. Findings

No findings of significance were identified.

OA6 Meetings

Exit Meeting

The inspector presented the inspection results to Mr. M. Pacilio and other members of licensee management at the conclusion of the inspection on June 29, 2001. The licensee acknowledged the findings were presented. No proprietary information was identified.

Interim Exit Meeting Summary

Senior Official at Exit: Mr. M. Pacilio Date: June 22, 2001

Proprietary: No

Subject: Evaluations of Changes, Tests, or Experiments

Inspection

Change to Inspection Findings: No

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>

- K. Baker, Design Engineering Manager
- J. Heffley, Site Vice President
- W. Iliff, Regulatory Services Director
- M. Pacilio, Plant Manager
- J. Randich, Work Management Director
- J. Sears, Radiation Protection Director
- R. Svaleson, Operations Manager
- F. Tsakeres, Maintenance Director
- P. Walsh, Training Director
- J. Williams, Site Engineering Director
- E. Wrigley, Nuclear Oversight Manager

	ITEMS OPENED, CLOSED, AND DISCUSSED
<u>Opened</u>	
None	
Closed	
None	
<u>Discussed</u>	
None	

LIST OF ACRONYMS

ADAMS Agency wide Documents Access and Management System

CR Condition Report

EDG Emergency Diesel Generator IMC Inspection Manual Chapter LOCA Loss of Coolant Accident

MR Maintenance Rule

NRC Nuclear Regulatory Commission
PARS Publicly Available Records
PERR Public Electronic Reading Room

PM Preventative Maintenance PMT Post-Maintenance Testing

RG Regulatory Guide

RHR Residual Heat Removal

SDP Significance Determination Process

SI Special Inspection

SRO Senior Reactor Operator SX Shutdown Service Water TS Technical Specification The following documents were selected and reviewed by the inspectors to accomplish the objectives and scope of the inspection and to support any findings.

1R02 Evaluation of Changes, Tests or Experiments

Procedures and Re	lated Documents	
CPS 1005.06	10 CFR 50.59 Reviews	May 29, 2001
LS-AA-104	Exelon 10 CFR 50.59 Review Process	Revision 2
Safety Evaluations		
99-125	Clarify Operation of the RHR Heat Exchanger Valves	Revision 0
99-194	Temporary Modification Parallel Switchyard 125 Volt DC Buses	Revision 0
99-216	Revise USAR Description of Service Air/Instrument Air Instrumentation and Alarm Features	Revision 0
2000-039	Post Maintenance Testing for Replacement DG 1C	Revision 1
2000-042	M-084 Supplement 0 1 , RHR/LPCS Keep Fill System Upgrade	Revision 0
2000-122	ECCS LOCA Analysis Change to the SAFER GESTR Methodology	Revision 0
2000-129	Final Feedwater Temperature Reduction	Revision 0
2000-138	Deferral of Electrical PMS (PEMAP 1301, PEMAP 1303) to RF-8	Revision 0
2000-140	Revision to USAR Appendix D, "Evaluation of Anticipated Transients with Single Failure to Verify No Fuel Failure"	Revision. 0
2001-002	Outboard MSIV Operation	Revision 0
2001-004	Changing Main Control Room Differential Pressure Indication (ECN 31858 and ECN 31934)	Revision 0
Safety Screenings		
CL-2001-S-0020	Disable Ground Detection Unit in Charger 1A,1B,1D,1E and1F	Revision 0
CL-2001-S-0031	Minor Revision to SLC Chemical Sampling Procedure	Revision 0
CL-2001-S-0032	CPS 6403.02, Rev. 15a	Revision 0
CL-2001-S-0034	Abnormal Reactor Coolant Flow	Revision 0

CL-2001-S-0035	Installation of Suppression Pool Cooling Heat Exchanger and Piping	Revision 0
CL-2001-S-0036	Install Drain Line for Suppression Pool via SF System	Revision 0
CL-2001-S-0041	CPS 4002.01, Rev 1 Abnormal RPV Level /Loss of FW	Revision 0
CL-2001-S-0047	CPS 3917.01, Operating Condensate Polishers	Revision 0
CL-2001-S-0051	Radiation Instrument Monitoring	Revision 0
CL-2001-S-0055	Diesel Generator Chemical Addition	Revision 0
CL-2001-S-0060	Operating Waste Sludge System, Operating Procedure	Revision 0

1R02 Identification and Resolution of Problems

Condition Reports (CRs)

2-00-08-002	Inadequate Safety Evaluation SE LOG #2000-004	August 1, 2000
2-00-03-003	Temporary Procedure/Checklist Change Process may Potentially Cause Missed Surveillance	March 2, 2000
2-00-02-011	Inadequate Safety Evaluation on USAR Change Package 8-352	February 2, 2000
2-00-02-027	MCR Challenged on Containment Building Scaffold Erection without a Safety Screening/Evaluation	February 4, 2000
2-00-03-036	Safety Evaluation Screening not Performed for FCCs	March 8, 2000
2-00-03-042	Inadequate Justification in a Safety Evaluation for USAR Change Package #8-328	March 9, 2000
2-00-01-063	Inadequate Preparation of a Safety Screening	January 13,
		2000
2-00-07-078	Safety Evaluation not Approved within 14 Days	July 26, 2000
2-00-07-078 2-00-06-081	Safety Evaluation not Approved within 14 Days ECN 30532 did not Identify All Affected Documents	
		July 26, 2000
2-00-06-081	ECN 30532 did not Identify All Affected Documents Inadequate Justification in Safety Evaluation of	July 26, 2000 June 15, 2000 January 17,

2-00-01-116	USAR Change not Implemented following Issuance of License Amendment #107	January 21, 2000
2-00-10-214	Safety Evaluation Screening for Procedure does not Completely Address the Change	October 25, 2000
2-01-06-017	50.59 Screening Form not Prepared	June 4, 2001
2-01-03-139	Safety Evaluation (Log 3 2000-097) does not Document the full Basis for Conclusion	March 16, 2001
2-01-06-197	Lack of Documentation Associated with the Safety Evaluation for GE Fuel	March 3, 2001