July 5, 2000

Mr. Oliver D. Kingsley
President, Nuclear Generation Group
Commonwealth Edison Company
ATTN: Regulatory Services
Executive Towers West III
1400 Opus Place, Suite 500

SUBJECT: BYRON - NRC INSPECTION REPORT 50-454/2000011(DRS); 50-455/2000011(DRS)

Dear Mr. Kingsley:

On June 9, 2000, the NRC completed an inspection at the Byron 1 and 2 reactor facilities. The enclosed report presents the results of that inspection. The results of this inspection were discussed on June 9, 2000, with Mr. W. Levis and other members of your staff.

The inspection was an examination of activities conducted under your license as they relate to the Safeguards Strategic Performance Area 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 involving your program for responding to safeguards contingency events, and your program for collecting and reporting performance indicator information. No findings 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).

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

Sincerely,

/RA by Steven Reynolds Acting For/

James R. Creed
Safeguards Program Manager
Division of Reactor Safety

Docket Nos. 50-454; 50-455
License Nos. NPF-37; NPF-66

Enclosure: Inspection Report 50-454/2000011(DRS);
50-455/2000011(DRS)

cc w/encl: D. Helwig, Senior Vice President, Nuclear Services
C. Crane, Senior Vice President, Nuclear Operations
H. Stanley, Vice President, Nuclear Operations
R. Krich, Vice President, Regulatory Services
DCD - Licensing
W. Levis, Site Vice President
R. Lopriore, Station Manager
B. Adams, Regulatory Assurance Manager
M. Aguilar, Assistant Attorney General
State Liaison Officer
State Liaison Officer, State of Wisconsin
Chairman, Illinois Commerce Commission

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James R. Creed
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: License Nos.	50-454; 50-455 NPF-37; NPF-66
Report No:	50-454/2000011(DRS); 50-455/2000011(DRS)
Licensee:	Commonwealth Edison Company
Facility:	Byron Generating Station, Units 1 and 2
Location:	4450 N. German Church Road Byron, IL 61010
Dates:	June 5-9, 2000
Inspector:	J. Belanger, Senior Physical Security Inspector
Approved by:	James R. Creed, Safeguards Program Manager 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
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

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

Byron Generating Station Units 1 and 2
NRC Inspection Report 50-454/2000011(DRS); 50-455/2000011(DRS)

This report covers a five-day inspection by a regional security specialist. This inspection focused on the Physical Protection Cornerstone, within the Safeguards Strategic Assessment area, and included a review of Response to Contingency Events (Protective Strategy and Implementation of Protective Strategy), performance indicator verification, identification and resolution of problems and Temporary Instruction 2515/144.

No findings were identified in this cornerstone.

Report Details

3. SAFEGUARDS

Cornerstone: Physical Protection

3PP3 Response to Contingency Events

a. Inspection Scope

The inspector reviewed the current Protective Strategy including the licensee's target set analysis, observed handgun and rifle annual requalifications, stress firing with contingency weapons at an off site firing range; conducted a walkdown of the protected area boundary and alarm system; observed testing of selected protected area alarm zones; evaluated alarm station operator performance and closed circuit television assessment capability; walked down security defensive positions, discussed defense strategy and procedures with licensee security personnel; observed two table top exercises; and reviewed procedures, training records, and licensee drill and exercise critiques pertaining to response to security contingency events.

b. Issues and Findings

There were no findings identified during this inspection.

4. OTHER ACTIVITIES

4OA5 Other

Temporary Instruction 2515/144, "Performance Indicator Data Collecting and Reporting Process"

a. Inspection Scope

The inspector reviewed the performance indicator data collecting and reporting process for the Fitness-For-Duty Personnel Reliability, Personnel Screening Program, and Protected Area Security Equipment performance indicators. This instruction was conducted in conjunction with the performance indicator verification performed per Inspection Procedure 71151, "Performance Indicator Verification." The review included data collecting and reporting process, definition of terms, calculation method, and consistency with industry guidance document NEI-99-02, Revision 0. The licensee performance indicator procedures reviewed included:

Personnel Screening, RS-AA-122-188, Revision 0
FFD/Personnel Reliability, RS-AA-122-119, Revision 0
Protected Area Security Equipment Performance Index, Revision 2

b. Issues and Findings

There were no findings identified during this inspection.

4OA6 Meetings, Including Exit

Exit Meeting Summary

The inspector presented the inspection results to Mr. W. Levis and other members of licensee management at the conclusion of the inspection on June 9, 2000. The licensee acknowledged the findings presented. The inspector asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

B. Adams, Regulatory Assurance Manager
D. Anderson, Training Supervisor, The Wackenhut Corporation
J. Bower, Assistant Station Security Administrator
D. Combs, Station Security Administrator
S. Kirven, Director, Nuclear Operations, The Wackenhut Corporation
W. Levis, Site Vice President
R. Lopriore, Station Manager
M. Mareth, Security Force Manager, The Wackenhut Corporation
R. Michv, President, Nuclear Services Division, The Wackenhut Corporation
D. Minor, Security Operations Coordinator, The Wackenhut Corporation
B. Saunders, Supervisor, Nuclear Security Operations

ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF ACRONYMS USED

CFR	Code of Federal Regulation
DRS	Division of Reactor Safety
FFD	Fitness-for-Duty
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission

LIST OF DOCUMENTS REVIEWED

NGG Security Training Program Lesson Plans

- Security Drills/Exercise Program: Force on Force Exercises
- Security Drills/Exercise Program: Table Top Drills/Exercise
- Contingency Training: Use of Force
- Stress Fire Course Exercise

Byron Station 2nd Quarter Self-Assessment: Operational Safeguards Response Evaluation

Safeguards Event Log: April 1999 to April 2000

Problem Identification Form B2000-01492 dated May 25, 2000, "Security Department Focus Area Self-Assessment Deficiencies

Documentation for Force-on-Force Drills conducted May 23-24, 2000, October 12-13, 1999, August 17-18, 1999, and June 29-30, 1999

Security Individual Qualification Records for J. Williams, S. Simmons, M. Gray, P. Grandon. B. Schultz and L. Sulouff