

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
		Year	Sequential Number	Sequential Number	Sequential Number	Revision Number	Revision Number			
Byron, Unit 1	0 5 0 0 0 4 5 4	8 8	-	0 0 8	-	0 0	V 2	QF	0 3	

TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

A. PLAN CONDITIONS PRIOR TO EVENT:

Event Date/Time 9/21/88 / 1133

Unit 1 MODE 6 - Refueling Rx Power 0% RCS [AB] Temperature/Pressure 90°F/0 psig

B. DESCRIPTION OF EVENT:

(On September 21, 1988 at 1133 with Unit 1 in Refueling (Mode 6) at 90 degrees F and 0 psig, Containment Building Fuel Handling Incident Area Radiation Monitor (IRT-AR012) [IL] detected an alert radiation condition (setpoint 100 millirem/hour) during the movement of the reactor vessel upper internals assembly from the reactor vessel to its storage stand. The IRT-AR012 transferred to the interlock mode, which caused a Containment Ventilation Isolation, and automatically transferred mini purge exhaust valve (1VQ005B) [VA] to its Engineered Safety Features (ESF) closed position. The Containment Ventilation Isolation also stopped the continuous Containment release that was in progress at the time. The Nuclear Station Operator (NSO) (licensed reactor operator) stopped the Containment Mini Purge Exhaust Fan at 1133. Operators were made aware of this event by the "CHANNEL IN ALERT ALARM - INTERLOCK" alarm on the Main Control Room Radiation Monitoring Display Console (RM-11) and the "CNMT VENT ISOLATION" main control board annunciator. The monitor had spiked to the setpoint and returned to a normal operating condition approximately one minute after the alert alarm, when the upper internals assembly was placed in its storage area. No plant systems or components were previously inoperable that contributed to this event. The Unit was maintained in a stable condition during this event. At 1312 the NSO opened 1VQ005B to reestablish the continuous Containment release and at 1314 the NSO started the Containment Mini Purge Exhaust Fan. This event is reportable under 10CFR50.73 (a)(2)(iv) due to the automatic ESF actuation.

C. CAUSE OF EVENT:

The cause of the ESF actuation was an increase in Containment Building area radiation levels caused by raising the reactor vessel upper internals assembly in preparation for reactor refueling. Radiation levels were expected to increase during this evolution, however, the ESF actuation was not anticipated by the procedures in use. During the first refueling of Unit One in early 1987, movement of the upper internals assembly did not increase radiation levels to the IRT-AR012 alert setpoint, therefore, the ESF actuation was not expected during the second refueling.

D. SAFETY ANALYSIS:

There was no effect on plant and public safety. The automatic transfer of mini purge exhaust valve 1VQ005B to its ESF closed position established a safer plant condition by isolating the Containment Building. Reactor vessel cavity radiation levels were also being continuously monitored locally by a Radiation Chemistry Technician. The safety consequences would have been the same had this event occurred under a more severe set of initial conditions.

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E. CORRECTIVE ACTIONS:

It is now recognized that, depending upon plant conditions, movement of the upper internals may cause Containment radiation levels to increase to a level at which the Containment Ventilation System automatically isolates. The "Removal of Upper Internals From Reactor Vessel Mechanical Maintenance Procedure" (BMP 3118-3) and the "Installation of the Upper Internals into the Reactor Vessel Mechanical Maintenance Procedure" (BMP 3118-5) will be revised to warn the licensed operators on shift of this potential ESF actuation. The "Refueling Outage General Operating Procedure" (1/2BGP 100-6) will be revised to provide licensed operators with guidance to preclude Containment Ventilation Isolations during upper internals assembly movement. Completion of procedure revisions is tracked by Action Item Records 454-225-88-0214 and 454-225-88-0215.

F. PREVIOUS OCCURRENCES:

There have been no previous occurrences of a Containment Ventilation Isolation caused by an actual high radiation condition.

G. COMPONENT FAILURE DATA:

a)	<u>MANUFACTURER</u>	<u>NOMENCLATURE</u>	<u>MODEL NUMBER</u>	<u>MFG PART NUMBER</u>
	Not Applicable			



Commonwealth Edison
Byron Nuclear Station
4450 North German Church Road
Byron, Illinois 61010

October 19, 1988

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Dear Sir:

The enclosed Licensee Event Report from Byron Generating Station is being transmitted to you in accordance with the requirements of 10CFR50.73(a)(2)(iv).

This report is number 88-008; Docket No. 50-454.

Sincerely,

R. Pleniewicz
Station Manager
Byron Nuclear Power Station

Enclosure: Licensee Event Report No. 88-008-00

cc: A. Bert Davis, NRC Region III Administrator
P. Brochman, NRC Senior Resident Inspector
INPO Record Center
CECo Distribution List

Ltr: BYRON 88-1108 (1921M/0206M)