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Facility Name (:) Byron, Unit 1 0] 5]							Docket Numbe	umber (2) Page (3)				
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					LICENSE	E CONTACT	FOR T	HIS LER	(12)			
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			COMPL	ETE ONE LINE	FOR EACH COMP	ONENT FAL	LURE DI	ESCRIBED	IN THIS REPOR	T (13)		
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ABSTRA	CT (Li	mit to	1400 sr	aces, i.e. a	pproximately f	ifteen si	ngle-s	pace typ	ewritten lines) (16)		

On September 21, 1988, at 1133 with the reactor depressurized at 90°F in the Refueling Mode, the Containment Building Fuel Handling Incident area radiation monitor detected an alert radiation condition during the movement of the reactor vessel upper internals assembly from the reactor vessel to its storage stand. The alert caused a Containment Ventilation Isolation, which automatically closed the Mini Purge Exhaust Valve. The radiation monitor had spiked to its setpoint and returned to its normal operating condition approximately one minute following the alarm. The unit was maintained in a stable condition during the event and the Containment Ventilation System was realigned for normal operation by 1314.

The cause of the Containment Ventilation Isolation was an increase in Containment Suilding Fadiation 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 Engineered Safet, Feature (ESF) actuation was not anticipated by the procedures in use.

The maintenance procedures used to lift the upper internals assembly will be revised to add steps to warn licensed operators on shift of the potential ESF actuation prior to upper internal movuments. The operating procedures will be revised to provide licensed operators with guidance to proclude Containment Ventilation Isolations during upper internals assembly movement.



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FACILITY NAME (1)	DOCKET NUMBER (2)	I LER JUMBER	Form Rev 2.0	
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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 EVEN ::

(In September 21, 1983 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 '00 millirem/hour) during the movement of the reactor vessel upper internals assembly from the reactor vesral to its storage stand. The IRT-AR012 transferred to the interlock mode, which caused a Containment Ventilation Isclation, and automatically transferred mini purge exhaust valve (1VQ0058) [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 spiken 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 rofueling.

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.

	LICENSEE EVENT REPORT (LER) T	EXT CONTI	INUATI	ON		For	m Rev	2.0		
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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" (7/28GP 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) MANUFACTURER

NOMENCLATURE

MODEL NUMBER

MEG PART NUMBER

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,

+ Clum

R. Pleniewicz Station Manager Byron Nuclea: Power Station

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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)

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