Dave Holm Plant General Manager R.E. Ginna Nuclear Power Plant, LLC 1503 Lake Road Ontario, New York 14519-9364

585.771.5205 Dave.A.Holm@constellation.com



July 3, 2008

U. S. Nuclear Regulatory Commission Washington, DC 20555-0001

**ATTENTION:** Document Control Desk

SUBJECT: R.E. Ginna Nuclear Power Plant Docket No. 50-244

> LER 2008-001, Plant Heatup with Required Residual Heat Removal Loops Inoperable Due to Personnel Error (Voluntary Report)

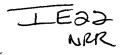
The attached voluntary Licensee Event Report (LER) 2008-001 is submitted under the provisions of NUREG 1022, Event Reporting Guidelines. There are no new commitments contained in this submittal. Should you have questions regarding the information in this submittal, please contact Mr. Thomas Harding at (585)771-3384 or thomas.harding@constellation.com.

Very truly yours,

David A. Holm

Attachments: (1) LER 2008-001

cc: S. J. Collins, NRC D. V. Pickett Resident Inspector, NRC (Ginna)



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# **ATTACHMENT 1**

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# LER 2008-001

	NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OME						: NO. 3150-0	0104		EXPIRES	: 08/31/2010					
(9-2007)	(9-2007)					Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the										
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4. TITLE	4. TITLE Plant Heatup with Required Residual Heat Removal Loops Inoperable Due to Personnel Error (Voluntary Report)															
5. E	VENT D	ATE	6. L	LER NUMBER	2	7. R	EPORT D	ATE				OTHER FA	CILITI	ES INV		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	ł	CILITY					DOCKET 0500	D
05	08	2008	2008	- 001 -	0	07	03	2008		CILITY	NAME				DOCKET 0500	NUMBER )
9. OPER	ATING	MODE	11.	. THIS REPOI	RT IS	SUBMITTI	ED PURSI	JANT T	о тн	E RE	QUIREMI	ENTS OF 1	0 CFR	§: (Che	ck all that	apply)
1			20.22	201(b)			0.2203(a)				50.73(a)			50.	73(a)(2)(vii	)
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				203(a)(2)(iii)			0.36(c)(2)				• • •				71(a)(4)	
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				203(a)(2)(vi)			0.73(a)(2)		50.73(a)(2)(v)(D) Specify in Abstract below							
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Residual Heat Removal (RHR) were isolated from the Reactor Coolant System (RCS) by Motor Operated Valve (MOV) closure and subsequent removal of power, rendering both RHR loops																
inoperable by TS Bases definition. The operability of Reactor Coolant Pump "A" was under																
evaluation at the time of RHR isolation, conservatively leaving RCS Loop B the only operable																
and operating loop available for cooling. Upon recognition of the LCO entry, power was																
immediately restored to the RHR valves, consistent with the requirements of LCO Required																
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The apparent cause, planned corrective actions and similar LERs are described in the																
1	appropriate sections of the attached report.															
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NRC FORM 366A (9-2007)	U.S. NUCLEAR REGULATORY COMMISSION						
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## I. DESCRIPTION OF EVENT

## A. PRE-EVENT PLANT CONDITIONS

On May 8, 2008, Ginna was completing its 2008 Refueling Outage (RFO). The plant was in Mode 4 with plant heatup in progress. Temperature was approximately 240 degrees, pressure was approximately 305 psig.

#### B. EVENT:

On the morning of May 8, 2008, plant personnel were performing steps of Procedure O-1.1, "Plant Heatup from Cold Shutdown to Hot Shutdown", in order to transition from Residual Heat Removal (RHR) to the Atmospheric Relief Valves (ARV) as a method of temperature control. The "B" Reactor Coolant Pump (RCP) was running, "A" Reactor Coolant System (RCS) Loop had been inoperable at the time of shift turnover due to low "A" Steam Generator water level; however, by the time of the event the "A" Steam Generator water level had been increased to a level adequate to support operability of a Reactor Coolant System loop.

The "A" RCP was under evaluation the morning of the event due to thrust bearing temperature concerns. The "A" RCP had not been formally declared inoperable as a result of these concerns but it had been shut down on the previous shift because of the elevated bearing temperatures. The Operations day shift considered the requirements of Technical Specification Limiting Condition of Operation (LCO) 3.4.6 to be met by the "B" RCS loop and the two available RHR loops. The Control Room Supervisor, however, after performance of a pre-job brief for part of the heatup procedure, mistakenly signed off on a procedural sub-step which verified two Reactor Coolant System loops available and one Reactor Coolant System loop in operation.

In order to continue with the heatup, RHR was isolated by shutting Motor Operated Valves (MOVs) 700, 701, 720, and 721 per procedure. The order was then given to lock open the respective breakers for these MOVs. Per the Technical Specifications Bases: "An operable RHR loop may be isolated from the RCS provided the loop can be placed into service from the control room." An on-duty operator questioned the order to open the breakers as it was given and questioned it again more forcefully when the report came back that the breakers were open. Entry into Technical Specifications (TS) Action 3.4.6.A was then confirmed, and the MOV breakers were immediately restored in compliance with the TS 3.4.6.A Required Actions. The two RHR loops were inoperable for a total time of approximately five minutes.

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# C. INOPERABLE STRUCTURES, COMPONENTS, OR SYSTEMS THAT CONTRIBUTED TO THE EVENT

None

#### D. DATES AND APPROXIMATE TIMES OF MAJOR OCCURRENCES

May 15, 2008

0630 EDST: Day shift assumes the duty.

0830 EDST: The Control Room Supervisor conducts a pre-job brief on removing Residual Heat Removal per procedure O-1.1, "Plant Heatup from Cold Shutdown to Hot Shutdown".

0840 EDST: Level in the "A" Steam Generator is returned above the limit for the loop to be considered "Operable".

0856 EDST: The "B" Residual Heat Removal pump is stopped and the Residual Heat Removal isolation valves are closed per procedure O-1.1.

0915 EDST: The RHR isolation valve motor breakers are opened.

0920 EDST: The RHR isolation valves returned to service due to breakers being closed.

0944 EDST: "A" RCP is formally declared inoperable.

#### E. OTHER SYSTEMS OR SECONDARY FUNCTIONS AFFECTED

None. In Mode 4, the flow from one RCS loop or one RHR loop is adequate for decay heat removal. Two paths are required to be available to provide redundancy.

F. METHOD OF DISCOVERY

The on-watch Shutdown Safety System Summary Senior Reactor Operator initially questioned the order given to open the isolation valve breakers and followed up on his question when the breakers were reported open.

G. MAJOR OPERATOR ACTION

The operator action was to close the RHR isolation valve breakers to restore RHR loop operability from the Control Room, per LCO 3.4.6.A.

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#### H. SAFETY SYSTEM RESPONSES

None. There were no safety system responses required.

#### II. CAUSE OF EVENT

This event falls under NUREG-1022 Cause Code "A", Personnel Error.

This event was entered into the site corrective action program (CR-2008-004290). The evaluation identified the following apparent cause:

A misread of a procedural step caused by inattention to detail. The procedure step was attempting to ensure that the RCS loops are both available to provide core cooling, before isolating the residual heat removal loops.

The procedural step that was misread did not contain an Independent Verification. The procedure also lacks detail as to what constitutes an operable RCS loop.

## III ANALYSIS OF THE EVENT

This event resulted in the entry into a Limiting Condition of Operation action statement under TS Section 3.4.6, which required two RCS loops to be operable with one in operation. The event created a condition where the operating RCS loop was the only loop available, although the "A" loop could have been used for some period if required. The recently isolated RHR loops were quickly returned to service and the LCO condition exited.

This is a voluntary LER, being reported per the guidelines of step 5.1.4 of NUREG-1022.

## IV. CORRECTIVE ACTIONS

# A. ACTION TAKEN TO RETURN AFFECTED SYSTEMS TO PRE-EVENT NORMAL STATUS

Residual Heat Removal Loops were restored to operable status by closing the breakers associated with the RHR isolation valves.

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#### B. ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE

- 1. Procedure changes are planned to more clearly identify what constitutes an operable RCS loop and include independent verification.
- 2. Criteria to be determined and proceduralized for an RCP to be considered "Available" to support RCS loop operability.
- V. ADDITIONAL INFORMATION
  - A. FAILED COMPONENTS

None.

B. PREVIOUS LERS ON SIMILAR EVENTS:

LER 2000-004 – Two Fans Inoperable During Transition from Mode 5 to Mode 4

- LER 2003-004 Auxiliary Feedwater Flow Path Inoperable During Mode Changes
- LER 2006-005 B Containment Sump Covered While in Mode 4
- LER 2006-006 Core Alterations and Movement of Irradiated Fuel with Containment Ventilation Isolation (CVI) Inoperable
- C. THE EMERGENCY INDUSTRY IDENTIFICATION SYSTEM (EIIS) COMPONENT FUNCTION IDENTIFIER AND SYSTEM NAME OF EACH COMPONENT OR SYSTEM REFERRED TO IN THIS LER:

COMPONENT	IEEE 803 FUNCTION IDENTIFIER	IEEE 805 SYSTEM IDENTIFICATION
Breaker	BKR	BP
Valve	20	BP
Pump	P	AB

D. SPECIAL COMMENTS

None.