

# CATEGORY 10

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9709040289      DOC. DATE: 97/08/27      NOTARIZED: NO      DOCKET #  
 FACIL: 50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G      05000244  
 AUTH. NAME      AUTHOR AFFILIATION  
 ST MARTIN, J. T.      Rochester Gas & Electric Corp.  
 MECREDY, R. C.      Rochester Gas & Electric Corp.  
 RECIP. NAME      RECIPIENT AFFILIATION

VISSING, G. S.

SUBJECT: LER 97-003-00: on 970730, high steam flow bistable instrument setpoint plus instrument uncertainty could exceed "allowable value" in ITS was identified. Caused by entry into ITS LCO 3.0.3. Switches placed in tripped configuration. W/970827 ltr.

DISTRIBUTION CODE: IE22T      COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 5  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES: License Exp date in accordance with 10CFR2,2.109(9/19/72).      05000244

RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
PD1-1 PD	1    1	VISSING, G.	1    1
INTERNAL: AEOD/SPD/RAB	2    2	AEOD/SPD/RRAB	1    1
FILE CENTER	1    1	NRR/DE/ECGB	1    1
NRR/DE/EEEB	1    1	NRR/DE/EMEB	1    1
NRR/DRCH/HHFB	1    1	NRR/DRCH/HICB	1    1
NRR/DRCH/HOLB	1    1	NRR/DRCH/HQMB	1    1
NRR/DRPM/PECB	1    1	NRR/DSSA/SPLB	1    1
NRR/DSSA/SRXB	1    1	RES/DET/EIB	1    1
RGN1 FILE 01	1    1		
EXTERNAL: L ST LOBBY WARD	1    1	LITCO BRYCE, J H	1    1
NOAC POORE, W.	1    1	NOAC QUEENER, DS	1    1
NRC PDR	1    1	NUDOCS FULL TXT	1    1

**NOTE TO ALL "RIDS" RECIPIENTS:**

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED

TOTAL NUMBER OF COPIES REQUIRED: LTTR    24    ENCL    24



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649-0001

AREA CODE 716 546-2700

ROBERT C. MECREDY

Vice President  
Nuclear Operations

August 27, 1997

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Attn: Guy S. Vissing  
Project Directorate I-1  
Washington, D.C. 20555

Subject: LER 97-003, Bistable Instrument Setpoint (plus Instrument Uncertainty) Could Exceed Allowable Value, Causes a Condition Prohibited by Plant Technical Specifications  
R.E. Ginna Nuclear Power Plant  
Docket No. 50-244

Dear Mr. Vissing:

In accordance with 10 CFR 50.73, Licensee Event Report System, item (a) (2) (i) (B), which requires a report of, "Any operation or condition prohibited by the plant's Technical Specifications", the attached Licensee Event Report LER 97-003 is hereby submitted. A further assessment will be provided in a supplement to this LER which is expected to be submitted by September 29, 1997.

This event has in no way affected the public's health and safety.

Very truly yours,

Robert C. Mecredy

xc: Mr. Guy S. Vissing (Mail Stop 14B2)  
PWR Project Directorate I-1  
Washington, D.C. 20555

U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA 19406

Ginna Senior Resident Inspector

9709040289 970827  
PDR ADDCK 05000244  
S PDR



111  
LER

<b>NRC FORM 366</b> (4-95)			<b>U.S. NUCLEAR REGULATORY COMMISSION</b>  <div style="text-align: center;"> <b>LICENSEE EVENT REPORT (LER)</b>          (See reverse for required number of          digits/characters for each block)       </div>			<b>APPROVED BY OMB NO. 3150-0104</b> <b>EXPIRES 04/30/98</b>  ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT																													
<b>FACILITY NAME (1)</b>  <div style="text-align: center;">R.E. Ginna Nuclear Power Plant</div>			<b>DOCKET NUMBER (2)</b>  <div style="text-align: center;">05000244</div>		<b>PAGE (3)</b>  <div style="text-align: center;">1 OF 4</div>																														
<b>TITLE (4)</b>  Bistable Instrument Setpoint (plus Instrument Uncertainty) Could Exceed Allowable Value, Causes a Condition Prohibited by Plant Technical Specifications																																			
<b>EVENT DATE (5)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">MONTH</th> <th style="width: 33%;">DAY</th> <th style="width: 33%;">YEAR</th> </tr> <tr> <td style="text-align: center;">07</td> <td style="text-align: center;">30</td> <td style="text-align: center;">97</td> </tr> </table>			MONTH	DAY	YEAR	07	30	97	<b>LER NUMBER (6)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">YEAR</th> <th style="width: 33%;">SEQUENTIAL NUMBER</th> <th style="width: 33%;">REVISION NUMBER</th> </tr> <tr> <td style="text-align: center;">97</td> <td style="text-align: center;">-- 003</td> <td style="text-align: center;">-- 00</td> </tr> </table>		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	97	-- 003	-- 00	<b>REPORT DATE (7)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">MONTH</th> <th style="width: 33%;">DAY</th> <th style="width: 33%;">YEAR</th> </tr> <tr> <td style="text-align: center;">08</td> <td style="text-align: center;">27</td> <td style="text-align: center;">97</td> </tr> </table>		MONTH	DAY	YEAR	08	27	97	<b>OTHER FACILITIES INVOLVED (8)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">FACILITY NAME</th> <th style="width: 40%;">DOCKET NUMBER</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>		FACILITY NAME	DOCKET NUMBER							
MONTH	DAY	YEAR																																	
07	30	97																																	
YEAR	SEQUENTIAL NUMBER	REVISION NUMBER																																	
97	-- 003	-- 00																																	
MONTH	DAY	YEAR																																	
08	27	97																																	
FACILITY NAME	DOCKET NUMBER																																		
<b>OPERATING MODE (9)</b>  <div style="text-align: center;">1</div>			<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)</b>																																
<b>POWER LEVEL (10)</b>  <div style="text-align: center;">100</div>			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">20.2201(b)</td> <td style="width: 25%;">20.2203(a)(2)(v)</td> <td style="width: 25%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 25%;">50.73(a)(2)(i)</td> <td style="width: 25%;">50.73(a)(2)(viii)</td> </tr> <tr> <td>20.2203(a)(1)</td> <td>20.2203(a)(3)(i)</td> <td></td> <td>50.73(a)(2)(ii)</td> <td>50.73(a)(2)(x)</td> </tr> <tr> <td>20.2203(a)(2)(i)</td> <td>20.2203(a)(3)(ii)</td> <td></td> <td>50.73(a)(2)(iii)</td> <td>73.71</td> </tr> <tr> <td>20.2203(a)(2)(ii)</td> <td>20.2203(a)(4)</td> <td></td> <td>50.73(a)(2)(iv)</td> <td>OTHER</td> </tr> <tr> <td>20.2203(a)(2)(iii)</td> <td>50.36(c)(1)</td> <td></td> <td>50.73(a)(2)(v)</td> <td rowspan="2">Specify in Abstract below or in NRC Form 366A</td> </tr> <tr> <td>20.2203(a)(2)(iv)</td> <td>50.36(c)(2)</td> <td></td> <td>50.73(a)(2)(vii)</td> </tr> </table>				20.2201(b)	20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)	50.73(a)(2)(viii)	20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)	20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71	20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER	20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A	20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)
20.2201(b)	20.2203(a)(2)(v)	<input checked="" type="checkbox"/>	50.73(a)(2)(i)	50.73(a)(2)(viii)																															
20.2203(a)(1)	20.2203(a)(3)(i)		50.73(a)(2)(ii)	50.73(a)(2)(x)																															
20.2203(a)(2)(i)	20.2203(a)(3)(ii)		50.73(a)(2)(iii)	73.71																															
20.2203(a)(2)(ii)	20.2203(a)(4)		50.73(a)(2)(iv)	OTHER																															
20.2203(a)(2)(iii)	50.36(c)(1)		50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A																															
20.2203(a)(2)(iv)	50.36(c)(2)		50.73(a)(2)(vii)																																
<b>LICENSEE CONTACT FOR THIS LER (12)</b>																																			
<b>NAME</b>  John T. St. Martin - Technical Assistant			<b>TELEPHONE NUMBER (Include Area Code)</b>  (716) 771-3641																																
<b>COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)</b>																																			
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS																									
<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>																																			
<input checked="" type="checkbox"/> <b>YES</b> (If yes, complete EXPECTED SUBMISSION DATE).				<input type="checkbox"/> <b>NO</b>		<b>EXPECTED SUBMISSION DATE (15)</b>		<b>MONTH</b>  <div style="text-align: center;">09</div>	<b>DAY</b>  <div style="text-align: center;">29</div>	<b>YEAR</b>  <div style="text-align: center;">97</div>																									
<b>ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)</b>  <p>On July 30, 1997, at approximately 1430 EDST, the plant was in Mode 1 at approximately 100% steady state reactor power. It was identified that the High Steam Flow Bistable Instrument Setpoint plus the Instrument Uncertainty could exceed the "Allowable Value" listed in the Ginna Station Improved Technical Specifications.</p> <p>Immediate corrective action was to declare all four channels of High Steam Flow inoperable and enter Limiting Condition for Operation 3.0.3. When action was taken to place the affected bistable proving switches in the tripped position, the plant exited Limiting Condition for Operation 3.0.3.</p> <p>The cause of this condition was insufficient margin between the High Steam Flow setpoint and the Allowable Value to account for process and instrument uncertainties.</p> <p>Corrective action to prevent recurrence is outlined in Section V.B. Additional corrective actions will be identified in a supplement to this LER.</p>																																			

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
R.E. Ginna Nuclear Power Plant	05000244	97	-- 003	-- 00	2 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

## I. PRE-EVENT PLANT CONDITIONS:

Personnel from Nuclear Engineering Services (NES) had been evaluating the impact of instrument uncertainties, including validation of actual plant-specific data.

On July 30, 1997, at approximately 1430 EDST, the plant was in Mode 1 at approximately 100% steady state reactor power. In activities unrelated to plant conditions, NES personnel identified that the High Steam Flow Bistable Instrument Setpoint, when added to the Instrument Uncertainty, could exceed the "Allowable Value" listed in the Ginna Station Improved Technical Specifications (ITS).

## II. DESCRIPTION OF EVENT:

## A. DATES AND APPROXIMATE TIMES OF MAJOR OCCURRENCES:

- July 30, 1997, 1430 EDST: Event date and time.
- July 30, 1997, 1430 EDST: Discovery date and time.
- July 30, 1997, 1527 EDST: High Steam Flow Bistable proving switches are placed in the tripped position, thus restoring the channels to operable status.

## B. EVENT:

On July 30, 1997, at approximately 1430 EDST, the plant was in Mode 1 at approximately 100% steady state reactor power. In activities unrelated to plant conditions, NES personnel reported to Operations supervision that the High Steam Flow Bistable Instrument Setpoint, when added to the Instrument Uncertainty, could exceed the Allowable Value for this Engineered Safety Feature Actuation System (ESFAS) Instrumentation, as listed in ITS Table 3.3.2-1, Function 4.d.

Since the setpoint plus the uncertainty could be non-conservative with respect to the Allowable Value, all four channels of High Steam Flow were declared inoperable at approximately 1438 EDST. There is no ITS Limiting Condition for Operation (LCO) to address the condition of four channels inoperable, so ITS LCO 3.0.3 was entered.

The Plant Operations Review Committee (PORC) reviewed this condition and concurred with the recommendation to place the bistable proving switches for the affected bistables in the tripped position.

The Control Room operators placed the affected bistable proving switches in the tripped position. This action ensured that any variation in the trip setpoint would not affect the completion of affected functions for High Steam Flow. Since the four affected channels of High Steam Flow were now performing their intended function by being maintained in the tripped configuration, these four channels were declared operable at approximately 1527 EDST on July 30, 1997.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
R.E. Ginna Nuclear Power Plant	05000244	97	-- 003	-- 00	3 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

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

None

## D. OTHER SYSTEMS OR SECONDARY FUNCTIONS AFFECTED:

None

## E. METHOD OF DISCOVERY:

This condition was self-identified by an NES engineer while performing validation of calculated instrument uncertainties.

## F. OPERATOR ACTION:

When notified of the results of the impact of the instrument uncertainty on operability of the High Steam Flow Bistables, Operations supervision notified the Shift Supervisor of this condition. Operations supervision also notified the NRC Resident Inspector.

Following notification, the Control Room operators declared all affected functions provided by the four channels of High Steam Flow inoperable and entered ITS LCO 3.0.3. After the affected bistable proving switches were placed in the tripped position and holds placed on these switches, they returned the four channels to operable status and exited ITS LCO 3.0.3.

## G. SAFETY SYSTEM RESPONSES:

None

## III. CAUSE OF EVENT:

## A. IMMEDIATE CAUSE:

The immediate cause of the condition prohibited by Technical Specifications was entry into ITS LCO 3.0.3 due to four channels of High Steam Flow being declared inoperable.

## B. INTERMEDIATE CAUSE:

The intermediate cause of all four channels of High Steam Flow being declared inoperable was a potential for instrument uncertainty to allow a trip setpoint to exceed the Allowable Value as listed in ITS Table 3.3.2-1 for ESFAS Instrumentation.

## C. ROOT CAUSE:

The underlying cause of the potential to exceed the Allowable Value was that the existing margin between the High Steam Flow setpoint and the ITS Allowable Value is insufficient to account for process and instrument uncertainties.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
R.E. Ginna Nuclear Power Plant	05000244	97	-- 003	-- 00	4 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

## IV. ANALYSIS OF EVENT:

This event is reportable in accordance with 10 CFR 50.73, Licensee Event Report System, item (a) (2) (i) (B), which requires a report of, "Any operation or condition prohibited by the plant's Technical Specifications." Having all four channels of High Steam Flow inoperable is a condition prohibited by the Ginna Station Improved Technical Specifications.

An assessment will be performed considering both the safety consequences and implications of this condition. A supplement to this LER will be submitted with the results of this assessment.

## V. CORRECTIVE ACTION:

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

The bistable proving switches were placed in the tripped configuration, and the affected functions for High Steam Flow were restored to operable status at approximately 1527 EDST on July 30, 1997.

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

- The affected bistable proving switches are held in the tripped configuration. These switches will not be reset until completion of further evaluations.
- Additional corrective actions will be identified in a supplement to this LER.

## VI. ADDITIONAL INFORMATION:

## A. FAILED COMPONENTS:

None

## B. PREVIOUS LERs ON SIMILAR EVENTS:

A similar LER event historical search was conducted with the following results: No documentation of similar LER events with the same root cause at Ginna Nuclear Power Station could be identified.

## C. SPECIAL COMMENTS:

None