

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8911200124 DOC.DATE: 89/11/06 NOTARIZED: NO DOCKET #
 FACIL:50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G 05000244
 AUTH.NAME AUTHOR AFFILIATION
 BACKUS,W.H. Rochester Gas & Electric Corp.
 MECREON,R.C. Rochester Gas & Electric Corp.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 89-012-00:on 891007,turbine runback caused by nuclear
 instrument sys rod drop circuitry.W/891106 ltr.
 W/8 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 1
 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

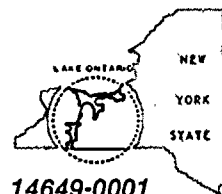
RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
PD1-3 LA	1 1	PD1-3 PD	1 1
JOHNSON,A	1 1		
INTERNAL: ACRS MICHELSON	1 1	ACRS MOELLER	2 2
ACRS WYLIE	1 1	AEOD/DOA	1 1
AEOD/DSP/TPAB	1 1	AEOD/ROAB/DSP	2 2
DEDRO	1 1	NRR/DEST/ESB 8D	1 1
NRR/DEST/ICSB 7	1 1	NRR/DEST/MEB 9H	1 1
NRR/DEST/MTB 9H	1 1	NRR/DEST/PSB 8D	1 1
NRR/DEST/RSB 8E	1 1	NRR/DEST/SGB 8D	1 1
NRR/DLPQ/HFB 10	1 1	NRR/DLPQ/PEB 10	1 1
NRR/DOEA/EAB 11	1 1	NRR/DREP/RPB 10	2 2
NUDOCS-ABSTRACT	1 1	REG-FILE 02	1 1
RES/DSIR/EIB	1 1	RGN1 FILE 01	1 1
EXTERNAL: EG&G WILLIAMS,S	4 4	L ST LOBBY WARD	1 1
LPDR	1 1	NRC PDR	1 1
NSIC MAYS,G	1 1	NSIC MURPHY,G.A	1 1
NUDOCS FULL TXT	1 1		

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TELEPHONE
AREA CODE 716 546-2700

November 6, 1989


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

Subject: LER 89-012, NIS Dropped Rod Signal Causes Turbine
Runback
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

In accordance with 10 CFR 50.73, Licensee Event Report System, item (a)(2)(iv), which requires a report of, "any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF) including the Reactor Protection System (RPS)", the attached Licensee Event Report LER 89-012 is hereby submitted.

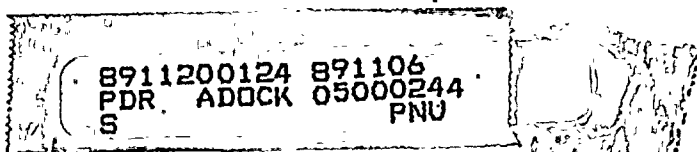
This event has in no way affected the public's health and safety.

Very truly yours,


Robert C. Mecredy
General Manager
Nuclear Production

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

Ginna USNRC Senior Resident Inspector



IE22
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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/89

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
R.E. Ginna Nuclear Power Plant	0 5 0 0 0 2 4 4	8 9	- 0 1 2	- 0 0	0 2	OF	0 6

TEXT (If more space is required, use additional NRC Form 388A's) (17)

I. PRE-EVENT PLANT CONDITIONS

The unit was at approximately 99% steady state full power with no major activities in progress. The Control Room operators were performing operating procedure O-6.3.2, (Maximum Unit Power Calculation Using the LEFM For Flow Measurement). (Note: "LEFM" is the Leading Edge Flow Meter)

II. DESCRIPTION OF EVENT

A. DATES AND APPROXIMATE TIMES FOR MAJOR OCCURRENCES:

- o October 7, 1989, 1734 EDST: Event date and time.
- o October 7, 1989, 1734 EDST: Discovery date and time.
- o October 7, 1989, 1734 EDST: Control Room operators performed the actions of abnormal procedure AP-TURB.2 (Automatic Turbine Runback) and stabilized the plant at approximately 80% power.
- o October 7, 1989, 1922 EDST: Started increasing load to approximately 100% full power.

B. EVENT:

On October 7, 1989 at 1734, with the reactor at approximately 99% full power, a turbine runback occurred. Prior to the turbine runback, the Control Room operators were adjusting gains on the power range channels per O-6.3.2 to reflect calculated unit power. As part of this sequence of adjusting gains, the dropped rod mode selector switch was placed from "normal" to bypass thus defeating the turbine runback from this power range channel while the adjustment was being made. After power range channel N-44 bistables verified normal, the dropped rod mode selector switch was placed from "bypass" to "normal".

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMS NO. 3150-0104

EXPIRES 8/31/89

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (3)

PAGE (3)

R.E. Ginna Nuclear Power Plant

0 5 0 0 0 2 4 4 8 9 - 0 1 2 - 0 0 0 3 OF 0 6

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

At this time the turbine runback occurred and the Control Room operators entered and performed the actions of AP-TURB.2 (Automatic Turbine Runback). The plant was stabilized at approximately 80% power and all systems and equipment performed normally. During the runback the dropped rod stop bistable on the N-44 channel was observed to be lit and the Main Control Board annunciator E-28 (Power Range Rod Drop, Rod Stop -5%/5 sec) was lit.

Subsequently, after the plant was stabilized, power range channel N-44 was defeated per equipment restoration procedure ER-NIS.3 and higher supervision, the NRC and the Instrument and Control (I&C) Department were notified of the event. The Core Quadrant Power Tilt Ratio (QPTR) was checked to be within operating limits thus verifying that a control rod had not dropped into the core.

After verifying that all control rods were in their required position the plant was returned to approximately 100% full power.

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

None.

D. OTHER SYSTEMS OR SECONDARY FUNCTIONS AFFECTED:

None.

E. METHOD OF DISCOVERY:

The event was immediately apparent due to alarms and indications in the Control Room.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/89

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
R.E. Ginna Nuclear Power Plant	0 5 0 0 0 2 4 4	8 9	— 0 1 2	— 0 0	0 4	OF	0 6

TEXT (If more space is required, use additional NRC Form 388A's) (17)

F. OPERATOR ACTION:

Immediate operator action was to stabilize the plant at approximately 80% reactor power by performing the applicable steps of AP-TURB.2

Subsequent operator action was to defeat power range channel N-44 per ER-NIS.3, notify Higher Supervision, the NRC and the I&C Department and verify the QPTR was within normal operating limits.

G. SAFETY SYSTEM RESPONSES:

The turbine generator decreased load automatically to approximately 80% reactor power due to the dropped rod runback circuitry.

III. CAUSE OF EVENT

A. IMMEDIATE CAUSE:

The automatic turbine runback was caused by Nuclear Instrument System Rod Drop circuitry on power range channel N-44.

B. INTERMEDIATE CAUSE:

The Nuclear Instrument System Rod Drop Circuitry event on power range channel N-44 occurred during the calorimetric adjustment of power range channel N-44, and subsequent switching of the rod mode selector switch from "bypass" to "normal".

C. ROOT CAUSE:

The underlying cause of the turbine runback from power range channel N-44 is undetermined at this time. The I&C Department could not duplicate the event during subsequent troubleshooting efforts.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)		
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R.E. Ginna Nuclear Power Plant	0 5 0 0 0 2 4 4	8 9	0 1 2	0 0	0 5	OF	0 6

TEXT (If more space is required, use additional NRC Form 368A's) (17)

IV. ANALYSIS OF EVENT

The event is reportable in accordance with 10 CFR 50.73, Licensee Event Report System, item (a)(2)(iv), which requires reporting of, "any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF) including the Reactor Protection System (RPS)". The automatic turbine runback was an automatic actuation of the RPS.

An assessment was performed considering both the safety consequences and implications of this event with the following results and conclusions:

There were no operational or safety consequences or implications attributed to the turbine runback event because:

- o The event was immediately apparent.
- o The turbine runback was in the conservative direction.
- o All reactor control and protection systems performed as designed thus limiting the overall effects of the transient.
- o The Control Room operators stabilized the plant very quickly.

Based on the above, it can be concluded that the public's health and safety was assured at all times.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)		
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R.E. Ginna Nuclear Power Plant	0 5 0 0 0 2 4 4	8 9	- 0 1 2	- 0 0	0 6	OF	0 6

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

V. CORRECTIVE ACTION

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

- o During subsequent troubleshooting efforts, the I&C Department could not duplicate or identify any malfunctions that would have caused the turbine runback from power range channel N-44.
- o After all troubleshooting efforts were completed, power range channel N-44 was returned to service.

B. ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE:

As the underlying cause of the event is still undetermined, I&C Department is planning to do a further analysis of power range channel N-44 circuitry to identify possible malfunctions that could have caused the event. For possible malfunctions that are identified, these circuits will be monitored during a future calorimetric adjustment, and I&C will perform appropriate troubleshooting.

Any further corrective action will depend upon conclusions reached from the above planned troubleshooting.

VI. ADDITIONAL INFORMATION:

A. FAILED COMPONENTS:

None identified.

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 Station could be identified.

C. SPECIAL COMMENTS:

None.

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULARY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8911200124 DOC. DATE: 89/11/06 NOTARIZED: NO DOCKET #
 FACIL: 50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G 05000244
 AUTH. NAME AUTHOR AFFILIATION
 BACKUS, W.H. Rochester Gas & Electric Corp.
 MECREON, R.C. Rochester Gas & Electric Corp.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 89-012-00: on 891007, turbine runback caused by nuclear
 instrument sys rod drop circuitry. W/8 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 1
 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
PD1-3 LA	1 1	PD1-3 PD	1 1
JOHNSON, A	1 1		
INTERNAL: ACRS MICHELSON	1 1	ACRS MOELLER	2 2
ACRS WYLIE	1 1	AEOD/DOA	1 1
AEOD/DSP/TPAB	1 1	AEOD/ROAB/DSP	2 2
DEDRO	1 1	NRR/DEST/ESB 8D	1 1
NRR/DEST/ICSB 7	1 1	NRR/DEST/MEB 9H	1 1
NRR/DEST/MTB 9H	1 1	NRR/DEST/PSB 8D	1 1
NRR/DEST/RSB 8E	1 1	NRR/DEST/SGB 8D	1 1
NRR/DLPQ/HFB 10	1 1	NRR/DLPQ/PEB 10	1 1
NRR/DOEA/EAB 11	1 1	NRR/DREP/RPB 10	2 2
NUDOCS-ABSTRACT	1 1	REG FILE 02	1 1
RES/DSIR/EIB	1 1	RGNI FILE 01	1 1
EXTERNAL: EG&G WILLIAMS, S	4 4	L ST LOBBY WARD	1 1
LPDR	1 1	NRC PDR	1 1
NSIC MAYS, G	1 1	NSIC MURPHY, G.A	1 1
NUDOCS FULL TXT	1 1		

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMS NO. 3150-0104

EXPIRES 8/31/89

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
R.E. Ginna Nuclear Power Plant	0 5 0 0 0 2 4 4	8 9	— 0 1 2	— 0 0	0 2	OF	0 6

TEXT (If more space is required, use additional NRC Form 306A's) (17)

I. PRE-EVENT PLANT CONDITIONS

The unit was at approximately 99% steady state full power with no major activities in progress. The Control Room operators were performing operating procedure O-6.3.2, (Maximum Unit Power Calculation Using the LEFM For Flow Measurement). (Note: "LEFM" is the Leading Edge Flow Meter)

II. DESCRIPTION OF EVENT

A. DATES AND APPROXIMATE TIMES FOR MAJOR OCCURRENCES:

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
R.E. Ginna Nuclear Power Plant	0 5 0 0 0 2 4 4	8 9	- 0 1 2	- 0 0	0 3	OF	0 6

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

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After verifying that all control rods were in their required position the plant was returned to approximately 100% full power.

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

None.

D. OTHER SYSTEMS OR SECONDARY FUNCTIONS AFFECTED:

None.

E. METHOD OF DISCOVERY:

The event was immediately apparent due to alarms and indications in the Control Room.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		89	012	00	04	OF	06

TEXT (If more space is required, use additional NRC Form 308A's) (17)

F. OPERATOR ACTION:

Immediate operator action was to stabilize the plant at approximately 80% reactor power by performing the applicable steps of AP-TURB.2

Subsequent operator action was to defeat power range channel N-44 per ER-NIS.3, notify Higher Supervision, the NRC and the I&C Department and verify the QPTR was within normal operating limits.

G. SAFETY SYSTEM RESPONSES:

The turbine generator decreased load automatically to approximately 80% reactor power due to the dropped rod runback circuitry.

III. CAUSE OF EVENT

A. IMMEDIATE CAUSE:

The automatic turbine runback was caused by Nuclear Instrument System Rod Drop circuitry on power range channel N-44.

B. INTERMEDIATE CAUSE:

The Nuclear Instrument System Rod Drop Circuitry event on power range channel N-44 occurred during the calorimetric adjustment of power range channel N-44, and subsequent switching of the rod mode selector switch from "bypass" to "normal".

C. ROOT CAUSE:

The underlying cause of the turbine runback from power range channel N-44 is undetermined at this time. The I&C Department could not duplicate the event during subsequent troubleshooting efforts.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)		
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R.E. Ginna Nuclear Power Plant	0 5 0 0 0 2 4 4	8 9	- 0 1 2	- 0 0	0 5	OF	0 6

TEXT (If more space is required, use additional NRC Form 306A's) (17)

IV. ANALYSIS OF EVENT

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- o The Control Room operators stabilized the plant very quickly.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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R.E. Ginna Nuclear Power Plant

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OF

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TEXT (If more space is required, use additional NRC Form 308A's) (17)

V.

CORRECTIVE ACTION

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

- o During subsequent troubleshooting efforts, the I&C Department could not duplicate or identify any malfunctions that would have caused the turbine runback from power range channel N-44.
- o After all troubleshooting efforts were completed, power range channel N-44 was returned to service.

B. ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE:

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None identified.

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 Station could be identified.

C. SPECIAL COMMENTS:

None.

November 6, 1989

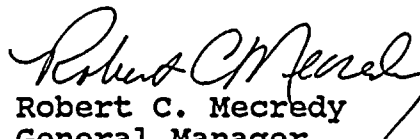
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Subject: LER 89-012, NIS Dropped Rod Signal Causes Turbine
Runback
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

In accordance with 10 CFR 50.73, Licensee Event Report System, item (a)(2)(iv), which requires a report of, "any event or condition that resulted in manual or automatic actuation of any Engineered Safety Feature (ESF) including the Reactor Protection System (RPS)", the attached Licensee Event Report LER 89-012 is hereby submitted.

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

Very truly yours,


Robert C. Mecredy
General Manager
Nuclear Production

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

Ginna USNRC Senior Resident Inspector

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