Maria Korsnick Site Vice President R.E. Ginna Nuclear Power Plant, LLC 1503 Lake Road Ontario, New York 14519-9364 585.771.3494 585.771.3943 Fax

maria.korsnick@constellation.com



September 12, 2006

U. S. Nuclear Regulatory Commission Washington, DC 20555

- **ATTENTION:** Document Control Desk
- **SUBJECT: R.E. Ginna Nuclear Power Plant** Docket No. 50-244

LER 2006-002, Off-site Power Systems Declared Inoperable

The attached Licensee Event Report (LER) 2006-002 is submitted in accordance with 10 CFR 50.73, Licensee Event Report System, item (a)(2)(v)(A). This report covers three separate events as provided for in NUREG 1022, Revision 2, Event Reporting Guidelines 10CFR 50.72 and 50.73, Section 2.3. These events in no way affected the public's health and safety. There are no new commitments contained in this submittal. Should you have questions regarding the information in this report, please contact Mr. Robert Randall at (585) 771-3734 or Robert.Randall@constellation.com.

Very truly yours snick

Mary G. Korsnick

IE22

1001629

Document Control Desk September 12, 2006 Page 2

MK/MR

Attachments: (1) LER 2006-002

cc: S. J. Collins, NRC P.D. Milano, NRC

.

Resident Inspector, NRC (Ginna)

1001629

ATTACHMENT (1)

LER 2006-002

													CYDIDCO	00100/0007
NRC FO (6-2004)	RM 366			U.S. NUCLI	EAR HI	EGULATO	RY COMM	ISSION	APPHU	VED BY UMB	: NO. 3150-0	104	EXPIRES	: 06/30/2007
LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)								Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the						
1. FACIL		ME					<u> </u>		2. DOCI	KET NUMB				
R.E.	Ginna	Nuclear	Power	Plant					0	5000 244		1	OF 5	5
4. IIILE Off-	site Po	wer Sys	stems D	eclared Inc	opera	ble								
5. E	VENT D	ATE	6.	LER NUMBE	Ŗ	7. R	EPORT D	ATE		8.	OTHER FA	CILITIES INV	OLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAF	FAGILI	TYNAME			050	NUMBER)00
07	17	2006	2006	- 002 -	0	09	12	200	5	TY NAME			DOCKET 050	NUMBER 100
9. OPER	ATING N	NODE	11	. THIS REPO	RTIS	SUBMITTI	ED PURS	JANT T	O THE F	REQUIREM	ENTS OF 10	CFR§: (Che	ck all that	apply)
l 10. power level 100			20.2: 20.2:	201(b) 201(d) 203(a)(1) 203(a)(2)(i) 203(a)(2)(ii) 203(a)(2)(iii) 203(a)(2)(iv) 203(a)(2)(v) 203(a)(2)(vi)	$\begin{array}{c c c c c c c c c c c c c c c c c c c $			(3)(i) (3)(ii) (4) (i)(A) (ii)(A) (ii) (ii) (i)(A))(i)(B)		☐ 50.73(a) ☐ 50.73(a) ☐ 50.73(a) ☐ 50.73(a) ☐ 50.73(a) ☐ 50.73(a) ☐ 50.73(a) ☐ 50.73(a) ☐ 50.73(a)	(2)(i)(C) (2)(ii)(A) (2)(ii)(B) (2)(ii) (2)(iv)(A) (2)(v)(A) (2)(v)(B) (2)(v)(C) (2)(v)(D)	 ☐ 50.73(a)(2)(vii) ☐ 50.73(a)(2)(viii)(A) ☐ 50.73(a)(2)(viii)(B) ☐ 50.73(a)(2)(ix)(A) ☐ 50.73(a)(2)(x) ☐ 73.71(a)(4) ☐ 73.71(a)(5) ☐ OTHER Specify in Abstract below or in NRC Form 366A 		
FACILITY					1	2. LICENS	SEE CONT	TACT F	OR THIS	LER	ITE		ER (Include A	rea Code)
Robert	Randa	II. Direc	ctor of J	Licensing							(5	585) 771-37	34	lea 0000,
<u> </u>			13. COM	IPLETE ONE	LINE	FOR EAC	H COMPO	NENT	AILURE	DESCRIBI	ED IN THIS	REPORT		
CAU	SE	SYSTEM	СОМРО	NENT FACT	NU- URER	REPOR TO I	TABLE EPIX	С	AUSE	SYSTEM	COMPONEN	NT MANU- FACTURE	REP(ORTABLE O EPIX
									·					
□ YE	S (If yes	14 complet	. SUPPL	EMENTAL RI	EPOR: MISS	T EXPECT	ED	×	I NO	15. EX SUB		MONTH	DAY	YEAR
ABSTRA	CT (Limi	it to 1400	spaces,	i.e., approxim	ately 1	15 single-s _l	, paced type	ewritten	lines)	<u> </u>				<u> </u>
 This LER covers three separate events per NUREG 1022, Revision 2, Section 2.3. On July 17, 2006, August 1, 2006 and August 2, 2006 the Rochester Gas and Electric (RG&E) Energy Control Center notified the R.E. Ginna Nuclear Power Plant (Ginna) control room that the post contingency low voltage alarm had been received for the off-site power system. Ginna Operations entered procedure O-6.9, Operating Limits for Ginna Station Transmission, and declared offsite power inoperable per Technical Specification (TS) 3.8.1 for each occurrence. Ginna declared the off-site power system operable for each occurrence when notified by RG&E that the alarm had cleared. Corrective action to prevent recurrence is outlined in Section V.B. 														

.

NRC FORM 366A (1-2001)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

1. FACILITY NAME	2. DOCKET NUMBER (2)	6	5. LER NUMBER	3. PAGE			
	05000244	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2	OF	5
R.E. Ginna Nuclear Power Plant		2006	002	00			2

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

I. PRE-EVENT PLANT CONDITIONS:

On July 17, 2006, August 1, 2006 and August 2, 2006 the plant was in Mode 1 at approximately 100% power. The off-site electrical system was in a 100/0 lineup configuration, meaning that off-site circuit 767 was providing power to the four (4) 480 volt safeguards busses.

II. DESCRIPTION OF EVENT:

A. EVENT:

On three different occasions, the Rochester Gas and Electric (RG&E) Energy Control Center notified the R.E. Ginna Nuclear Power Plant (Ginna) control room that the post contingency low voltage alarm had been received for the off-site power system. Ginna Operations entered procedure O-6.9, Operating Limits for Ginna Station Transmission, and declared the off-site power inoperable per Technical Specifications (TS) 3.8.1. In each case RG&E subsequently notified Ginna that the alarm had cleared, and off-site power was declared operable. The dates and times for each event are detailed in section II.C below.

The post contingency low voltage alarm is a service provided by RG&E's state estimator, a computer model of the bulk power system, which uses real time data on system loads and generation to determine voltage and transmission loading conditions throughout its system, including Station 13A. The state estimator program is run every 15 minutes. Using the state estimator calculated conditions, a trip of Ginna with worst case accident loading is inserted, and the 115 kV voltage conditions at Station 13A are compared to the minimum required voltages for the Ginna off-site power lineup. Ginna was operating with all off-site power supplied from Station 13A, circuit 767. The minimum required 115 kV voltage in this mode of operation is 108.9 kV, per design basis documentation. If the calculated post trip station 13A 115 kV voltage drops below 108.9 kV the post contingency low voltage alarm is activated. Per the Substation Operating Agreement between RG&E and Ginna, RG&E validated the alarm and initiated actions to clear the alarm. The initial actions did not clear the alarm and Ginna was informed of the alarm condition.

The events of July 17, 2006 and August 1, 2006 were not immediately recognized as reportable, and were subsequently reported as an amendment to Event number 42751 on August 3, 2006 under 10CFR50.72 (b)(3)(v)(A). This was entered into Ginna's corrective action process.

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

None

C. DATES AND APPROXIMATE TIMES OF MAJOR OCCURRENCES:

July 17, 2006, 1427 EDST: Off-site power declared inoperable due to notification

NRC FORM 366A (1-2001)

NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION (1-2001)											
LICENSEE EVENT REPORT (LER)											
	1. FACII	LITY NAME	2. DOCKET NUMBER (2)	6. LER NUMBER 3. PAGE							
R.E. Ginna Nu	clear Pov	wer Plant	05000244	YEAR SEQUENTIAL REVISION NUMBER 3 OF 5							
				2006 002 00							
17. NARRATIVE (/	f more spa	ice is required, use additional copie	es of NRC Form 36	6A)							
		from RG&E of a post co	ontingency lov	v voltage alarm.							
		July 17, 2006, 1448 ED RG&E that the post con	ST: Off-site power declared operable due to notification from itingency low voltage alarm was clear.								
		August 1, 2006, 1022 E from RG&E of a post co	DST: Off-site ontingency lov	power declared inoperable due to notification voltage alarm.							
	August 1, 2006, 1843 EDST: Off-site power declared operable due to notification from RG&E that the post contingency low voltage alarm was clear.										
		August 2, 2006, 1127 E from RG&E of a post co	DST: Off-site ontingency lov	power declared inoperable due to notification voltage alarm.							
.		August 2, 2006, 1655 E from RG&E that the pos	DST: Off-site st contingency	power declared operable due to notification low voltage alarm was clear.							
		August 2, 2006, 1655 E. the August 2, 2006 ever	DST: Event notification number 42751 made to report at under 10 CFR 50.72 (b)(3)(v)(A).								
•		August 3, 2006, 1430 E notification of the July	EDST: Event notification number 42751 amended to include 17, 2006 and August 1, 2006 events								
	D.	OTHER SYSTEMS OR	R SECONDARY FUNCTIONS AFFECTED:								
		None, since there were 1	no failures of a	ny components with multiple functions.							
	E.	METHOD OF DISCOV	ERY:								
		Notification from RG&	E of a post cor	tingency low voltage alarm.							
	F.	SAFETY SYSTEM RE	SPONSES:								
	There were no safety system responses required.										
III.	CAUSE OF EVENT:										
	The events are NUREG-1022 Cause Code (C), "External Cause"										
IV.	ASSESSMENT OF THE SAFETY CONSEQUENCES OF THE EVENT:										
	These events are reportable in accordance with 10 CFR 50.73, Licensee Event Report System, item $(a)(2)(v)(A)$, which requires a report of, "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are need to shutdown the reactor and maintain it in a safe condition."										
	The Ginna UFSAR Section 8.1.3 states in part: "When the reactor trips concurrent with an outage of off-site power, the emergency diesel generators will automatically assume vital station auxiliary loads necessary for safe shutdown as described in Section 8.3.1.2.6. These loads will be transferred to the diesel generators when the last source of voltage decreases to a preset value and the diesel generators come up to speed and voltage."										

NRC FORM 366A (1-2001)

•											
NRC FORM 366A (1-2001)		LICENSE	E EVENT RE	PORT (ז LER	J.S. NUCL	EAR R	EGUL	ATORY	COMMIS	SSION
	1. FACIL	LITY NAME	2. DOCKET NUMBER (2)	6. LER NUMBER				3. PAGE			
			05000244	YEAR	SE	QUENTIAL NUMBER	RE ^V NU	VISION IMBER			
R.E. Ginna Nuc	05000244	2006		002 -	-	00	4	OF	5		
17. NARRATIVE (h	f more spa	ce is required, use additional copie	es of NRC Form 360	5A)							
	The G accide auxilia shutdo types o dumpi During (DG) availal single an ope power of its a	inna UFSAR Section 8.3. int (which is considered thary (startup) transformers, own condition by operation of accidents, e.g., loss of the ing steam in conjunction were g the time that the off-site were operable. The Ginn- ble for the design basis ac active failure occurs subse- trable Diesel Generator. Of unavailability, the plant to accident analysis.	1.2.6.1 states in the worst-case of the diesel ge flow or steam 1 with flow coase power was co a accident anal coidents. Furth sequent to the a Given that Gin remained with	in part: " condition vn that th nerators line brea tdown ar nsidered ysis assu er, it is a accident. na entera n its des	In the b) and to su k, co nd na inop imes issun Thi ed the ign b	e event l with an ant can l pply vit oldown tural cir berable, that off ned that s is assu a applica asis and	of a l n out be ma al lo can l culat both -site an ad imed able l l with	oss-o age o aintai ads. 1 be acc ion." Diese powe dditio to be LCO hin th	f-cool f the s ned in Durin compl el Ger r is no nal w the fa for the e assu	lant tation a safe g other ished b herators ot orst cas ailure o e off-si imptior	y se f te is
V.	CORR A.	ECTIVE ACTIONS: ACTION TAKEN TO RETURN AFFECTED SYSTEMS TO PRE-EVENT NORMAL STATUS:									
		RG&E took steps to clear in the event of a plant tr	&E took steps to clear the alarm and ensure off-site power was available to Ginna he event of a plant trip or outage.								
	В.	ACTION TAKEN OR PLANNED TO PREVENT RECURRENCE:									
		Ginna has requested RG contingency models for of Station 13A post cont appropriate changes to th automatic (the normal co based on the results of th After RG&E has exhaus New York Independent	&E to perform conditions that tingency voltag he model, such onfiguration) a ne review. ted their local System Operat	a review t would n ges. It is a as placi- nd impro- options	w of t result antic ing g oving to cle	the state in over ipated F enerator model car the a	e estin cons G&l volt para larm	mator servat E will age re meter they	and ive produced make egulat accur will re	redictio ors in racies equest (ns
		support (reactive power) this with the NYISO and) on the 345 kV 1 will include t	/ transm he action	ission n dur	n systen ing futu	n. Th re ala	ney ha	ituatio	scussed	l
		The RG&E transmission voltages within the norm post contingency low vo voltage to clear the post situations.	n operators hav nal 118 to 123 ltage alarm. R contingency lo	re been in kV oper G&E w ow voltag	nstrue ating ill ini ge ala	cted to r range v itiate lov arm duri	naint vhen werin ing fu	tain th atterring of t uture	ne stat opting the sta alarm	ion 137 to clea ation 13	A ra SA
		Long term actions being (NYSEG):	considered by	RG&E	/ Nev	v York (State	Elect	tric an	d Gas	
		1) Addition of 425 MVA added to Station 13A.	AR of capacito	rs to the	RG&	E syste	m, 7:	5 of v	vhich	will be	

NRC FORM 366A (1-2001)

NRC FORM 366A	.			-	U.S. NUCI	EAR REGUL	ATORY COMMIS	SION			
(1-2001)		LICENSE	E EVENT RE	PORT (L	ER)						
	1. FAC	ILITY NAME	2. DOCKET		5. LER NUMBE	R	3. PAGE				
·			NUMBER (2)	YEAR	SEQUENTIAL	REVISION		5			
R.E. Ginna Nu	iclear Po	ower Plant	05000244	2006	NOMIBER	NOMBER	5 OF				
				2000	002	00					
17. NARRATIVE ((It more sp	bace is required, use additional copi	es of NHC Form 36	6A)							
	2) Extension of circuit 909 to Station 122. This will add a Station 13A to the 345 kV system.										
	These long term actions are scheduled for a 12/2007 completion as part of the Rochester Transmission Project. This project was not initiated by this event, but was a system upgrade project initiated by RG&E due to increased system loading and local generation retirements.										
VI.	ADD	ADDITIONAL INFORMATION:									
	А.	FAILED COMPONEN	ENTS:								
		There were no failed co	t.								
	В.	PREVIOUS LERS ON SIMILAR EVENTS:									
		There are no previous L	voltage alarr	n.							
	C. THE ENERGY INDUSTRY IDENTIFICATION SYSTEM (EIIS) COMPO FUNCTION IDENTIFIER AND SYSTEM NAME OF EACH COMPONE SYSTEM REFERRED TO IN THIS LER:										
	<u>CON</u>	<u>IPONENT</u>	<u>NTIFIER</u>	<u>IEEE 805</u> SYSTEM IDENTIF	ICATION						
	Off-s	ite Power	JX	JX							
	Emer	gency Diesel Generators	DG								
	D.	SPECIAL COMMENTS	S:								
	Off-site power was never lost to the site and the DGs were not required to operate. The post contingency alarm is a conservative estimate of the voltage following a trip of the unit with full safeguards loading on the vital busses (design basis accident). In all cases both DGs were operable and canable of performing their design function if										

all cases both DGs were operable and capable of performing their design function if the off-site voltage was not sufficient. Therefore, the undervoltage system would strip the vital busses from off-site power and load them on the DGs, assuring that adequate power is available to the required safeguards equipment.