

L-2017-190 10 CFR § 50.73 November 7, 2017

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D. C. 20555-0001

Re: Turkey Point Unit 4 Docket No. 50-251 Licensee Event Report: 2017-001-00 Date of Event: September 10, 2017 Manual Reactor Trip Due to Lowering Steam Generator Level Caused by Loss of Flow Regulating Valve Positioner Control

The attached Licensee Event Report 05000251/2017-001-00 is submitted pursuant to 10 CFR 50.73(a)(2)(iv)(A) due to actuations of the reactor protection and auxiliary feedwater systems.

If there are any questions, please call Mr. Mitchell Guth at 305-246-6698.

Sincerely,

Thomas Summers Regional Vice President - Southern Region Florida Power & Light Company

Attachment

cc: Regional Administrator, USNRC, Region II Senior Resident Inspector, USNRC, Turkey Point Nuclear Plant

Florida Power & Light Company

NRC FO	RM 366	-	U.S. NUCLEAR REGULATORY COMMISSION						APPROVED BY OMB: NO. 3150-0104					EXPIRES: 03/31/2020		
(04-2017) LICI (See Pa			ENSEE EVENT REPORT (LER) ge 2 for required number of digits/characters for each block)						Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects. Resource@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							
(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)									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 information collection.							
1. FACILITY NAME Turkey Point Unit 4								2. docket number 05000 251				3. PAGE	3. page 1 OF 2			
4. TITLE Manua	Reacto	or Trip Du	e to Low	vering Ste	eam Gei	nerator I	_evel C	ause	ed by Los	s of I	Flow Regula	ting Valve Po	sitioner Co	ontrol		
5. EVENT DATE			6. LER NUMBER			7. REPORT D			DATE	TE 8. OTHER F			CILITIES INVOLVED			
					IAL RE	V MO				FACILITY NAME				DOCKET NUMBER		
WONTH	DAT	YEAR	YEAR	NUMBER	R NO	D.		DAT	TEAR				05000			
9	10	2017	2017	001	0	0 1	1	7	2017	FAC	CILITY NAME		DOCKET NUMBE			
														050	00	
9. OPERATING MODE 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)																
				20.2201(b)			20.2203(a)(3)(i)			☐ 50.73(a)(2)(ii)(A)			50.73(a)(2)(VIII)(A)			
1			20.2201(d)			20.2203(a)(3)(ii)				50.73(a)(2)(ii)(B)			50.73(a)(2)(viii)(B)			
			□ 20.2203(a)(1)			20.2203(a)(4)				50.73(a)(2)(iii)			1 50.73(a)(2)(ix)(A)			
			□ 20.2203(a)(2)(i)			150.36(c)(1)(i)(A)				\boxtimes 50.73(a)(2)(iv)(A)			$\Box 50.73(a)(2)(x)$			
10. 1	POWERL	EVEL		2203(a)(2)	50.36(c)(1)(ii)(A)				50.73(a)(2)(V)(A)				\Box 73.71(a)(4)			
				2203(a)(2)	\Box 50.36(C)(2)				\Box 50.7 3(a)(2)(V)(B)				$\Box 73.77(a)(1)$			
88				50.4	50.46(a)(3)(ii)			\Box 50.73(a)(2)(V)(C)				\Box 73.77(a)(1) \Box 73.77(a)(2)(i)				
			$\Box 20.2203(a)(2)(v)$			☐ 50.7	30.73(a)(2)(i)(R)			\Box 50.73(a)(2)(vii)				\Box 73.77(a)(2)(ii)		
						\Box 50.73(a)(2)(i)(C)				OTHER Specify in Abstract below				or in NRC Form 366A		
						12. LIC			TACT FO	R TH				1111 3007	`	
LICENSEE	CONTACT											TELEPHON	IE NUMBER (In	clude A	rea Code	
<u> </u>			13	COMPLE	Paul F	. Czay	а Еаснсо	OMP	ONENT FA	ILURE	EDESCRIBED	IN THIS REPOR	(305) 247-7150 T			
CAL	CAUSE		COMPONENT MANUFACTUR		ER TO EPIX		CAUS	SE	SYSTEM COMPONENT		MANU- FACTURER		REPORTABLE TO EPIX			
14. SUF	14. SUPPLEMENTAL REPORT EXPECTED									15. EXPECTED			MONTH	D	AY	YEAR
	YFS (If)	es comple	ete 15. EXPECTED SUBMISSION DATE)									AISSION				
	T (l imit to	1400 00000		wimotok 1			· _/				D	ATE				L
ABSTRAC		1400 space.	s, <i>i.e., app</i> r	Oximalely 1	o single-sp		vrilleri iirie	:5)								
On S	Septen	ber 10,	2017	at appr	roxima	tely 18	55 ho	urs	, the Tu	Irke	y Point Ur	nit 4 reactor	was ma	anua	lly tri	pped
from	88%	bower d	ue to l	owering	g level	in Ste	am Ge	ene	rator (S	G) (, C. The re	actor was s	stabilized	d in l	Mode	∋ 3.
Auxiliary Feed Water actuated as expected on low level in SG C and was secured at approximately 1933																
hours. At the time of the event, the Turkey Point site was experiencing high winds with rain associated with																
Hurricane Irma. The B and C Main Feedwater Regulating Valves (MFRV) had been in manual control when																
the (V failed	close	d. The	cause	of the	even	t wa	as a deg	grad	led signal	due to wat	er intrus	ion i	nto ti	ne C
	V Valv	e positi	oner n	and se	lector s	SWITCH	encio	sure	e result	ing i	rom a les	s than ade	quate de	sign	and	ouroo
and	anclos		clive a	ictions is and r	inciuue enair (t mouil of a fai	Ication	mnc	nent as	il J a soci	anu 4 ivirr iated with t	the 4C MER		tions	ally f	sures
term	inal/n	ill pox s	pecific	ations	will he	revise	d to in	nnra	ove dire	ectio	n for insta	llation activi	ties Saf	fetv «	siani [.]	ficance
is ve	is very low because the unit responded as designed to the trip															
	,						0			•						

04-2017)	U.S. NUCLEAR REGULA	TORY COMMISSION	APPROVED BY OMB: NO. 3150-0104 EXPIRES: 3/31/2020 Estimated burden per response to comply with this mandatory collection request: 80 hours. Reporter							
	CENSEE EVENT RI	EPORT (LER) SHEET	comments regarding burden estimate to the Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs							
(See NUREG-1022, R.3 http://www.nrc.gov/readin	for instruction and guidance for ng-rm/doc-collections/nuregs/s	or completing this form staff/sr1022/r3/)	used to impose an information collection doe NRC may not conduct or sponsor, and a collection.	ernent and Budge es not display a c person is not re	urrently valid OMB contr quired to respond to, t	rol number, the the information				
1. FACILITY NAME		2. DOCKET N	UMBER		3. LER NUMBER					
Turkey	Point Unit 4	05000-251		YEAR	SEQUENTIAL NUMBER	REV NO.				
NARRATIVE				2017	001	00				
DESCRIPTION OF	THE EVENT									
On September 10, 2 power due to lowerin [BA] actuated as exp Turkey Point site wa The Reactor Protect	2017 at approximately 18 ng level in Steam Genera pected on low level in SC is experiencing high wind tion System (RPS) [JC],	855 hours, the Turke ator [SB, SG] C. Th G C and was secure ds with rain associat and AFW actuations	ey Point Unit 4 reactor [AC, RC e reactor was stabilized in Mo d at approximately 1933 hours ted with Hurricane Irma. s were reported in accordance	CT] was ma de 3. Auxi s. At the tir with 10 CI	nually tripped fr iary Feed Wate ne of the event, FR 50.72 in Eve	rom 88% er (AFW) the ent				
Notification 52960 a	nd are also reportable in	accordance with 10) CFR 50.73(a)(2)(iv)(A).							
CAUSE OF THE EV	/ENT									
The direct cause of [SJ, FCV] positioner contributing cause w	the event was a degrade hand selector switch en vas a less than adequate	ed signal due to wate closure. The root ca e design change tha	er intrusion into the 4C Main F ause was a latent weakness ir t installed the enclosures.	eedwater F n the install	Regulating Valve ation of the encl	e (MFRV) losure. A				
ANALYSIS OF THE	EVENT									
The event was initia manually due to pos controller inputs. Th demanded full open Troubleshooting ide 4C MFRV PSS was removed during the	ted by failure of the 4C M itioner issues. The oper le 4C SG level continued . The reactor operator m ntified water intrusion in t found to have a broken troubleshooting.	IFRV. At the time o ator controlling SG I to lower even thou nanually tripped the the 4B and 4C MFR wire weakened by c	of the event, level in the 4B and levels noticed the 4C SG level gh the 4C MFRV and its asso reactor as briefed at the 20% CV positioner selector switches corrosion. The wire appears to	d 4C SGs v was not re ciated bypa level in the (PSS). Do have brok	vas being contro sponding as ex ass valve both w 4C SG. uring troublesho en when a cove	olled pected to vere poting, the er was				
ANALYSIS OF SAF	ETY SIGNIFICANCE									
Safety significance is	s very low because the ι	unit responded as de	esigned to the trip.							
CORRECTIVE ACT	IONS									
Corrective actions a	re contained in Conditior	n Report 2224218 a	nd include:							
 Modifications were broken wire association the scope of work The terminal/pull I water intrusion. 	e completed on the Unit ciated with the 4C MFRV pox specifications will be	3 and 4 MFRV hand / was repaired. Oth revised to improve	d selector switch enclosures a er enclosures in safety signific direction for installation of enc	nd enclosu ant system losures neo	re penetrations. s were also incl eding protection	. The luded in I from				
ADDITIONAL INFO	RMATION: EIIS Codes a component f	are shown in the form function identifier (if a	mat [IEEE system identifier, co appropriate)].	omponent f	unction identifie	r, second				
FAILED COMPONE										
		e								