

FORM 301
2000

U.S. NUCLEAR REGULATORY COMMISSION
OPERATIONS CENTER

CR 319646

REACTOR PLANT ORIGINAL
EVENT NOTIFICATION WORKSHEET EN # 37839

OPERATION TELEPHONE NUMBER: PRIMARY - 301-916-6100 or 800-832-3449; BACKUPS (18T) 301-951-0550 or 800-449-3894;
301-415-0550 and (3rd) 301-415-0550. Licensees who maintain their own ETS are provided these telephone numbers.

NOTIFICATION TIME 1542	FACILITY OR ORGANIZATION SUSQUEHANNA LLC	UNIT 2	NAME OF CALLER Gordon E. Robinson	CALL BACK # (570) 542-3807
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EVENT TIME & ZONE 108 EST	EVENT DATE 03/14/2001	POWERMODE BEFORE 0% / 5	POWERMODE AFTER 0% / 5
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EVENT CLASSIFICATIONS		1-Hr. Non-Emergency 10 CFR 50.72(b)(1)		8-Hr. Non-Emergency 10 CFR 50.72(b)(3)	
GENERAL EMERGENCY	GEN/AEC	TS Deviation	ADEV	(v)(A) Safe S/D Capability	AINA
SITE AREA EMERGENCY	SIT/AEC	4-Hr. Non-Emergency 10 CFR 50.72(b)(2)		(v)(B) RHR Capability	AINB
ALERT	ALE/AEC	(i) TS Required S/D	ASHU	(v)(C) Control of Rad Releases	AINC
UNUSUAL EVENT	UNU/AEC	(v)(A) ECCS Discharge to RCS	ACCS	(v)(D) Accident Mitigation	AIND
50.72 NON-EMERGENCY (see next column)		(v)(B) RPS Actuation (scram)	ARPS	(vi) Onsite Medical	AMED
PHYSICAL SECURITY (73.71)	DOOD	(vi) Offsite Notification	APRE	(vii) Loss Comm/Asm/Resp	ACOM
MATERIAL/EXPOSURE	B77?	8-Hr. Non-Emergency 10 CFR 50.72(b)(3)		80-Day Optional 10 CFR 50.73(a)(1)	
FITNESS FOR DUTY	HFIT	(v)(A) Degraded Condition	ADEG	Invalid Specified System Actuation	AINV
OTHER UNSPECIFIED REQNT (see last column)		(v)(B) Unanalyzed Condition	AUNA	Other Unspecified Requirement (Identify)	
INFORMATION ONLY	NNF	(v)(A) Specified System Actuation	AESF		NONR

DESCRIPTION

Include: Systems affected, actuations & their initiating signals, causes, effect of event on plant, actions taken or planned, etc. (Continue on back)

RETRACTION OF ENS NOTIFICATION # 37839 / REPLACE WITH 60 - DAY NOTIFICATION OF INVALID SYSTEM ACTUATIONS.

ENS Notification # 37839 documented that the loss of the Unit 2 Division 1 RPS power supply on 3/14/01 required an 8-hour ENS notification for actuation of a containment isolation signal that affected multiple systems and a loss of a safety function required to remove residual heat (10CFR50.72(b)(3)(v)(A) and 10CFR50.72(b)(3)(v)(B) respectively). After subsequent evaluation of the event, the reportability determination is being changed to retract the 8-hour notification and provide the required a 60-day ENS notification for an invalid actuation that affected multiple systems. See the discussion below:

The initial condition was reported per 10CFR50.72(b)(3)(v)(B), loss of safety function that is needed to remove residual heat. A subsequent review of the event and reporting requirements by PPL has concluded that the event is not reportable per this section of the rule. In this case the 37-minute interruption did not and would not have prevented the fulfillment of the RHR shutdown cooling function.

The original notification stated that an actuation of a containment isolation signal that affected multiple systems was reportable as an 8-hour ENS notification per 10CFR50.72(b)(3)(v)(A). For this event, a half-scrum while the unit was shutdown, was the result of an invalid signal since it was due to loss of RPS power. Except for critical scrams, invalid actuations are not reportable by telephone under 10CFR50.72. Therefore this 60-day optional report, as allowed by 10CFR50.73(a)(1), is being made under the reporting requirement in 10 CFR50.73(a)(2)(iv)(A) to describe an invalid actuation of general containment isolation signals affecting isolation valves in more than one system.

NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD?	<input type="checkbox"/> YES (Explain above)	<input checked="" type="checkbox"/> NO
NRC RESIDENT	X					
STATE(s)		X		DID ALL SYSTEMS FUNCTION AS REQUIRED?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO (Explain above)
LOCAL		X				
OTHER GOV AGENCIES		X		MODE OF OPERATION:	ESTIMATED (actual)	ADDITIONAL INFO ON BACK?
MEDIA/PRESS RELEASE		X		UNTIL CORRECTED 5	RESTART DATE: 4/23/01	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

B-1A

ADDITIONAL INFORMATION

LOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in description)

LIQUID RELEASE	GASEOUS RELEASE	UNPLANNED RELEASE	PLANNED RELEASE	ONGOING	TERMINATED
MONITORED	UNMONITORED	OFFSITE RELEASE	T.S. EXCEEDED	RM ALARMS	AREA EVACUATED
PERSONNEL EXPOSED OR CONTAMINATED		OFFSITE PROTECTIVE ACTIONS RECOMMENDED		*State release path in description	

	Release Rate (Ci/sec)	% T.S. LIMIT	HOO GUIDE	Total Activity (Ci)	% T.S. LIMIT	HOO GUIDE
oble Gas			0.1 Ci/sec			1000 Ci
dine			10 uCi/sec			0.01 Ci
articulate			1 uCi/sec			1 mCi
quid (excluding tritium & dissolved noble gases)			10 uCi/mln			0.1 Ci
quid (tritium)			0.2 Ci/mln			5 Ci
otal Activity						

	PLANT STACK	CONDENSER/AIR EJECTOR	MAIN STEAM LINE	SG BLOWDOWN	OTHER
J MONITOR READINGS:	NA				
JRM SETPOINTS:					
J.S. LIMIT (if applicable)					

S OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS: (specific details/explanations should be covered in event description)

LOCATION OF THE LEAK (e.g., SG #, valve, pipe, etc.):

LEAK RATE	UNITS: gpm/gpd	T.S. LIMITS	SUDDEN OR LONG TERM DEVELOPMENT?
AK START DATE:	TIME:	COOLANT ACTIVITY & UNITS:	PRIMARY SECONDARY

IT OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL:

EVENT DESCRIPTION (Continued from front)

At 15:08 on March 14, 2001 with Unit 2 in Mode 5 at 0% power, the primary power supply to the "A" Reactor Protection System (RPS) power distribution panel was lost when the Motor-Generator (MG) set generator in that division failed. This resulted in Primary Containment Isolation System actuations including isolation of an Residual Heat Removal shutdown cooling suction valve and other automatic system initiations. RPS as well as other plant systems functioned as designed in response to the event. The "A" RPS distribution panel was swapped to alternate power and all isolations were reset by 16:10. The loss of power was due to a failure of the "A" RPS M-G set generator. The generator failed due to a manufacturing defect of an internal conductor connection. The failed generator was replaced and other like-in-kind generators will be inspected. There were no safety consequences or compromises to the health or safety of the public. This event has been entered into the site-specific corrective action program for resolution. Internal and industry events were reviewed to assess if a generic problem exists with this type of generator. No evidence of similar failures was found, which indicates that a generic problem does not exist.

The NRC site Resident Inspector has been notified

CONTACT: Leigh Trocine

p 2 of 4

REVISED REPORTABILITY DETERMINATION FOR CR 319646

ENS Notification # 37839 documented that the loss of the Unit 2 Division 1 RPS power supply on 3/14/01 required an 8-hour ENS notification for actuation of a containment isolation signal that affected multiple systems and a loss of a safety function required to remove residual heat (10CFR50.72(b)(3)(iv)(A) and 10CFR50.72(b)(3)(v)(B) respectively).

After subsequent evaluation of the event, the reportability determination is being changed to retract the 8-hour notification and require a 60-day ENS notification for an invalid actuation that affected multiple systems. See discussion below.

System Actuations

The original notification stated that an actuation of a containment isolation signal that affected multiple systems was reportable as an 8-hour ENS notification per 10CFR50.72(b)(3)(iv)(A). For this event, the actuation resulted in a half-scam while the unit was shutdown and was invalid since it was due to loss of RPS power not a valid signal. Page 49 of NUREG-1022 Rev. 2 states, "except for critical scrams, invalid actuations are not reportable by telephone under 10CFR50.72". Therefore, an 8-hour notification was not required. Per NDAP-QA-0720 Rev. 7 attachment K, appendix A, the event is reportable as either a 60 day written report per 10 CFR50.73(a)(2)(iv)(A) or a 60 day ENS notification per 10CFR50.73(a). The 60-day ENS notification option will be used.

Loss of Safety Function

The initial condition was reported per 10CFR50.72(b)(3)(v)(B), loss of safety function that is needed to remove residual heat. A subsequent review of the event and reporting requirements by Licensing and Operations has concluded that the event is not reportable per this section of the rule.

NUREG-1022 Rev. 2 states "a single failure that defeats the safety function of a redundant system is reportable even if the design of the system, which allows such a single failure to defeat the function of the system, has been found acceptable. For example, if a single RHR suction line valve should fail in such a way that RHR cooling cannot be initiated, the event would be reportable".

P 3/4

This section of the NUREG was originally believed to describe the event in CR 319646 since both trains of RHR shutdown cooling have a common suction line that isolated when the HV251F009 valve closed. A more detailed analysis of the above NUREG section shows that the event in CR 319646 does not meet this guidance.

The key phrase in the example is "... For example, if a single RHR suction line valve should fail in such a way that RHR cooling cannot be initiated, the event would be reportable". The suction line valve closed but it did not fail in a way that would have prevented RHR shutdown cooling from being initiated. NUREG - 1022 Rev. 2 page 53 states "...several different expressions such as 'would have,' 'could have,' 'alone could have,' and 'reasonable doubt' are used to characterize this standard. In the staff's view, all of these should be judged on the basis of a reasonable expectation of preventing fulfillment of the safety function". It has been determined, for the reasons described below that it is not a reasonable expectation that the event prevented fulfillment of the RHR shutdown cooling function.

There is no automatic initiation of RHR shutdown cooling; the system is manually aligned and operated in accordance with approved procedures. In the event on 3/14/01, the RHR shutdown cooling suction valve (HV251F009) isolated to the closed position when the Unit 2 division 1 normal RPS power was lost, but loss of the normal power supply did not create a situation in which the valve could not be opened in a time frame commensurate with normal expectations for aligning the system. The following supports this conclusion:

- Operations personnel used approved procedures to swap Unit 2 RPS division 1 to its alternate power supply. This action restored power to HV251F009 and the normal suction path for RHR shutdown cooling was restored within 37 minutes of the isolation. This was within the 1-hour completion time required by condition C of TS 3.9.7.
- The reactor was in Mode 5 with the reactor cavity flooded and cross-tied to the spent fuel pool. The reactor coolant temperature increased less than 2 degrees F.
- TS basis 3.9.7 states that "...operation (either continuous or intermittent) of one subsystem can maintain and reduce the reactor coolant temperature as required".
- Technical Specification 3.9.7 contains a note that allows both RHR shutdown-cooling subsystems to be removed from operation for up to 2 hours per 8-hour period. This is consistent with the TS Basis for 3.9.7 which states that the RHR system is not required to mitigate any events or accidents evaluated in the safety analysis. The RHR system is required for removing decay heat

P 4 of 4

to maintain the temperature of the reactor coolant and was retained in the Technical Specifications as an important contributor to risk reduction.

The event did not create a condition that was adverse to RHR shutdown cooling with respect to the most limiting single failure that it is designed to accommodate, i.e., a Loss of Offsite Power with an additional failure of one of the RHR shutdown cooling suction valves.

- FSAR section 5.4.7.1.1.1(2) states "the design basis for the most limiting single failure for the shutdown cooling mode of RHR is that the shutdown line isolation valves can be opened by hand (Section 5.4.7.1.5) and that the plant can then be shut down using a single RHR heat exchanger and its RHR Service Water loop. Shutdown to 212 degrees F can be achieved within about 20 hours, which is acceptable. If the shutdown line cannot be opened manually, the alternate shutdown cooling systems described in Section 15.2.9 are capable of acceptable shutdown heat removal."
- FSAR section 5.4.7.1.5 states "...Shutdown suction and discharge valves are required to be powered from both offsite and standby emergency power for purposes of isolation and shutdown following a loss of offsite power. In the event either of the two shutdown supply valves fail to operate, and the shutdown supply valves cannot be opened by hand, alternate shutdown cooling is established in accordance with plant procedures".

In this case the loss of the Unit 2 division 1 normal RPS power supply did not and would not have prevented either of the RHR shutdown cooling suction valves from being opened electrically or by hand.

Conclusion

The reportability determination for CR 319646 is being changed to retract the 8-hour notification and require a 60-day ENS notification for an invalid actuation that affected multiple systems.

RETRACTION OF ENS NOTIFICATION # 37839 / REPLACE WITH 60 - DAY NOTIFICATION OF INVALID SYSTEM ACTUATIONS.

ENS Notification # 37839 documented that the loss of the Unit 2 Division 1 RPS power supply on 3/14/01 required an 8-hour ENS notification for actuation of a containment isolation signal that affected multiple systems and a loss of a safety function required to remove residual heat (10CFR50.72(b)(3)(iv)(A) and 10CFR50.72(b)(3)(v)(B) respectively). After subsequent evaluation of the event, the reportability determination is being changed to retract the 8-hour notification and provide the required a 60-day ENS notification for an invalid actuation that affected multiple systems. See the discussion below.

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At 15:08 on March 14, 2001 with Unit 2 in Mode 5 at 0% power, the primary power supply to the "A" Reactor Protection System (RPS) power distribution panel was lost when the Motor-Generator (MG) Set generator in that division failed. This resulted in Primary Containment Isolation System actuations including isolation of an Residual Heat Removal shutdown cooling suction valve and other automatic system initiations. RPS as well as other plant systems functioned as designed in response to the event. The "A" RPS distribution panel was swapped to alternate power and all isolations were reset by 16:10. The loss of power was due to a failure of the "A" RPS M-G set generator. The generator failed due to a manufacturing defect of an internal conductor connection. The failed generator was replaced and other like-in-kind generators will be inspected. There were no safety consequences or compromises to the health or safety of the public. This event has been entered into the site-specific corrective action program for resolution. Internal and industry events were reviewed to assess if a generic problem exists with this type of generator. No evidence of similar failures was found, which indicates that a generic problem does not exist.

The NRC site Resident Inspector has been notified

ORIGINAL

REPORTABILITY DETERMINATION	CONDITION REPORT NO. <u>319646</u>	Page <u>1</u> of <u>1</u>
PART 1		
<u>DETAILS OF IMMEDIATE REPORTABILITY DETERMINATION</u>		
Immediate NRC Reporting Required: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES PER <u>see below</u>		
NRC Notification Made: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES Type: <input type="checkbox"/> 1 HR <input type="checkbox"/> 4 HR <input checked="" type="checkbox"/> 8 HR <input type="checkbox"/> 24 HR		
<u>BASIS FOR DETERMINATION:</u>		
Unit 2 was in Mode 5 on the fifth day of its 10th Refuel and Inspection Outage. At 1508 hours, the unit experienced an unexpected loss of Division 1 RPS Power supply. The loss of power was a result of the Electrical Protection Assembly (EPA) A & C breakers and motor generator output breaker tripping. The cause is under investigation. The loss of power caused the RHR Shutdown Cooling suction valve HV251F009 to close. This is a common suction valve to both divisions of RHR and resulted in the complete loss of RHR Shutdown Cooling. In accordance with 10CFR50.72(b)(3)(v) this represents a loss of the a safety system which removes residual heat and requires an 8 hour ENS call.		
In addition to the isolation of RHR SDC, RWCU isolated due to containment valve HV244F001 closing, and Unit 2 HVAC Zone 3 (refuel floor) isolated. These isolations constitute an actuation of a Containment Isolation signal that affected multiple systems, and is reportable per 10CFR50.72(b)(3)(v)(A).		
<u>Tom Middleton</u> Completed By	<u>03/14/01</u> Date	<u>[Signature]</u> Shift Supervisor
		<u>13/14/01</u> Date
PART 2		
<u>DETAILS OF FOLLOW-UP REPORTABILITY DETERMINATION</u>		
Reportable:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> P	Per _____
Special Report:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> P	Per Section _____
Reportable Per 10CFR50.9/10CFR21:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> P	
Referred to Nuclear Licensing:	<input type="checkbox"/> Y <input type="checkbox"/> N	Date: _____
Report Due Date: _____		
Basis for Determination:		
_____ Completed By	_____ Date	_____ Supv. Operating Exp. Svcs. or Nuc. Licensing Supervision
		_____ Date

NRC FORM 381
(12-2000)

U.S. NUCLEAR REGULATORY COMMISSION
OPERATIONS CENTER

REACTOR PLANT
EVENT NOTIFICATION WORKSHEET

EN # 37839

NRC OPERATION TELEPHONE NUMBER: PRIMARY - 301-816-5100 or 800-832-3449, BACKUPS - (1st) 301-851-0660 or 800-449-3884, (2nd) 301-418-0650 and (3rd) 301-418-0653. *Licensees who maintain their own ETS are provided these telephone numbers.

NOTIFICATION TIME 1802 est	FACILITY OR ORGANIZATION SUSQUEHANNA LLC	UNIT 2	NAME OF CALLER Robert R. Boesch	CALL BACK #. (570) 542-3907
EVENT TIME & ZONE 1508 EST	EVENT DATE 03/14/2001	POWERMODE BEFORE 0 % / 5	POWERMODE AFTER 0% / 5	
EVENT CLASSIFICATIONS		1-Hr. Non-Emergency 10 CFR 50.72(b)(1)		(v)(A) Safe S/D Capability AINA
GENERAL EMERGENCY GEN/AEAC	TS Deviation ADEV X			(v)(B) RHR Capability AINA
SITE AREA EMERGENCY SIT/AEAC	4-Hr. Non-Emergency 10 CFR 50.72(b)(2)		(v)(C) Control of Rad Release AINC	
ALERT ALE/AEAC	(i) TS Required S/D ASHU			(v)(D) Accident Mitigation AINA
UNUSUAL EVENT UNU/AEAC	(iv)(A) ECCS Discharge to RCS ACCS			(di) Offsite Medical AMED
50.72 NON-EMERGENCY (see next column)	(iv)(B) RPS Actuation (scram) ARPS			(dii) Loss Conv/Asm/Resp ACOM
PHYSICAL SECURITY (73.71) ODDD	(d) Offsite Notification APRE			60-Day Optional 10 CFR 50.73(e)(1)
MATERIAL/EXPOSURE B77?	8-Hr. Non-Emergency 10 CFR 50.72(b)(3)		Invalid Specified System Actuation AINV	
FITNESS FOR DUTY HFIT	(v)(A) Degraded Condition ADEG	Other Unspecified Requirement (Identify)		
OTHER UNSPECIFIED REOMT (see last column)	(v)(B) Unanalyzed Condition AUNA	NONR		
INFORMATION ONLY NNF X	(iv)(A) Specified System Actuation AESF	NONR		

DESCRIPTION

Includer Systems affected, actuations & their initiating signals, causes, effect of event on plant, actions taken or planned, etc. (Continue on back)

Unit 2 was in Mode 5 on the fifth day of its 10th Refuel and Inspection Outage. At 1508 hours, the unit experienced an unexpected loss of Division 1 RPS Power supply. The loss of power was a result of the Electrical Protection Assembly (EPA) A & C breakers and motor generator output breaker tripping. The cause is under investigation.

The loss of power caused the RHR Shutdown Cooling suction valve HV251F009 to close. This is a common suction valve to both divisions of RHR and resulted in the complete loss of RHR Shutdown Cooling. The reactor currently has its head removed with the reactor cavity flooded up with the gates to the spent fuel pool removed. A Supplemental Decay Heat Removal system was in service at the time, but was not considered fully capable of decay heat removal. Reactor coolant temperature increased less than 2 degrees during the 37 minutes SDC was out of service. The RPS power supply was switched to its alternate supply and SDC was restored at 1545 hours. In accordance with 10CFR50.72(b)(3)(v) this represents a loss of ~~the~~ a safety system which removes residual heat and requires an 8 hour ENS call. In addition to the isolation of RHR SDC, RWCU isolated due to containment valve HV244F001 closing, and Unit 2 HVAC Zone 3 (refuel floor) isolated. These isolations constitute an actuation of a Containment Isolation signal that affected multiple systems, and is reportable per 10CFR50.72(b)(3)(iv)(A).

Contact- STEVE SANDIN

NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD? <input type="checkbox"/> YES (Explain above) <input checked="" type="checkbox"/> NO
NRC RESIDENT	X			
STATE(s)		X		DID ALL SYSTEMS FUNCTION AS REQUIRED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (Explain above)
LOCAL		X		
OTHER GOV AGENCIES		X		MODE OF OPERATION: UNTIL CORRECTED 5
MEDIA/PRESS RELEASE		X		ESTIMATED RESTART DATE: 04/14/01
				ADDITIONAL INFO ON BACK? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



CONDITION REPORT FACT

DSS Home DSS Quick Navigation Search Again

Print Chart

Status Info | Event Info | Affected Objects | Actions Taken | Significance Rvw | Evaluation | Trend Info | Action Items | Workflow History | Attached Media

STATUS INFORMATION

CR Number: 319646	Sub Type/Sub Cat: CR
Lead Group: 312GL-PDC-NSE ELEC LEAD	Significance Level: Level 2 Cause Determination
Reso Due: 04/14/2001	Status: ARCHIVING
Reso Cmpl: 04/16/2001	

EVENT INFORMATION

Event Date	Originator	Problem Statement
03/14/2001 03:30PM	GOIN*JAMES W	LOSS OF DIV I RPS

2CBS003A-A AND 2CBS003A-C EPA BREAKERS TRIPPED ALONG WITH THE M/G SET OUTPUT BREAKER CAUSING LOSS OF DIV I RPS WHILE UNIT IN CONDITION 5. CLICK ON REFERENCE INFO. BUTTON AND ATTACHED MEDIA TO SEE ADDITIONAL INFORMATION.

AFFECTED OBJECTS

Object Category	ID	Description
Design Component	2CBS003A-A	RPS MG SET A EPA BREAKER 2CBS003A-A
Design Component	2CBS003A-C	RPS MG SET A EPA BREAKER 2CBS003A-C
Unit/System	258A	RPS REACTOR PROTECTION SYSTEM
Document	319646	LOSS OF DIV I RPS

PRELIMINARY ACTIONS TAKEN

Action Date	Action Taken By	Action Text
Not Assigned	Not Assigned	No Text Available

ACTION PLAN ITEMS

Item Number	Responsible Group	Assigned To	Priority	Due Date	Status
320040	381-CRA-RPT DETERM	CODDINGTON*CORNELIUS T	2	03/29/2001	CLOSED

Description: PROVIDE REPORTABILITY FOLLOWUP FOR CR 319646. CR DESCRIPTION: 2CBS003A-A AND 2CBS003A-C EPA BREAKERS TRIPPED ALONG WITH THE M/G SET OUTPUT BREAKER CAUSING LOSS OF DIV I RPS WHILE UNIT IN CONDITION 5.

Action Completed	Action Taken By	Actions Taken:
03/20/2001 03:AM	CODDINGTON*CORNELIUS T	The loss of the Division 1 RPS power supply resulted in the loss of RHR shutdown cooling. The loss of RHR shutdown cooling represents a loss of a safety system which removes residual heat. This loss is reportable in accordance with 10CFR50.72(b)(3)(v) and 10CFR50.73(a)(2)(v).

327888	330-AR/CR CLOSURE PENDING	SCOTT*MARGARET	5	11/11/2002	CLOSED
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Description: ACTION TO PREVENT RECURRENCE: DURING ESTABLISHED RPS WORK WINDOWS, REMOVE THE END BELL FROM RPS M/G GENERATORS, (1G201A & B, 2G201B), AND INSPECT AND REPAIR ANY DAMAGE OR LOOSENESS NOTED WITH THE CONNECTING WIRES AND TERMINATIONS. REPLACE THE THYRITE. REF: CR'S 325794, 325799 AND 325801. 2CBS003A-A AND 2CBS003A-C EPA BREAKERS TRIPPED ALONG WITH THE M/G SET OUTPUT BREAKER CAUSING LOSS OF DIV I RPS WHILE UNIT IN CONDITION 5. CLICK ON REFERENCE INFO. BUTTON AND ATTACHED

MEDIA TO SEE ADDITIONAL INFORMATION.

Action Completed	Action Taken By	Actions Taken:
08/20/2002 08:AM	SCOTT*MARGARET	Closed - no further action A review of all open CRAs was performed by OES in July of 2002. During that review, the CRAs were classified as Correct (the action was required to correct a Condition Adverse to Quality (CAQ)), Prevent (for prevent recurrence where the action was derived from some form of causal analysis and was determined necessary to prevent recurrence), or Related. This review was performed with the intent of removing CRAs from the database that did not come under Appendix B Criterion 16 (i.e., those that are "Related"). As a result of the CRA backlog review, this CRA was closed because it was not cost effective.

SIGNIFICANCE REVIEW
Screening Summary:

PER SCREENING 3/15/01, THIS IS A LEVEL 2 CAUSE DUE TO THE ENS PHONE CALL.

Past Occurrences:

No Comment Provided

Significance Review:

No Comment Provided

Interim Actions:

No Comment Provided

Classifier:

HELSEL*LISA S

EVALUATION
Investigation:

No Comment Provided

Safety Assessment:

No Comment Provided

Causes:

No Comment Provided

Use-As-Is/Repair:

No Comment Provided

ATTACHED MEDIA

Attached Document	Type	Description	Comment
24017785.PDF	ATTACHMENT	Reportability Determination - CR 319646	
25403584.PDF	ATTACHMENT	Reportability Determination (5/14/01) - CR 319646	
25408765.PDF	ATTACHMENT	ENS Notification Worksheet - CR 319646	

TREND INFORMATION

Trend Code	Trend Code Value	
DEFICIENCY TAG	TAG NOT APPLIED	
EQUIPMENT OPERABILITY	OPERABLE NO ADDL FOLLOWUP	None.
REPORTABILITY DETERMINATION	8HR 10CFR50.72(B)(3)(IV)A&B	ENS Notification was made on 03/14/01 at 1802. EN# 37839.
REPORTABILITY	8HR 10CFR50.72(B)(3)(V)&(VI)	ENS Notification was made on

DETERMINATION 03/14/01 at 1802. EN# 37839.
 A06-SELF IDENTIFICATION WORK GROUP SELF ID
 A12-CR HOLD TAG TAG NOT APPLIED
 A08-IDENTIFIED BY OPERATIONS
 A07-METHOD OF ALARM
 DISCOVERY
 A02-EVENT CATEGORY RPS EVENTS
 A10-EQUIPMENT TYPE BREAKER/CONTACTOR/CONTROLLER
 A09-PROCESS TRENDING PLANT OPERATIONS
 CODES
 A04-REPORTABILITY YES
 A09-PROCESS TRENDING MATERIAL CONDITION
 CODES
 A10-EQUIPMENT TYPE GENERATOR/INVERTER/MOTOR GEN
 A13-MAINT RULE FF YES
 CYCLE NUMBER UNIT 2 10TH REFUEL CYCLE

RELATED INFORMATION

Type	ID	Priority	Relation Type:	Status:
PCWO	319647	2	CORRECT CONDITION	ARCHIVED
2CBS003A-A AND 2CBS003A-C EPA BREAKERS TRIPPED ALONG WITH THE M/G SET OUTPUT BREAKER CAUSING LOSS OF DIV I RPS WHILE UNIT IN CONDITION 5				
OSSCR	319648	1	RELATED	CLOSED
2CBS003A-A/2CBS003A-C LOSS OF DIV I RPS				
CRA	320040	2	CORRECT CONDITION	CLOSED
PROVIDE REPORTABILITY FOLLOWUP FOR CR 319646. CR DESCRIPTION: 2CBS003A-A AND 2CBS003A-C EPA BREAKERS TRIPPED ALONG WITH THE M/G SET OUTPUT BREAKER CAUSING LOSS OF DIV I RPS WHILE UNIT IN CONDITION 5.				
AR	325801	NA	RELATED	CLOSED
REMOVE THE ENDBELL; CLEAN, INSPECT AND REPAIR ANY DAMAGE OR LOOSENESS NOTED WITH THE CONNECTING WIRES AND TERMINATIONS. REPLACE THE THYRITE. (REFERENCE CR 319646)				
CRA	327888	5	RELATED	CLOSED
ACTION TO PREVENT RECURRENCE: DURING ESTABLISHED RPS WORK WINDOWS, REMOVE THE END BELL FROM RPS M/G GENERATORS, (1G201A & B, 2G201B), AND INSPECT AND REPAIR ANY DAMAGE OR LOOSENESS NOTED WITH THE CONNECTING WIRES AND TERMINATIONS. REPLACE THE THYRITE. REF: CR'S 325794, 325799 AND 325801. 2CBS003A-A AND 2CBS003A-C EPA BREAKERS TRIPPED ALONG WITH THE M/G SET OUTPUT BREAKER CAUSING LOSS OF DIV I RPS WHILE UNIT IN CONDITION 5. CLICK ON REFERENCE INFO. BUTTON AND ATTACHED MEDIA TO SEE ADDITIONAL INFORMATION.				
LIC	330959	1	RELATED	CLOSED
GENERATE LER 388/01-003-00 IN WHICH THERE WAS A LOSS OF SHUTDOWN COOLING FOR UNIT 2. (REF. CR 319646) STATUS: LER WAS NOT NEEDED, 60 DAY ENS NOTIFICATION #37839. CLOSED 5/21/01.				
NRC	356436	NA	RELATED	CLOSED
NRC COMMITMENT, ENS #37839 RE: U2 EXPERIENCED AN UNEXPECTED LOSS OF SHUTDOWN COOLING DUE TO TRIPPING OF VARIOUS POWER SUPPLY BREAKERS. (REF. CR 319646) ACTION: INSPECT AND REPAIR ANY DAMAGE OR LOOSENESS NOTED WITH CONNECTING WIRES AND				

TERMINATIONS IN RPS M/G SETS 1G201A AND B, AND 2G201B. (REF. CRA 327888, PCWO'S 325912, 325913 AND 325914).

AR 423754 NA RELATED CLOSED
 INSPECTION UNDER WO #325913 FOUND THAT THE LUG OF THYRITE WIRE IN 1G201B WAS LOOSE. AS ALLOWED BY THE WORK PLAN, A NEW BLUE STRIPE QUARTER INCH STUD LUG WAS CRIMPED ON TO THE WIRE. THE CONDITION HAS BEEN CORRECTED. WO #325913 WAS INITIATED TO PREVENT RECURRENCE OF EVENT CR 319646 WHERE A LOOSE LUG ON A THYRITE WIRE CAUSED THE LOSS OF RPS MG SET 2G201A. WITH THE COMPLETION OF THIS WO, ALL THYRITE LUG INSPECTIONS IN THE UNIT 1 & 2 RPS MG SETS ARE COMPLETE.

WORKFLOW HISTORY

Action	Step Name	Performed By	Date
COMPLETE no comment provided	IDENTIFY	GOIN*JAMES W	03/14/2001 04:01:00
COMPLETE no comment provided	OPER EVAL	PETRILLA III*JOHN J	03/14/2001 09:17:00
COMPLETE no comment provided	EVAL RPTBL	BURNS*GARY D	03/15/2001 03:01:00
COMPLETE no comment provided	SS RPTBLTY	BOESCH*ROBERT R	03/15/2001 08:26:00
COMPLETE no comment provided	SCREEN	SPROUT*SHERRY A	03/15/2001 01:45:00
COMPLETE no comment provided	CLASSIFY	MASICH*MELODY J	03/15/2001 03:35:00
COMPLETE no comment provided	CR ASSIGN	SCHECHTERLY*ROBERT R	04/16/2001 11:14:00
COMPLETE no comment provided	CR ACTPLAN	*	11/10/2001 12:29:00
COMPLETE no comment provided	APLAN APPR	SCHECHTERLY*ROBERT R	11/10/2001 12:29:00
COMPLETE no comment provided	IDENTIFY	GOIN*JAMES W	11/10/2001 12:29:00
APPROVE hardcopy	AP WORKING	GARREN*DEBRA L	09/26/2002 09:57:00

Add On Data

Name	Type	Description	Active
NO DATA AVAILABLE			

Status Info | Event Info | Affected Objects | Actions Taken | Significance Rvw | Evaluation | Trend Info | Action Items | Workflow History | Attached Media