

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Fort St. Vrain, Unit No. 1 DOCKET NUMBER (2) 0500021617 PAGE (3) 1 OF 017

TITLE (4) TECHNICAL SPECIFICATION SURVEILLANCES NOT PERFORMED AS REQUIRED

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)			
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER(S)		
03	29	89	89	006	00	04	28	89	N/A	050000		
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THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (8) N	20.402(b)	20.408(a)	50.73(a)(2)(iv)	72.71(b)
POWER LEVEL (10) 0112	20.408(a)(1)(i)	50.38(a)(1)	50.73(a)(2)(vi)	72.71(a)
	20.408(a)(1)(ii)	50.38(a)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 308A)
	20.408(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.408(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.408(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME S. W. Chesnutt, Supervisor, Nuclear Licensing-Compliance TELEPHONE NUMBER 3103 61201-1101217

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 29, 1989 and again on April 5, 1989 with the reactor operating at power, it was discovered that two rescheduled Technical Specification surveillance requirements had not been completed as required.

These two surveillances are associated with (1) demonstrating operability of the standby diesel generator shutdown and declutch functions and (2) demonstrating operability of the gaseous reactor building ventilation exhaust stack monitors. Failure to perform these surveillances in accordance with the requirements established in the FSV Technical Specifications constitutes a condition prohibited by the Technical Specifications and is being reported herein per 10 CFR 50.73(a)(2)(i)(B).

This event was caused by inadequate control of rescheduled Technical Specification surveillance procedures. PSC is addressing this deficiency.

Upon discovering that these surveillance tests had not been performed as required, both tests were issued and completed. All equipment tested was found to be operable as designed.

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

BACKGROUND

The two surveillance procedures not performed in accordance with the FSU Technical Specifications were SR 5.6.1d-M and ESR 8.1.1a-M. These procedures test the standby diesel generator shutdown and declutch functions and verify that the reactor building ventilation exhaust stack activity monitors respond to a radioactive source. A brief explanation of each system and the related surveillance requirements is as follows:

1. Standby Diesel Generators

The operability of the AC electrical power sources during power operation ensures that sufficient power will be available as required to perform the intended safety functions under postulated abnormal and accident conditions. Alternate on-site AC electrical power is supplied by two Standby Diesel Generators (SDG), either of which has the capability to power all electrical auxiliaries that are essential for Safe Shutdown Cooling. The generator sets each have continuous duty ratings of 1210 kW (605 kW with one of the two diesel engines operating), 480 VAC, 3 phase, 60 Hertz, and are connected to separate 480 VAC "essential" switchgear buses. To enhance their reliability, the standby generators are each driven by two diesel engines. Each engine is rated at one-half capacity or 605 kW continuous duty, and is provided with air operated disconnect devices. The diesel engines are standard commercial design, twelve cylinder engines, manufactured by the Caterpillar Tractor Company.

The SDG's are provided with exhaust temperature shutdown and declutch protective functions. Per Technical Specification Surveillance Requirement SR 5.6.1d, the shutdown and declutch functions shall be tested monthly. Each diesel engine is connected to its generator through a clutch assembly. Should the exhaust temperature of one or both diesel engines not increase above 180 degrees F, that diesel engine will be shutdown and declutched from the generator. Generation then continues at one-half of unit capacity powered by the remaining engine.

2. Plant Exhaust Stack Monitors

Per Technical Specification Surveillance Requirement ESR 8.1.1a, the exhaust stack monitors shall be source checked monthly. A "source check" verifies that the monitor upscales when exposed to a small radioactive source. The exhaust stack monitors consist of three noble gas monitors, three halogen monitors, and two particulate monitors. Five of these are considered to be primary monitors (two noble gas, two halogen, and one particulate) and three are considered as backup monitors (one noble gas, one halogen, and one particulate). Technical Specification ELCO 8.1.1 requires that during reactor power operation and/or a release from the gaseous waste holdup system, one noble gas monitor, one halogen monitor and one particulate monitor shall be operable. Provisions are included in the Technical Specifications that allow continued operation and/or release of gas waste should the noble gas monitors become inoperable.



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

EVENT DESCRIPTION:

Event 1: Failure to perform SR 5.6.1d-M prior to exceeding 2% reactor power.

LCO 4.6.1 requires that both standby diesel generator [EK]\* sets be operable whenever the plant is operated at power (i.e., greater than 2% reactor power). The surveillance requirements established in SR 5.6.1 define standby diesel generator operability. Included in these is the requirement to perform a monthly functional test of the diesel engine exhaust temperature shutdown and declutch function.

On March 27, 1989 at 2021 hours, the reactor power level was increased above 2% without having completed SR 5.6.1d-M within the last month. This surveillance procedure had not been performed the previous month due to the diesel generators being removed from service for maintenance. Since the plant was shutdown at the time, failure to complete the test at that time did not constitute a Technical Specification violation.

The surveillance was placed on "reschedule" and was required to be issued and performed prior to exceeding 2% reactor power. When a surveillance is placed on "reschedule" it is not issued on its standard interval (monthly in this case) but is put on hold until the conditions required to complete the test are satisfied or the responsible department supervisor requests the test be issued.

On March 28, 1989, with the reactor operating greater than 2%, the surveillance scheduling technician identified that SR 5.6.1d-M had not been completed and notified the Shift Supervisor. At 0102 hours on March 29, 1989, reactor power was decreased below 2% as a precautionary measure until the status of SR 5.6.1d-M could be verified. The test was verified incomplete and was performed that day. All standby diesel generator shutdown and declutch functions were found to operate as designed. Upon completion of the surveillance, reactor power was increased to greater than 2%.

\* Energy Industry Identification System (EIIS) Codes

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

Event 2: Failure to perform ESR 8.1.1a-M within the required interval.

On November 22, 1988, surveillance procedure ESR 8.1.1a-M was issued to be performed by November 30, 1988. This particular surveillance test performs a source check on the plant's exhaust stack gaseous activity monitors [IL]\* and is to be performed on a monthly basis. The responsible department performed the November 22 source check test on the five primary reactor building ventilation exhaust stack monitors. However, the source check test could not be performed on the three backup monitors since they were removed from service for maintenance work. Successful testing of the five primary stack monitors satisfied the requirements for operable activity monitors and therefore permitted continuation of gaseous waste releases.

Since the November 22 test was not completed in its entirety, a surveillance retest was issued. Surveillance retests are the mechanism by which test steps not completed during the initial surveillance test are completed upon repair of the deficient condition(s). Since the three backup monitors were still removed from service, the retest could not be completed at that time and the responsible department supervisor directed that the retest be rescheduled for when the backup monitors were returned to service. However, the scheduling technician mistakenly placed the entire monthly stack monitor source check surveillance on reschedule as opposed to just placing the retest on reschedule. When a surveillance is placed on reschedule it is not issued on its standard interval but is put on hold until the required conditions to complete the test are satisfied, or the responsible department supervisor requests the test be issued. Unaware that the entire surveillance had been placed on reschedule, the responsible supervisor did not request the test be issued for approximately five months.

On April 5, 1989 it was discovered that the monthly exhaust stack activity monitor source check surveillance had not been performed since November 1988. The scheduling technician immediately issued the monthly source check test and it was performed that day. The five primary stack monitors were found to be operable within surveillance acceptance criteria. The three backup stack activity monitors were still removed from service and could not be tested, however these monitors function redundantly with the primary stack monitors and are not required if the primary monitors are operable.

\* Energy Industry Identification System (EIIS) Codes



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TEXT (If more space is required, use additional NRC Form 386A's) (17)

CAUSE:

The primary cause of both events was inadequate control and tracking of rescheduled Technical Specification surveillance procedures.

The Shift Supervisor is responsible for insuring completion of required surveillances. The mechanism for controlling and tracking rescheduled surveillance tests that are approaching their due date is a daily status report. This report is intended to provide the various department supervisors with concise information regarding the status of Technical Specification surveillances for which the supervisors are responsible. Both SR 5.6.1d-M and ESR 8.1.1a-M were included in this weekly Technical Specification surveillance status report. However, the content and format of the report was confusing and did not clearly identify, in either event, that a Technical Specification compliance problem existed.

SAFETY ANALYSIS:

Event 1

Since FSV Technical Specification LCO 4.6.1 requires both standby diesel generator sets to be operable whenever the plant is "at power" (greater than 2% reactor power), this event constitutes operation in violation of the Technical Specifications and is being reported herein per 10 CFR 50.73(a)(2)(i)(B).

On March 29, 1989, after identifying that SR 5.6.1d-M had not been completed, reactor power was reduced below 2%. SR 5.6.1d-M was performed and the shutdown and declutch functions of both standby diesel generator sets were found to operate as designed. In addition, on March 29, 1989, the start and load capability of both standby diesel generators was demonstrated through successful performance of a two hour load test per SR 5.6.1a-W.

Therefore, based on these successful demonstrations of diesel operability, it is concluded that this event posed no threat to the health and safety of the public.

Event 2

FSV Technical Specification ESR 8.1.1a establishes that the exhaust vent monitors shall be source checked monthly. Failure to perform this source check surveillance from November 1988 to April 1989 constitutes a condition prohibited by the Technical Specifications and is being reported herein per the requirements of 10 CFR 50.73(a)(2)(i)(B).

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

When the missed surveillance test was performed on April 5, 1989, all five primary exhaust stack monitors responded to the source check test as designed thereby demonstrating these monitors were capable of responding to radioactivity during the time from November 1988 to April 1989. However, the source check function is only one criteria used to demonstrate monitor operability. Other operability criteria include the ability to automatically trip at or below the established setpoint and the ability to terminate gas waste flow to the exhaust stack. The ability to trip at or below the established setpoint is maintained through monitor calibration. The termination function is demonstrated prior to each gaseous waste release from the gas waste system. Neither the monitor trip capability nor release termination capability were affected by the failure to test the source check function. The operability of both these capabilities has been demonstrated through performance of Technical Specification surveillance test procedures in accordance with the required intervals. In addition, the exhaust stack monitors are channel checked daily, and functionally tested quarterly in accordance with Technical Specification surveillance procedures.

Therefore, the failure to perform the monthly exhaust stack monitor source check surveillance from November 1988 to April 1989 had no impact on the ability of the primary exhaust stack monitors to perform their safety functions.

Based on this analysis it is concluded that adequate control and monitoring capability of gaseous waste was maintained and that this event did not pose a threat to the health and safety of the public.

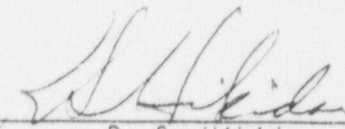
CORRECTIVE ACTIONS:

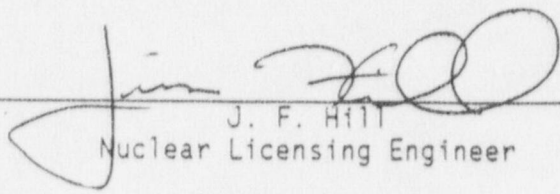
1. Surveillance procedure SR 5.6.1d-M was completed on March 29, 1989. The SDGs were restored to operable status and plant startup was continued.
2. Upon discovering the monthly source check surveillance ESk 8.1.1a-M had not been performed within the required interval, the test was issued and completed on April 5, 1989.
3. The format and content of the daily surveillance status reports that are issued to Operations will be revised to more clearly identify surveillances that have the potential for impacting Technical Specification compliance. The report format will be revised by May 31, 1989.
4. The plant procedure that addresses required conditions for increasing reactor power to greater than 2% has been revised to include a specific sign-off for a scheduling representative to verify that all required surveillances have been completed.

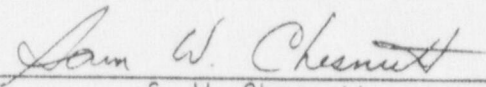
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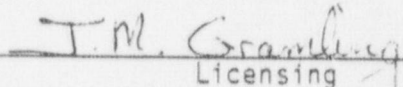
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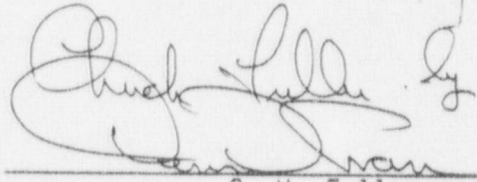
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 R. S. Hikida  
 Nuclear Licensing Engineer

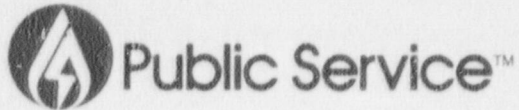
  
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 J. F. Hill  
 Nuclear Licensing Engineer

  
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 S. W. Chesnutt  
 Supervisor, Nuclear Licensing-Compliance

  
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 J. M. Grambling  
 Licensing

  
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 C. H. Fuller  
 Manager, Nuclear Production  
 and Station Manager





Public Service  
Company of Colorado

16805 WCR 19 1/2, Platteville, Colorado 80651

April 28, 1989  
Fort St. Vrain  
Unit No. 1  
P-89164

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Docket No. 50-267

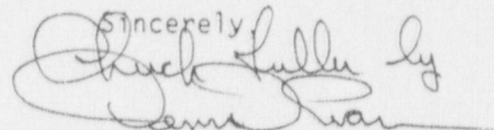
SUBJECT: Licensee Event Report  
89-006-00, Final Report

REFERENCE: Facility Operating  
License No. DPR-34

Gentlemen:

Enclosed, please find a copy of Licensee Event Report  
No. 50-267/89-006-00, Final, submitted per the requirements of  
10 CFR 50.73(a)(2)(i)(B).

If you have any questions, please contact Mr. M. H. Holmes at (303)  
480-6960.

Sincerely,  


C. H. Fuller  
Manager, Nuclear Production  
and Station Manager

Enclosure

cc: Regional Administrator, Region IV  
ATTN: Mr. T. F. Westerman, Chief  
Projects Section B

Mr. R. E. Farrell  
Senior Resident Inspector, FSV

CHF/lmb

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