



Public Service Company of Colorado

16805 ROAD 19½
PLATTEVILLE, COLORADO 80651

April 9, 1981
Fort St. Vrain
Unit No. 1
P-81118



Mr. Karl V. Seyfrit, Director
Nuclear Regulatory Commission
Region IV
Office of Inspection and Enforcement
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76012

Reference: Facility Operating License
No. DPR-34

Docket No. 50-267

Dear Mr. Seyfrit:

Enclosed please find a copy of Reportable Occurrence Report No. 50-267/79-34, Final, submitted per the requirements of Technical Specification AC 7.5.2(b)2.

Also, please find enclosed one copy of the Licensee Event Report for Reportable Occurrence Report No. 50-267/79-34.

Very truly yours,

Don Warembourg
Don Warembourg
Manager, Nuclear Production

DW/clg

Enclosure

cc: Director, MIPC

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REPORT DATE: April 9, 1981

REPORTABLE OCCURRENCE 79-34

ISSUE 1

OCCURRENCE DATE: August 30, 1979

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FORT ST. VRAIN NUCLEAR GENERATING STATION
PUBLIC SERVICE COMPANY OF COLORADO
16305 WELD COUNTY ROAD 19 1/2
PLATTEVILLE, COLORADO 80651

REPORT NO. 50-267/79-34/03-X-1

Final

IDENTIFICATION OF
OCCURRENCE:

On August 30, 1979, during normal surveillance testing, the emergency diesel generator day tank levels were found to be less than 500 gallons. This is a degraded mode per Fort St. Vrain Technical Specification LCO 4.6.1 and is reportable per AC 7.5.2(b)2.

EVENT
DESCRIPTION:

On August 30, 1979, while at 36% thermal power and 105 MW electrical power, normal scheduled surveillance testing found that the high level switches on both emergency diesel generator day tanks were inoperable. The contacts were in the open condition which simulated a high tank level.

See Figure 1. The level switch high (LSH), (1), opens on high tank level to de-energize the diesel transfer pump control relay (CR), (2). When tank level decreases enough for the high level alarm to clear, the level switch high contacts close, energizing the control relay, starting the fuel oil transfer pump, and increasing tank level until the level switch high again opens on day tank high level. This action should normally maintain tank level at around 500 gallons per tank.

With the level switch high, (1), open, the day tank level fell to approximately 350 gallons where the level switch low (LSL), (3), contacts closed, energizing the level switch low auxiliary relay, (4), and the control relay, (2), through auxiliary relay contacts, (5). This started the fuel oil transfer pump. With the high level switch open, the day tank level cycled around the low switch level setpoint, approximately 350 gallons.

The original control configuration for the diesel fuel oil transfer pump was as follows: When tank level fell to the low level switch setpoint, about 350 gallons, the transfer pump would be started and fill the day tank level to the high level switch setpoint, greater than 500 gallons. This was recognized as unsatisfactory due to the possibility of the diesel generator being shut off with the day tank level less than the 500 gallons, which was the limit required by Technical Specification.

EVENT

DESCRIPTION: (Cont'd)

To correct the problem, the switches were rewired by Field Change Notice 2405 to the configuration described above, where the level switch high controls the transfer pump and the level switch low acts as a backup. During post modification testing, it was discovered that the dead band of the switches (the distance the level must rise or fall to change the switches state), was too wide to allow the tank level to be maintained at greater than 500 gallons. While other methods of solving the problem were being investigated, an operations order was issued requiring the Operators to manually fill the tank until the high level alarm was received. This would assure the 500 gallon minimum level was met.

A Technical Specification change requesting the lowering of the required minimum level from 500 gallons to 325 gallons was submitted on March 7, 1979, reference P-79056.

As an interim measure, while waiting for response from the Nuclear Regulatory Commission on the Technical Specification change, a Change Notice was initiated, CN-1132, to replace the switches with one having a narrower dead band. This Change Notice was in progress when Amendment No. 22 to the Technical Specifications was issued, so the CN-1132 was cancelled.

CAUSE

DESCRIPTION:

The level switch high setpoints were such that regardless of the tank levels, the contacts were open, which simulated high tank levels.

These switches were not normally tested, and since the high level alarms were up, it appeared the day tank level control systems were operating properly.

CORRECTIVE

ACTION:

The level switch high setpoints were re-adjusted to the proper setpoint, and the Surveillance Test revised to include testing these switches. The test was successfully completed.

The Technical Specification change requested by Public Service Company on March 7, 1979, reference P-79056, was issued by the Commission in Amendment Number 22 on October 1, 1980, allowing a minimum level of 325 gallons.

No further corrective action is anticipated or required.

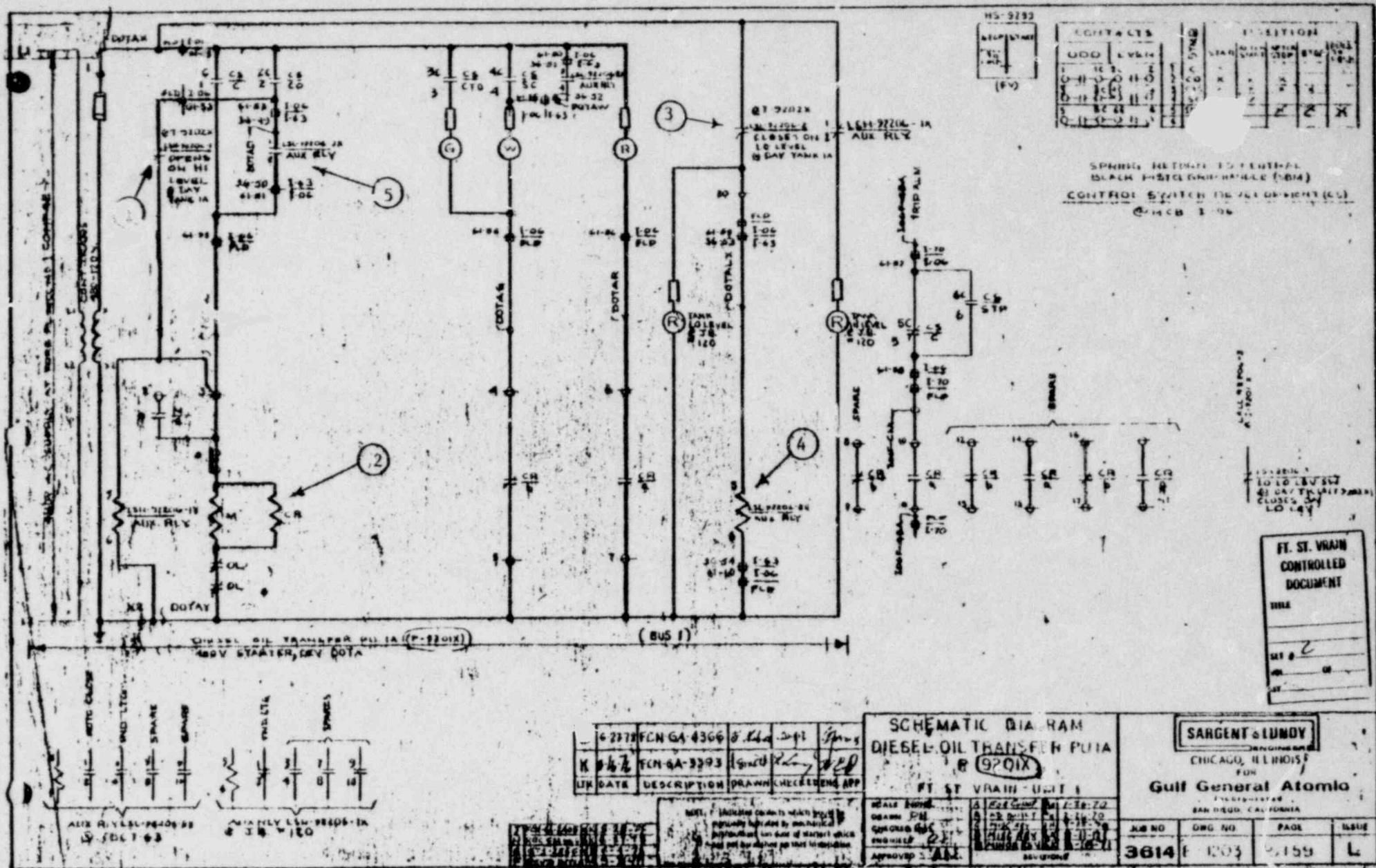


FIGURE 1

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