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SACRAMENTO MUNICIPAL UTILITY DISTRICT ☐ 6201 S Street, P.O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

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DTS 88-039

U.S. Nuclear Regulatory Commission
Attn: Frank J. Miraglia, Jr.
Associate Director for Projects
Phillips Building
7920 Norfolk Avenue
Bethesda, MD 20014

Docket 50-312
RANCHO SECO NUCLEAR GENERATING STATION
LICENSE NO. DPR-54
INFORMATION ON TDI DIESEL GENERATOR BACKUP AIR

Dear Mr. Miraglia:

Per the request of your staff, the District provides the following information with respect to Design, Operation, and Testing of the TDI diesel generator backup air system.

Design

The Backup Air System is a seismic Catagory I system which will provide air to the TDI pneumatic controls when air pressure in the TDI air receiver decreases to 75 psig. Backup air use for seven days of diesel operation is calculated to be 1569 standard cubic feet (SCF). This value is based on observed engine air use during seismic testing. The six "active" bottles have a capacity of 1614 SCF. This figure is obtained assuming a starting pressure of 2400 psig at 70 degrees F (300 SCF/ bottle) and a final pressure of 100 psig (13.4 SCF/bottle). The "backup bottle low air pressure" alarm setpoint of 150 psig provides 2 hours operation before the 100 psig minimum pressure is reached. A relief valve is set at 275 psig to prevent overpressurizing the existing TDI air system lines. (See Attachment 1 - TDI Diesel Generator Backup Air Sketch.)

Operation

During normal operation, air to pneumatic controls is provided by the existing TDI air receivers. Normal pressure in the air start system is approximately 250 psig. A pressure control valve in each TDI air system provides service from the backup air supply. The pressure control valve will not allow flow from the backup

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air bottles until system pressure downstream of the valve decreases to 75 psig; the pressure control valve then modulates to maintain system pressure at 75 psig. The six "active" backup air bottles provide sufficient air for seven days operation, with six "reserve" backup air bottles for emergency or extended use. Isolation valves and check valves are provided in the Backup Air System for system isolation and to prevent back flow, respectively.

Testing

The Backup Air System will be functionally tested to ensure it will supply air to the diesel air system for seven days (STP.1146 A & B).

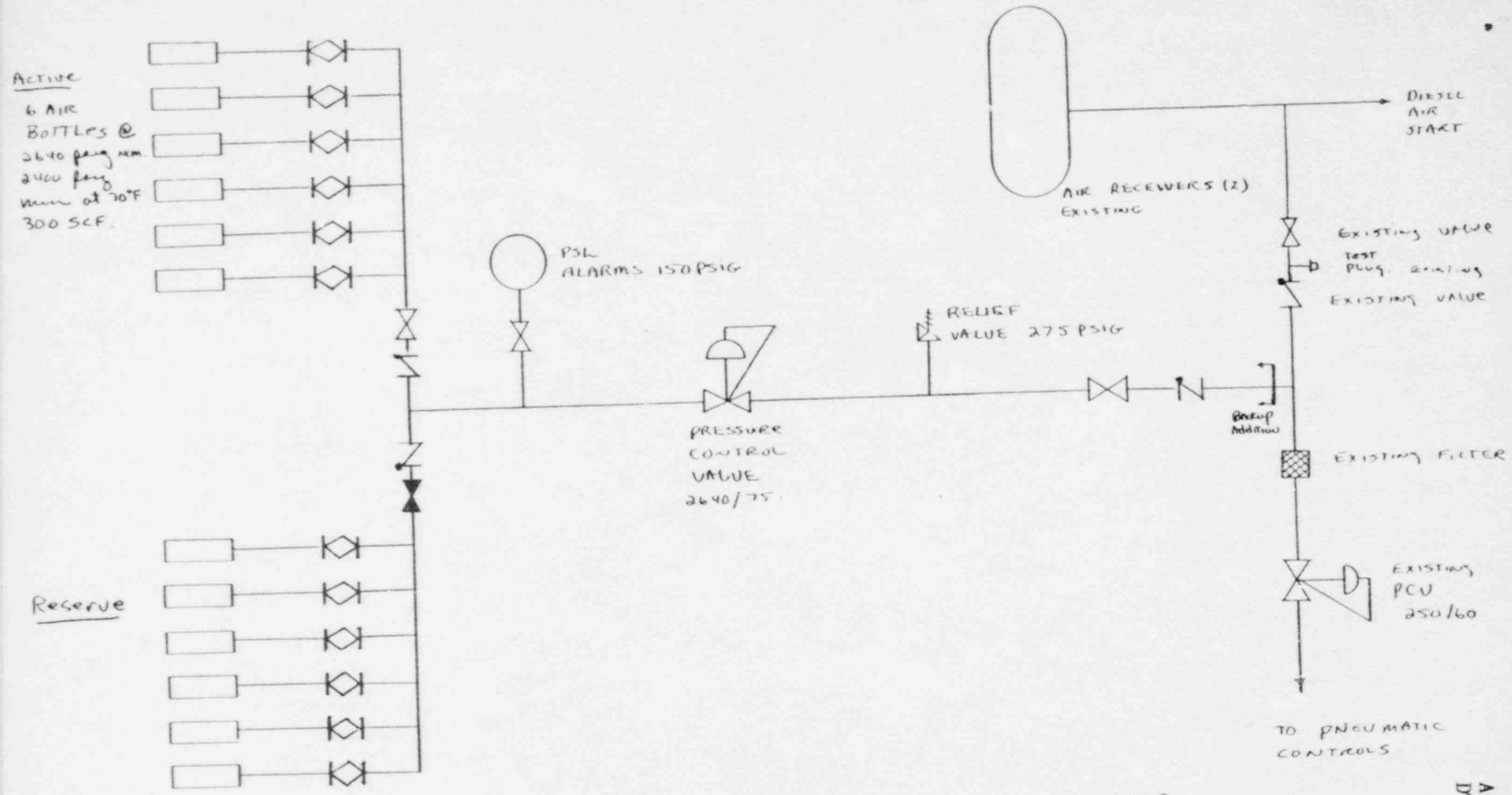
Please contact me if you have any questions. Members of your staff requiring additional information or clarification may contact Jerry Delezenski at (209) 333-2935, extension 4914.

Sincerely,

Bob G. Croley
Director,
Technical Services

Attachment

cc: A. D'Angelo, NRC, Rancho Seco
G. Kalman, NRC, Bethesda (2)
J. Martin, NRC, Walnut Creek
D. Crutchfield, NRC, Bethesda



TDI DIESEL GENERATOR
BACK UP AIR SKETCH

Attachment to
DTS 88-039