



DOW CHEMICAL U.S.A.

April 22, 1991

L. LOUISIANA DIVISION
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SUBJECT: MEETING, 4-10-91, TO REVIEW/UPDATE GAS TURBINE
STARTUP AND OPERATING PROCEDURES.

Attendees: E. Bahry, 5601
B. Bailey, 3301W
J. Lewis, 5601
S. Milligan, 3701
R. Peebles, 5601
C. Troxclair, 3601
C. Weber, 5601

Gt-501A & B, Associated HRU's and the oven system site was visited. The procedures and flow scheme were reviewed and discussed.

The primary concern was to upgrade equipment and procedures to handle an explosive gas mixture situation that could occur as a result of gas turbine "failure to start".

The following conclusions were made:

1. To further assure that methane does not enter the gas turbines and exhaust systems when the unit(s) are shutdown the fuel gas to each turbine will be remotely blocked and bled, using three pneumatically actuated valves which are actuated by one switch. The double block-and-bleed system will be located as near as possible to each turbine to reduce the inventory of feed gas under pressure.
2. Another means of unburned gas evacuation must be used in event of failure to start or other situation in which fuel gas could collect in the system instead of using the oven blower as done in the past to evacuate the potentially explosive mixture.

The favored option is to install a blower to discharge air into the turbine exhaust to purge out a potentially explosive mixture.

The possibility of using the turbine starter to spin the turbine and blow the unburned gas away is also being considered. The methane driven starter could, however, cause environmental problems.

Both options and variations will be studied.

3. Determine how much methane is exhausted by the starter and determine if it is an environmental problem.

Note: This has been done. Information from the manufacturer indicated that about 1040 scf or 45 lb. is discharged from the starter during startup (starter runs 80 sec.- Clay Weber). Presently, since this has been routinely done and is less than 100 lb., special reporting is not required.

This group will be consulted as progress continues on this project.


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