

May 18, 1999

NOTE TO: Ed. Burchfield, Licensing Manager
Oconee Nuclear Station

FROM: Dave LaBarge, Senior Project Manager *DLB*
NRR

SUBJECT: Hydrogen Storage Survey

The following is an NRR management-approved survey pertaining to hydrogen storage at operating nuclear plants. As background, the issue of hydrogen storage at sites was previously addressed as GSI 106 and was closed when the results of the reviews were issued in GL 93-06, "Research Results on Generic Safety Issue 106, "Piping and the use of Highly Combustible Gases in Vital Areas" dated October 25, 1993. A fire at a hydrogen storage area earlier this year at FitzPatrick has renewed interest in this topic and a PM survey was selected as a preliminary means of gathering data to determine if more study of this issue is warranted. PMs are hereby requested to contact their licensees to conduct the following survey and to report back to me with the results by COB on May 28, 1999.

Licensee Survey - Hydrogen Storage Facilities

As a result of a recent event and questions that arose following the event, NRR is interested in updating the information collected during its research that closed Generic Safety Issue 106, "Piping and the Use of Highly Combustible Gases in Vital Areas." We have chosen this telephone survey as a vehicle to collect information in order to support a preliminary evaluation to then determine if additional study may be warranted. The collection of this information is covered by OMB Clearance 3150-0012 which expires June 30, 2000 and we expect that the effort will take approximately two hours to collect information and report back to us by telephone. EPRI report NP-5283 "Guidelines for Permanent BWR Hydrogen Water Chemistry Installation" may be a useful reference. If the requested information is contained in information submitted to the NRC (in the IPEEE submittal, for example), reference to the submittal is an adequate response. Where data is not readily available regarding distances, it is expected that licensees will provide estimates and not expend resources to perform measurements or calculations. Please provide the following information:

- (1) The hydrogen storage sources (excluding portable bottles) and associated volumes,
- (2) The distance from the hydrogen storage sources to the closest safety-related or risk-significant (per maintenance rule guidance) structures, systems or components (SSCs),
- (3) The distance from the hydrogen storage sources to the closest ventilation system intake, and

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- (4) Brief description of actions taken (if any) in response to GL 93-06. If a risk analysis pertaining to this issue is described in a document submitted to the NRC (e.g. IPEEE, license amendment submittal), please refer us to those submittals.

If your estimate to collect and report back this information is significantly above our estimate (2 hours), please call us to discuss your response prior to undertaking the data collection effort.

Docket Nos. 50-269, 50-270, and 50-287

Distribution:

Docket File

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