



Carolina Power & Light Company

June 9, 1980

Central File
50-400
401
402
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Mr. James P. O'Reilly
Region II
United States Nuclear Regulatory Commission
101 Marietta Street, NW
Atlanta, Georgia 30303

SHEARON HARRIS NUCLEAR POWER PLANT UNIT NOS. 1, 2, 3, AND 4
DOCKET NOS. 50-400, 50-401, 40-402, AND 50-403
IE BULLETIN 80-05

Dear Mr. O'Reilly:

As requested in IE Bulletin 80-05, Carolina Power & Light Company (CP&L) has reviewed the design of all systems that contain low pressure or holdup tanks that can be valved to contain primary system water for the Shearon Harris Nuclear Power Plant (SHNPP). In all cases, adequate measures have been provided to protect against vacuum conditions that could result in tank damage with the potential for release of radioactive material or detrimental effects with regard to overall safety of plant operations.

Please find attached a listing of the subject tanks and the measures taken to protect them against vacuum conditions. In providing these measures adequate consideration has been given to a) admission rates of cover gases, if applicable, b) surveillance programs for vacuum relief valves and c) freeze protection, if applicable.

Carolina Power & Light Company intends no further response to this bulletin.

Yours very truly,

M. A. McDuffie
Senior Vice President
Engineering & Construction

MAM/JJS/pfb

cc: United States Nuclear Regulatory Commission
Office of Inspection and Enforcement
Division of Reactor Operations Inspection
Washington, D. C. 20555

ATTACHMENT

LOW PRESSURE OR HOLDUP TANKS AT SHNPP
VALVED TO THE PRIMARY SYSTEM

<u>TANK</u>	<u>PROTECTIVE MEASURES AGAINST VACUUM</u>
1. Accumulator Tank	- Tank external design pressure is 60 psig. Therefore, tank is more than adequate to withstand full vacuum condition
2. RCS Drain Tank	- Same as above
3. Volume Control Tank	- Tank is designed for full vacuum condition (external design pressure = 15 psig)
4. Pressurizer Relief Tank	- Tank is designed for full vacuum condition (external design pressure = 15 psig)
5. CCW Surge Tank	- Tank is provided with a vacuum breaker
6. Boric Acid Batch Tank	- Tank is provided with an overflow vent
7. Boron Surge Tank	- Tank is provided with an overflow vent
8. Chiller Surge Tank	- Tank is provided with a top vent
9. Waste Evaporator Condensate Tank	- Tank is provided with a diaphragm, top vent and overflow vent
10. RCP Seal Standpipe	- Equipped with a top vent
11. Boron Injection Tank	- No viable mechanism available to draw vacuum in tank under system operational conditions
12. Waste Gas Decay Tank	- No viable mechanism available to draw vacuum in tank under system operational conditions
13. Chemical Drain Tank	- No viable mechanism available to draw vacuum in tank under system operational conditions
14. Recycle Holdup Tank	- Tank is provided with a diaphragm, a top vent and an overflow vent

