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Mr. James P. O'Reilly, Director, Region II
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

Re: RII:JPO
(50-250, 50-251)
IE BULLETIN 80-05

Florida Power & Light Company has reviewed the subject bulletin and offers the following response:

1. Tanks with cover gas which can be valved to contain RCS water are provided in Table 1. Also provided are the tank design pressures, their system designations and volumes. As requested in the bulletin, our evaluation will be limited to low pressure tanks, or tanks with an internal design pressure of 15 psig or below. Thus, based on Table 1, only the CVCS Holdup Tanks and the Refueling Water Storage Tank (RWST) are considered. Adequate measures have been taken to protect these tanks against vacuum conditions that could result in tank damage. These measures are discussed in our response to Item 2 below.
2. The systems reviewed in Item 1 included the Reactor Coolant System, the Chemical and Volume Control System, the Radioactive Waste Disposal Liquids System, and the Safety Injection System. As indicated in Item 1, the only tanks requiring further consideration are the CVCS Holdup Tanks and the RWST. The three CVCS Holdup Tanks are each designed in accordance with ASME Section III Class C and have a maximum external pressure capability of ~ 15 inches water column.

Water can be withdrawn from the tanks via three (3) gas stripper feed pumps, each rated at 25 gpm. A holdup tank recirculation pump, rated at 500 gpm, is used to mix the contents of a tank or to transfer water between tanks. The gas space in the holdup tanks is vented to the vent header in the Radioactive Waste Disposal Gas System (RWDGS). A connection to the RWDGS cover gas header is also provided as well as a backup nitrogen supply to maintain the tanks under positive pressure and prevent inleakage of air.

Normal operating pressure of the holdup tanks is 3 psig, provided cover gas from the cover gas header is available. In the event the cover gas header is out of commission, a Nitrogen backup supply has been provided to maintain tank pressure at a minimum of 1 psig.

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Mr. James P. O'Reilly
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Each holdup tank is provided with two vacuum breaker valves, which will operate automatically if the pressure in the tank decreased below 3 inches (w.c.) vacuum. Each vacuum breaker valve has a maximum capacity of 100 scfm when fully open (at a vacuum of 6 inches w.c.). Assuming that the recirculation pump is operating at runout capacity of 700 gpm and the gas stripper pumps are operating at a rated capacity of 25 gpm each, the maximum gas flowrate out of the tank is ~104 scfm. The system is designed and operated such that operation of the vacuum breakers is minimized. The following features are provided to accomplish this:

- a) The tanks are provided with cover gas from the gas decay tanks via the cover gas header with a Nitrogen backup supply. The N₂ backup supply pressure regulator is capable of supplying 35 scfm (equivalent to ~240 gpm) @ 1 psig set pressure.
- b) The holdup tank recirculation pump stops automatically when the tank pressure decreases to 1 psig.
- c) A low pressure alarm, set at 1 psig is provided in the local control panel to alert the operator of a possible system malfunction.
- d) Administrative procedures have been established to prevent transfer of liquid between tanks by gravity unless the respective tank vent line valves are open.

The vacuum protection of the RWST was also investigated. A calculation was performed assuming that all of the pumps taking suction on the RWST would be operating at their maximum flowrate simultaneously. The results are that the RWST has sufficient vent capability (a factor of safety of 10.8)

Based on the above discussion, the existing measures for vacuum protection at Turkey Point Units 3 and 4 are adequate and no further modifications are required.

Very truly yours,



Robert E. Uhrig
Vice President
Advanced Systems & Technology

- REU/MAS/cph

cc: Director, Office of Inspection and Enforcement
Harold F. Reis, Esquire

TABLE 1

TANK	SYSTEM	QUANTITY	VOLUME (Gal)	DESIGN PRESSURE Psig
1. Pressurizer Relief Tank	RCS	1/unit	9724	100 Int.
2. Reactor Drain Tank	RWDLS	1/unit	350	25 Int.
3. Volume Control Tank	CVCS	1/unit	2244	75 Int./15 Ext.
4. CVCS Holdup Tanks	CVCS	3/2 units	97240 each	15 Int.
5. Refueling Water Storage Tank	SIS	1/2 units	338,000	Atmospheric