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**DUKE POWER COMPANY**

**GENERAL OFFICES**

422 SOUTH CHURCH STREET

TELEPHONE: AREA 704  
373-4011

JUN 12 1980  
CHARLOTTE, N. C. 28242

June 9, 1980

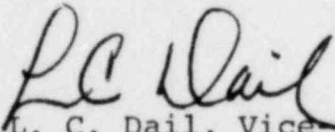
Mr. J. P. O'Reilly, Director  
U.S. Nuclear Regulatory Commission  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Re: Perkins Nuclear Station  
Docket Nos.: 50-488, 50-489, 50-490  
Cherokee Nuclear Station  
Docket Nos.: 50-491, 50-492, 50-493  
IE Bulletin 80-05  
Duke File: P81-1412.11-1

Dear Mr. O'Reilly:

Enclosed is Duke Power's response to IE Bulletin 80-05 which was transmitted by your letter of March 10, 1980.

Very truly yours,



L. C. Dail, Vice President  
Design Engineering

EKM/pam

Enclosure

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CHEROKEE & PERKINS NUCLEAR STATIONS - RESPONSE TO IE BULLETIN 80-05

VACUUM CONDITIONS IN LOW PRESSURE AND HOLDUP TANKS

| <u>TANK NAME</u>                        | <u>SYSTEM</u> | <u>QUANTITY/UNIT</u> | <u>INSIDE OR<br/>OUTSIDE</u> | <u>EXTERNAL DESIGN<br/>PRESSURES</u> | <u>VACUUM PROTECTION<br/>MEASURES</u>   |
|---|---------------|----------------------|------------------------------|--------------------------------------|---|
| Volume Control Tank                     | NV            | 1                    | Inside                       | 15 psid                              | Designed for full vacuum  |
| Reactor Drain Tank                      | NB            | 1                    | Inside                       | 15 psid                              | Designed for full vacuum  |
| Holdup Tank                             | NB            | 1                    | Outside                      | 0.5 psid                             | Vacuum breaker redundant to unvalved vent to Filtered Exhaust Gas Collection Header                           |
| Refueling Water Tank                    | NB            | 1                    | Outside                      | 0.5 psid                             | Redundant, heat-traced vacuum breakers; Vent to Gas Collection Header through a locked open valve.            |
| Equipment Drain Tank                    | NB            | 1                    | Inside                       | 15 psid                              | Designed for full vacuum  |
| Waste Tanks                             | WM            | 4                    | Inside                       | 0.5 psid                             | Unvalved vent to Filtered Exhaust Gas Collection Header; Calculations performed to insure adequate vent size. |
| Containment*<br>Cooler Condensate Tanks | WM            | 2                    | Inside                       | 0.5 psid                             | Unvalved vent to Gas Collection Header; Calculations performed to insure adequate vent size.                  |

\*Normal contents of these tanks is clean condensate. If there were a Reactor Coolant System leak inside containment, some evaporated reactor coolant could condense on the containment cooler coils and drain to the Containment Cooler Condensate Tanks. However, containment isolation valves to the Containment Cooler Condensate Tanks would close on high containment radioactivity.