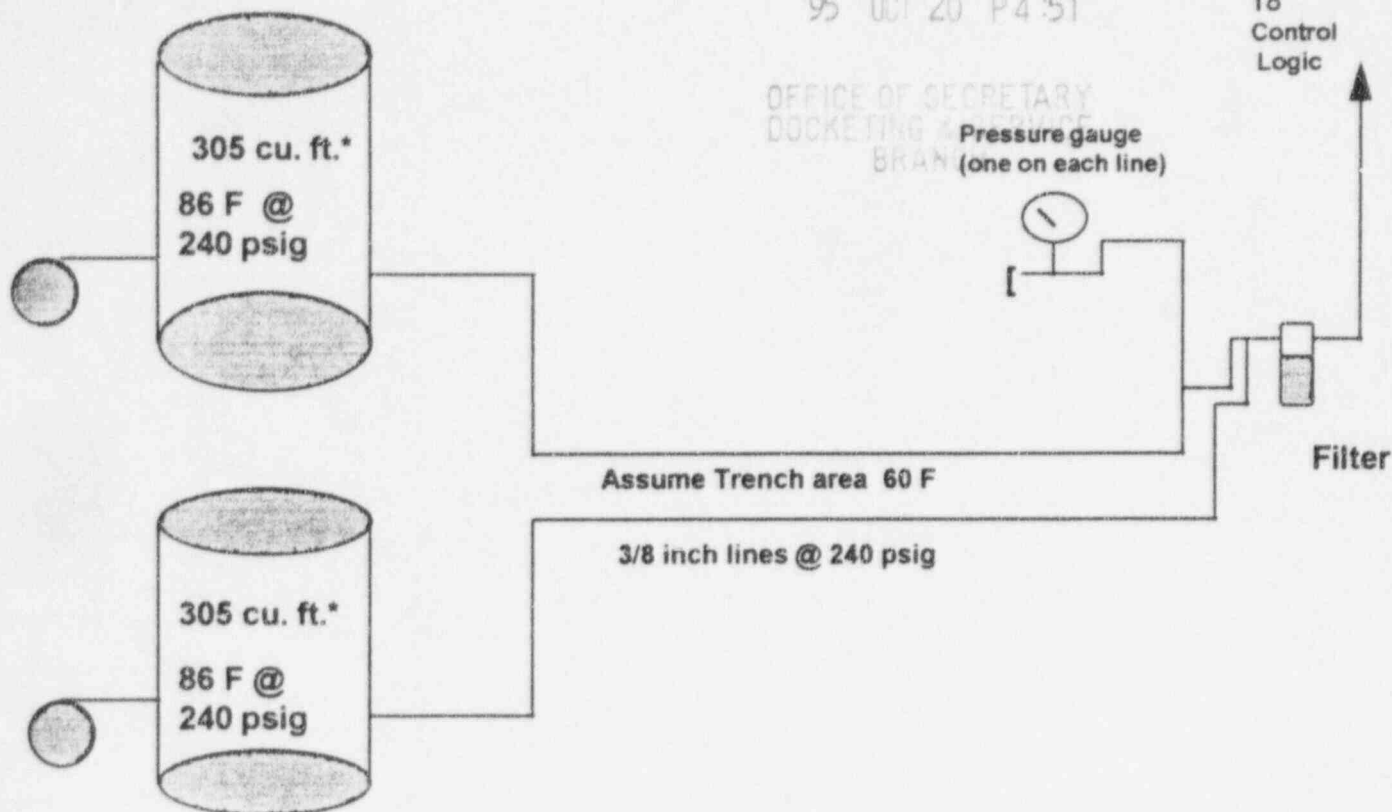


# Water Formation in Control Air Supply Typical Conditions (early April 1990)

'95 OCT 20 P4:51

OFFICE OF SECRETARY  
DOCKETING  
BRANCHPressure gauge  
(one on each line)

Water condensed cooling 240 psig air from 86 F to 60 F = .017 oz. / cu. ft.

8 oz.

Volume of 240 psig air required to condense 8 oz of water =

.017 oz./ cu. ft.

= 470 cu. ft. @ 17.3 atm  
(240 psig) & 86 F

= 1594 cu. ft. @ 5.1 atm  
(60 psig) & 86 F

= 7326 scf.

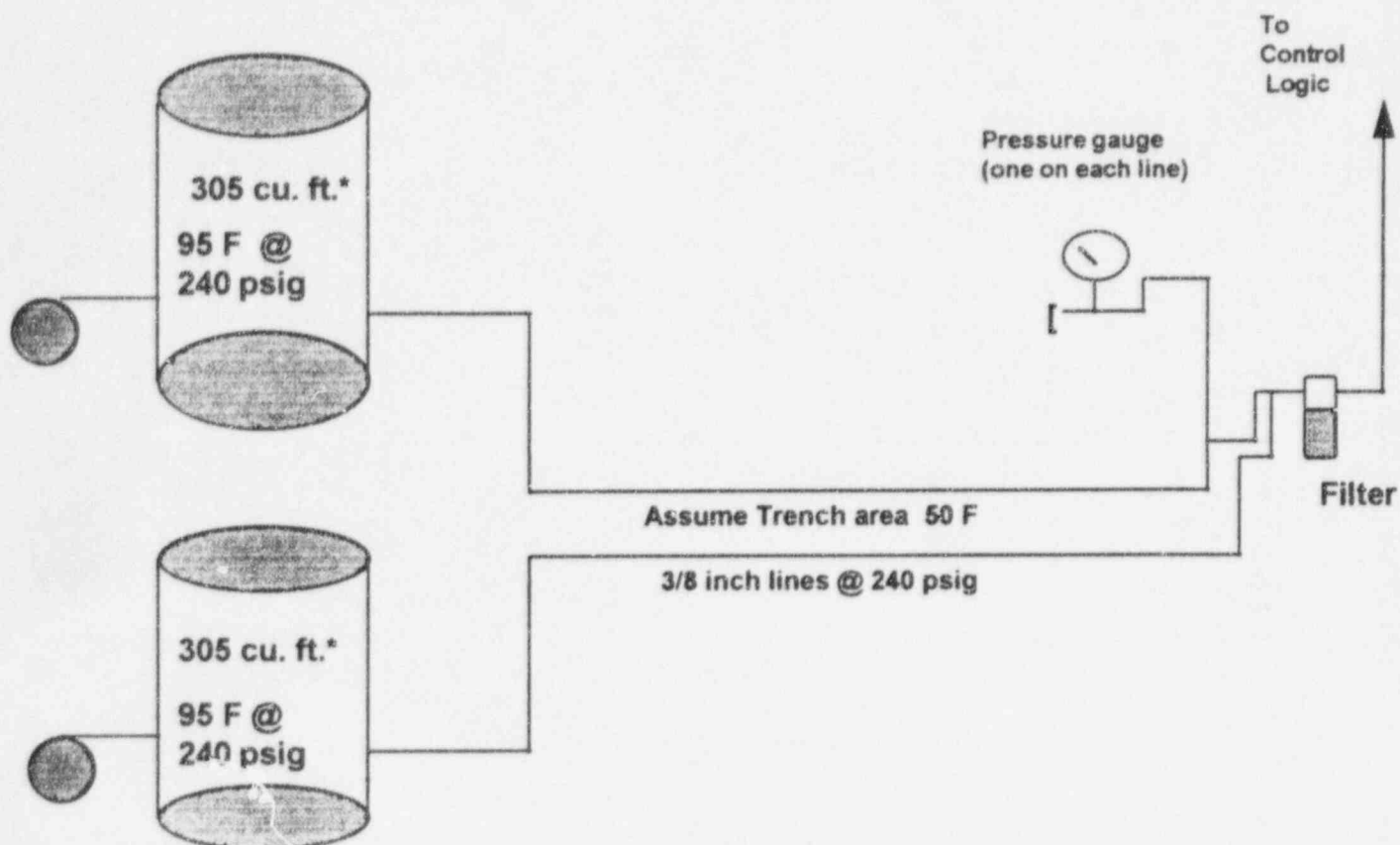
Time to condense 8 oz. Water = 7326 scf / 2784 scfd = 2.6 days

Time available before 3-20-90 = 7 days (last run of DG1A before 3-20-90 was 3-13-90)

9601220312 950919  
PDR ADOCK 05000424  
G PDR

NUCLEAR REGULATORY COMMISSION  
Docket No. 50-424/425-OLA-3 EXHIBIT NO. II-264  
In the matter of Georgia Power Co. et al., Vogtle Units 1 & 2  
☐ Staff ☐ Applicant ☒ Intervenor ☐ Other  
☐ Identified ☒ Received ☐ Rejected Reporter SD  
Date 9/19/95 Witness HILL and WARD

# Water Formation in Control Air Supply Adverse Conditions



Water condensed cooling 240 psig air from 95 F to 50 F = .03 oz. / cu. ft.

Volume of 240 psig air required to condense 8 oz of water =  $\frac{8 \text{ oz.}}{.03 \text{ oz./ cu. ft.}}$

= 267 cu. ft. @ 17.3 atm  
(240 psig) & 95 F  
= 905 cu. ft. @ 5.1 atm  
(60 psig) & 95 F  
= 4093 scf.

Time to condense 8 oz. Water =  $4093 \text{ scf} / 2784 \text{ scfd} = \underline{1.5 \text{ days}}$

Time available before 3-20-90 = 7 days (last run of DG1A before 3-20-90 was 3-13-90)