air. Infiltration through these openings will be assisted by the "pumping action" resulting from elevator travel.

f. Radiation shielding of the control room has been analyzed in the FSAR and in Carolina Power & Light (CP&L) Company's December 1979 submittal in response to NUREG-0578 Item 2.1.6.b. Additional analyses described in Section 5.0 of this report confirmed the adequacy of previous calculations.

4.3 Results

Differences between the design of Brunswick's control room ventilation system and current NRC criteria set forth in Standard Review Plan 6.4 are detailed in Appendix A. In addition, the following areas were identified as concerns:

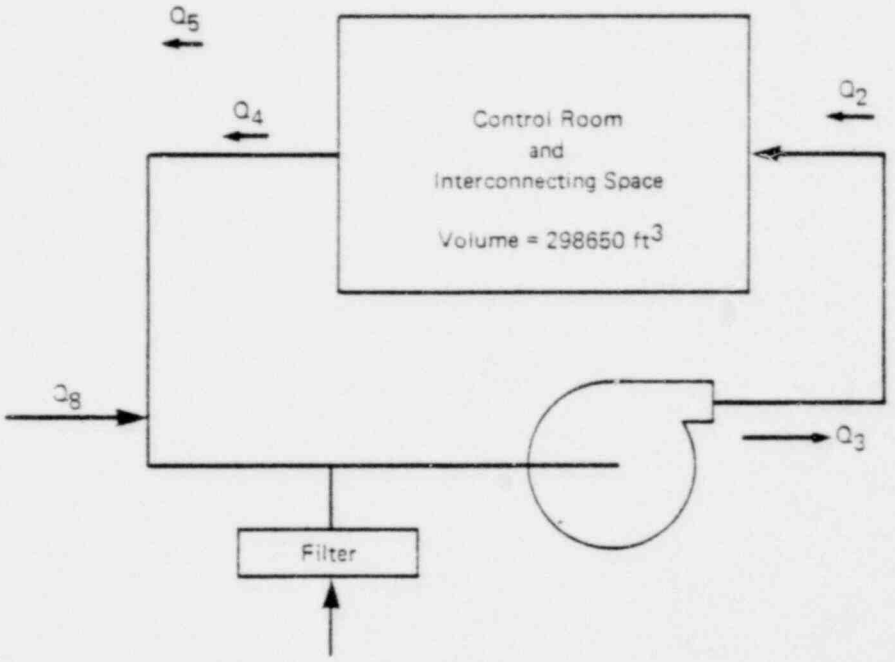
a. One door of the mechanical equipment room was found ajar and one was found off its hinges.

b. Because the cable access ways potentially communicate with the outside, these areas may not be suitable for storage of emergency food supplies or breathing gear.

c. Ducting in the emergency filter system was found to have been poorly maintained.

d. Two unsealed penetrations were found in the control building floor. One was located in the Unit 2 cable access way and consisted of an open, 2-inch diameter pipe. The other was located in the washroom and consisted of an annular gap between a 4-inch diameter cutout and a 2-inch diameter pipe passing through the cutout. This condition should be checked against fire protection requirements.

e. Several Engineering Work Requests pertaining to the control room ventilation system were identified as being unresolved.



Ventilation Flow, Q_i	Operating Mode	
	Normal	Isolated (chlorine)
	Flow ft^3/min	Flow ft^3/min
Q_1	2,000	0
Q_2	40,000	40,000
Q_3	40,000	40,000
Q_4	37,728	37,728
Q_5	2,272	1,372
Q_6	0	1,100
Q_8	272	272

Figure 6-1. Simplified Brunswick Control Room Ventilation System