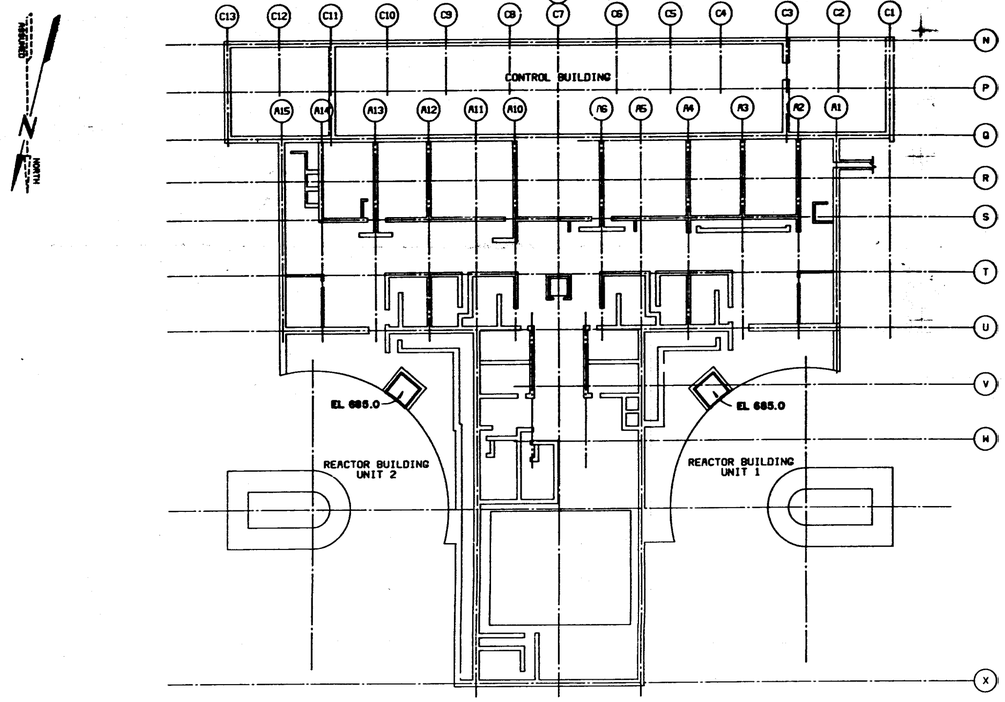
9215R0



PLAN - EL 685.0 & 692.0

GENERAL NOTES: FIGURE AND NOTE NUMBERS CORRESPONS TO THOSE OF REFERENCE 1. ALL FIGURES AND NOTES REQUIRED FOR THE AREA(S) ARE GIVEN.

NOTES:

1. OPERATIONAL CONDITION DEFINITIONS:
   1. NORMAL
   2. ABNORMAL
   3. LOCA/MSLB INSIDE PRIMARY CONTAINMENT (WORST CASE SMALL BREAK FOR TEMPERATURE - LARGE BREAK FOR PRESSURE)
   4. MSLB OUTSIDE PRIMARY CONTAINMENT
   5. TORNADO (GREATER PRESSURE DROP OF 3 PSI)
   6. INADVERTENT CONTAINMENT SPRAY INITIATION - SEE NOTES 19, 22

2. ATM -INDICATES ATMOSPHERIC PRESSURE EXISTS. NORMAL ATMOSPHERIC PRESSURE AT MSN IS APPROXIMATELY 14.6 PSIA.

   ATM(+) -INDICATES A POSITIVE PRESSURE WITH RESPECT TO THE ATMOSPHERE.

   ATM(-) -INDICATES A NEGATIVE PRESSURE WITH RESPECT TO THE ATMOSPHERE. THE ANNULUS IS MAINTAINED AT A NOMINAL PRESSURE OF -5.0 INCHES OF WATER DURING ALL NORMAL AND ABNORMAL CONDITIONS. DURING AN ACCIDENT CONDITION (OPERATIONAL CONDITION 3) AND DURING PERIODS OF TESTING THE ESTS, ANNULUS PRESSURE WILL BE MAINTAINED AT -0.5 INCHES OF WATER.

8. THESE MAXIMUM AND MINIMUM ABNORMAL TEMPERATURES COULD OCCUR AS A RESULT OF OUTSIDE TEMPERATURE EXCURSIONS, TEMPORARY GREATER THAN DESIGN HEAT LOADS, OR DEGRADED ENVIRONMENTAL CONTROL SYSTEM OPERATION. THIS CONDITION COULD EXIST FOR UP TO EIGHT HOURS PER EXCURSION AND WILL OCCUR LESS THAN 1% OF THE PLANT LIFE.

10. THESE MAXIMUM AND MINIMUM ABNORMAL HUMIDITIES COULD EXIST FOR UP TO 8 HRS PER EXCURSION AND WILL OCCUR LESS THAN 1% OF THE PLANT LIFE.

11. ALL 40 YR INTEGRATED DOSES SHOWN ARE UPPER LIMITS FOR THE SUMMATION OF THE GAMMA AND BETA CONTRIBUTIONS UNLESS OTHERWISE INDICATED. RADIATION DOSE INFORMATION WAS TAKEN FROM THE FSAR SECTION 3.11.2. FIGURES 12.3-1 THRU 12.3-7.
    THE INTEGRATED ACCIDENT DOSE GIVEN IS FOR A LOCA. TOTAL RADIATION DOSE IS OBTAINED BY ADDING THE 40 YR INTEGRATED AND INTEGRATED ACCIDENT DOSES FOR SPACES WHICH HAVE 40 YR INTEGRATED DOSES $\geq 1.75 \times 10^5$. USE 1×10^6 RADS FOR AREAS WHICH HAVE 40 YR INTEGRATED DOSES $\leq 1.75 \times 10^5$ RADS AND INTEGRATED ACCIDENT DOSES $< 1 \times 10^6$ RADS.

12. AREAS LISTED ARE DIVIDED INTO THREE CATEGORIES DEFINED AS FOLLOWS:
    A. SPACES THAT ARE SERVED BY SAFETY-RELATED REDUNDANT ENVIRONMENTAL CONTROL SYSTEMS BACKED BY ONSITE EMERGENCY ELECTRICAL POWER.
    B. SPACES NOT MAINTAINED BY REDUNDANT ENVIRONMENTAL CONTROL SYSTEMS BACKED BY ONSITE EMERGENCY ELECTRICAL POWER.
    C. SPACES SERVED BY NON SAFETY-RELATED ENVIRONMENTAL CONTROL SYSTEMS DURING NORMAL CONDITIONS AND REDUNDANT SAFETY-RELATED SYSTEMS DURING ACCIDENT CONDITIONS.

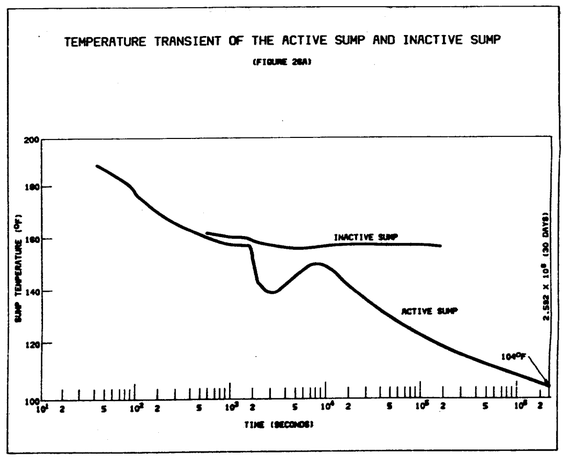
13. THESE SPACES ARE AFFECTED BY BREAKS IN THE FOLLOWING HIGH ENERGY SYSTEMS: AUXILIARY FEEDWATER (AFW) STEAM SUPPLY, AUXILIARY BOILER SYSTEM, RESIDUAL HEAT REMOVAL (RHR) SYSTEM AND CHEMICAL AND VOLUME CONTROL SYSTEM (CVCS) LETDOWN LINE. THE COMPANION DRAWINGS REFERENCED CONTAIN TEMPERATURE AND PRESSURE VS TIME PROFILES FOR ALL THE WORST CASE BREAK SCENERIOS INVOLVING THESE SYSTEMS. PROFILE TITLES EXPLAIN WHICH HIGH ENERGY SYSTEM EFFECT IS BEING DEPICTED. THE VOLUME NUMBER CORRESPONDS TO AREAS OR PORTIONS OF THE AREAS HIGHLIGHTED ON THE KEY PLAN. EACH TEMPERATURE AND PRESSURE CURVE SHOULD BE ASSUMED TO DECREASE LINEARLY TO THE NORMAL MAXIMUM VALUE GIVEN IN THE ENVIRONMENTAL TABLE AT THE END OF 24 HOURS IF IT HAS NOT REACHED THAT VALUE WITHIN THE TIME SCALE OF THE FIGURE. THE SAME HUMIDITY VS TIME FIGURE APPLIES IN EACH CASE. FOR QUALIFICATION PURPOSES, THE WORST CASE MSLB PROFILES REPRESENTING THE EVENTS FOR WHICH THE EQUIPMENT IN QUESTION IS REQUIRED TO FUNCTION SHOULD BE USED.

14. THE COMPUTED MAXIMUM POSSIBLE FLOOD LEVEL OF 740.3 FT WILL NOT AFFECT THE SAFETY RELATED EQUIPMENT IN THIS (THESE) AREAS. (REF FSAR SEC 2.4.2.2).

21. DURING POST-LOCA CONDITIONS, THE TEMPERATURE INSIDE THIS SPACE WILL VARY ACCORDING TO THE ACTIVE SUMP CURVE SHOWN ON FIGURE 26A. RELATIVE HUMIDITY WILL REMAIN WITHIN THE ABNORMAL RANGE WHILE PRESSURE CHANGE IS NEGLIGIBLE.

29. NA INDICATES NOT APPLICABLE FOR THIS OPERATIONAL CONDITION.

BUILDING LOCATION AND ROOM NUMBER	OPERATIONAL CONDITION (NOTE 1)	TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	PRESSURE (PSIA) (NOTE 2)	TOTAL 40 YEAR INTEGRATED DOSE (RADS) (NOTE 11)	INTEGRATED ACCIDENT DOSE (RADS) (NOTE 11)	AREA TYPE (NOTE 12)	FLOODING
AUXILIARY BUILDING RESIDUAL HEAT REMOVAL (RHR) VALVE ROOMS EL 685.0	1	AVG 80 MAX 104 MIN 60	55 80 30	ATM ATM ATM	NA 10^6 (UNIT 1) 10^6 (UNIT 2) NA	NA NA NA	NA	NOTE 14
	2	MAX 110 MIN 50 } NOTE 8	90 10 } NOTE 10	ATM ATM	NA NA	NA NA		
	3	190 { NOTE 21 FIGURE 26A	NOTE 21	NOTE 21	NA	1×10^7 (UNIT 1 & 2)		
	5	NA	NA	NA	NA	NA		



REFERENCE:

1. SUMMARY OF HARSH ENVIRONMENTAL CONDITIONS FOR SEQUOYAH AND WATTS BAR NUCLEAR PLANTS (NEB 82-0726-235).

REV NO	ECN NO	DATE	ORIGN	DRFTR	CHKD	SUPV	ENGR	UNIT	PLANT	RECD	APPD
ORIG											
REV 1											
REV 2											
REV 3											

MGR
ENGINEER

SCALE: NTS EXCEPT AS NOTED

AUXILIARY BUILDING
UNITS 1 & 2

ENVIRONMENTAL DATA
ENVIRONMENT - HARSH
EL 685.0

WATTS BAR NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

SUBMITTED	RECOMMENDED	APPROVED

FURTHER REVIEWED
EEB VO
CEB
MEB
NEB

INSPECTED AND APPROVED FOR ISSUE

CONSTRUCTION

KNOXVILLE	8-26-83	05	M	47E235-77	R0

RECORD DRAWING AS CONSTRUCTED

PRINT M
SIZE P