

34

34

22

22

17

17

11

11

5.8

5.8

8.5

8.5

11

11

17

17

22

22

34

34

DIMENSIONS ARE MINIMUM SEPARATION DISTANCES

GENERAL PLANT AREA

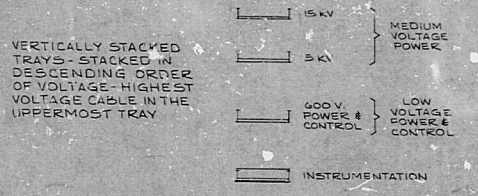
	POWER, CONTROL & INSTRUMENTATION	POWER (CONTROL TO POWER) OR INSTRUMENTATION TO INSTRUMENTATION	POWER, CONTROL & INSTRUMENTATION	INSTRUMENTATION	POWER, CONTROL CONDUIT TO INSTR. TRAY
NON-CLASS IE	<p>NOTE: SEPARATION CAN BE LESS THAN 12" IF INDICATED ON CABLE TRAY LAYOUT DWGS.</p>				
CLASS IE SAME DIVISION	<p>NOTE: SEPARATION CAN BE LESS THAN 12" IF INDICATED ON CABLE TRAY LAYOUT DWGS.</p>				
CLASS IE REDUNDANT DIVISIONS	<p>NOTE: SEPARATION OF THE SAME DIVISIONS BUT OF DIFFERENT UNITS SHALL BE THE SAME AS FOR CLASS IE REDUNDANT DIVISIONS.</p>				
CLASS IE AND NON-CLASS IE	<p>SAME AS CLASS IE REDUNDANT DIVISIONS</p>				

- NOTES:
- CABLE TRAYS OR CONDUIT OF DIFFERENT DIVISIONS (REDUNDANT) RUNNING PARALLEL TO EACH OTHER IN MECHANICAL BAY ZONES SHALL HAVE A MINIMUM SEPARATION OF 20 FEET OR THICKER REINFORCED CONCRETE WALL BETWEEN THE CABLE TRAYS OR CONDUIT.
 - THE FOLLOWING TOLERANCES WILL BE ACCEPTED ON INSTALLED CABLE TRAY VERTICAL 2 INCHES, HORIZONTAL 3 INCHES. THE 4" DIMENSION FOR THE GAP IN TRAYS BETWEEN BLDGS. SHALL BE A MINIMUM (SEE NOTE 7).
 - REFERENCED DIMENSIONS FROM PIPES SHALL BE AFTER INSULATION IS INSTALLED.
 - NOMINAL MINIMUM SEPARATION BETWEEN CONDUITS OF REDUNDANT CLASS IE DIVISIONS IS 6 INCHES. THE MINIMUM SEPARATION MAY BE REDUCED TO 1 INCH FOR CONDUITS ROUTED THROUGH WALL AND FLOOR PENETRATIONS AND ON CONDUIT RUNS WHERE THE SEISMIC ATTACHMENT CRITERIA AS SHOWN ON THE 55-215 SERIES DRAWINGS AND THE CONDUIT LAYOUTS SHOWN ON THE D-215 SERIES DRAWINGS PRECLUDE THE 6 INCH SEPARATION CRITERIA.
 - WHEN TOP CONDUIT IS NON-CLASS IE, USE SEPARATION FOR NON-CLASS IE.
 - LIGHTING, SECURITY AND COMMUNICATIONS CONDUITS SHALL USE THE SEPARATION FOR NON-CLASS IE CONDUIT CONDUITS.
 - A TOLERANCE MAY NOT BE USED IF IT WILL CREATE A VIOLATION OF SEPARATION CRITERIA UNLESS APPROVED BY THE ENGINEER. IF THE DIMENSIONS ON THE LAYOUT DRAWINGS INDICATE LESS THAN MINIMUM SEPARATION AND A BARRIER IS SHOWN, THE TOLERANCES MAY BE USED. MINIMUM SEPARATION FOR FIRE BARRIERS MUST BE FOLLOWED.
 - PARALLEL SEPARATION AS SHOWN AND PERPENDICULAR SEPARATION FOR TRAY TO TRAY AND CONDUIT TO CONDUIT SHALL BE THE SAME.
 - WHEN A BOX PULL SLEEVE OR CONDULET IS INSTALLED IN A CONDUIT IN A PARALLEL RUN OF CONDUITS, THE SEPARATION MAY BE REDUCED TO 1" MINIMUM BETWEEN THE BOX PULL SLEEVE OR CONDULET AND AN ADJACENT CONDUIT, BOX, PULL SLEEVE, OR CONDULET (FOR CLASS IE REDUNDANT DIVISIONS).

DIMENSIONS ARE MINIMUM SEPARATION DISTANCES

CABLE SPREADING ROOM

	POWER, CONTROL & INSTRUMENTATION	POWER (CONTROL TO POWER) OR INSTRUMENTATION TO INSTRUMENTATION	POWER, CONTROL & INSTRUMENTATION	INSTRUMENTATION	POWER, CONTROL CONDUIT TO INSTR. TRAY
CLASS IE REDUNDANT DIVISIONS	<p>NOTE: SEPARATION OF THE SAME DIVISIONS BUT OF DIFFERENT UNITS SHALL BE THE SAME AS FOR CLASS IE REDUNDANT DIVISIONS.</p>				
CLASS IE AND NON-CLASS IE	<p>SAME AS CLASS IE REDUNDANT DIVISIONS</p>				
NON-CLASS IE	<p>NOTE: SEPARATION CAN BE LESS THAN 12" (11") AND 14" (10") IF INDICATED ON CABLE TRAY LAYOUT DWGS.</p>				
CLASS IE SAME DIVISION	<p>SAME AS NON-CLASS IE</p>				



- NOTES:
- FOR ADDITIONAL NOTES, REFERENCES AND DETAILS, SEE DWG. D-214-001.
 - ELECTRICAL CONDUIT LAYOUT DETAILS, SEE DWG. D-215-001.
 - FIRE BARRIER DETAILS - TRAY AND CONDUIT, SEE DWG. D-201-140, SHEETS 1 AND 2.

ADDED CABLE DENSITY FOR SINGLE CONDUCTOR CABLE @ DWG. COORDS. FILED.

Checked Drawing Released for Construction. Added Minimum Separation Distances at Coords. AA, AS, AG, BA, BS, BU, CA, CS, CU, DA, DS, DD, EA, ES, GA, GS, HA, HS, HU, IA, IS, JA, JS, KA, KS, LA, LS, MA, MS, MU, NA, NS, NU, OA, OS, PA, PS, PU, RA, RS, RU, SA, SS, SU, TA, TS, UA, US, VA, VS, VU, WA, WS, WU, XA, XS, XU, YA, YS, YU, ZA, ZS, ZU.

FILED

PRC APERTURE CARD

NUCLEAR SAFETY RELATED

CONSTRUCTION LIMITED CONSTRUCTION AS NOTED PRELIMINARY NOT FOR CONSTRUCTION BIDDING PURPOSES

DATE RELEASED FOR ENGR

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

PERRY NUCLEAR POWER PLANT UNIT 1

ELECTRICAL CONDUIT AND TRAY SEPARATION CRITERIA

DESIGNED BY: GLENN ASSOCIATES, INC.

DATE: 04-1-89

DRAWING NUMBER: D-214-004 J

ADDED MINIMUM SEPARATION DISTANCES AT COORDS. AA, AS, AG, BA, BS, BU, CA, CS, CU, DA, DS, DD, EA, ES, GA, GS, HA, HS, HU, IA, IS, JA, JS, KA, KS, LA, LS, MA, MS, MU, NA, NS, NU, OA, OS, PA, PS, PU, RA, RS, RU, SA, SS, SU, TA, TS, UA, US, VA, VS, VU, WA, WS, WU, XA, XS, XU, YA, YS, YU, ZA, ZS, ZU.

REVISIONS:

NO.	DATE	DESCRIPTION
1	04-01-89	ISSUED FOR CONSTRUCTION
2	04-01-89	REVISED AS INDICATED
3	04-01-89	REVISED AS INDICATED
4	04-01-89	REVISED AS INDICATED
5	04-01-89	REVISED AS INDICATED
6	04-01-89	REVISED AS INDICATED
7	04-01-89	REVISED AS INDICATED
8	04-01-89	REVISED AS INDICATED
9	04-01-89	REVISED AS INDICATED
10	04-01-89	REVISED AS INDICATED
11	04-01-89	REVISED AS INDICATED
12	04-01-89	REVISED AS INDICATED
13	04-01-89	REVISED AS INDICATED
14	04-01-89	REVISED AS INDICATED
15	04-01-89	REVISED AS INDICATED
16	04-01-89	REVISED AS INDICATED
17	04-01-89	REVISED AS INDICATED
18	04-01-89	REVISED AS INDICATED
19	04-01-89	REVISED AS INDICATED
20	04-01-89	REVISED AS INDICATED

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