

**\*\*ENGINEERING NOTES:**

1. TRANSFORMER POSITION OPPOSITE CROSS ARM

TITLE:

THREE TRANSFORMERS  
ON MULTI PHASE LINE

**GARLAND**  
POWER & LIGHT

DRAWN BY: GL	DATE: 7/27/04	APPROVED BY: CP
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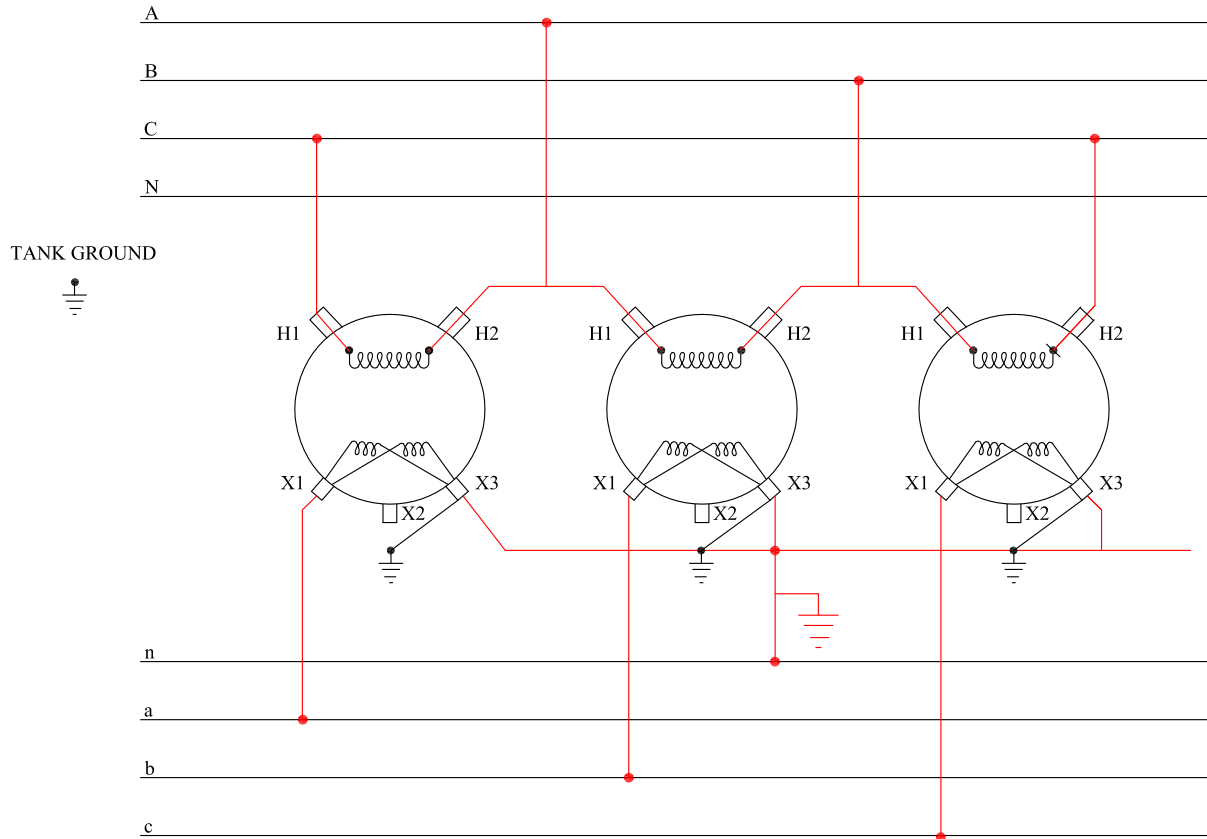
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STANDARD NO.:

OH-1110

PRIMARY--DELTA EACH TRANSFORMER IS ENERGIZED BY TWO PHASES FROM THE PRIMARY CIRCUIT. TWO BUSHING TRANSFORMERS WITH PRIMARY VOLTAGE RATINGS OF 12470 MUST BE USED IN THIS CONNECTION. THE TRANSFORMERS MUST MATCH WITH REGARD TO IMPEDANCE . EXCESSIVE CIRCULATING CURRENTS MAY OVERHEAT AND BURN OUT THE TRANSFORMERS IF THEY ARE NOT WITHIN TOLERANCE LIMITS.

IMPEDANCE DIFFERENCE ALLOWED  
± 10%



SECONDARY--WYE THIS CONNECTION IS USED TO SERVE THREE-PHASE AND SINGLE PHASE LOADS AT A VARIETY OF VOLTAGES, 120/208 AND 277/480. IN THE 120/208 CONNECTION , THE SECONDARY COILS OF STANDARD DISTRIBUTION TRANSFORMERS ARE CONNECTED IN PARALLEL INSIDE THE TRANSFORMER TO PROVIDE FOR 120 VOLTS ONLY. IN THE 277/480 CONNECTION, SPECIAL TRANSFORMERS ARE USED WHICH HAVE ONLY ONE SECONDARY WINDING AND ONLY TWO SECONDARY BUSHINGS.

NOTE:  
MOVE X2 GROUND STRAP TO THE GROUNDED BUSHING ( X1 ABOVE) ON EACH TRANSFORMER.

DRAWN BY: SJ/JC	DATE: 7/18/12	APPROVED BY:
REVISED BY:	DATE:	APPROVED BY:

TITLE:

DELTA-WYE

**GARLAND**  
POWER & LIGHT

REFERENCE NO.:

OH-1110  
DELTA/WYE

