

## RG-09 : MULTIPLE SOURCES, SINGLE NEUTRAL-GROUNDING RESISTOR

For multiple sources feeding a single bus, it is best to ground the system with a single neutral-grounding resistor (NGR) as opposed to one NGR per source. When multiple NGR's are used, prospective ground-fault current changes when a source is added or removed. Multiple grounding resistors make it difficult to control the prospective ground-fault current, difficult to select a ground-fault pickup level, and impossible to monitor the integrity of an individual NGR. Generators require special attention.

When one NGR is used to ground the system, prospective ground-fault current is consistent, it is simple to select the ground-fault pickup level, and reliable NGR monitoring is possible.

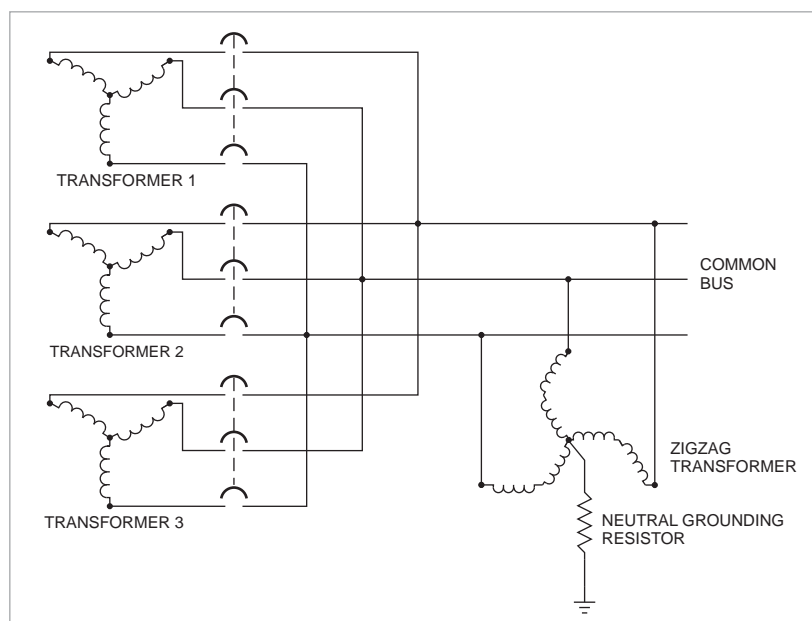


Figure 1: Multiple Sources Grounded with a Single NGR