

# ***Flood Damaged Electrical Requirements***

CNI-027

**Purpose:** To provide the requirements for the repair and replacement of flood damaged electrical wiring and equipment.

The following requirements apply to any electrical wiring and equipment which has been submerged in flood water for any length of time and/or sustained any other water or storm damage.

1. An electrical permit is required for all repairs and replacements of electrical wiring and equipment.
2. Before an electrical service panel may be re-energized it must be cleaned and dried throughout and all circuit breakers and/or other damaged components replaced.
3. The busbars must show no evidence of corrosion or oxidation and the connected load must be in an electrically safe condition.
4. The following electrical wiring and equipment must be replaced:
  - a. Electronically controlled and solid state contactors and starters.
  - b. Components containing semi-conductors and transistors.
  - c. Overload relays.
  - d. Adjustable speed drives.
  - e. Molded case circuit breakers, switches and receptacle outlet devices.
  - f. Fuses.
  - g. Any cable or wire not listed for wet locations which has been submerged at either end thus allowing water to enter its body.  
**Note Exception:** The cable or wire does not need to be replaced if a report is submitted to the Permit and Resource Management Department with the results of a high voltage test of the wiring (such as a megohmmeter test) which indicates that the insulation has not failed. This test must be performed by a licensed electrical contractor.
5. Manual and magnetic motor controllers and motor controlled centers may be reconditioned by trained personnel.