

### TECHNICAL AWARENESS:

In “half power” situations with residential customers, where an LDC installs a Dead-Leg Adapter, overheating can occur in the neutral wire of the customers’ split receptacle.

### DEAD-LEG ADAPTER:

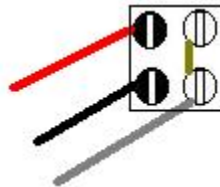
Dead-Leg Adapters allow the resumption of temporary service when one leg of a 120/240 volt service is dead, due to events such as storm damage or faulted underground service cable. Removing the fuse from the faulted leg side and placing it across the load side lugs allows 120 volts to be provided to each side of the service, however there is no longer a 180 degree phase difference.



Dead-Leg Adapter

### SPLIT RECEPTACLES:

In Ontario, Split Receptacles are allowed by the OESC to be installed in kitchens. Under normal operating conditions, the two outlets of a Split Receptacle are fed by opposite hot legs of the service (180 degree phase difference). The current in the neutral wire is the difference of the currents in the hot legs. Without the 180 phase difference, removed by using a Dead-Leg Adapter, the current in a Split Receptacle’s neutral wire now is additive. This additive current may exceed the ampacity of the Split Receptacle’s neutral wire.



### RECOMMENDATION:

When installing a dead-leg adapter please have the trouble crew advise the customer to only plug in and use one appliance at a time in kitchen receptacles.

Additional information requests, including report(s) and follow-up information, may be directed to ESA. Please be prepared to quote Bulletin “DTB-04/06”.