



## ESAO Hazard Alert

### LOCK-OUT RELATED CRITICAL INJURY

An electrician at an Ontario College suffered a critical injury in May. The electrician was replacing a faulty breaker on an air-conditioning system. Power was isolated at the main panel servicing 5 buildings: (600 volt 4000 amp, 1972 switchgear). The electrician's lock was too large to fit in the disconnect handle, and so he pulled the 3 breakers and left them in the switchgear panel box. His lock and tag were attached to the door hasp.

After the work was completed, the electrician removed his lock and tag and pulled up on the handle. The breakers, that had been previously pulled and left in the switchgear box, caused an arc (or a short) from the ground to the knives, causing a fire and smoke.

The electrician received 1<sup>st</sup> and 2<sup>nd</sup> degree burns to the face, hand and lower arm.

#### **Suggestions to Prevent a Recurrence:**

1. Do not leave any loose items in any electrical panel, switch box or electrical disconnect box. (Tools, fuses, etc. should be removed and placed in a safe location away from all sources of electricity.) A specific location should be established for placing fuses when they are removed.
2. Have various size locks or multilock lockout adapters available to staff. The adapters should be kept in the work area to ensure they are available to all workers in an emergency.
3. Ensure the required proper PPE is available and used
4. Review lockout procedures and training