

# SAFETY ALERT

*Target Zero*  
Living and working *safely*



*Communicate to affected personnel within three business days*

## Cooper VFI failure

On Feb. 16, 2019, there was a momentary Cooper vacuum fault interrupter (VFI) failure at 3:42 a.m. The unit remained energized until 4:02 a.m., when it failed again; the upstream protective device reclosed twice and then locked open. On the final reclose, the unit violently failed as shown in the picture below. No one was present at this location, and no injuries resulted from this failure. A high percentage of Cooper VFIs have failed over the past few years at We Energies locations; this is the most violent failure yet. All units that failed have done so during the winter months. Cooper has been contacted, and engineering is working with supply chain to verify all Cooper units have been pulled from our stock inventory. These units were only used on the WEC system at We Energies.



## Next steps

Effective immediately, whenever work is to be performed on or nearby Cooper visible-open switchgear, the upstream protective device will be placed in a non-reclosing state, and a hotline caution energized clearance will be required. Remember that only SFU qualified switchers can switch in these units.

When a lockout occurs on a line containing any of these devices with no cause determined and the fault distance is within range of these units, the unit shall be inspected prior to re-energization for any signs of defects.

If a momentary fault occurs on a line containing any of these devices, with no cause determined and the fault distance is within range of these units, the upstream protective device shall be put on a hotline caution energized clearance and the unit inspected for any signs of defects.

A proactive replacement plan has been initiated to remove this style of switchgear from our system. While we implement the replacement plan, we need to remain vigilant until all these Cooper devices have been removed from our system.