

Increasing Our Reliability:

OCR Testing Program



Ken Carda

kcarda@byelectric.com

One way Bon Homme Yankton Electric increases reliability and safety for our members is by using oil circuit reclosers (OCRs). OCRs are an automatic, high-voltage electric switch. Like a circuit breaker on household electric lines, it shuts off electric power when trouble occurs. Where a household circuit breaker remains shut off until it is manually reset, a recloser automatically tests the electrical line to determine whether the trouble has been removed. If the problem was only temporary, then the recloser automatically resets itself and restores the electrical power.

OCRs contain a coil that senses currents and can detect when something disrupts the line. For example, say a squirrel was on our line, the OCR would sense the squirrel and open the circuit. An instant later, the OCR would test if the object has been removed from the line and keep the power restored if the trouble is gone. This process can cause brief blinks in power.

Common causes for temporary faults are birds, small animals, tree branches, ice, and lightning.

If the trouble persists on the line, say a tree branch is caught, the OCR is programmed to consider the problem permanent and keep the power off. Bon Homme Yankton Electric would then send an outage restoration crew to fix the problem.

OCRs save considerable time and expense, since they allow power to be restored automatically, after only a flicker or two. For outages that require a repair crew, OCRs minimize the outage area and help crews quickly locate the problem and restore power.

Bon Homme Yankton Electric contracts Solomon Corporation to service our OCRs every year. We test all our OCRs on a three year rotating basis, and we test an average of 75 to 100 OCRs a year.

Solomon Corporation is based in Kansas, but they have seven locations throughout the Midwest. To service our OCRs, they take them apart, service them, repaint them, replace parts and oil, and test them for safety and function.

Chris, one of the technicians that serviced our OCRs this year said, "Our main goal is that everybody goes home in the same condition they went into work."

OCRs save considerable time and expense, since they allow power to be restored automatically, after only a flicker or two.

Solomon technician servicing an OCR



OCRs waiting to be serviced

View inside OCR

