LER Report:

Event Notification Report for July 28, 2023: <https://www.nrc.gov/reading-rm/doc-collections/event-status/event/2023/20230728en.html#en56641>

Including EN56631 and EN56641.

EN56631:

On July 20, 2023, at 1507 EDT, the Department was notified by the licensee that while performing semi-annual shutter checks the licensee discovered that the handle on a Berthold LB7440D had broken off which prevented the shutter from being locked. The licensee cordoned off the area and was able to rotate the shutter to the closed and shielded position. The gauge is a Berthold Model LB7440D s/n FT314 and contains a 30 mCi Cesium-137 source. On July 21, 2023, BRH [Bureau of Radiological Health] on-call duty officer met licensee's RSO at 0800, to perform a visual inspection and radiation survey of the gauge. The highest radiation measured was 0.2 mR/hr. The licensee has contacted a licensed vendor to schedule the repair of the handle.

EN56641:

River Bend Station completed an internal Part 21 evaluation concerning a motor driven relay that failed pre-installation testing due to a buildup of corrosion between the rotor and relay core. The relay was planned for use in the Remote Shutdown System. The NRC Resident has been notified. A written notification will be provided within 30 days.

Event: <https://www.nrc.gov/docs/ML2321/ML23212A954.pdf>

The 1/4" Socket Head Capscrew (Part No. 48 in the valve drawing) installed to each of the supplied check valuves was shorter than the required 1.25" length. The capscrew connects the Cylinder Rod Extension to the Hinge Shaft Actuactor Arm. The shortened capscrew limited the thread engagement with the Cylinder Rod Extension to apprximately two to three threads and had the risk of coming loose and falling out. Loss of the capscrew could potentially create binding to prevent the valve from opening and closing, which in turn limits the emergency feedwater flow to all three steam generators when needed. This condition also has the potential to affect the isolation function of the check valve.

Event: <https://www.nrc.gov/docs/ML2320/ML23207A076.pdf>

On April 5th, 2023, Duke Catawba Nuclear Station informed Paragon of a failure of the relay card upon installation into the CH-531 control panel during planned maintenance on the chiller system. Following replacement, the relay module bound to the Adaptiview system correctly, but the chiller attempted to start without signal to start from the control room. The issue was discovered when the chiller initiated diagnostics for missing evaporator water flow. Flow was not maintained on the chiller due to continued maintenance; however, an internal failure of the 1A13 Module (X13650728-06) caused the module to read a closed contact at terminals J3-1/2 which would ordinarily come from closure of the control room start contact. The failure was readily determined during system restoration.

The affected card was originally supplied to Catawba in December 2024 with three other units which have been tested satisfactorily at the plant. The specific failure noted above would not prevent the chiller from performing its safety function. To date this is the only failure of the affected part number which has been reported to Paragon. Our analysis of the failed relay card has identified minor delamination and water intrusion of the microcontroller chip (date code 1308) installed. This is the only anomaly identified to date, and therefore it is difficult to determine 1) if this condition could exist in more units and 2) if this condition prevent the chiller from performing its safety function.