Subject: Use of HMI Panel in MCR


An HMI panel often used by the OC and Operators enables them to perform certain PASS system functions without going to the main PASS panel. This activity has been allowed for many years but not properly documented in the OPM. Specifically there was a potential concern that the process might be considered a violation of the controlled access procedure when the OC uses the HMI panel to provide a simultaneous release for a sweep team without visual verification.

The committee recommended the continued use of the HMI panel as presently utilized by operations. The use of the panel would be covered by TPL 12-07 and a modification of the sweep procedure OPM 4.56.

Discussion

The access control systems typically recognize a status of enclosures in which the area has been switched from restricted access to controlled access but the process of accounting for personnel in the area has not started. All PLC controlled areas have this transient state. Therefore, from a logic point of view the area has not yet been fully controlled. This is usually the status of an area when the sweep team enters to conduct a sweep. Often the Operations Coordinator (OC) is in MCR alone handling several tasks. It becomes inconvenient for him to leave his station to go to the pass station to visually verify the sweep team entrants. Instead the OCs typically provides a simultaneous release using a PASS HMI panel at OC work station. The sweep teams needs a controlled access key to enter the area through the gate with the simultaneous release from MCR. The sweep team also needs a sweep/reset key to activate the reset stations. This practice of the sweep team entering in this manner has be standard practice for years.

The process of accounting for personnel in the area does not begin till the sweep team activates the first reset station. Any personnel that are given permission to enter after the sweep team would be encountered by the sweep team as part of the sweep process. After the first reset station has been activated any access point to the area that is opened will cause all resets to be dropped even if a simultaneous release is given. A gate being
opened will require the sweep process to start over. The committee found no loss of protection by the present practice for the sweep team or other potential entrants. Therefore, it was recommended that the process should continue with appropriate documentation via an OPM. TPL 12-07 was written to cover the authorized uses of the remote HMI panel.

Other operation procedures were examined to consider how they should tie into the sweep process. It was decided that the best option was to note in OPM 4.56, “Procedure for Sweeping Primary Enclosures-Controlled Access”, the actions related for the sweep team entry. OPM 4.56 has been modified to require that the sweep team clearly identify themselves by full name to the OC. Other OPMs were examined including OPM 4.44 “Operations of Pass” and OPM 4.1 “C-A Complex Access Control Procedures for Primary Beam Enclosures”. It was decided that these are not the appropriate place to document the sweep team entry process. The sweep team does not log themselves into these areas on a controlled access sheet. The committee did not consider the present use a violation of existing procedures, but thought this process should be better documented.

The remote HMI panel enables the OC to monitor PLC system functions. It can be reset chipmunk interlocks, reset hardware faults, provide simultaneous gate releases, change area mode commands, and change camera views. The HMI panel used at OC station is not to be used for changing the mode status of an area or the camera view. Should an OC make an error there would be no safety consequence only operational inconvenience. TPL 12-07 documents the allowed functions for the HMI. The modification of the HMI code will be examined to determine if it is possible to prevent the OC from activate undesired functions from the remote HMI panel.

CC:
Present
RSC
RSC Interlock file
RSC Minutes file