severe fire hazard. In other words, if the induced draft fans are shut down or out of commission from a power failure or other failure, the whole system—including the ovens—would have positive pressure. When under positive pressure, the volatile matter at the oven can be released from the doors, air-inlets, or other openings. The uncontrolled release path would likely put plant personnel at a safety risk, cause an environmental release, and potentially damage plant equipment.

52. The vent stack is the means to maintain negative pressure even during a power failure. Generally, bypass stacks are held closed by powered pistons and negative pressure on the ovens is maintained by other means. If the pistons ever cease operating, the by-pass stacks open automatically. When open, the resulting draft creates negative pressure. A passive safety device is crucial for personnel safety around the ovens. But if any control is applied to the vent stack, the natural draft will be blocked and the back pressure will cause the dangerous and damaging uncontrolled release.

53. In any event, applying a control to the vent stack would be futile because controls require power to run. As discussed, one of the central purposes of the vent stack is to maintain negative pressure in the