

STATIONARY FIRE PUMPS

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Drill #5 - Operation of basic fire pump controls:

Despite being “automatic,” fire pump controllers may require interaction from you as the responding fire department. It is important that you are familiar with those systems in your area, so that you may react appropriately in those situations.

For example, in the event of a completed fire response or in an accidental activation situation, you may need to know how to shutdown the system, in accordance with your automatic fire protection protocols. While NFPA 20 allows for automatic pump shutdown in some cases, manual shutdown of fire pumps is preferred because an automatic shutdown could occur during fire conditions if the controller interprets a low-flow condition as meeting the pressure setting.

If a system is returned to a normal state, the controller can simply be stopped using the basic controller functions, typically being a well-marked “stop” button or switch. However, if a system has open heads or mains and cannot be returned to a pressurized state, you may need to actually turn off the main power at the controller to stop the pump activation.

On the other hand, in the event of pump controller failure, particular in the case of electrical power failure, it may be necessary to operate fire pump controls manually in order to activate a diesel pump. Each system is different, but NFPA 20 requires a manually operated switch or valve on the controller panel. This must be installed so that operation of the engine, when manually started, cannot be affected by any failure or operation the pressure-actuated switch circuit. The engine itself may have manual controls, as well.

For specific requirements for installation, as well as inspection, testing and maintenance of fire pumps, refer to NFPA 20 and NFPA 25

