

Construction Industry Communication #53

From: Amit Ghosh, Chief Building Official
Re: Natural Gas-fueled Emergency and Standby Power Systems for Commercial Buildings
Date: July 22, 2019

Requirements: Ohio Building Code (OBC) Section 2702.1.2 requires emergency power systems and standby power systems to be installed in accordance with the (OBC) and NFPA 70. Regarding performance, classification, transfer, testing and maintenance, these systems shall also comply with NFPA 110.

Additionally, OBC Section 2702.1.1.1.2 requires gas piping serving emergency or standby generators to comply with NFPA 37 and the International Fuel Gas Code.

Background: Emergency and standby power are critical to life safety systems of a building and if not operational, will place the building occupants at great risk and hinder firefighting operations. NFPA 110 recognizes the importance of a continuous gas flow to the generator to prevent interruption. Consideration must also be given, so that the marking of gas shut off valves and supply piping enable first responders to quickly identify and separately control the shut off valves for the generator gas piping and the shut off valves for the building gas piping.

Memorandum: In order to prevent someone from inadvertently shutting off the gas supply to an emergency or standby power generator and to assist the gas supplier and fire department personnel in an emergency, designers should consider incorporating the following recommendations in addition to the minimum code requirements, into their designs for natural gas-fueled emergency and standby power systems:

- Locate the generator on the outside of the building, at ground level and be visible from the right-of-way;
- Provide a separate tap designated for the generator with the meter located as close as practical to the generator. Owners should be made aware that a separate tap may affect metering and rates;
- Provide only valves necessary for the proper operation and isolation of the system and all valves on the supply side of the meter should be electronically supervised by a listed fire alarm control panel. Where a fire alarm control panel is not provided, the valves may be locked in the open position;
- Provide signage approved by the Division of Fire and the gas supplier at all valves indicating the existence of the emergency or standby power generator; and
- Paint generator gas supply piping red.

For additional information, please call 614-645-7562 or visit our website at www.columbus.gov/bzs.