ACEC New York

American Council of Engineering Companies of New York

Testimony on Intro. 341

Submitted to the City Council Committee on Housing and Buildings
April 11, 2019

General

ACEC New York represents close to 300 consulting engineering and affiliate firms throughout New York State. Our members plan and design the structural, mechanical, electrical, plumbing, civil, environmental, fire protection and technology systems for buildings and infrastructure throughout the City. We thank you for the opportunity to provide comments on Intro. 341.

Intro. 341 would retroactively apply certain Building Code requirements to existing buildings. In effect, the bill requires installation of standby power systems for certain elevators in existing buildings and installation of an emergency lighting systems for certain egress pathways and areas in existing buildings.

It is beneficial to have secondary power in place in the event of a power outage or emergency so we support the bill's intent. However, the bill raises questions of feasibility. Compliance with the bill's requirements will be challenging in many existing buildings.

Existing buildings often have limitations on available space which may create challenges for the installation of large equipment and the distribution systems necessary to move fuel and power through the building. A lack of available space in basements and rooftops and the need to preserve fire department access on roofs may force the location of equipment to be in close proximity to other buildings which could create problems of noise and emissions. Lack of space is often a reason why existing buildings have elected to defer the installation of these systems in the past.

The retroactive installation of backup power systems may also be challenged by the presence of hazardous materials that need to be abated to complete the work.

If the Council advances the bill, it should provide for the Commissioner to grant flexibility and relief from its requirements, or other code challenges, where warranted. This may include exempting the operation and testing of this equipment from noise codes and other requirements that don't impact safety. The bill could also consider requiring backup power installation on existing building systems *only* when such building systems undergo substantial upgrades or modifications so there is greater opportunity for flexibility. The proposed alteration would trigger the requirement instead of the bill triggering changes that would not have otherwise been considered.

Specific Comments and Questions

1. The effective date in accordance with Section 28-315.8.1 should be re-adjusted since the 8-year deadline specified in 28-315.8.1 was anchored to the effective date of the 2014 administrative code. That would imply completion by the end of 2021.

2. The proposed law should allow natural gas fueled generators to supply both, the emergency and standby loads in other than R-2 occupancies. The text as written could require a minimum of 6-hour fuel storage in other than R-2 occupancies if supplying emergency loads, since in non-R2 occupancies gas fueled source may not be used for emergency power.

3. If the emergency egress lighting requirements are met by installation of fixtures with 90-minute battery back-up, will connection of the generator power still be required? If yes, that would imply the need for rewiring of lighting circuits potentially within finished, or tenant spaces.

4. Rules of Chapter 27 relating to locations of generators, transfer switch equipment should not be as stringent, particularly when applied to R-2 occupancy buildings. Old code (pre-2008 code) buildings often do not have available space for generators rooms, ATS room, fuel storage and fuel pumping equipment, additional gas regulator and gas pressure booster equipment, or any fire resistance requirements for feeders serving emergency panels. Current code requires dedicated spaces for generator and transfer switches.

5. Natural gas fueled generators require a separate gas service. If a separate gas service will be required for R-2 occupancy buildings, it will likely be hardship for building owners. Additional space will be required for gas regulators and meters, gas-boosters to increase pressure, inverters or UPS to power gas pressure boosters. Any natural gas fueled or diesel generator that would be located on roof, would require a vertical riser shaft to contain piping, which in R-2 occupied buildings may cause sever disruption.

6. Existing R-2 occupancy buildings constructed under old codes may not be equipped with fire alarm systems or sprinkler systems. Current code would require smoke detection system or a fire suppression system, while the building may not have such systems.

7. NYC is developing the Existing Building Code, so the code should address and consider the abovementioned issues. For example, installation of a generator should not be a trigger for installation of systems that the building currently does not have; i.e. fire suppression system.

If you have questions or would like to discuss the bill with representatives of our Code Committees, please let us know.

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