

Safety First: Electrical System Operations, Management and Safety

This pilot credit applies to

- Cities & Utilities (1-2 points)
- Campuses (1-2 points)

Intent

To promote best practices and ensure that the electrical systems are operated safely during re-occupancy or restarting of equipments, post pandemic.

Requirements

Health and Hygiene:

- Provide workers with access to all necessary personal protective equipment (e.g., sanitizer, face masks/shields etc.) to keep them safe.
- Have in place training procedures that ensure operations and field personnel are familiar with social distancing, infection control, and self-screening practices.

Safe Operation of Electrical System:

- Conduct inspections across the project boundary using the [NEC Electrical Inspection Checklist](#) to identify any electrical issues and reduce the potential for any hazards or equipment damage.
- Have the substations, control rooms, areas under transformers, switchgears, diesel generators, AHUs (Air Handling Units) or ventilation systems etc., cleaned of dust and debris.
- Disinfect the areas of common touch points on the electrical system safely as per the original equipment manufacturer (OEM) instructions for specific cleaning protocols for equipments. Allow the approved disinfection solution sufficiently to dry prior to restarting any equipment and avoid any signages or markings getting removed from the process.
- Establish safe operating procedures for working with electrical equipment including re-commissioning of electrical systems including substations, diesel generators, control rooms, lighting and ventilation systems, etc. Also, verify the stored chemicals and flammable liquid containers, before fully restoring power or starting up any equipment.

Credit Documentation/Submittals

Documentation
Provide a narrative describing the measures taken towards health and hygiene of the workers.
Safety inspection report along with the checklist.
Narrative along with images on the disinfection process of electrical systems.
Submit a copy of the operational safety procedures.

Questions to be included in the Pilot Credit Survey

- Has your project faced any major challenge due to the pandemic and if yes what are they?
- Does your project currently have an officially approved pandemic preparedness plan addressing:
 - Health and hygiene for employees and customers, and
 - Safe operation of electrical system?
- If not, do you intend to develop a plan or update an existing plan in the next 1–2 years?
- Do these requirements provide comprehensive guidance to develop a pandemic preparedness plan and update an existing one?
- Are you implementing any additional strategies for operation of power system, which is not captured in the requirements?
- What were the major challenges faced in development of a pandemic preparedness and response plan?

Background

At this point, the COVID-19 pandemic needs no preamble or introduction. This virus has reshaped our society and economy. Many states and cities are still under lockdown and industries are shutdown.

There's a lot of uncertainty, on restarting operations during the ongoing phase and post-COVID work environment. In this regard, Cities, Utilities, Campuses and buildings are looking for guidance on restart and how to reduce their impact due to COVID-19 and one of the biggest challenge is being faced by Utility and operations team as their systems needs continuous operations and stopping it from operation for a prolonged period will not only damage their critical electrical infrastructure but also cause safety issues and financial risk.

It is the need of the hour to implement safety procedures on re-starting the Cities, Utilities, Campuses and buildings power system and with special focus to the health and hygiene measures, more than ever.

Standards and References

[U.S. Occupational Safety and Health Administration COVID-19 Page](#)

[National Fire Protection Association](#) Standard for Electrical Safety in the Workplace, NFPA 70E

[National Electrical Manufacturers Association](#) (NEMA) COVID-19 Cleaning and Disinfecting Guidance for Electrical Equipment, NEMA GD 4-2020