



# An Open Letter to the CEO: The Business Argument for Electrical Safety

Dear CEO:

Like most businesses, your organization likely uses some sort of incentive program to reward outstanding achievements of various kinds on the part of your employees. You are just as likely to value this program and credit it with motivating your people to work toward corporate goals. The purpose of this letter is to introduce you to a different kind of incentive program in which you are the primary participant.

Allow me to cut to the chase: It is imperative your organization invests the money and resources needed to improve electrical safety in your facilities. The best way to do this is adherence to NFPA 70E. This could be argued from a human interest perspective, as there are plenty of stories of terrible personal loss as a result of preventable electrical accidents. The National Institute for Occupational Safety and Health (NIOSH) estimates these incidents occur five to 10 times a day in the United States. However, I want to discuss improving electrical safety purely from a bottom line, business point of view. Just as you are in the habit of rewarding good work on behalf of your employees, so the positive business effects of a functional electrical safety program can provide you the incentive to put forth the capital needed for the achievement.

Over the past 30 years there have been major advances in electrical safety, including, but not limited to: exploration of the effects of shock on the human body, research on arc flash and new ways to predict its severity, and new fabrics developed to prevent burn injuries. Thousands of dedicated volunteers have spent countless hours developing new standards, including NFPA 70E, based on this research. This enlightenment has allowed us to avoid and/or mitigate injuries and fatalities caused by electrical accidents by properly addressing the hazards. Sadly, in spite of all these advances, many employers continue to unnecessarily expose their employees to electrical hazards the same way they did 30 years ago.

One of the most common objections business leaders make regarding implementing an electrical safety program is the assumption such a program will be cost-prohibitive. Indeed, taking the proper steps to protect employees can be expensive. Appropriate implementation of 70E will produce the need for numerous decisions to be made and initiatives established, many of them relating to expenditures: hiring training providers, implementing a Personal Protective Equipment (PPE) program, performing an arc flash analysis, possible equipment modifications to name a few.

But what is the cost of doing nothing? While electrical accidents may be small in terms of a percentage of all workplace accidents, the severity of the injury incurred and the fatality rate are much higher. Therefore, the impact can be much longer-lasting.

If one of your electricians suffers a severe burn from an arc flash event, the cost of that accident to the organization over the next five or ten years could be in the tens of millions of dollars. First, OSHA will likely issue a citation for failing to protect your employee. But that will be insignificant chump change compared to the other costs to come. These costs include equipment damage, lost product, downtime, medical bills, insurance premium increases, workers compensation, attorney's fees, accident investigation costs, law suits, retraining, the list goes on. Indirect costs, such as OSHA's news release announcing your company's accident and citation, can be even more costly. The news release will explain to the world, mentioning your company by name, that the accident could have been avoided by following recognized safe practices for working around electrical hazards. Instantly, safety newsletters and blogs will pick up the story and in minutes the news is spread around the world.

It's hard to associate an exact dollar figure with these costs, but experience has shown us, without question, it is far more expensive to allow one of these preventable accidents to occur than it is to avoid it.

Aversion of high cost is only one argument made by upper management against properly protecting employees from electrical hazards. Another contention is that OSHA regulations do not explicitly require compliance with the NFPA 70E standard. This attitude borders on willful ignorance and must be addressed.

OSHA regulations concerning electrical hazards are a clear example of the saying, easier said than done. They state that you must protect employees from electrical hazards - shock and arc flash. OSHA requires proper personal protective equipment be provided as a line of defense against these hazards. OSHA requires specific safety related work practices be employed that are consistent with the associated electrical hazard. OSHA requires employers to perform, and document, assessments of the workplace to determine the PPE required; OSHA requires employers to train employees on the proper use of this PPE.

OSHA requires all of these things without giving you enough detail on how to accomplish them. That's where 70E comes in. It is a bridge between OSHA regulations and compliance. As top OSHA officials have said, If I were an employer, and I had to protect my employees from electrical hazards, the first place I would look is NFPA 70E (David Wallis, U.S. OSHA Director, IEEE interview, July 2004). Do not misunderstand: Items do not have to be explicitly spelled out in OSHA regulations for OSHA to expect you to do them. It does not matter that NFPA 70E is not mentioned by name in OSHA regulations; it is the recognized best practice for electrical safety in the workplace. OSHA does require employers follow recognized best practices.

Implementing NFPA 70E in all facilities is a good business decision. It protects the employee and the assets of the organization. Yes, it may involve a significant upfront investment, but it will protect the organization from rolling, potentially damaging costs for years to come. If an injury or fatality were to occur on your watch stemming from a circumstance warned against in NFPA 70E, it would be very difficult to defend.

Protection from arc flash and shock is not something for which to prepare for the future. It is required now. If you are not going to follow NFPA 70E then to which recognized best practice will you adhere? The cost of inaction on electrical safety is more than enough incentive to take the necessary steps to protect your organization's employees and capital, and, by extension, its bottom line.

**Sincerely,  
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President/Founder  
Lewellyn Technology**