

Solar Energy and the Fire Service

As the consumption of electricity continues to increase the demand for alternative energy sources will be increased as well. This class will provide a good understanding of how solar energy works in combination with the utility companies power grid and the associated dangers we would face at an emergency incident. Not only will we discuss the electrical operation and dangers in a residential setting, but we will also discuss the impact to truss loads, their failure and on conducting roof operations that have solar panels and their supporting systems installed. The same conditions can be applied to solar installations for commercials and industrial applications, but emergency operations become more complex due to the increased size of the solar panel components. The class will also contain information on the growing sector involving large energy storage configurations using lithium ion and FLO battery technology and their associated dangers and hazardous materials challenges facing emergency responders. Emergency response personnel are not equipped to handle the host of alternative energy source hazards that are becoming commonplace across their residential and commercial communities. This class has been designed to prepare first responders with the knowledge and practical applications to handle these emergencies effectively and safety. Topics include increasing solar energy awareness, hardware configurations, electrical operation, fire service dangers including electrical and HazMat and safety precautions needed. Additional information on how to interface with utility company representatives is provided.