

# HAZARD FACTORS OF ELECTROMAGNETIC RADIATION FROM ENERGY STORAGE POWER STATIONS



What information should power plants give employees about EMF risk? We recommend that power plants give at least the most relevant EMF risk information to employees, such as the Action Values from the EU Directive, how to recognize potential high exposure areas (signs and fences) and the possible health effects, including nausea, vertigo, phosphenes and so on (Health & Safety Executive 2016).



How do electromagnetic fields affect human health? The widespread use of various electrical and telecommunication applications that produce electromagnetic fields (EMFs) is increasing rapidly in the past few decades [1]. These (EMFs) affect human health as they are transformed partially into radiation waves [2].



Why is electromagnetic radiation a problem? It has become part of the global ecological problem on Earth and part of the general and workplace environments early in the 20th century. Electromagnetic radiation (EMR) is a form of environmental pollution which may hurt humans as well as wildlife.



What are the risks associated with radio frequency radiation (RFR) hazards? Probably aware of the many risks associated with Radio Frequency Radiation (RFR) Hazards. You're probably aware that RF emissions from these systems have the potential to cause catastrophic damage.



Should power plants have a 'heat map' of EMF exposure? Since power plants appear to be well-informed about precise EMF exposure in various locations on their premises, they could even include a 'heat map' of EMF exposure in their risk information system, as recommended by Koehler and Volckens (2011).

#### 4.2. Strengths and limitations

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What are the health risks of living near an electric substation? Living near an electric substation can pose some health risks. Since skin is directly exposed to these radiations, it can be badly damaged. Studies have been done on people that live within 300 meters of a substation. There is some evidence to suggest an increased risk of some type of cancer.



The energy stored and later supplied by ESSs can greatly benefit the energy industry during regular operation and more so during power outages. Electrochemical energy storage has taken a big leap in adoption compared to ???



As the number of electric vehicles (EV) increases, the number of EV chargers also increases. Charging infrastructure will be built into our close environment. Because of this, the assessment of the electromagnetic field ???

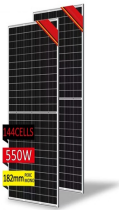


Although Amateur Radio is basically a safe activity, in recent years there has been considerable discussion and concern about the possible hazards of electromagnetic radiation (EMR), ???



If you are involved in military, aerospace or defense and have been around radar and communication systems, with high-power RF transmitters and high-gain antennas, you are probably aware of the many risks associated with ???

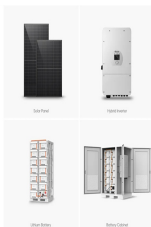
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A substation is used to step down high voltage (generated in power stations) for domestic and commercial usage. The aim of these substations is to provide electricity to a populated area. A typical substation includes: Power ???



The amount of energy absorbed depends on the various factors such as the type of radiation source, distance between the human and the radiation source, and many other factors including the physical characteristics ???



Chapter 14 - Radiation Hazards Chapter 14 - Radiation Hazards Print  
Chapter Ionizing radiation is a form of energy. Unlike some other types of energy, such as heat (infrared radiation) or ???