

OVERVOLTAGE FACT LIST

1. **Overvoltage, and its destructive effects, are well known but are often not recognized or understood.**
2. **Little is documented in terms of its magnitude and frequency.**
3. **It is difficult to identify, due to its sporadic nature, and often comes and goes undetected.**
4. **Because of all the above, its existence is sometimes denied.**
5. **Equipment failures due to overvoltage are often misperceived as defective equipment.**
6. **Power companies do not deny its existence; but they do not publish or otherwise inform the users that it exists, or warn users of potential periods in which it may occur.**
7. **With very few exceptions, electrical power distribution systems are inadequate to provide voltage within acceptable limits to all users at all times.**
8. **Power companies cannot prevent overvoltage because they can only react to its existence, usually in response to customer (user) complaints about failing appliances, etc.**
9. **The time of response can vary widely (anywhere between one minute and weeks) depending on many variables in the distribution system.**
10. **Overvoltage can occur at any time, due to many factors, but is most likely to occur during certain periods such as fast changing high load demands, as seen during severe cold weather periods.**
11. **Power companies are mandated by law to provide service without overvoltage.**
12. **Power companies are not held accountable by any regulation authority for overvoltage.**
13. **Power companies will sometimes reimburse damage costs due to overvoltage if proof is provided by the complainant.**
14. **Overvoltage can only be proved by the use of a voltage recorder.**
15. **Some power companies offer overvoltage insurance to users.**
16. **Electric resistance heaters are the most critical component of an HVAC system in terms of safety. Heat output is increased exponentially when overvoltage is applied.**
17. **At least one electric heat manufacturer provides protection against overvoltage which disconnects heating elements to prevent catastrophic failures.**
18. **These events are misperceived to be heater failures leading to their replacement with other brands that do not have overvoltage protection and essentially mask the effects of overvoltage which can lead to inevitable catastrophic failures.**