CURRENTS

JNEC's August 2023 Newsletter

Follow us on Facebook @JasperNewtonEC

Electric Car Safety Concerns: Fact or Fiction

Electric vehicles (EVs) and plug-in hybrids receive a lot of attention in the media. They get a lot of exposure, because the cars are becoming more common and because they are, well, just different than their gas-powered predecessors.

Plug-in hybrids run on electricity first and then once depleted, convert to gasoline for power.

True EVs run only on electricity (charged at home with 120 or 240 volts or at public charging stations). Some electric car enthusiasts use solar energy to power their 240-volt charging station. (An at-home 240-volt charging unit, known as a level 2 system, used with or without solar, should be installed by a qualified electrician.)

The strongest allure of EVs is obvious: they run on electricity, not gas. They're also fun to drive (they can get up and go!) and are becoming more affordable than the high-end versions offered by Tesla.

Aside from the excitement of driving right past the gas station, there are at least three main safety concerns surrounding electric cars:

Battery Fires and Explosions

The main fire risk posed by electric cars stems from the battery pack. In most cases, the packs are wrapped in an extra layer of protection. However, if the battery pack is exposed to severe external damage it could lead to an electrical short, which could start a fire.

A fatal Tesla crash in California was a prominent news story in spring 2018. The driver hit a median barrier and the car caught on fire. It was a tragic accident, but there is no evidence that EVs catch on fire more often or more easily than gas-powered cars. Moreover, it's not uncommon for any vehicle to catch on fire after a high-speed crash.

According to the National Highway Traffic Safety Administration (NHTSA), there have been fires involving electric cars, but not nearly as many as those involving gas-powered vehicles when compared mile per mile. That isolated fact doesn't mean EVs are necessarily safer; there are simply far fewer on the road.

In fact, the likelihood of EVs catching on fire from battery systems and the severity of fires and explosions "… are anticipated to be somewhat comparable to or perhaps slightly less than those for gasoline or diesel vehicular fuels," it states in a 2017 NHTSA report on electric and plug-in hybrid vehicles.

First Responder Safety

Once a lithium-ion battery catches fire, it can produce a slow-motion chain reaction, eventually igniting all the batteries it is connected to (within the battery pack). In 2014, a Tesla Model S lithium-ion battery reignited two times after it was involved in a fatal high-speed crash in Florida: once when it was being removed from the scene and once as it arrived at the storage yard. After that fatal spring 2018 Tesla crash in California, the battery pack reignited three times in six days.

Firefighters must use different tactics for EV fires than they do for regular vehicles, according to the U.S. Fire Administration (USFA). Lithium-ion batteries burn differently than regular car batteries, and methods normally used for gasoline fires may make the situation worse. Due to the possibility of a fire reigniting, an EV or hybrid vehicle must also be stored differently after an accident.

Pedestrian Safety

New owners of EVs often complain of people walking out in front of them in parking lots. Drivers eventually come to the realization that people just don't hear them coming and get used to the caveat of driving a nearly inaudible car. The National Highway Traffic Safety Administration is working on methods to address the whisper-quiet vehicles, such as requiring electric cars to emit audible sounds while operating at low speeds. This option is already featured on many electric cars currently on the market.

For more information on electrical safety, go to SafeElectricity.org.

Hurricane Preparedness

Hurricane Season is June 1- Nov. 30.

Preparedness Checklist:

- **Make an Evacuation Plan.** Find activated evacuation routes here: **DriveTexas.org** or by dialing (800) 452-9292. Call **2-1-1** to find out if you live in an evacuation zone.
- **Sign-Up for Emergency Alerts.** Make sure your device is enabled to receive Wireless Emergency Alerts (WEAs).
- **Prepare an Emergency Supply Kit.** Learn how to build an emergency kit here: **https://www.ready.gov/build-a-kit**
- **Review Your Home Insurance Policy.**
- **Register with State of Texas Emergency Assistance Registry (STEAR):** **https://stear.tdem.texas.gov/** or by dialing **2-1-1** if you live in evacuation zone and:
  - have a disability or medical needs and do not have a car or other vehicle to use in an evacuation.
  - have a disability or medical needs and do not have friends or family to help in an evacuation. ***STEAR Registry information collected is confidential***

Hurricane Preparedness Online Resources:
Texas Division of Emergency Management Website: **www.tdem.texas.gov**
Texas Department of State Health Services: **www.texasready.gov**
American Red Cross: **www.redcross.org**
U.S. Department of Homeland Security: **www.ready.gov**
Office of the Texas Governor Greg Abbott: **www.gov.texas.gov**

Preparación para Huracanes

La temporada de huracanes es del 1 de Junio al 30 de Noviembre.

Lista de verificación de preparación:

- **Haga un Plan de Evacuación.** Encuentre rutas de evacuación activadas aquí: **DriveTexas.org** o marcando (800) 452-9292. Llame **2-1-1** para averigüar si usted vive en una zona de evacuación.
- **Regístrese para recibir alertas de emergencia.** Asegúrese de que su dispositivo esté habilitado para recibir Alertas de Emergencia Inalámbricas (AEI).
- **Prepare un estuche de Suministros de Emergencia.** Aprenda cómo construir un estuche de emergencia aquí: **https://www.ready.gov/build-a-kit**
- **Revise su póliza de seguro de hogar.**
- **Regístrese en el Registro de Asistencia de Emergencia del Estado de Texas (RAEET):** **https://stear.tdem.texas.gov/** o marcando el **2-1-1** si vive en una zona de evacuación y:
  - tiene una discapacidad o necesidades médicas y no tiene un automóvil u otro vehículo para usar en una evacuación
  - tiene una discapacidad o necesidades médicas y no tiene amigos o familiares para ayudar en una evacuación. *** La información recolectada del Registro RAEET es confidencial ***

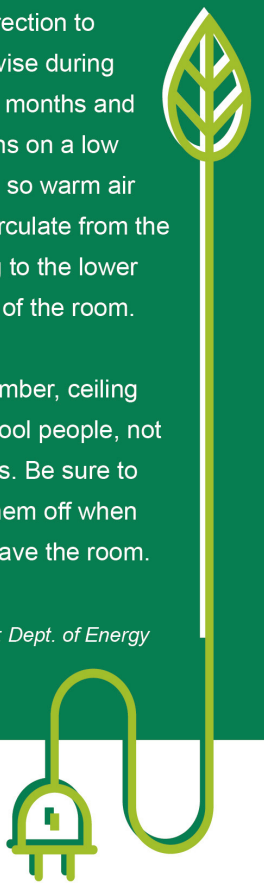
Recursos en línea para la preparación en caso de huracanes:
Sitio web de la División de Administración de Emergencias de Texas: **www.tdem.texas.gov**
Departamento de Servicios de Salud del Estado: **www.texasready.gov**
Cruz Roja Americana: **www.redcross.org**
Departamento de Seguridad Nacional de los Estados Unidos: **www.ready.gov**
Oficina del Gobernador de Texas Greg Abbott: **www.gov.texas.gov**

Energy Efficiency Tip of the Month

Did you know ceiling fans can make a room feel 4 degrees cooler? To save energy through ceiling fan use, remember to raise your thermostat a few degrees while fans are turned on. Ceiling fans can help improve comfort year-round. In the summer, operate ceiling fans in a counterclockwise direction. Reverse the direction to clockwise during winter months and set fans on a low speed so warm air can circulate from the ceiling to the lower levels of the room.

Remember, ceiling fans cool people, not spaces. Be sure to turn them off when you leave the room.

Source: Dept. of Energy



JNEC
JASPER-NEWTON ELECTRIC COOPERATIVE