

August 17, 2024

BY EMAIL

Accessibility
Pacific Gas and Electric
ADASupport@pge.com

Re: Notice of Dangerous and Discriminatory Conditions – LED Flashing Lights

Dear Pacific Gas and Electric,

California Vehicle Code (“CVC”) Section 25250 states, “Flashing lights are prohibited on vehicles except as otherwise permitted.” There is no California statute that authorizes the use of LED flashing lights on vehicles, and thus all LED flashing lights on vehicles are prohibited by CVC Section 25250. PG&E is using LED flashing lights on vehicles without legal authorization. Since government authorities have not enforced this code, this letter serves as a private enforcement action under the Americans with Disabilities Act and California Unruh Civil Rights Act.

The introduction of unregulated Light Emitting Diode (“LED”) products has segregated the public into two groups: those individuals without disabilities who are not acutely impacted by LED lights, and those individuals with disabilities who suffer acute adverse reactions to LED lights, including non-epileptic and epileptic seizures, migraines, vomiting, anxiety, panic attacks, impaired vision, reduced cognitive abilities, and suicidal ideations.

The US Department of Energy states that LEDs are a “radically new technology” that emit a “directional” light with “unique characteristics”.¹ It is the directional nature of LEDs and their unique spatial, spectral, and temporal characteristics which cause individuals with disabilities to suffer acute adverse neurological reactions when exposed to LED flashing lights such as on PG&E utility trucks. The US Food and Drug Administration is mandated by 21 U.S.C. 360ii(a) to maintain a radiation control program for LED products to minimize the exposure to, and emissions of, unnecessary LED light. However, the FDA has ignored this mandate, and thus all LED products are entirely unregulated, despite LEDs being a radically new technology with directional light and unique characteristics.

Here is a sampling of reports of neurological, psychological, and physical injury caused by LEDs:

¹ https://www1.eere.energy.gov/buildings/publications/pdfs/ssl/ssl_lessons-learned_2014.pdf

- Minnesota Department of Human Rights – LED RRFB – (<https://www.softlights.org/wp-content/uploads/2023/06/74059-6-15-2023-ECP-Memorandum-.pdf>)
- LED RRFB – Seizure / Concussion - (<https://www.softlights.org/wp-content/uploads/2022/09/MA-Incident-Report.pdf>).
- Emergency Vehicle – Seizure Reaction / Panic Attack - (<https://www.softlights.org/wp-content/uploads/2021/09/Encounter-with-Emergency-Vehicle.pdf>)
- LED Incident Reports - (<https://www.softlights.org/led-incident-reports/>)
- NYSPSC LED Streetlight Case 21-02623 Public Comments: (<https://tinyurl.com/3b9farmy>)

Pulsed LED light is particularly dangerous. Below are several examples of LED flashing light videos and their titles:

1. My LED Lights (epilepsy/seizure warning): (<https://www.youtube.com/shorts/gvtmhHbPeMU>)
2. LED Strobe Lights - Blue **Warning May Cause Seizure***: (https://youtu.be/K_oIWfOMKel)
3. How to Have a Seizure 101 (Warning Flashing Lights) (<https://www.youtube.com/shorts/1fGBrt2D9s4>)
4. Edmonds, WA RRFB installation: (<https://youtu.be/bdabrTTnf3w>)
5. 2015 Dodge Charger Police Car LED Police Lights outfitted by HG2 Emergency Lighting: (https://youtu.be/KJ_1CiNvtTo)
6. LVT Manual Strobe and Flood Light: (<https://youtu.be/FVqCqBi5wY>)

Seizure reactions are primarily a function of radiance, flash rate, and cycle depth. The higher the radiance, the more risk. The faster the rate, the more risk. The closer to digital pulsing, the more risk. All three factors play a role. A very high radiance LED can cause a seizure with zero flashing. A low radiance light can cause a seizure if the rate is high. A digital on/off has a higher risk of seizure than sine wave. As can be seen in the videos, the first three videos are marked with seizure warnings, whereas the other LED flashing lights are in public places, are unavoidable, are triggering seizures, but are not marked with seizure warnings.

Many companies believe that the Americans with Disabilities Act allows for a company to provide a reasonable accommodation when notified of a discriminatory barrier. However, this understanding is not correct when the issue involves alterations to a company facility. 42 U.S.C. 12181(2)(B) establishes PG&E as a commercial facility. A company facility is broadly interpreted to include company vehicles. 28 C.F.R. § 36.402(a)(1) states:

Any alteration to a place of public accommodation or a commercial facility, after January 26, 1992, shall be made so as to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs.

Since the LED flashing lights on PG&E vehicles were installed after 1992, there is an absolute requirement that this alteration not create a new discriminatory barrier where none

existed previously. There is no allowance for reasonable accommodation in this situation. LED light has unique spatial, spectral, and temporal properties that are debilitating for certain individuals with disabilities. The addition of LED flashing lights on PG&E vehicles was a major alteration that required extensive analysis to ensure that the radically new LED technology did not create a path-of-travel barrier for individuals with disabilities and to ensure that the altered area was still readily accessible and usable by individuals with disabilities. Due to the failure of the FDA to comply with 21 U.S.C. 360ii(a), and the decision by PG&E to implement LED technology without ensuring its safety, the LED products that have been installed on PG&E vehicles now need to be turned off and/or removed so that individuals with disabilities can regain full and equal access to government and business services.

On August 14, 2024, in the case Baker v. Petrovich involving LEDs creating a discriminatory barrier, the Court ruled that the case can continue, stating, “Petrovich’s demurrer to the first cause of action [The Americans with Disabilities Act] in plaintiff’s complaint is OVERRULED. (Code Civ. Proc., § 430.010, subd. (e).) **The Court finds that plaintiff has alleged facts sufficient to state this cause of action.** (42 USC 12181, subd. (7)(E); 28 CFR 36.101, 36.402; Martinez v. San Diego County Credit Union (2020) 50 Cal.App.5th 1048, 1060; see Serrano v. Priest (1971) 5 Cal.3d 584, 591; Compl., ¶¶ 2, 12, 15, 16, 30 – 33, 35 – 37.)”² (emphasis added). While this ruling is not the result of a trial and is not an appellate level ruling, this ruling nonetheless shows that company and government officials may not install unregulated, dangerous technology and simply let individuals with disabilities suffer the consequences.

LED flashing lights are prohibited by CVC 25250, 28 CFR 36.402(a)(1), and California Civil Code Section 51(b) because LED flashing lights on vehicles have not been authorized by the California Legislature, because LED flashing lights create a barrier to path-of-travel for individuals with disabilities, and because LED flashing lights cause acute adverse neurological reactions for individuals with disabilities. This letter is a good-faith effort to allow PG&E to correct the LED flashing light violations by turning off and/or removing LED flashing lights on PG&E vehicles without being subjected to litigation. However, failure to turn off and/or remove LED flashing lights from PG&E vehicles may result in a discrimination lawsuit.

Sincerely,

/s/ Mark Baker

President

Soft Lights Foundation

mbaker@softlights.org

² <https://www.yolo.courts.ca.gov/sites/default/files/yolo/default/2024-08/ATO-TEN-240815.pdf>