

Frequently Asked Questions In-Use Off-Road Diesel Vehicle Regulation

Electrically-Powered Ground Support Equipment (GSE) Used At Airports FAQ

Revised May 2011

Q - What credit does the off-road regulation give for the purchase of electric ground support equipment (GSE)? Can electric GSE count towards the Large Spark Ignition Fleet (LSI) regulation in addition to the off-road regulation?

A - The off-road regulation gives different credit for the purchase of electric GSE, depending on whether the vehicle was purchased prior to January 1, 2007, or on or after that date. Additionally, the fleet may include an electric vehicle 25 horsepower or greater in the fleet average calculations, as specified in section 2449(d)(1)(B), as long as its owner can demonstrate the following:

- (1) The electric vehicle perform the work of a diesel vehicle and must be used for a purpose for which diesel vehicles are predominately used;
- (2) The electric vehicle must be used predominately outdoors; and
- (3) The electric vehicle cannot already be included in the fleet average requirements for large spark ignition engine fleets (except as described below).

For GSE electric vehicles purchased before January 1, 2007: A fleet may apply 20 percent of the horsepower of the electric vehicles towards compliance with the off-road regulation. In addition, the entire horsepower of the airport electric GSE may be counted toward the Fleet Requirements for Off-Road Large Spark-Ignition (LSI) Engine-Powered Forklifts and Other Industrial Equipment (Title 13, California Code of Regulations, sections 2775, 2775.1, and 2775.2).

For all electric vehicles (GSE and non-GSE) purchased on after January 1, 2007: For an electric vehicle that replaced a diesel vehicle in the owner's fleet, the horsepower of the diesel vehicle replaced may be used as the electric vehicle's horsepower. For an electric vehicle added to the fleet that did not replace a diesel vehicle, the fleet owner may apply to the Executive Officer to use the horsepower of a diesel vehicle that serves the same function and performs equivalent work to that of the electric vehicle. Fleets may decide whether to apply the credit to either the off-road regulation or the LSI regulation, but not both.

While this document is intended to assist fleets with their compliance efforts, it is the sole responsibility of fleets to ensure compliance with the In-Use Off-Road Diesel Vehicle Regulation.

For compliance dates in 2014 through 2016, the max horsepower of all electric vehicles purchased on or after January 1, 2007, will receive double credit towards the Off-road regulation. For compliance dates in year 2017 and beyond, the max horsepower of all electric vehicles purchased on or after January 1, 2007, will receive single credit towards the Off-road regulation.

The applicable section of the Off-Road regulation is Title 13, 2449(d)(1)(B). The applicable section of the LSI regulation is Title 13, Section 2775(d) definition of "Fleet Average Emission Level". All criteria listed in the regulations must be met in order for a fleet to receive credit for an electric vehicle. Please review the regulatory language for a more thorough understanding, which may be found at:
Off-road regulatory language: www.arb.ca.gov/ordiesel
LSI regulatory language: www.arb.ca.gov/lsi

For more information on what horsepower or emission factors to use for electric vehicles, please see the Emission Factors FAQ, which is available on the off-road regulation knowledge center at:
www.arb.ca.gov/msprog/ordiesel/knowcenter.htm

Q - How does the horsepower of electric GSE count in determining a fleet's requirements?

A - Electric GSE are accounted for in a fleet's emissions averages. This is a benefit to a fleet because electric GSE has emission factors of zero.

The horsepower of electric GSE does not apply in the determination of BACT requirements. Also, the horsepower of the electric GSE is not included when determining fleet size.

This provides an incentive for fleets to purchase electric GSE because these greatly help a fleet to meet the emissions targets and does not create a situation where the inclusion of electric GSE increases a fleet's BACT requirements.

An example:

A fleet owns a total of 6,000 horsepower, which includes 4,000 horsepower of off-road diesel-powered vehicles and 2,000 HP of electric GSE. The fleet averages are calculated using the 6,000 HP. The fleet's BACT requirements and fleet size is based on the 4,000 HP (excludes electric GSE); therefore, the fleet in this example is a small fleet.

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