



Regulatory Advisory

Last Updated January 2011



TRU Advisory: 08-02

Electric Standby/Hybrid Electric Compliance Option

The purpose of this advisory is to describe how transport refrigeration units (TRU) that are equipped with electric standby (E/S) or hybrid electric TRUs may be used to comply with the in-use performance standards of the TRU Airborne Toxic Control Measure (ATCM) as an Alternative Technology (see title 13, California Code of Regulations, section 2477, subsection (e)(1)(A)3.a.).

E/S-equipped TRUs and hybrid electric TRUs are Alternative Technologies that qualify to meet the Ultra-Low-Emission TRU (ULETRU) in-use performance standard only if the TRU is not operated under diesel engine power while at a facility, except during an emergency¹. This also applies to meeting the less stringent Low-Emission TRU In-Use Performance Standard (LETRU).

To qualify, the TRU engine use must be eliminated at all facilities, with narrow exceptions:

- 1) During an emergency,
- 2) During normal ingress and egress yard maneuvering, and
- 3) To make short-duration stops to unload refrigerated goods at restaurants, grocery and convenience stores, and similar facilities, provided these stops are within the following limitations:
 - No more than two TRUs are present at a time, and
 - The delivery stay is no longer than 30 minutes.

E/S-equipped TRUs would be required to plug-in at restaurants, grocery and convenience stores and similar facilities to qualify for compliance if these limits are exceeded.

A robust recordkeeping system would be needed to demonstrate diesel engine operation is eliminated while at all facilities. The following records, in combination, may provide this demonstration:

- Gate time stamps or logs at each facility gate exit and entry (or arrival/departure).
- Engine hour meter readings at each entry and exit.
- E/S hour meter readings at each entry and exit.
- Diesel fuel consumption records for each unit.

Reporting to the California Air Resources Board (ARB) is not required; but, records going back three years would need to be made available to ARB inspectors to demonstrate compliance.

Warning: E/S may not be a practical compliance option for many TRU owners. TRUs that visit distribution centers that are not owned by the TRU owner may not have access to a compatible electric power plug at all times. E/S may only be practical where TRUs load at the TRU owner's distribution center and are used for delivery routes with short duration stops.

¹ "Emergency" means any of the following times:

- (A) A failure or loss of normal power service that is not part of an "interruptible service contract" (see definition in subsection (d));
- (B) A failure of a facility's internal power distribution system, provided the failure is beyond the reasonable control of the operator;
- (C) When an affected facility is placed under an involuntary "rotating outage".

Related Frequently Asked Questions:

Question #1: Does electric standby have to be verified?

Answer #1: No. Alternative technologies that eliminate TRU diesel engine operations while at all facilities, within narrow exceptions as noted above, do not require verification. Also, recordkeeping that demonstrates compliance with these conditions (as described above) may be required. Verification is required (under 13 California Code of Regulations, section 2700 to 2710) for all diesel engine exhaust retrofit systems, alternative diesel fuels, fuel cells that use diesel fuel reformers, and other systems that do not emit diesel particulate matter or increase public health risk while at a facility.

Question #2: Do I also have to retrofit my engine exhaust with a Verified Diesel Emission Control Strategy to cut my emissions while operating on the road?

Answer #2: No, but to qualify as an Alternative Technology, the TRU diesel engine operations must be eliminated while at all facilities, within the narrow exceptions noted above. Also, recordkeeping may be needed to demonstrate compliance with these qualifying conditions, as described above.

Question #3: If a TRU owner had an E/S-equipped TRU before the LETRU compliance date, can they count this as early compliance and thus get a delay in the ULETRU compliance date?

Answer #3: Just having E/S on a TRU does not automatically qualify the TRU as being in compliance with the in-use performance standards in the TRU ATCM. To qualify as an Alternative Technology compliance strategy, the owner must be able to show that the E/S-equipped TRU is operated in a way that eliminates the TRU diesel engine operation while at a facility. Qualifying Alternative Technologies meet ULETRU, and would therefore also meet the less stringent LETRU. Thus, there would be no need for a delay for ULETRU. A robust recordkeeping system would be needed to demonstrate compliance with these qualifying conditions, as described above.

Question #4: If an E/S-equipped TRU is at a distribution center, does it need to be plugged in at all times to qualify for compliance with LETRU and ULETRU?

Answer #4: To qualify as an Alternative Technology compliance strategy, the owner must be able to show that the E/S-equipped TRU is operated in a way that eliminates the TRU diesel engine operation while at a facility. Qualifying Alternative Technologies meet ULETRU, and would therefore also meet the less stringent LETRU. A robust recordkeeping system would be needed to demonstrate compliance with these qualifying conditions, as described above. An inspector may need to see more than just a TRU being plugged in to demonstrate the TRU qualifies for compliance at all facilities.

Question #5: If an E/S-equipped TRU is at a delivery point longer than 30 minutes, or while there are more than 2 TRUs present at one time, can the driver just shut the TRU down?

Answer #5: The answer to this question is similar to that provided for the question immediately above. A robust recordkeeping system would need to demonstrate compliance with the qualifying conditions described above.

For more information

To obtain a copy of the regulation or other related compliance assistance documents, visit the TRU website at <http://www.arb.ca.gov/diesel/tru/tru.htm>. Additional questions may be addressed by calling the toll-free TRU Help Line at 1-888-878-2826 (1-888-TRU-ATCM).

If you require special accommodation or language needs, please call 1-888-878-2826 or email tru@arb.ca.gov. TTY/TDD/Speech users may dial 711 for a California Relay Service.