# Document Summary

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# Revision History

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| 2320-0211431 | Initial | Feb 10, 2023 | Middleton, B. | Initial release |
| 2320-0211431 | 1 | Mar 6, 2023 | Middleton, B. | Updated definitions |
| 2320-0211431 | 2 | Mar 28, 2023 | Middleton, B. | Removed 3.6 Brakes, 3.9 Stripped Chassis and Packer body trucks |
| 2320-0211431 | 3 | Apr 13, 2023 | Middleton, B. | Updated definitions |
| 2320-0211431 | 4 | Apr 14, 2023 | Middleton, B. | Updated definition |

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# SCOPE

This specification establishes the minimum requirements for Medium and Heavy Duty Electric Vehicles. These vehicles will be used on highways, city/county roads and shall be designed to operate under typical ambient temperatures (which can range from 10° to 120° F).

# APPLICABLE LAWS and INDUSTRY STANDARDS

Specifications and standards referenced in this document in effect on the opening of the solicitation form a part of this specification where referenced. Each vehicle delivered shall be fully compliant with all Federal and State regulations for vehicles in effect as of the date of manufacture.

## LAWS and REGULATIONS

* + 1. SAFETY: Each vehicle delivered shall conform to the Federal Motor Vehicle Safety Standards (FMVSS) and the California Vehicle Code (CVC) requirements in effect as of the date of manufacture.
    2. BRAKES: All motor vehicle brake friction materials must meet the requirements as identified in Health and Safety Code Section 25250.51
    3. EMISSIONS: The engine shall be California Air Resource Board (CARB) certified to operate on-highway in the State of California at the time of sale.
    4. WHEEL WEIGHTS: Wheel weights shall contain no more than 0.1 percent lead by weight (Health and Safety Code Section 25215.6).
    5. PAINT: Exterior shall be painted with a solar reflective color (white, silver metallic or gold metallic) per SAM Section 3620.1

## DEFINITIONS

* + - GVWR – Gross Vehicle Weight Rating
    - Curb Weight – The weight of the vehicle including a full tank of fuel and all standard equipment. It does not include the weight of any passengers, cargo, or optional equipment.
    - WB – Wheelbase
    - OEM – Original Equipment Manufacturer
    - BEV – Battery Electric Vehicle
    - FCEV – Fuel Cell Electric Vehicles
    - 4x2 – Two wheel drive
    - 4x4 – Four wheel drive

# TECHNICAL REQUIREMENTS

## GENERAL

Each vehicle shall be new (unused), current production as specified in the solicitation at the line item description. Vehicles bid must meet or exceed the requirements in the solicitation line item description. Each vehicle shall be supplied with all equipment and accessories indicated as standard equipment in the manufacturer’s published literature (or web site). Optional equipment necessary to meet the minimum requirements of this specification shall be included.

Vehicles that are produced by converting an existing gasoline or diesel fueled vehicle into a BEV shall meet the Original Equipment Manufacturer (OEM) Body Builders Standards and Guidelines.

## CHARGING

All applicable vehicles shall come equipped with charging plugs that allow for charging at the maximum available level via CCS-Type 1 connection. Proprietary charging plugs or cables shall be supplied with adapter to meet CCS-Type 1 connection.

## BATTERY ELECTRIC VEHICLE

Battery Electric Vehicles (BEVs), use a battery pack to store the electrical energy that powers the motor. The batteries are charged by plugging the vehicle in to an electric power source. These vehicles are classified as zero-emission vehicles because they produce no direct exhaust or tailpipe emissions.

## FUEL CELL VEHICLE

Fuel Cell Electric Vehicle (FCEV) use fuel cells, sometimes in combination with a small battery or supercapacitor, to power its onboard electric motor. The fuel cells in these vehicles generate electricity generally using oxygen from the air and compressed hydrogen. These vehicles are classified as zero-emissions vehicles that emit only water and heat.

## RANGE

All vehicles shall have at least an 80 mile range at maximum GVWR

## MISCELLANEOUS EQUIPMENT

The following items (supplementing, if necessary, those items already cataloged as standard equipment) shall be furnished:

* + - Power steering
    - Tilt steering wheel
    - Heater / Air Conditioner
    - AM/FM Radio
    - Back-up alarm, 97db (minimum)
    - Original Equipment Manufacturer (O.E.M.) floor mat sets installed in all seating rows where the vehicle comes with carpeted floors

## VANS

The solicitation line item description and the technical questionnaire shall specify the configuration, which is defined as follows:

* Cargo Step Van: Also known as a walk-in delivery or multi-stop \*van which are equipped with Two (2) entry steps on both the driver and passenger side of the vehicle, sliding entry doors on both the street and passenger side of the vehicle, a pass through from the cab to the cargo area, a full access rear entry door(s), and seating for a driver (at minimum).
* Cargo Panel: Equipped with at least 2 passenger doors and cab seating for 2passengers, with at least 1 cargo access door on the passenger side, and full access rear doors, a pass through from the cab to the cargo area.
* Passenger: Equipped with at least 3 passenger doors and seating for at least 12 passengers.

## TRUCKS

The solicitation line item description and the technical questionnaire shall specify the cab configuration, which is defined as follows:

All trucks shall be equipped with at least 2 doors and seating for 2-3 passengers

* Cab Over: Also known as a tilt cab and features an extremely short front bumper to back-of-cab dimension. Cab over trucks shall include a provision for tilting the cab forward on a pivot to provide access to the area where the engine would normally be.
* Cutaway: A cutaway cab offers an opening located in the rear of the cab allowing the driver to fully access the body interior.
* Tractor: "tractor" is a vehicle designed and used primarily for drawing other vehicles and not so constructed as to carry a load, other than a part of the weight of the vehicle and the load so drawn.