

Proposed Advanced Clean Truck Sales Regulation Potential Modifications

Sacramento, California February 20, 2020

Today's Overview

- Initial staff proposal and Board direction
- How to increase zero emission vehicle (ZEV) sales
- How to streamline fleet reporting
- Next steps





Initial Staff Proposal and Board Direction

As Proposed December 12, 2019

Initial Advanced Clean Trucks Proposal

Manufacturer ZEV Sales

 Must sell ZEVs as a percentage of annual sales

Large Entity Reporting

- One time reporting in 2021
- Vehicles, facilities, contracted vehicle services



Initial ZEV Sales Proposal

- Manufacturers with California sales.
 - Exemption for <500 annual sales
- Zero-Emission Powertrain Certification
- Credit for near-zero-emission vehicles
 - Minimum all-electric range
 - Up to 75% of a ZEV credit
- Credits tradable across weight classes
- Minimum tractor sales required







Model Year (MY)	Class 2b-3 ¹	Class 4-8	Class 7-8 Tractors
2024	3%	7%	3%
2025	5%	9%	5%
2026	7%	11%	7%
2027	9%	13%	9%
2028	11%	24%	11%
2029	13%	37%	13%
2030 ²	15%	50%	15%

- 1. Excludes pickups until 2027 MY
- 2. 2030 MY requirements continue after 2030

Note: Class 2B-3 (GVWR: 8,501-14,000 lb.), Class 4-8 (GVWR: >14,000 lb.), Class 7-8 tractor (GVWR: >26,000 lb.)



Initial Large Entity Reporting Scope

Businesses: >\$50 Million in Revenue

• With facilities in California (May or may not own vehicles)

Large Fleets: Own 100+ Vehicles

• With facilities in California

Brokers: Directing 100+ Vehicles

• To or from California

Government: All Levels

• Municipalities, State, Federal



Initial Large Entity Reporting Summary

Section	Description
General Entity	Business type, size, contactSubcontractor/subhauler information
Grouped Facility	 How many of each type, list of addresses Where goods are being moved Typical service or freight contract types
Representative Facility	 Number of truck trips in 1 week sample Detailed facility characteristics, supplier counts
Grouped Vehicles	Operational characteristics, purchase patternsWhere assigned, existing on-site infrastructure



Why Large Entity Reporting is Needed

- Support zero emission (ZE) regulatory frameworks
 - Fleet standards, fleet purchases, contracting with ZE fleets, ZE zones
- Ensure level playing field
 - Large fleets vs small fleets
 - Own trucks vs outsourced truck services
- Assess infrastructure needs
 - Energy demand, barriers, build-out planning
 - On-route fueling location and potential facility requirements
- Match technology with duty cycles
 - Understand fleet specific use cases
 - Compare to available vehicle capabilities



Board Direction from Intial Hearing

- Increase the number of zero-emission trucks sold and deployed
- Evaluate EMA proposal of 100% ZEV sales by market segment
- Accelerate benefits in disadvantaged communities
- Work with industry to streamline the reporting requirement
- Expedite complementary zero-emission fleet rules
- Establish pathway to 2045 carbon neutrality
- Additional considerations
 - (eg. extend near-zero emission vehicle (NZEV) credit)



Comments, Questions, Clarifications?





Updates Since December

Steps Since December

- Meetings with CalChamber, CCEEB, EMA, NGO's, CTA and fleets
- ACT Fleets workshop on February 12, 2020
 - ZEV goals by market segment
 - Discussed EMA proposal
- Compiled new announcements for ZEV truck models



Established Aggressive Goals and Pathway to 2045 Carbon Neutrality

- All ZEV fleet by 2035
 - Drayage trucks
- All ZEV fleet by 2040
 - First/last mile delivery, refuse trucks, and local buses
- All ZEV or NZEV by 2040
 - Utilities and government fleets
- All ZEV or NZEV by 2045
 - All other truck segments where feasible



EMA Proposal

- 100% ZE sales by segment
 - 2023 School buses and stepvan sales to municipalities
 - 2024 All sales to public utilities and all yard tractor sales
 - 2025 All stepvans, airport service vehicles, all shuttle bus sales
 - 2026 All refuse trucks
 - 2027 Concept continues for other segments
- Discussed at ACT Fleet workshop on February 12, 2020

EMA Proposal Considerations

- Cannot incorporate into manufacturer sales proposal by May 2020
 - Would require new rulemaking for 100% ZEV purchases by fleets
 - Scope of notice for manufacturer sales did not include fleet rules
- Challenges require more time to address
 - Need more exceptions if 100% purchases start earlier
 - o Variable use, small fleet, infrastructure barriers, emergency use
 - Use case for tractors not known to manufacturer at time of sale
 - o Drayage, last mile delivery, short-haul, other
- Proposing that ACT Fleet rule include 100% ZEV purchases where/when feasible
 - Initial staff proposal accelerated; estimated in 2021/2022



Recent ZEV Pickup Truck Announcements

- Multiple ZEV pickup truck announcements
 - Bollinger Motors Medium-duty BEV pickup and SUV by 2021
 - Ford BEV F-150 pickup anticipated 2021
 - GM Electric pickup anticipated 2021, BEV Hummer
 - Nikola BEV and FCEV pickup truck annoucement
 - Rivian BEV pickup and SUV starting 2020
 - Tesla medium-duty Cybertruck starting 2021
- Some to be in Class 2b or Class 3





How to Increase ZEV Sales

Summary of ACT Sales Concepts

- Start pickup requirements in 2024 (Class 2b-3)
- Align early ZEV sales in Class 4-8* to match EMA proposal sales
- Increase Class 7-8 tractor sales
 - Align with ZE drayage fleet goal by 2035
 - Ensure benefits for disadvantaged communities
- Increase ZEV sales after 2030 MY to align with 2045 ZEV fleet goal
 - Extend NZEV credit
- Other technical changes



Stronger ACT Concept: Manufacture Areas to Increase ZEV Sales Numbers

- Increase Class 2b-3 ZEV sales by including pickups
- Increase 2027-2030 ZEV sales
 - Match EMA sales in Class 4-8
 - Increase 2b-3 sales by 2030
 - Increase tractor sales by 2030
- Increase percentages post 2030 to set clear goals on pathway to 2045
- Looking for feedback on how much to increase sales percentages

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2029	13%	37%	13%
2030	15%	50%	15%
2031	15%	50%	15%
2032	15%	50%	15%
2033	15%	50%	15%
2034	15%	50%	15%
2035+	15%	50%	15%



Extend Credits for NZEVs

- Hybrid-electric vehicles with a minimum all-electric range
- Proposing to extend credit from 2030 to 2035
- What should criteria be post 2030?
 - Increase minimum all-electric range to 75 miles
 - Phase out NZEV credit value
 - Other suggestions



Other Technical Changes

- §1963(c)(5) "Class 4-8 Vehicle Group" definition
 - Clarify intent by explicitly including yard tractors
- §1963(c)(13) "Manufacturer" definition
 - Modify to exclude powertrain-only suppliers?
- §1963.1(a)(1) Deficit generation
 - Clarify deficit calculation language
- §1963.2(g) Limited credit lifetime
 - 5 years from end of model year to match Phase 2 GHG
- §1963.2(i) No double-counting for Advanced Clean Cars ZEVs
 - Clarifications to prevent double-counting of NZEVs



Other Technical Changes (Continued)

- §1963.3(b) Requirement to make up a deficit
 - Clarify that manufacturers have one year to make up a deficit
- §1963.3(c) Credit retirement order
 - Rearrange credit retirement order per manufacturer feedback
 - First to expire are first out, NZEV credits before ZEV credits
- §1963.3(e) Tractor deficits must be met with tractor credits
 - Provide flexibility to use up to 20 credits from any ZEV category
- §1963.4 Reporting and recordkeeping
 - Clarify all due dates are 90 days after the end of the model year



Comments, Questions, Clarifications?





How to Streamline Large Entity Reporting

§2012 - §2012.3

Summary of Potential Changes to Large Entity Reporting

- Adjust scope and applicability to fleets
- Clarify definitions
- Use alternative methods to collect facility information
- Clarify vehicle reporting
- Other issues



Modify Scope and Definitions

- §2012 Scope, applicability, and definitions
- Limit reporting to owners/operators of vehicles >8,500 lb. GVWR
 - Government fleets
 - Fleets with >\$50 million in revenue
 - Other fleets and brokers that own or direct >50 vehicles
- Clarify definitions
 - Broker, subhauler, subcontractor
 - Vehicle backup/spare, where assigned/domiciled
 - Other



Minor Changes to General Entity Questions

- §2012.1 General entity characteristics
- Clarify questions about sustainability plans
- Ask for number of trucks under contract regardless of contract period



Remove Grouped Facility Questions

- Remove section 2012.2 Number of facilities by category, characteristics, shipment/service contracts, representative facility details and truck traffic
- Seek to gather information through contractor
 - Identify high traffic facility types, emission hotspots
 - Identify locations for fueling/charging infrastructure at stores, warehouses, cold storage facilities with suitable dwell times
 - What entities contract for different types of truck services
- Work directly with stakeholders for survey participation



Minor Changes to Vehicle Fleet Questions

- §2012.3 Vehicle type, usage and assigned facility questions
 - Include "goalpost" language to clarify expectations/bins
 - Location sensitivity (clarify no home addresses)
 - Add flexibility to pick baseline date for fleet composition
 - Clarify one address per parcel or for adjacent facilities
 - Optional question for cost of existing infrastructure
- Data to be used for assessing fleet needs for ACT Fleet rule
- Supports early utility planning for infrastructure rollout



Other Reporting Issues

- Revisions to add flexibility and encourage early reporting
- Optional questions do not need to be in rule language
- Exploring how to allow for clarifications of reported information
 - Eg. Staff to contact fleet to address apparent anomalies
- Suggestions to minimize confidentiality concerns



Summary of Proposed Changes to Large Entity Reporting

Section	Potential Changes
Scope, Applicability, §2012	 Limit scope to owners/operators vehicle (>8,500 lb. GVWR) Government fleets, entities with >\$50 million revenue, and Other fleets/brokers that own or direct >50 vehicles
General Entity Questions §2012.1	Minor changes for clarity
Facility Questions §2012.2	 Remove entire section Use contractor to collect representative sample data
Vehicle Questions §2012.3	Optional baseline fleet date and minor changes



Comments, Questions, Clarifications?



Next Steps

- Revised regulation language to be posted in March 2020
 - Available for 15-Day change comment period
- Final recommendation to Board planned on May 28, 2020

