

## MAJOR REGULATIONS STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

DF-131 (NEW 11/13)

### STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

Agency (Department) Name <b>Air Resources Board</b>	Contact Person <b>Emily Wimberger</b>	Mailing Address 1001 I Street, Sacramento, CA 95814
Email Address <b>ewimberg@arb.ca.gov</b>	Telephone Number <b>(916) 327-5932</b>	
<p>1. Statement of the need for the proposed major regulation.</p> <p>The proposed amendment is developed to help meet the goals of the Zero Emission Vehicle (ZEV) Regulation's fast refueling credit provision while preventing excessive credit generation that could lead to substantial reductions in ZEV credit sales. This amendment is required to ensure that only the appropriate amount of fast refueling ZEV credits are issued to encourage innovative strategies on range extension, but not excessive credit generation.</p>		
<p>2. The categories of individuals and business enterprises who will be impacted by the proposed major regulation and the amount of the economic impact on each such category.</p> <p>The primary entities affected by the proposed amendment are ZEV manufacturers that will sell Model Year (MY) 2017 automobiles in California with battery exchange capabilities that qualify for ZEV fast refueling credits. The direct cost impact to the affected entities would be up to \$252 million for MY 2017. Since MY 2018 and beyond ZEVs will be awarded credits only based on standard driving cycle electric range, the proposed amendment would only affect MY 2017 ZEVs.</p>		
<p>3. Description of all costs and all benefits due to the proposed regulatory change (calculated on an annual basis from estimated date of filing with the Secretary of State through 12 months after the estimated date the proposed major regulation will be fully implemented as estimated by the agency).</p> <p>Costs: The proposed amendment does not impose any direct costs on individuals. However, the amendment imposes costs, in the form of reduced potential revenue, on ZEV manufacturers that will sell MY 2017 automobiles in California with battery exchange capabilities that qualify for ZEV fast refueling credits. These ZEV manufacturers under the proposed amendment could lose an estimated \$252 million in credit revenue. There are also additional indirect costs as a result of the estimated direct costs.</p> <p>Benefits: There are no substantial benefits directly introduced to individuals or to California businesses by the proposed amendment.</p>		
<p>4. Description of the 12-month period in which the agency estimates the economic impact of the proposed major regulation will exceed \$50 million.</p> <p>The estimated economic impact of the amendment is expected to exceed \$50 million in a 12-month period after implementation of the regulation. While the estimated \$252 million in direct costs is modeled to be incurred evenly over a 24-month period, the total economic impact of the amendment may exceed \$50 million in a 12-month period as a result of the regulation's indirect and induced cost impacts. Further, it is possible for the estimated direct costs (\$252 million) to be incurred over a time period shorter than 24 months. The 12-month period may begin on, or after, January 2 of the 2017 Calendar Year (CY), and extend into CY 2018.</p>		

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5. Description of the agency's baseline:

For the baseline scenario, ARB utilized the Regional Economic Models, Inc. (REMI), specific to California, to model the macroeconomic impact of the ZEV Fast Refueling Proposal, which assumes the California economy absent the proposed amendment as the baseline. REMI Policy Insights Plus (PI+) is utilized to provide year-by-year estimates of the total impacts of the proposed amendment, pursuant to the requirements of SB 617 and the California Department of Finance (DoF). ARB uses the REMI PI+ one-region, 160-sector model that has been customized by the DoF to include California-specific data on population, demographics, and employment.

6. For each alternative that the agency considered (including those provided by the public or another governmental agency), please describe:

- a. All costs and all benefits of the alternative
- b. The reason for rejecting alternative

Alternative 1: No Action.

a. Alternative 1 would impose no additional costs on consumers or ZEV manufacturers. This scenario would allow the ZEV Regulation to continue as it was written in CCR, Title 13, § 1962.1.

b. Alternative 1 does not sufficiently meet the goals of the proposed amendment, which is to eliminate the potential for excess generation of fast refueling ZEV credits. Therefore, it is not a viable alternative to the proposed amendment.

Alternative 2: Remove the Battery Exchange Program from Qualifying as Fast Refueling.

a. Alternative 2 would have a direct cost to ZEV manufacturers, as ZEV credit revenue would decline relative to the current ZEV Regulation. That direct cost is \$262.5 million.

b. While Alternative 2 may provide the most cost-effective solution, it does not provide the desired encouragement for development of innovative methods to refuel ZEVs at speeds equivalent to those of gasoline- or diesel-powered cars. Therefore, it does not meet the goals of the ZEV Regulation and is not a viable alternative to the proposed amendment.

7. A description of the methods by which the agency sought public input. (Please include documentation of that public outreach).

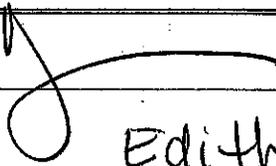
Starting in May 2013, ARB held three public workshops on ZEV regulation modifications including modifications on credits earned by battery exchange. These public workshops engaged representatives from manufacturers, Section 177 states, and environmental advocates. The public workshops were held in Sacramento on May 20, 2013, July 14, 2014, and June 5, 2015, and were webcast to encourage participation from stakeholders that could not attend in person.

After the October 2014 Board Hearing, ARB prepared a concept proposal for amending the battery exchange provision of the ZEV Regulation based on direction from the Board to provide additional ZEV credits to a vehicle for only one fast refuel. In March 2015, ARB distributed the concept proposal through a listserve to solicit regulatory alternatives from stakeholders. However, ARB did not receive any alternative proposals by the requested deadline.

8. A description of the economic impact method and approach (including the underlying assumptions the agency used and the rationale and basis for those assumptions).

ARB expects the proposed amendment would directly impact the revenue stream of manufacturers whose vehicles generate fast refueling credits – with the change in the number of credits awarded for fast refueling impacting net earnings. To estimate the economic impacts of the proposed amendment, ARB assumes all direct cost impacts imposed on ZEV manufacturers are passed on to California vehicle owners through an increase in the purchase price of new vehicles.

Under the proposed amendment, vehicle manufacturers are expected to adjust the consumer price of all vehicles they produce (including conventional petroleum vehicles and ZEVs) to offset losses in credit revenue. Thus, as modeled, the estimated \$252 million direct cost to manufacturers is entirely passed through to consumers through an increase in the consumer price of new motor vehicles. The increase in the price of new motor vehicles reduces the purchasing power of consumers as they reduce their spending in other categories to offset the higher vehicle purchase price.

Agency Signature	Date 6/19/15
 Edith Chang for Richard Corey	