Attachment O - Additional Documents or Incorporated Documents Added to the Record

In the interest of completeness and in accordance with Government Code section 11347.1, subdivision (a), staff has also added to the rulemaking record and invites comments on the following additional documents relied upon for the proposed regulations:

1. Updates to Staff Report

   Revised Tables to ISOR Appendix G, ACC II ZEV Technology Assessment (included as an Attachment P to this notice)

   This document presents updates and corrections to Appendix G of the ISOR. The updates presented in Attachment P reflect the changes staff propose to the ACC II ZEV Technology Assessment (released on April 12, 2022), and do not include any updates to the methodology or inputs to the incremental ZEV cost calculations.

   The proposed changes only impact the incremental ZEV technology cost values printed in the related tables. In ISOR Appendix G, Tables 31 and 32 incorrectly displayed the incremental costs for the identified ZEV technologies. However, those incorrect values were not used in any of the economic modeling. The ZEV Cost Workbook (*https://ww2.arb.ca.gov/sites/default/files/2022-06/ZEV_Cost_Modeling_Workbook_Update_March_2022_1.xlsx*) contains the correct values and staff propose to update Tables 31 and 32 accordingly.

2. Incorporated Documents

   INL/EXT-15-34184 Battery Test Manual for Electric Vehicles," Revision 3, June 2015 *https://inldigitallibrary.inl.gov/sites/sti/sti/6492291.pdf*

   SAE J1979-3, "E/E Diagnostic Test Modes: Zero Emission Vehicle Propulsion Systems on UDS (ZEVonUDS)", published draft June 20, 2022 (subject to copyright)

   SAE J2534-2_202012, "Optional Pass-Thru Features," December 2020 (subject to copyright)

   SAE J2534-5_0404_202201, "Pass-Thru Interface – Alternate Platforms for API Version 04.04," January 2022 (subject to copyright)

   SAE J2534-2/9_0500_202201, "Pass-Thru Extended Features – Ethernet NDIS," January 2022 (subject to copyright)

SAE J2534-5_0500_202201, "Pass-Thru Interface – Alternate Platforms for API Version 05.00," January 2022 (subject to copyright)

3. Spreadsheets and References Added

CARB 2022a. California Air Resources Board. 2022. MDV Cost Analysis for SRIA – ACC II. This is a spreadsheet of the data used to calculate the MDV cost for ACC II.

CARB 2022b. California Air Resources Board. 2022. MDV Fleet Average Calculations – ACC II. This is a spreadsheet of the data used to support the fleet average standards for ACCII.

CARB 2022c. California Air Resources Board. 2022. MDV MAW Calculations – ACCII. This is a spreadsheet of data which was used to support the proposed PEMS MAW test procedures and standards for ACCII.

CARB 2022d. California Air Resources Board. 2022. MDV Chassis Dyno and PEMS Test Results - ACCII. This is a spreadsheet of data used to support the proposed chassis standards and PEMS standards for ACCII.

CARB 2022e. California Air Resources Board. 2022. MDV Chassis Engine Speed and Torque - ACCII. This is a spreadsheet of data used to support our proposed PEMS MAW test procedures and standards for ACCII.

CARB 2022f. California Air Resources Board. 2022. MDV Certification Data Emission Analysis. This is a spreadsheet of data used to support our proposed chassis standards for ACCII.

CARB 2022g. California Air Resources Board. 2022. MY2020 and 2021 MDV Certification Data. This is a spreadsheet of data used to support our proposed chassis and PEMS MAW test procedures and standards for ACCII.

CARB 2022h. California Air Resources Board. 2022. MDV FCL Calculations. This is a spreadsheet of data used to support our proposed PEMS MAW test procedures and standards for ACCII.

CARB 2022i. California Air Resources Board. 2022. MDV Catalyst Data Analysis. This is a spreadsheet of data used to support the cost analysis for our proposed chassis standards.

CARB 2022j. California Air Resources Board. 2022. MY2021 Evaporative Running Loss Emission Certification Data. This is a spreadsheet of the data which was used to support the proposed new running loss standard of 0.01 grams / mile.

CARB 2022k. California Air Resources Board. 2022. Puff Equation Change: Data and Reasons Supporting Adjustment of the 1.2 Factor to 1.08. This document provides a summary of gasoline working capacity canister data submitted by auto manufacturers,

which was used to change the aging factor in the evaporative minimum canister size compliance equation.

CARB 2022l. California Air Resources Board. 2022. 2019 and 2020 NMOG+NOx Fleet Average Data. This spreadsheet contains the NMOG+NOx fleet average compliance data of each light-duty automaker for the 2019 and 2020 model years. The calculated values are based purely on current model year sales, and do not include use of banked or purchased credits.

CARB 2022m. California Air Resources Board. 2022. 2020 MY Cert Data for CO. This spreadsheet contains CO emission certification data of each light-duty vehicle test group for the 2020 model year for FTP, US06, and SC03 tests.

CARB 2022n. California Air Resources Board. 2022. 2020 MY Data for US06 vs FTP NMOG+NOx. This spreadsheet contains NMOG+NOx emission certification data of each light-duty vehicle test group for the 2020 model year for FTP, US06, and SC03 tests.

CARB 2022o. California Air Resources Board. 2022. 2020 MY Certification Data for US06 PM. This spreadsheet contains particulate matter emission certification data of each light-duty vehicle test group for the 2020 model year for FTP and US06 tests.

CARB 2022p. California Air Resources Board. 2022. 2020 MY FTP Certification Data. This spreadsheet contains NMOG+NOx emission certification data of each light-duty vehicle test group for the 2020 model year for the FTP test and analysis of the fleet distribution of FTP emission bins.

CARB 2022q. California Air Resources Board. 2022. CHTS Data for Soak Time Distribution. This spreadsheet contains soak time distribution data as used in EMFAC2017 and originally gathered by the National Renewable Energy Laboratory, "2010-2012 California Household Travel Survey", *https://www.nrel.gov/transportation/secure-transportation-data/tsdc-california-travel-survey.html*.

CARB 2022r. California Air Resources Board. 2022. Early Drive Away EMFAC Analysis. This spreadsheet contains the calculations that were used to convert emission test data into EMFAC inputs to analyze the impacts of early drive aways on NMOG+NOx emissions. The corresponding EMFAC results are also contained within this spreadsheet.

CARB 2022s. California Air Resources Board. 2022. EMFAC 2021 Model v1.0.2. CARB EMFAC model used to determine the proposal emission impacts associated with the modified battery cost inputs described in the 15-day change notice. *https://content.govdelivery.com/accounts/CARB/bulletins/314a532*

CARB 2022t. California Air Resources Board. 2022. EMFAC Fleet Inputs for SULEV30 vs SULEV20 Comparison. This spreadsheet contains the EMFAC fleet mix inputs that were used to compare the emission impacts of reducing the ICE vehicle fleet average requirement from 0.030 g/mile to 0.020 g/mile.

CARB 2022u. California Air Resources Board. 2022. EMFAC ICE Fleet Inputs for Proposal and Alternatives. This spreadsheet contains the EMFAC fleet mix inputs that were used to analyze the emission impacts of the ACC II proposal and two alternative scenarios.

CARB 2022v. California Air Resources Board. 2022. EMFAC ICE Fleet Inputs for FSOR. This spreadsheet contains the EMFAC fleet mix inputs that were used to analyze the emission impacts in the ACC II FSOR proposal and two alternative scenarios.

CARB 2022w. California Air Resources Board. 2022. EMFAC Results to Compare 0.030 vs 0.020 ICE fleet average. This spreadsheet contains the results of the EMFAC analysis that compared the emission impacts of reducing the ICE vehicle fleet average requirement from 0.030 g/mile to 0.020 g/mile.

CARB 2022x. California Air Resources Board. 2022. High Power Starts PHEV Test Data. This spreadsheet contains individual emission test results and the average emission values for NMOG+NOx for the high-power cold start emission tests that were conducted by CARB staff to investigate the impacts of high-power cold starts on PHEV emissions.

CARB 2022y. California Air Resources Board. 2022. High Power Test Cycles for PHEV Testing. This spreadsheet contains the time versus speed traces for the high-power cold start test cycles that were used to investigate the NMOG+NOx emission impacts of high-power cold starts for PHEVs.

CARB 2022z. California Air Resources Board. 2022. Initial Idle Analysis of Real-World Trips. This spreadsheet contains trip by trip data of initial idle times of more than 47,000 real world trips. Analysis of the trip data initial idle distribution is also included.

CARB 2022aa. California Air Resources Board. 2022. Initial Idle and Early Drive Away Test Data. This spreadsheet contains individual emission test results for vehicles tested by CARB to investigate the impacts of initial idle time on NMOG+NOx emissions. Analysis of the test data, a list of test vehicles, and the vehicle speed traces that were used for the testing are also included.

CARB 2022bb. California Air Resources Board. 2022. LEV Cost Estimates. This spreadsheet contains the calculations used to estimate the costs of the proposed LEV regulations in the ISOR in ACC II. Specifically, the spreadsheet contains staff's calculations and estimates for incremental catalyst costs for the proposed stand-alone US06 standards and the estimated cold-start calibration costs for the partial soak, early drive away, and high-power cold start proposals.

CARB 2022cc. California Air Resources Board. 2022. LEV FSOR Cost Estimates. This spreadsheet contains the calculations used to estimate the costs of the proposed LEV regulations in the FSOR for ACC II. Specifically, the spreadsheet contains staff's calculations and estimates for incremental catalyst costs for the proposed stand-alone US06 standards and the estimated cold-start calibration costs for the partial soak, early drive away, and high-power cold start proposals.

CARB 2022dd. California Air Resources Board. 2022. LEV FSOR Alternative 1 Cost Estimates. This spreadsheet contains the calculations used to estimate the costs of Alternative 1 scenario in the FSOR for ACC II. Specifically, the spreadsheet contains staff's calculations and estimates for incremental catalyst costs for the proposed stand-alone US06 standards and the estimated cold-start calibration costs for the partial soak, early drive away, and high-power cold start proposals.

CARB 2022ee. California Air Resources Board. 2022. LEV FSOR Alternative 2 Cost Estimates. This spreadsheet contains the calculations used to estimate the costs of Alternative 2 scenario in the FSOR for ACC II. Specifically, the spreadsheet contains staff's calculations and estimates for incremental catalyst costs for the proposed stand-alone US06 standards and the estimated cold-start calibration costs for the partial soak, early drive away, and high-power cold start proposals.

CARB 2022ff. California Air Resources Board. 2022. Partial Soaks EMFAC Analysis. This spreadsheet contains staff's calculations that were used to convert emission test data into EMFAC inputs to analyze the impacts of partial soaks on NMOG+NOx emissions. A summary of the corresponding EMFAC results is also contained within this spreadsheet.

CARB 2022gg. California Air Resources Board. 2022. Partial Soaks Test Data Analysis. This spreadsheet contains staff's calculations and analysis of the NMOG+NOx partial soak emission test data from the "Initial Idle and Early Drive Away Test Data" spreadsheet.

CARB 2022hh. California Air Resources Board. 2022. PGM Prices Last 5 Years. This spreadsheet contains the daily prices, from October 2016 to October 2021, of precious metals that are used in light-duty vehicle catalysts and staff's analysis of those prices that were used to estimate a 5-year average price for the purpose of estimating LEV proposal costs in the "LEV Cost Estimates" spreadsheet.

CARB 2022ii. California Air Resources Board. 2022. Phase Out ZEVs from Fleet Average Standards. This spreadsheet contains calculations that compare the impacts keeping versus removing ZEVs from the NMOG+NOx fleet average on ICE and fleet wide NMOG+NOx emissions.

CARB 2022jj. California Air Resources Board. 2022. PHEV High Power Cold Start EMFAC Inputs. This spreadsheet contains staff's calculations that were used to derive EMFAC inputs for PHEV high power cold start emissions that were used to estimate the impacts of high-power cold starts on NMOG+NOx emissions.

CARB 2022kk. California Air Resources Board. 2022. PHEV US06 Test Data. This spreadsheet contains individual US06 test data for NMOG+NOx emissions for PHEVs tested by CARB and analysis of that test data to determine average emission values and test-to-test variations.

CARB 2022ll. California Air Resources Board. 2022. US06 Test Data for NMOG+NOx. This spreadsheet contains individual test data for US06 emission tests conducted by

staff and analysis of that data to develop the proposed US06 stand-alone standards for NMOG+NOx.

CARB 2022mm. California Air Resources Board. 2022. US06 Test Data for PM. This spreadsheet contains the individual test data for US06 emission tests conducted by CARB staff to determine the particulate matter emissions for various vehicles and analysis of that test data to determine average PM emission values and to investigate test-to-test variations in PM emissions on the US06 test cycle.

CARB 2022nn. California Air Resources Board. 2022. ISOR OEM Cost Calculator Main Scenario. This workbook was used to determine the manufacturer incremental and total costs associated with the main proposal described in the Initial Statement of Reasons.

CARB 2022oo. California Air Resources Board. 2022. FSOR OEM Cost Calculator Main Scenario. This workbook was used to determine the manufacturer incremental and total costs associated with the modified battery costs described in the 15-day change notice.

CARB 2022pp. California Air Resources Board. 2022. FSOR OEM Cost Calculator Alternative 1. This workbook was used to determine the manufacturer incremental and total costs associated with the modified battery costs described in the 15-day change notice under assumptions described in Alternative 1 of the ISOR.

CARB 2022qq. California Air Resources Board. 2022. FSOR OEM Cost Calculator Alternative 2. This workbook was used to determine the manufacturer incremental and total costs associated with the modified battery costs described in the 15-day change notice under assumptions described in Alternative 2 of the ISOR.

CARB 2022rr. California Air Resources Board. 2022. FSOR Proposal Criteria Emissions. This workbook contains EMFAC criteria emissions output associated with the battery cost changes described in the 15-day change notice.

CARB 2022ss. California Air Resources Board. 2022. FSOR Proposal GHG Emissions. This workbook contains EMFAC GHG emissions output associated with the changes described in the 15-day change notice

CARB 2022tt. California Air Resources Board. 2022. FSOR VMT and Fuel Calculations. This workbook contains the calculations used to calculate downstream energy demand using EMFAC output derived from the changes described in the 15-day change notice.

CARB 2022uu. California Air Resources Board. 2022. MY 2018 Fuel Economy Data. Efficiencies of MY 2018 BEV, PHEV and FCEV vehicles for use in calculating downstream energy demand associated with the ISOR and 15-day notice changes. These data were obtained from *www.fueleconomy.gov*

CARB 2022vv. California Air Resources Board. 2022. FSOR ACC II Upstream Summary. This spreadsheet contains a summary of changes in upstream emissions for light-duty vehicles due to the measures described in the 15-day change notice.

CARB 2022ww. California Air Resources Board. 2022. FSOR Baseline GHG Emissions. This spreadsheet contains a summary of the baseline GHG emissions.

CARB 2022xx. California Air Resources Board. 2022. FSOR Total Emissions Summary. This spreadsheet summarizes combined downstream and upstream emission impacts associated changes described in the 15-day change notice.

CARB 2022yy. California Air Resources Board. 2022. FSOR Total Cost of Ownership Inputs. This workbook provides a summary of the inputs needed for the total cost of ownership (TCO) analysis associated with the changes described in the 15-day change notice.

CARB 2022zz. California Air Resources Board. 2022. ISOR OEM Cost Calculator Main Alternative 1. This workbook was used to determine the manufacturer incremental and total costs associated with alternative 1 described in the Initial Statement of Reasons.

CARB 2022aaa. California Air Resources Board. 2022. ISOR OEM Cost Calculator Main Alternative2. This workbook was used to determine the manufacturer incremental and total costs associated with alternative 2 described in the Initial Statement of Reasons.

CARB 2022bbb. California Air Resources Board. 2022. ISOR Total Cost of Ownership Inputs February. This workbook provides a summary of the inputs needed for the total cost of ownership (TCO) analysis.

CARB 2022ccc. California Air Resources Board. 2022. Baseline VMT and Fuel Calculations. This workbook provides a summary of the baseline downstream fuel demand calculations used to determine upstream emissions.

CARB 2022ddd. California Air Resources Board. 2022. Proposal VMT and Fuel Calculations. This workbook provides a summary of the proposal downstream fuel demand calculations used to determine upstream emissions.

CARB 2022eee. California Air Resources Board. 2022. Alternative 1 VMT and Fuel Calculations. This workbook provides a summary of alternative 1 downstream fuel demand calculations used to determine upstream emissions.

CARB 2022fff. California Air Resources Board. 2022. Alternative 2 VMT and Fuel Calculations. This workbook provides a summary of alternative 2 downstream fuel demand calculations used to determine upstream emissions.

CARB 2022ggg. California Air Resources Board. 2022. Emissions Summary Proposal, Alternative 1, and Alternative 2. This workbook provides a summary of tailpipe emissions for criteria and greenhouse gases under the proposal, alternative 1 and alternative 2 scenarios.

CARB 2022hhh. California Air Resources Board. 2022. ACC 2 REMI Results Proposal 15-day July. A workbook summarizing macroeconomic impacts associated with the changes described in the 15-day notice.

CARB 2022iii. California Air Resources Board. 2022. Health Benefits Proposal July. A workbook summarizing the health benefits associated with the changes described in the 15-day notice.

CARB 2022jjj. California Air Resources Board. 2022. FSOR Proposal LDV MDV Benefits. A spreadsheet summarizing the emission benefits associated with the changes described in the 15-day notice for the purpose of calculating health impacts.

CARB 2022kkk. California Air Resources Board. 2022. Model Turnover Scenarios. This spreadsheet contains the summary of ZEV market shares based on different assumptions of automaker conversions to ZEVs dependent on redesign cycles described in the Initial Statement of Reasons.

CARB 2022lll. California Air Resources Board. 2022. ZEV Assurance Measure Costs ISOR. This spreadsheet contains a summary of the manufacturer compliance costs associated with the ZEV assurance measures described in the Initial Statement of Reasons, which were subsequently added to the ISOR OEM cost calculators.

CARB 2022mmm. California Air Resources Board. 2022. ISOR ACC II Upstream Summary. This spreadsheet contains a summary of changes in upstream emissions for light-duty vehicles due to the measures described in the Initial Statement of Reasons.

CARB 2022nnn. California Air Resources Board. 2022. EMFAC MDV Upstream Emissions. This spreadsheet contains a summary of changes in upstream emissions for medium-duty vehicles due to the measures described in the Initial Statement of Reasons.

CARB 2022ooo. California Air Resources Board. 2022. ISOR Proposal and Alternative 1 and 2 Fuel Demand. This spreadsheet summarizes energy demand by fuel type for the light-duty vehicle sector under the proposal and alternatives described in the Initial Statement of Reasons.

CARB 2022ppp. California Air Resources Board. 2022. Social Cost of Carbon Calculation. This spreadsheet contains the estimates of the proposal's total annual social cost of carbon benefits at varying discount rates based on based on the updated emission reductions from the updated fleet mix resulting from the proposed battery durability modifications.

CARB 2022qqq. California Air Resources Board. 2022. ZEV Cost Modeling Workbook July 2022.
ZEV_Cost_Modeling_Workbook_Update_July_2022_UpdatedSOCUtilzation. This workbook contains ZEV cost modeling updates related to the battery durability proposed modifications.

CARB 2022rrr. California Air Resources Board. 2022. ACC II Battery Durability Battery Volume Analysis. This workbook provides a summary of battery production estimates based on potential ZEV, PHEV, and FCEV fleet mixes assumed in the ISOR and based on an updated fleet mix resulting from the proposed battery durability modifications.

CARB 2022sss. California Air Resources Board. 2022. ACC II TCO 15-Day Version Proposal. This workbook provides the Total Cost of Ownership (TCO) model used in the ISOR and SRIA. It includes the updated Statewide TCO, TCO examples, and fiscal impact results reflecting the 15-Day changes for the Regulatory Proposal.

CARB 2022ttt. California Air Resources Board. 2022. ACC II EVSE TCO 15-Day Version Alternative 1. This workbook provides the Total Cost of Ownership (TCO) model used in the ISOR and SRIA. It includes the updated Statewide TCO, TCO examples, and fiscal impact results reflecting the 15-Day changes for Alternative 1.

CARB 2022uuu. California Air Resources Board. 2022. ACC II EVSE TCO 15-Day Version Alternative 2. This workbook provides the Total Cost of Ownership (TCO) model used in the ISOR and SRIA. It includes the updated Statewide TCO, TCO examples, and fiscal impact results reflecting the 15-Day changes for Alternative 2.

Bolorinos 2021. Bolorinos, Jose. 2021. EVs can make California's grid more fire-safe and resilient. Will it seize the opportunity? Stanford Precourt Institute for Energy. January 31. Accessed June 16, 2022. *https://energy.stanford.edu/news/evs-can-make-california-s-grid-more-fire-safe-and-resilient-will-it-seize-opportunity*.

bp 2021. bp. 2021. bp takes first major step into electrification in the US by acquiring EV fleet charging provider AMPLY Power. December 7. Accessed July 11, 2022. *https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-takes-first-major-step-into-electrification-in-us-by-acquiring-ev-fleet-charging-provider-amply-power.html*

CAISO 2022. California ISO. 2022. 20-year Transmission Outlook: CA ISO's 20-Year Outlook. January 31. Accessed July 8, 2022. *http://www.caiso.com/InitiativeDocuments/20-YearTransmissionOutlook-May2022.pdf*

CalEPA 2022. California Environmental Protection Agency. 2022. Lithium-Ion Car Battery Recycling Advisory Group Final Report. March 16. Accessed June 16, 2022. *https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/2022_AB-2832_Lithium-Ion-Car-Battery-Recycling-Advisory-Goup-Final-Report.pdf*.

Caltrans & CEC 2022. California Department of Transportation and California Energy Commission. 2022. California's Deployment Plan for the National Electric Vehicle Infrastructure Program. Accessed July 5, 2022. *https://efiling.energy.ca.gov/GetDocument.aspx?tn=243505&DocumentContentId=77335*.

CARB 2011a. California Air Resources Board. 2011. Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider the "LEV III" Amendments to the California Greenhouse Gas and Criteria Pollutant Exhaust and

Evaporative Emission Standards and Test Procedures and to the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and the Evaporative Emission Requirements for Heavy-Duty Vehicles. December 7, 2011.
https://www.arb.ca.gov/regact/2012/leviiighg2012/leviiighg2012.htm

CARB 2011b. California Air Resources Board. 2011. Staff Report: Initial Statement of Reasons Advanced Clean Cars 2012 Proposed Amendments to the California Zero Emission Vehicle Program Regulations. December 7, 2011.
https://www.arb.ca.gov/regact/2012/zev2012/zevisor.pdf

CARB 2012a. California Air Resources Board. 2012. Final Statement of Reasons for Rulemaking Including Summary of Comments and Agency Responses, 2012 Amendments to the Zero Emission Vehicle Regulations.
https://www.arb.ca.gov/regact/2012/zev2012/zevfsor.pdf

CARB 2012b. California Air Resources Board. 2012. "LEV III" Amendments to the California Greenhouse Gas and Criteria Pollutant Exhaust and Evaporative Emission Standards and Test Procedures and to the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and the Evaporative Emission Requirements for Heavy-Duty Vehicles, Final Statement of Reasons. *https://www.arb.ca.gov/regact/2012/leviiighg2012/levfsor.pdf*

CARB 2017. California Air Resources Board. 2017. 2017 Midterm Review Report. Accessed July 8, 2022. *https://ww2.arb.ca.gov/resources/documents/2017-midterm-review-report*

CARB 2020. California Air Resources Board. 2020. Proposed Amendments to the Exhaust Emissions Standards and Test Procedures for 2024 and Subsequent Model Year Heavy-Duty Engines and Vehicles, Heavy-Duty On-Board Diagnostic System Requirements, Heavy-Duty In-Use Testing Program, Emissions Warranty Period and Useful Life Requirements, Emissions Warranty Information and Reporting Requirements, and Corrective Action Procedures, In-Use Emissions Data Reporting Requirements, and Phase 2 Heavy-Duty Greenhouse Gas Regulations, and Powertrain Test Procedures, Staff Report: Initial Statement of Reasons. June 23. Accessed July 11, 2022.
https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2020/hdomnibuslownox/isor.pdf

CARB 2021a. California Air Resources Board. 2021. Notice of Public Hearing to Consider Proposed Revisions to the On-Board Diagnostic System Requirements and Associated Enforcement Provisions for Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles and Engines, and Heavy-Duty Engines, May 18. Accessed July 11, 2022.
https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/obd2021/notice.pdf

CARB 2021b. California Air Resources Board. 2021. Public Hearing to Consider the Proposed Revisions to the On-Board Diagnostic System Requirements and Associated

Enforcement Provisions for Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles and Engines, and Heavy-Duty Engines, Staff Report: Initial Statement of Reasons, June 1. Accessed July 11, 2022. *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/obd2021/isor.pdf*

CARB 2021c. California Air Resources Board. 2021. Proposed Revisions to the On-Board Diagnostic System Requirements and Associated Enforcement Provisions for Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles and Engines, and Heavy-Duty Engines, Resolution 21-15, July 22. Accessed July 11, 2022. *https://ww2.arb.ca.gov/sites/default/files/barcu/board/res/2021/res21-15.pdf*

CARB 2022vvv. California Air Resources Board. 2022. ZEV Cost Modeling Workbook. March. Accessed July 1, 2022. *https://ww2.arb.ca.gov/sites/default/files/2022-06/ZEV_Cost_Modeling_Workbook_Update_March_2022_1.xlsx*

CARB 2022www. California Air Resources Board. 2022. Notice of Availability of Modified Text and Availability of Additional Documents and/or information: Proposed Revisions to the On-Board Diagnostic System Requirements and Associated Enforcement Provisions for Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles and Engines, and Heavy-Duty Engines. February 15. Accessed July 11, 2022. *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/obd2021/15daynotice.pdf*

CARB 2022xxx. California Air Resources Board. 2022. Second Notice of Public Availability of Modified Text: Proposed Revisions to the On-Board Diagnostic System Requirements and Associated Enforcement Provisions for Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles and Engines, and Heavy-Duty Engines. April 22. Accessed July 11, 2022. *https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2021/obd2021/2nd15daynotice.pdf*

CARB 2022yyy. California Air Resources Board. 2022. Draft 2022 Scoping Plan Update. May 10. Accessed July 8, 2022. *https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents*

CEC 2018. Mahone, Amber, Zachary Subin, Jenya Kahn-Lang, Douglas Allen, Vivian Li, Gerrit De Moor, Nancy Ryan, and Snuller Price. 2018. Deep Decarbonization in a High Renewables Future: Updated Results from the California PATHWAYS Model. California Energy Commission. Publication Number: CEC-500-2018-012

CEC 2022. Lopez, Thanh and Madison Jarvis. 2022. Draft Zero-Emission Vehicle Infrastructure Plan (ZIP). California Energy Commission. Publication Number: CEC-600-2022-054. April. *https://www.energy.ca.gov/sites/default/files/2022-04/CEC-600-2022-054.pdf.*

CEC, CPUC, CARB 2021. California Energy Commission (CEC), California Public Utilities Commission (CPUC), and California Air Resources Board (CARB). 2021. SB 100 Joint Agency Report: Achieving 100 Percent Clean Electricity in California: An Initial

Assessment. March. Accessed July 8, 2022. *https://efiling.energy.ca.gov/EFiling/GetFile.aspx?tn=237167&DocumentContentId=70349*

Chen et al. 2016. Chen, Min, Paul Smith, and Michael Wolcott. 2016. U.S. Biofuels Industry: A Critical Review of Opportunities and Challenges. BioProducts Business. Volume 1, Number 4. 42-59. July 6. Accessed July 8, 2022. *https://biobus.swst.org/index.php/bpbj/article/view/18/6*.

Climate Adaption 2022. Climate Adaptation Platform. 2022. Climate Adaptation Platform. February 22. Accessed June 16, 2022. *https://climateadaptationplatform.com/sustainable-extraction-of-lithium/.*

Consumer Reports 2022. Bartlett, Jeff. 2022. More Americans Would Buy an Electric Vehicle, and Some Consumers Would Use Low-Carbon Fuels, Survey Shows. *Consumer Reports.* July 7. Accessed July 12, 2022. *https://www.consumerreports.org/hybrids-evs/interest-in-electric-vehicles-and-low-carbon-fuels-survey-a8457332578/*

Denham 2020. Denham, Ryan. 2020. $750 Million: Rivian's Investment at Normal Manufacturing Plant. WGLT NPR from Illinois State University. February 13. Accessed July 12, 2022. *https://www.wglt.org/business-and-economy/2020-02-13/750-million-rivians-investment-at-normal-manufacturing-plant*

DMV 2020. California Department of Motor Vehicles. 2020. How to Register a Vehicle from Out of State. March. Accessed July 8, 2022. *https://www.dmv.ca.gov/portal/file/how-to-register-an-out-of-state-vehicle-htvr9/*

EIA 2022. U.S. Energy Information Administration. 2022. Monthly Biofuels Capacity and Feedstocks Update. April. Accessed July 12, 2022. *https://www.eia.gov/biofuels/update/table1.pdf*

Elgowainy et al. 2020. Elgowainy, Amgad, Jarod Kelly, Michael Wang. 2020. "Life Cycle Greenhouse Gas Emissions for Small Sport Utility Vehicles." U.S. Department of Energy Record #21003. November 1. Accessed June 7, 2022. *https://www.hydrogen.energy.gov/pdfs/21003-life-cycle-ghg-emissions-small-suvs.pdf*

Elkind et al. 2022. Elkind, Ethan N., Ted Lamm, Katie Segal, and Gil Damon. 2022. *Driving Equity: Policy Solutions to Accelerate Electric Vehicle Adoption in Lower-Income Communities.* Policy Report, Policy Report, University of California, Berkeley, School of Law, Center for Law, Energy & the Environment, and University of California, Los Angeles, School of Law, Emmett Institute on Climate Change and the Environment. *https://www.law.berkeley.edu/wp-content/uploads/2022/04/Driving-Equity-May-2022.pdf*.

EVgo 2019. EVgo Services LLC. 2019. EVgo and Chevron Bring EV Fast Charging to Select California Gas Stations. May 20. Accessed July 12, 2022. *https://www.evgo.com/press-release/evgo-and-chevron-bring-ev-fast-charging-to-select-california-gas-stations/*

Forbes 2021. Morris, James. 2021. Electricity Grids Can Handle Electric Vehicles Easily – They Just Need Proper Management. *Forbes.* November 13. Accessed June 16, 2022. *https://www.forbes.com/sites/jamesmorris/2021/11/13/electricity-grids-can-handle-electric-vehicles-easily--they-just-need-proper-management/?sh=67813b1b7862*

Ford 2021. Ford Motor Company. 2021. Ford to Lead America's Shift to Electric Vehicles with New Mega Campus in Tennessee and Twin Battery Plants in Kentucky; $11.4b Investment to Create 11,000 Jobs and Power New Lineup of Advanced EVs. September 27, 2021. Accessed June 14, 2022. *https://media.ford.com/content/fordmedia/fna/us/en/news/2021/09/27/ford-to-lead-americas-shift-to-electric-vehicles.html*

GM 2022a.General Motors. 2022. Factory ZERO, Our First Fully Dedicated EV Assembly Plant. Accessed July 12, 2022 *https://www.gm.com/stories/factory-zero-first-dedicated-ev-plant*

GM 2022b. General Motors. 2022. GM Accelerates its Drive to Lead the EV Industry with $7 Billion Investment in Michigan, Creating 4,000 New Jobs and Retaining 1,000. *GM Newsroom.* Accessed July 12, 2022. *https://news.gm.com/newsroom.detail.html/Pages/news/us/en/2022/jan/0125-michigan-investment.html#:~:text=%E2%80%94%20General%20Motors%20Co., investment%20announcement%20in%20GM%20history*.

IEA 2020. International Energy Agency. 2020. Energy Technology Perspectives 2020. 1-400. September 2020. Accessed July 8, 2022. *https://iea.blob.core.windows.net/assets/7f8aed40-89af-4348-be19-c8a67df0b9ea/Energy_Technology_Perspectives_2020_PDF.pdf*.

IEA 2021. International Energy Agency. 2021. Net Zero by 2050: A Roadmap for the Global Energy Sector. 1-224. May 18. Accessed July 8, 2022. *https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf.*

Lark et al. 2022. Lark, Tyler J., Nathan P. Hendricks, Aaron Smith, Nicholas Pates, Seth A. Spawn-Lee, Matthew Bougie, Eric G. Booth, Christopher J. Kucharik, and Holly K. Gibbs. 2022. Environmental outcomes of the US Renewable Fuel Standard. Proceedings of the National Academy of Sciences (PNAS) 2022 Vol. 119 No. 9 e2101084119. 1-8. February 14, 2022. Accessed July 8, 2022. *https://www.pnas.org/doi/pdf/10.1073/pnas.2101084119*.

Lynch et al. 2020. Lynch, Lauren A., Chad A. Hunter, Bradley T. Zigler, Matthew J. Thornton, and Evan P. Reznicek. 2020. *On-Road Heavy-Duty Low-NOx Technology Cost Study.* Technical Report, Golden, CO: National Renewable Energy Laboratory. *https://www.nrel.gov/docs/fy20osti/76571.pdf*.

Neil 2019. Neil, Dan. 2019. Wall Street Journal. November 8. Accessed June 16, 2022. *https://www.wsj.com/articles/could-electric-vehicles-really-help-prevent-forest-fires-11573236808*.

POET 2022. POET. 2022. "RE: POET COMMENTS ON APRIL 12, 2022 CARB PROPOSED ACC II." May 31. Testing of higher ethanol blends in gasoline, above 10-percent, show insignificant NOx benefits, with NOx being the most important criteria pollutant to reduce from gasoline fueled vehicles.

Searle et al. 2021. Searle, Stephanie, Georg Bieker, and Chelsea Baldino. 2021. Decarbonizing Road Transport By 2050: Zero-Emission Pathways for Passenger Vehicles. 1-14. July 20. Accessed July 8, 2022. *https://theicct.org/wp-content/uploads/2021/12/zevtc-decarbonizing-by-2050-Jul2021%E2%80%AF.pdf*.

Shell 2022a. Shell plc. 2022. "Powering Progress: Annual Report and Accounts for the year ended December 31, 2021." Accessed July 11, 2022 *https://reports.shell.com/annual-report/2021/_scripts/download.php?file=shell-annual-report-2021.pdf&id=1273*.

Shell 2022b. Shell plc. 2022. Shell's Growing Public EV Charging Network. January 13. Accessed July 8, 2022. *https://www.shell.com/energy-and-innovation/mobility/mobility-news/shells-growing-public-ev-charging-network.html*

UCS 2015. Nealer, Rachael, David Reichmuth, and Don Anair. 2015. Cleaner Cars from Cradle to Grave: How Electric Cars Beat Gasoline Cars on Lifetime Global Warming Emissions. Union of Concerned Scientists. November. Accessed July 8, 2022. *https://www.ucsusa.org/sites/default/files/attach/2015/11/Cleaner-Cars-from-Cradle-to-Grave-full-report.pdf*

US DOE 2016. United States Department of Energy. 2016. 2016 Billion-Ton Report: Advancing Domestic Resources for a Thriving Bioeconomy, Volume 1: Economic Availability of Feedstocks. M. H. Langholtz, B. J. Stokes, and L. M. Eaton (Leads), ORNL/TM-2016/160. Oak Ridge National Laboratory, Oak Ridge, TN. 448p. doi:10.2172/1271651. Accessed July 8. 2022.*https://www.energy.gov/sites/default/files/2016/12/f34/2016_billion_ton_report_12.2.16_0.pdf*

UT Austin 2021. University of Texas at Austin. 2021. ScienceDaily - New way to pull lithium from water could increase supply, efficiency. September 8. Accessed June 16, 2022. *https://www.sciencedaily.com/releases/2021/09/210908180556.htm*.

Virta 2021. Virta Global. 2021. Virta - Myth buster: Electric vehicles will overload the power grid. July 29. Accessed June 16, 2022. *https://www.virta.global/blog/myth-buster-electric-vehicles-will-overload-the-power-grid*.

White House 2022. White House Briefing Room. 2022. FACT SHEET: Biden-Harris Administration Proposes New Standards for National Electric Vehicle Charging Network. June 9. Accessed July 8, 2022.

Attachment O

https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/09/fact-sheet-biden-harris-administration-proposes-new-standards-for-national-electric-vehicle-charging-network/

These documents are available for inspection at the California Air Resources Board, 1001 I Street, Sacramento, California, 95814, between the hours of 9:00am to 4:00pm, Monday through Friday (excluding holidays). To inspect these documents please contact Bradley Bechtold, Regulations Coordinator, (279) 208-7266.