



May 31, 2018

Hon. Mary D. Nichols
Chair
California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812

Dear Chair Nichols and Members of the Air Resources Board:

Pursuant to the California Air Resources Board's (CARB) "Request for Public Input on Potential Alternatives to a Potential Clarification of the "Deemed to Comply" Provision for the LEV III Greenhouse Gas Emission Regulations for Model Years Affected by Pending Federal Rulemakings," Tesla submits the following comments.

Since its founding, Tesla's goal has been to accelerate the advent of sustainable transport by bringing compelling mass-market electric cars to market as soon as possible. Today, Tesla builds not only all-electric vehicles but also infinitely scalable clean energy generation and storage products. Tesla believes the faster the world stops relying on fossil fuels and moves towards a zero-emission future, the better.

Tesla disagrees with the recent EPA "Reconsideration of the Mid-Term Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards for Model Years (MY) 2022-25" (Final April 2018 MTE) finding that the MY 2022-25 EPA GHG Light-Duty Vehicle Standards may be too stringent.ⁱ Tesla believes that CARB's "Deemed to Comply" Resolution 17-3 and regulations only applies to the existing EPA GHG Light-Duty Vehicles Standards and does not incorporate any subsequent diminution in the stringency of these existing standards that may occur as a result of the Final April 2018 MTE determination.ⁱⁱ

CARB's adoption of the "deemed to comply" regulation was conditioned upon an understanding that the federal standards would deliver equivalent GHG emission reductions as California's standards. That the federal government may weaken its approach to addressing GHG emissions should not mandate -- and does not support -- any relaxation of California's approach to addressing the need to reduce GHG emissions. The arbitrary nature of the federal government's Final April 2018 MTE determination ignored the peer-reviewed findings of the EPA's November 2016 Technical Assessment Review (TAR)ⁱⁱⁱ that the current standards are achievable at a lower cost and more quickly than was previously understood.

Should CARB determine to "deem" any changed and diminished EPA GHG Light-Duty Standards as still equivalent to the CA LEV III GHG standards, the change in market circumstances and



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regulatory certainty would negatively affect the future competitiveness of U.S. advanced vehicle manufacturing (and the domestic supply chain that supports it).

I. Tesla Has Demonstrated How Electric Vehicle Manufacturing Can Help Create Significant American Economic Development

Tesla is now the largest manufacturing employer in California and the only automaker building electric vehicles (EVs) at scale in the state. Tesla employs over 20,000 employees in California (which has also created over 31,000 more indirect jobs in the state) and produces over 100,000+ zero emission vehicles each year. As the recent report entitled “The Economic Contribution of Tesla in California” finds, Tesla’s economic impact in California goes far beyond that of its immediate employees and includes infusing over \$4 billion into the California economy in 2017 alone.^{iv} (See full report attached).

II. The Current EPA’s GHG Light-Duty Vehicle Standards and CA LEV III GHG Standards Can Be Met and CARB’s “Deemed to Comply” Resolution Is Limited To These Standards

Tesla believes the current EPA GHG Light-Duty Standards are a bare minimum and can easily be met with only small increases in the efficiency of fossil fuel engines. In its January 2017 MTE of the existing standards, EPA properly concluded that a thorough analysis of existing vehicle technologies “remains consistent with the key conclusions reached in the 2012 FRM: there are multiple compliance paths based chiefly on deployment of advanced gasoline engine technologies with minimal needed penetration of strong hybrid or full electric vehicles, projected per vehicle costs are lower than in the 2012 FRM, and the cost of the lower emitting technology is fully paid back by the associated fuel savings.”^v

Similar to the EPA’s January 2017 MTE conclusions, CARB’s Midterm Review of the California Advanced Clean Cars Program (which includes the CA LEV III GHG Standards) found that conventional technology to achieve those standards is moving at a faster pace than originally expected, and that achieving those vehicle emission limits is feasible, and will result in cost-savings for consumers.^{vi} Both EPA’s prior and CARB’s mid-term review conclusions remain consistent with recent technological developments and automotive industry trends.

California’s “deemed to comply” resolutions are based on the EPA GHG Light-Duty Standards adopted in 2012 and confirmed by the conclusions reached in both EPA’s January 2017 and California mid-term reviews. CARB’s Resolution 17-3 specifically references these standards, documents, and findings.^{vii} It is clear from the references that CARB’s “deemed to comply” determination applies only to the current EPA GHG Light-Duty Standards and the levels of stringency contained therein.

Moreover, in 2012, CARB’s first “deemed to comply” resolution identifies the standards being deemed as the existing EPA GHG Light-Duty Standards.^{viii} Subsequently, the EPA itself recognized that CARB’s “deemed to comply” determination was specific to the existing EPA GHG Light-Duty

Standards. In 2013, EPA's determination to approve the Clean Air Act waiver for California's Advanced Clean Car Program, specifically addressed the scope of CARB's "deemed to comply" regulation, stating (emphasis added):

CARB's "deemed to comply" regulation, adopted by CARB's Board on November 15, 2012 and final action taken by CARB's Executive Officer on December 6, 2012, allows automobile manufacturers to demonstrate compliance with CARB's GHG standards by complying with EPA's GHG standards which were published for those MYs. By today's decision we are confirming that CARB's ZEV amendments, as they affect 2017 and prior MYs are within the scope of previous ZEV waivers. EPA also finds that the entire ACC program meets the criteria for a waiver of Clean Air Act preemption and thus we are granting a waiver for CARB's ACC program. Included in EPA's full waiver are CARB's "deemed to comply" regulations, and the ZEV regulations as they affect 2017 and prior MYs.^{ix}

As indicated by EPA, the standards that are "deemed to comply" with California are the existing EPA Light-Duty Standards that had been published in 2012.

Indeed, California's participation in the National Program was predicated on an understanding that the Program would adhere to the goals set forth in EPA's and NHTSA's July, 2011 Notice of Intent (2011 NOI) See Letter from Mary Nichols to Ray LaHood and Lisa Jackson (July 28, 2011) ("Commitment Letter"). The 2011 NOI contemplated that EPA and NHTSA intended "to propose standards that would be projected to achieve, on an average industry fleet wide basis ... 54.5 mpg..."^x 76 Fed. Reg. 48759 (Aug. 9, 2011). California's Commitment Letter states that California's actions, including its action to promulgate its "deemed to comply" regulation, would be contingent on "EPA propos[ing] federal GHG standards and NHTSA propos[ing] CAFE standards for MYs 2017 and beyond *substantially as described in the July 2011 Notice of Intent, and the agencies adopt standards substantially as proposed.*"^{xi} (emphasis added). That the CARB Commitment Letter also contemplated the potential that EPA's standards might be amended after 2012 does not alter its overarching intent that companies would only be in compliance with California's standards under the National Program if the federal standards reflected the intent as noticed in 2011. Furthermore, it reflects that the Mid-Term Evaluation would be based on a fair, transparent, and participatory collective endeavor with California -- something which was disregarded in the Final April 2018 MTE.

Accordingly, "deemed to comply" would not apply to any new EPA standards that diminish, with no justifiable basis, the level of public health and consumer protections provided by the existing, published standards.

III. California's LEV III Greenhouse Gas Emissions Standards Were Established at Levels Needed to Meet the State's Compelling and Extraordinary Conditions

California is taking action to reduce dramatically air pollutant emissions from transportation – a sector that accounts for 50 percent of the state's greenhouse gas emissions and 80 percent of smog-forming pollutants.^{xii} Every Tesla is assembled in California and these vehicles help to reduce the emission of harmful air pollutants across communities throughout California and directly contribute to California's goal of 5 million zero emission vehicles (ZEVs) cars on the road by 2030 and significant

GHG emissions reductions consistent with the State's long-term goals.^{xiii} Maintaining the stability and stringency of the CA LEV III GHG Standards is a critical piece of meeting the state's goals.

As CARB Resolution 12-35 put forth, when California approved regulations deeming the EPA GHG Light-Duty Standards to allow for compliance with the CA LEV III GHG Standards, the approval incorporated a series of administrative findings and determinations that such "deeming" would not diminish the protective level of the state's vehicle program needed to address the extraordinary and compelling public health and welfare impacts resulting from GHG emissions.

Similarly, in 2012, EPA recognized that its GHG Light-Duty Standards would reduce hundreds of cases of premature mortality and thousands of lost workdays resulting from air pollution.^{xiv} As EPA has previously noted:

EPA has consistently determined that the phrase "compelling and extraordinary conditions" refers to: * * * Certain general circumstances, unique to California, primarily responsible for causing its air pollution [including] * * *geographical and climate factors [as well as] * * * the presence and growth of California's vehicle population, whose emissions were thought to be responsible for ninety percent of the air pollution problem in certain parts of California. CARB also submits that the 2012 ZEV and LEV amendments (the ACC program) meet the same compelling and extraordinary conditions justifying previous waivers (e.g., the South Coast and San Joaquin Air basins continue to experience some of the worst air quality in the nation and that California has an ongoing need for dramatic emission reductions generally and from passenger cars specifically). CARB also submits that as in 1967, EPA's previous waivers have noted that California continued to have geographic and climatic conditions that, when combined with the large numbers and high concentrations of automobiles, created a serious air pollution problem. . . . In its recent announcement of new PM2.5 ambient air quality standards, EPA projected that only seven of approximately 3,000 counties in the country may require state or local action to reduce fine particle pollution in order to meet the new standards by 2020. All seven counties are in California.^{xv}

Moreover, since the EPA's granting of California's Advanced Clean Car waiver in 2013, the peer-reviewed science supporting the compelling need for California to maintain light-duty vehicle standards that significantly reduce GHG emissions has only grown. For example, in the 2014 National Climate Assessment, the most comprehensive and authoritative scientific report about climate change in the United States, *inter alia*, found:

Climate change is projected to harm human health by increasing ground-level ozone and/or particulate matter air pollution in some locations. . . . Increases in global temperatures could cause associated increases in premature deaths related to worsened ozone and particle pollution.^{xvi}

Other post-2012 studies also indicate that, absent mitigation measures, climate change can roll back progress in curbing air pollution, with a substantial cost to public health. California is among the states projected to be most affected by worsening air quality due to climate change.^{xvii xviii} Indeed, CARB's Resolution 17-3 recognizes that climate change can contribute to an exacerbation of California air quality challenges and the health and economic impacts resulting for worsening air quality.

Likewise, EPA gave credence in its last evaluation to the CARB showings of climate change impacts in California:

Record-setting fires, deadly heat waves, destructive storm surges, loss of winter snowpack—California has experienced all of these in the decade and will experience more in the coming decades. California’s climate— much of what makes the state so unique and prosperous—is already changing, and those changes will only accelerate and intensify in the future. Extreme weather will be increasingly common as a result of climate change. In California, extreme events such as floods, heat waves, droughts and severe storms will increase in frequency and intensity. Many of these extreme events have the potential to dramatically affect human health and well-being, critical infrastructure and natural systems.^{xix}

These state-specific impacts have continued and even intensified since the last waiver evaluation.

Indeed, the CARB determinations to “deem to comply” in 2012, and subsequently in 2017, were made by finding the EPA GHG Light-Duty Standards contained a level of achievability and protectiveness necessary for the state to reduce air pollution at the levels meeting the state’s identified public health protection needs. Unless CARB has determined that California’s air quality concerns have receded, the level of protection established by the existing EPA GHG Light-Duty Standards remain a necessary minimum. Allowing for the expansion of CARB’s “deemed to comply” determinations to now cover a diminution in this previously identified level of needed public health protection would result in CARB running afoul of the very statutory mandates and directives CARB recites in the preamble of Resolution 17-3.

In conclusion, Tesla has shown that electric vehicle manufacturers contribute significant ongoing and new investment in domestic manufacturing. Tesla does not support a relaxation in the levels of public health and environmental protections provided for in the CA LEV III GHG Standards and EPA GHG Light Duty Standards. Indeed, Tesla’s mission is to accelerate the advent of sustainable energy, and to relax these standards would be run counter to our founding principles. CARB’s regulatory “deemed to comply” text is only applicable to the existing, published EPA GHG Light-Duty Standards and neither the history of the “deemed to comply” regulation nor the increasing and dangerous impacts from climate change on California countenance an expansion of “deemed to comply” to include a revised, less-stringent EPA GHG Light-Duty Standard. Tesla also fully supports the State taking the steps necessary to preserve its unique and critical authorities in setting vehicle GHG emissions standards.

Respectfully submitted,



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- ⁱ See, [EPA, Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022–2025 Light-Duty Vehicles](#), 83 Fed. Reg. 16077 (April 13, 2018).
- ⁱⁱ CARB, [Resolution 17-3](#) (March 24, 2017)
- ⁱⁱⁱ [EPA, Proposed Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation: Technical Support Document](#) (Nov. 2016).
- ^{iv} IHS Markit, [The Economic Contribution of Tesla in California](#) (May 2018).
- ^v See [EPA, Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emissions Standards under the Midterm Evaluation](#) (January 2017) at 23-24.
- ^{vi} CARB’s [Midterm Review of Advanced Clean Cars Program](#) (Jan. 17, 2018)
- ^{vii} CARB, Resolution 17-3 at 5, 7, and 15.
- ^{viii} CARB, [Resolution 12-35](#) (Nov. 15, 2012) at 5.
- ^{ix} EPA, California State Motor Vehicle Pollution Control Standards; Notice of Decision Granting a Waiver of Clean Air Act Preemption for California’s Advanced Clean Car Program and a Within the Scope Confirmation for California’s Zero Emission Vehicle Amendments for 2017 and Earlier Model Years, [78 Fed. Reg. 2112](#), 2113 (Jan. 9, 2013).
- ^x [NHTSA and EPA, 2017-2025 Model Year Light-Duty Vehicle GHG Emissions and CAFE Standards: Supplemental Notice of Intent](#), 76 Fed. Reg. 48759 (Aug. 9, 2011)
- ^{xi} Id.
- ^{xii} See, Office of Gov. Edmund G. Brown, Jr., [Governor Brown Takes Action to Increase Zero-Emission Vehicles, Fund New Climate Investments](#) (Jan. 26, 2018)
- ^{xiii} See, Id.
- ^{xiv} EPA estimated that the final rule would reduce between 110 and 280 cases of PM2.5-related premature mortality annually in 2030. [77 Fed Reg. 62624](#), 62933 (Oct. 15, 2012) and estimated benefits from PM2.5 reduction in 2030 include reducing annual lost works day by 14,000, and 3,500 incidents of asthma exacerbation in children. [77 Fed Reg. 62624](#), 62934 (Oct. 15, 2012).
- ^{xv} 78 Fed. Reg. at 2128-29.
- ^{xvi} USGCRP, Chapter 11 “Human Health” [Climate Change Impacts in the United States: The Third National Climate Assessment](#) at 222 (2014)
- ^{xvii} See, Pfister, G.G., et al. [Projections of future summertime ozone over the U.S.](#), *J. Geophys. Res. Atmos.*, 119 (2014).
- ^{xviii} See, e.g., Health Effects Institute, [Study examines impacts of emissions regulations in the Atlanta area](#) (April 2018); American Lung Association, [Clean Air Future: Health and Climate Benefits of Zero Emission Vehicles](#) (October 27, 2016); Pfister, G.G., et al. [Projections of future summertime ozone over the U.S.](#), *J. Geophys. Res. Atmos.*, 119 (2014); Driscoll, C.T, Buonocore, J., Reid, S., Fakhraei, H, and Lambert, K.F. [Co-benefits of Carbon Standards Part 1: Air Pollution Changes under Different 111d Options for Existing Power Plants](#). Syracuse University, Syracuse, NY and Harvard University, Cambridge, MA. A report of the Science Policy Exchange. 34 pp (2014); Akhtar, F.H.; Pinder, R.W.; Loughlin, D.H.; Henze, D.K. [GLIMPSE: A rapid decision framework for energy and environmental policy](#); *Environ. Sci. Technol.* (2013); West, J.J., et al. [Co-benefits of mitigating global greenhouse gas emissions for future air quality and human health](#). *Nature Climate Change* 3, 885-889 (Sept. 22, 2013). See also Thurston, George D. Mitigation Policy Health Co-Benefits. *Nature Climate Change* 3 863-64 (Oct 2013) (describing significance of West et al. article); Kleeman, Mike, Zappata, et al. [PM2.5 co-benefits of climate change legislation part 1: California’s AB 32](#) *Climatic Change* 117, 377-397 (2013).
- ^{xix} 78 Fed. Reg. at 2129.