COMMENTS OF STATES AND CITIES SUPPORTING THE PROPOSED RULEMAKING TO UPDATE THE DEPARTMENT OF ENERGY'S PETROLEUM-EQUIVALENT FUEL ECONOMY CALCULATION

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## I. INTRODUCTION

Our States and Cities[1] hereby submit these comments in support of the United States Department of Energy's ("DOE") Notice of Proposed Rulemaking: Petroleum-Equivalent Fuel Economy Calculation, 88 Fed. Reg. 21,525 (Apr. 11, 2023) ("Proposed Rule"). We support the Proposed Rule and urge DOE to adopt an updated petroleum equivalency factor ("PEF") value, because the Proposed Rule uses current data, is more consistent with the applicable statutory requirements, and will encourage the growth of the electric vehicle market while requiring improvements in fuel efficiency of internal combustion engines.

In enacting the Energy Policy and Conservation Act ("EPCA") in 1975, Congress established the Corporate Average Fuel Economy ("CAFE") program as part of a suite of measures to reduce energy consumption. Pub. L. No. 94-163 § 2(5), 89 Stat. 871, 874, 901-02 (1975). For the purposes of the CAFE program, a vehicle's fuel economy means "the average number of miles traveled by an automobile for each gallon of gasoline (or equivalent amount of other fuel) used." 49 U.S.C. § 32901(a)(11). Electric vehicles[2] do not use gasoline or "other fuel," because "fuel" is defined as gasoline, diesel, or other liquid or gaseous fuel. *Id*. § 32901(a)(10). Thus, these vehicles have no "fuel economy" value. However, to incentivize the production and sale of these vehicles, Congress allowed manufacturers to use them as a part of their overall strategy to comply with fuel economy standards. *See* H.R. Rep. No. 96-730, at 14 (1979). Congress therefore mandated the creation of petroleum-equivalent fuel economy values for electric and other alternative-fueled vehicles for use in calculating the average fuel economy of auto manufacturers' respective fleets. Pub. L. No. 96-185 § 18, 93 Stat. 1324, 1336 (1980). At the same time, Congress intended that manufacturers would continue to improve the fuel efficiency of their conventional fleets. *Cf.* H.R. Rep. 100-476, at 12 (Dec. 14, 1987) ("This incentive [to manufacture alternative-fueled vehicles] is not intended to allow manufacturers to relax their efforts to achieve better mileage in the remainder of their fleets that are still fueled with gasoline.").

The current petroleum-equivalent fuel economy values for electric vehicles frustrate these congressional purposes because the present values are based on outdated data and are too high.

[1] The States of California, Connecticut, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, New York, Oregon, Rhode Island, Vermont, and Washington; the Commonwealths of Massachusetts and Pennsylvania; the District of Columbia; and the Cities of Chicago and New York.

[2] In this comment, "electric vehicles" specifically refers to battery electric vehicles.

Despite the statutory mandate to annually consider updating the PEF—which is "the key component in the calculation of petroleum-equivalent fuel economy values" for electric vehicles—DOE has not done so since 2000. 65 Fed. Reg. 36,781, 36,986 (Jun. 12, 2000). Consequently, much of the data and many of the assumptions underlying the calculation for the existing PEF are based on obsolete data from over two decades ago. *See id*. Additionally, DOE improperly incorporated a multiplier not applicable to electric vehicles when it previously determined the PEF.[3] As a result, the PEF is significantly inflated, which leads to an overestimation of the petroleum-equivalent fuel economy values for electric vehicles. This overestimation has the practical effect of undermining both the incentive for auto manufacturers to manufacture electric vehicles and the statutory mandate to improve the fuel efficiency of conventional vehicles. *See* 49 U.S.C. § 32902(a); Comments of States and Cities Supporting the Petition for Rulemaking Regarding the Department of Energy's Petroleum Equivalency Factor at 5 (Feb. 28, 2022) (EERE-2021-VT-0033-0010) ("Multi-State Comments") (providing an example of overestimation of petroleum-equivalent fuel economy values of electric vehicles).

In response to these concerns and the statutory requirement that DOE annually review the petroleum-equivalent fuel economy values of electric vehicles, DOE proposes updating the PEF calculation in the Proposed Rule. The Proposed Rule uses current data and is more consistent with applicable statutory requirements. It will also encourage the growth of the electric vehicle market while simultaneously requiring improvements in fuel efficiency of internal combustion engines, as Congress intended. *See* 64 Fed. Reg. 37,905, 37,906 (July 14, 1999) (explaining that the purpose of the petroleum-equivalent fuel economy values for electric vehicles is "to provide an incentive for vehicle manufacturers to produce electric vehicles by including the expected high equivalent fuel economy of these vehicles in their corporate average fuel economy calculation"). Accordingly, our States and Cities support the Proposed Rule and strongly urge DOE to adopt it, and we encourage DOE to facilitate and improve public involvement in its annual PEF review process.

## II. DOE SHOULD ADOPT A NEW PEF BASED ON APPLICABLE STATUTORY PROVISIONS AND CURRENTLY AVAILABLE DATA

As explained below, DOE's proposed PEF calculation is based on applicable statutory factors and incorporates current, reliable data and projections, and it incentivizes the production of electric vehicles and the improvement of fuel efficiency for conventional vehicles. Our States and Cities urge DOE to adopt its Proposed Rule.

### A. DOE's Updated PEF is Correctly Based on the Four Statutory Factors in Section 32904 Analyzed Using Current Data

In order to determine the petroleum-equivalent fuel economy values of electric vehicles, DOE must consider four statutory factors. 49 U.S.C. § 32904(a)(2)(B). These factors are incorporated

[3] The multiplier that DOE incorporated into the PEF calculation is found in Section 32905 and applies to alternative liquid- and gas-fueled vehicles. 49 U.S.C. § 32905(a), (c). Section 32905 expressly provides that a gallon of liquid alternative fuel and of gaseous fuel "is deemed to contain .15 gallon of fuel," whereas the statute does not provide a fuel content factor for electric vehicles. *Id*.

into the PEF, which DOE uses to calculate the petroleum-equivalent fuel economy of electric vehicles. 10 C.F.R. § 474.2. These statutory factors are:

(i) the approximate electrical energy efficiency of the vehicle, considering the kind of vehicle and the mission and weight of the vehicle;
(ii) the national average electrical generation and transmission efficiencies;
(iii) the need of the United States to conserve all forms of energy and the relative scarcity and value to the United States of all fuel used to generate electricity; and
(iv) the specific patterns of use of electric vehicles compared to petroleum-fueled vehicles.

49 U.S.C. § 32904(a)(2)(B). DOE last updated the petroleum-equivalent fuel economy values of electric vehicles over two decades ago, and the data underlying the analysis of these four statutory factors are now severely outdated. Multi-State Comments at 7–10. Electric vehicle capabilities and uses, the composition of electricity generation sources, and the availability and reliability of various fuels have all changed since the last update to the PEF calculation in 2000.[4] The Proposed Rule recognizes these changes and utilizes updated data to analyze the four statutory factors, as discussed below.

*1. Approximate Electrical Energy Efficiency of the Vehicle*

We support DOE's proposed revision to the accessory factor as part of DOE's consideration of the first statutory factor, the vehicle's approximate electrical energy efficiency. 49 U.S.C. § 32904(a)(2)(B)(i). DOE's proposal to set the accessory factor at 1 appropriately reflects new information about the electric vehicle market since the 2000 Final Rule. 88 Fed. Reg. at 21,527.

In the 2000 Final Rule, DOE projected that a "minority of electric vehicles . . . may be equipped with auxiliary petroleum-powered accessories," and DOE included an accessory factor value of

[4] *Compare* Argonne National Laboratory, *Evaluation of Electric Vehicle Production and Operating Costs* (Nov. 1999) at 69, accessible at https://publications.anl.gov/anlpubs/2000/05/36138.pdf (estimating electric vehicle usable range of 42-51 miles in 1999), *with* U.S. Department of Transportation, *Electric Mobility Basics: Vehicle Types* (last updated May 4, 2023), https://www.transportation.gov/rural/ev/toolkit/ev-basics/vehicle-types ("Almost all BEVs can travel at least 100 miles on a charge, and many new vehicles coming on the market offer an all-electric range of 200-300 miles or more."); *compare* U.S. Department of Energy, Energy Efficiency and Renewable Energy, 2010 Renewable Energy Data Book (2011) at 12, accessible at https://www.nrel.gov/docs/fy12osti/51680.pdf (demonstrating renewable sources accounted for about 9% of electricity generation in 2000), *with* U.S. Energy Information Administration, *Frequently Asked Questions (FAQS), What is U.S. electricity generation by energy source?* (last updated Mar. 2, 2023), https://www.eia.gov/tools/faqs/faq.php?id=427&t=3 (estimating renewable sources accounted for 22% of electricity generation in 2022); U.S. Energy Information Administration, *Petroleum & Other Liquids: U.S. Field Production of Crude Oil*, https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=mcrfpus2&f=a (showing annual variability in crude oil production).

0.9 to "address[] the possible use of such petroleum-powered accessories."[5] 65 Fed. Reg. at 36,987. In 2000, DOE included the accessory factor to "provide[] an incentive for manufacturers to develop vehicles with electrically-powered accessories." *Id*. However, "DOE expect[ed] that very few electric vehicles will be equipped with petroleum-powered accessories, as such accessories contradict many of the motivations and attractions that lead customers to purchase electric vehicles." *Id*. at 36,990. DOE's prediction proved accurate, because no electric vehicles currently produced include such accessories, even in cold climates like Norway,[6] and future electric vehicles are not likely to include them. 88 Fed. Reg. at 21,527. For this reason, we support DOE's proposal to update the accessory factor to 1.

*2. National Average Electricity Generation and Transmission Efficiencies*

"[T]he national average electrical generation and transmission efficiencies" statutory factor is expressed in the PEF calculation as a gasoline-equivalent energy content of electricity factor. 49 U.S.C. § 32904(a)(2)(B)(ii). This factor considers the "full energy cycle of electricity and conventional fuel" from point of production through end-use to allow DOE to compare the lifecycle efficiency of each as a means to power vehicles. 88 Fed. Reg. at 21,527. In DOE's view, "[t]his approach is necessary because electricity is generated upstream of the vehicle and stored onboard whereas conventional vehicles convert fuel to useful energy onboard the vehicle," and energy losses that impact efficiency occur at different stages of these energy cycles. *Id*. We support DOE's proposal to update the inputs for generation and transmission efficiencies and relative grid mix projections to account for updated data and recent policy changes, but we encourage DOE to use U.S. Energy Information Administration's ("EIA") Annual Energy Outlook ("AEO") 2023 for its grid mix projection. *Id.*

DOE proposes to use the 2022 version of the National Renewable Energy Laboratory ("NREL") 95 by 2050 projection scenario, "in which the United States achieves 95% renewable generation of electricity by 2050."[7] *Id*. at 21,531. DOE proposes using this scenario because, unlike scenarios from the EIA's AEO 2022, it accounts for recent policy changes that are expected to affect future grid mix, such as the Inflation Reduction Act and the Infrastructure Investment and Jobs Act. *Id*. We encourage DOE to instead use the AEO 2023, which was published after the

[5] Examples of such accessories include cabin heaters, defrosters, and air-conditioning. 88 Fed. Reg. at 21,527.

[6] Norway leads among European countries in sales share of battery electric vehicles and plug-in hybrid electric vehicles. International Energy Agency, *Global EV Outlook 2023* (Apr. 2023) at 18–19, accessible at https://www.iea.org/reports/global-ev-outlook-2023.

[7] DOE used the 2021 version of the NREL 95 by 2050 projection scenario for the purposes of the Proposed Rule and states that it will use the 2022 version for the final rule. 88 Fed. Reg. at 21,531, n.45; *see also*, *e.g.*, International Energy Agency, *World Energy Outlook 2022* (Oct. 2022) at 137–38, accessible at https://www.iea.org/reports/world-energy-outlook-2022 (estimating that renewables—mainly solar and wind—could make up around 90% of electricity generation by 2050).

Proposed Rule and reflects the most recent policy changes.[8] DOE "generally regards AEO as one of the best available projections for future grid mix and energy prices," and AEO 2023 addresses DOE's concern with AEO 2022 by accounting for the Inflation Reduction Act where possible and "assum[ing] current laws and regulations."[9] 88 Fed. Reg. at 21,531. We support DOE's proposal to use an updated grid mix projection, and we urge DOE to use the AEO 2023 rather than the 2022 version of the NREL 95 by 2050 projection scenario.

*3. Need of the United States to Conserve Energy and Relative Scarcity and Value of Fuels*

In assessing "the need of the United States to conserve all forms of energy and the relative scarcity and value to the United States of all fuel used to generate electricity," DOE proposes that there is a need to conserve finite energy resources, such as petroleum, and that the increasing availability of renewable electricity generation sources allows for greater conservation. 49 U.S.C. § 32904(a)(2)(B)(iii); 88 Fed. Reg. at 21,528. DOE also proposes that the fuel content factor—the way that this statutory factor is currently expressed in the PEF calculation—is no longer warranted. *Id.* Our States and Cities agree with both proposed determinations.

DOE explains that "[s]upply and demand of fossil fuels can change rapidly and be subject to market constraints," and fossil fuels are a finite resource. 88 Fed. Reg. at 21,528. Given this, and the projected rapid growth of reliable renewable electricity generation sources, it is reasonable for DOE to conclude that "the current and future addition of renewable generation sources onto the grid allows for greater conservation of the finite resources," such as petroleum. *Id*.

We agree that the fuel content factor should be removed from the PEF calculation, because it is based on an inapplicable statutory section, significantly inflates the PEF value, and runs counter to the need to conserve energy. In 2000, DOE did not expressly consider the need to conserve energy in any component of the PEF equation. Rather, DOE determined that there was not a scarcity of fuel and improperly decided to add the fuel content factor to the PEF for consistency with procedures for alternative fueled vehicles under section 32905, to provide similar treatment to all types of alternative fueled vehicles, and for simplicity's sake. 65 Fed. Reg. at 36,988; 64 Fed. Reg. at 37,907; 88 Fed. Reg. at 21,528. None of these three reasons are related to the statutory factors in section 32904(a)(2)(B).

Moreover, section 32905—which applies a fuel content factor—does not apply to electric vehicles. Because the fuel content factor takes the form of a 1/0.15—or 6.667—multiplier, it "result[s] in a very substantial adjustment to the raw calculated energy efficiency of electric vehicles" that is unjustified. *Id.* That substantial adjustment also enables manufacturers to

[8] U.S. Energy Information Administration, *Annual Energy Outlook 2023* (released Mar. 16, 2023) at 4, 7, 33–46, accessible at https://www.eia.gov/outlooks/aeo/narrative/index.php.
[9] *Id*. Other agencies also rely on EIA's AEO data. *See e.g.*, 87 Fed. Reg. 25,710, 25,987 (May 2, 2022) (describing NHTSA's reliance on fuel price projections from AEO 2021 and noting that "Federal Government agencies generally use EIA's price projections in their assessment of future energy-related policies").

produce less efficient conventional vehicles. *Id*. Accordingly, we strongly agree that the fuel content factor lacks legal foundation here and should be removed from the PEF equation. 88 Fed. Reg. at 21,530.

*4. Specific Patterns of Use of Electric Vehicles Compared to Petroleum-Fueled Vehicles*

Finally, we agree with DOE that the driving pattern factor should remain at 1. In 2000, DOE established a driving pattern factor to account for the fourth statutory criterion, the patterns of electric vehicle use compared to petroleum-fueled vehicles. 49 U.S.C. § 32904(a)(2)(B)(iv). At that time, DOE set the driving pattern factor at 1 because DOE believed that electric vehicles offered capabilities like those of conventional gasoline-powered vehicles. 65 Fed. Reg. at 36,987; 88 Fed. Reg. at 21,530.

Recent research supports DOE's continued belief that current electric vehicles are equivalently capable vehicles that are likely to be used similarly to gasoline-powered or hybrid-electric vehicles.[10] 88 Fed. Reg. at 21,530. Indeed, plug-in electric vehicle use is correlated to similar variables and factors as is conventional vehicle use, including population density, built environment, attitudes toward technology, and lifestyle preferences, indicating that electric vehicles are viable alternatives to conventional vehicles to meet the travel needs of households.[11]

DOE recognized in 2000 that electric vehicle driving ranges may be the exception to its belief that electric vehicles will offer capabilities similar to conventional vehicles. However, electric vehicle driving ranges have increased substantially since 2000 and are continuing to grow. 65 Fed. Reg. at 36,987; *see* Multi-State Comments at 9, n.13. In model year 2011, the median range for all-electric vehicles was 68 miles and the maximum range was 94 miles, and in model year 2022, the median range was 257 miles and the maximum range was 520 miles.[12] Most new and upcoming battery-electric vehicles are longer-range vehicles, and shorter range battery electric vehicles are being phased out.[13] The evolution of the electric vehicle market to include more

[10] Debapriya Chakraborty, Scott Hardman, and Gil Tal, *Integrating Plug-in Electric Vehicles (PEVs) into Household Fleets - Factors Influencing Miles Traveled by PEV Owners in California* (Aug. 31, 2021) at 1–2, 33–34, accessible at https://escholarship.org/uc/item/2214q937 (showing that electric vehicles travel a similar number of miles per year as conventional vehicles).

[11] *Id*. at 2, 33.

[12] Vehicle Technologies Office, *FOTW #1290, May 15, 2023: In Model Year 2022, the Longest-Range EV Reached 520 Miles on a Single Charge* (May 15, 2023), https://www.energy.gov/eere/vehicles/articles/fotw-1290-may-15-2023-model-year-2022-longest-range-ev-reached-520-miles.

[13] Chakraborty, et al., *supra* note 10, at 2, 33; *see also* California Air Resources Board, *ACC II Appendix G ZEV Technology Assessment* (Apr. 12, 2022) at 11–12, 15–18, 23–25, accessible at https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/accii/appg.pdf; Vehicle Technologies Office, *FOTW #1286, April 17, 2023: Top 10 New Electric Vehicle Registrations in 2022 Were Models with Long Ranges* (Apr. 17, 2023), https://www.energy.gov/eere/vehicles/articles/fotw-

electric vehicle models with greater driving ranges further supports a driving pattern factor set at 1.[14]

### B. The Proposed PEF Advances the Goals of the CAFE Program

We support the proposed PEF for the additional reason that the lower PEF value better serves congressional intent to allow for the use of electric vehicles for compliance with the CAFE program (to incentivize the production of electric vehicles), as well as the overall purposes of the CAFE program to conserve energy and improve the energy efficiency of motor vehicles. Pub. L. No. 94-163 §§ 2(4) and (5), 89 Stat. 871, 874 (1975); 46 Fed. Reg. 22,747, 22,747 (Apr. 21, 1981) (citing Pub. L. No. 96-185 § 18, 93 Stat. 1324, 1336 (1980)); Summary of Public Comments on PEF NOPR at 3, in Aug. 17, 1999 Documents (EERE-2023-VT-0009-0007) ("Reducing petroleum use is the reason for the existence of vehicle fuel economy standards in the first place."). In the Proposed Rule, DOE appropriately proposes to reject alternatives to calculating the PEF that would yield a higher PEF value and, as a consequence, undermine these goals. 88 Fed. Reg. 21,536. A higher PEF subverts the statutory goals because it results in inflated petroleum-equivalent fuel economy values for electric vehicles that significantly and artificially boost auto manufacturers' average fleetwide fuel economy. *See* Multi-State Comments at 5–6.

## III. DOE SHOULD PROMOTE STAKEHOLDER INVOLVEMENT IN ITS ANNUAL REVIEW OF PART 474 AND RETAIN THE PUBLICATION AND REVIEW REQUIREMENTS IN SECTION 474.5

DOE should facilitate public involvement in the administrative process. We support DOE's intention to seek stakeholder input regarding its annual reviews of the PEF, 88 Fed. Reg. at 21,533, and we encourage DOE also to establish a schedule for regular and ongoing public participation and publication of results. DOE should facilitate public participation by publishing the results of its annual review that section 32904(a)(2)(B) requires. In addition, DOE should consider retaining the publication and review requirements in 10 C.F.R. part 474, which contains the procedures for calculating the petroleum-equivalent fuel economy of electric vehicles and

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1286-april-17-2023-top-10-new-electric-vehicle-registrations-2022-were; California Air Resources Board, *EMFAC2017 Volume III Technical Documentation V1.02* (July 20, 2018) at 174, 176-177, accessible at https://ww2.arb.ca.gov/sites/default/files/2023-01/emfac2017-volume-iii-technical-documentation.pdf (technical documentation for model used to estimate emissions inventories of onroad mobile sources noting that "[a]s battery range will be increasing over time, the 70 percent used for the [calendar year (CY) 2015] base year will need to be increased each year to achieve an anticipated 100 percent by CY2025."); David Gohlke, Yan Zhou, Xinyi Wu, and Calista Courtney, *Assessment of Light-Duty Plug-in Electric Vehicles in the United States, 2010-2021, Energy Systems and Infrastructure Analysis Division*, Argonne National Laboratory (Nov. 2022) at 14, accessible at https://doi.org/10.2172/1898424 (describing that the "average range of PEVs has increased since 2010").

[14] *See* California Air Resources Board, *ACC II Appendix G ZEV Technology Assessment*, *supra*, note 13, at 10–18 (describing the increase in available electric vehicle models and the implications for market growth).

requires DOE to review these procedures five years after publishing a final rule to determine whether any updates or revisions are necessary. 10 C.F.R. § 474.5. As part of this review, DOE is required to publish a notice soliciting stakeholder input and to publish its review findings and any resulting adjustments to part 474. *Id*.

DOE should commit to involving stakeholders in its annual review process. DOE is statutorily required to review the petroleum-equivalent fuel economy values on an annual basis. 49 U.S.C. § 32904(a)(2)(B) (providing that DOE "shall review [the petroleum-equivalent fuel economy] values each year and determine and propose necessary revisions."). Thus, to involve stakeholders, DOE should publish the results of its annual reviews of the PEF. By annually publishing its decision whether to update the PEF, and the bases for its decision, DOE will keep the public apprised of the Department's compliance with its mandatory duty and prevent leaving the PEF in a "bureaucratic twilight zone." *Env't Defense Fund v. Thomas*, 870 F.2d 892, 900 (2d Cir. 1989); *see* Multi-State Comments at 6–7 (citing cases supporting that delay is impermissible when new data is available). Even though DOE anticipates that its annual review results will not be "particularly significant," that does not excuse DOE from conducting the annual review or minimize the interest stakeholders have in understanding DOE's decision whether to update the PEF. 88 Fed. Reg. at 21,531, 21,533.

Moreover, establishing a schedule for public participation and publication of results—whether every five years after publication of a final rule, as section 474.5 currently requires, or more frequently— promotes governmental transparency. This is "critical to maintaining a functional democratic polity, where the people have the information needed to check public corruption, hold government leaders accountable, and elect leaders who will carry out their preferred policies." *Cf. Hamdan v. U.S. Dep't of Justice*, 797 F.3d 759, 769–770 (9th Cir. 2015); *Iowa League of Cities v. E.P.A.*, 711 F.3d 844, 873 (8th Cir. 2013) ("Notice and comment procedures secure the values of government transparency and public participation"). Governmental transparency in this context is especially warranted because DOE has not updated part 474 since 2000, even though its 2000 update was premised in part on a future five-year review, and new data on electric vehicles have become available since 2000.

In the 2000 Final Rule, DOE committed to reviewing part 474 five years after publication to determine whether any updates and/or revisions were necessary, and to publish notice of DOE's review, findings, and any resulting adjustments to part 474 in the Federal Register. 65 Fed. Reg. at 36,992; 10 C.F.R. § 474.5. DOE justified its 2000 calculation of the PEF in part on its regulatory requirement to conduct the five-year review. 65 Fed. Reg. at 36,988, 36,990; *see* Multi-State Comments at 7. However, there is no evidence that DOE conducted a review in 2005, and DOE acknowledges that it has not updated part 474 since the 2000 Final Rule. 88 Fed. Reg. at 21,533. DOE's express reason for adding this five-year review was "to determine whether any updates and/or revisions [were] necessary." 10 C.F.R. § 474.5. Moreover, new data about electric vehicles became available after 2000, which DOE should have considered as a part of its annual review and included in its five-year publications. *See* 88 Fed. Reg. at 21,529; Multi-State Comments at 8–9. And new data may become available that are relevant to the section 32904 factors as the electric vehicle market and electricity generation resources continue

to evolve. *See* 88 Fed. Reg. at 21,529. For example, DOE notes that the grid mix approaching 2030 "is likely to be significantly different from today's grid mix." 88 Fed. Reg. at 21,536. Even in the past three years, there has been "some change" in the grid mix. *Id*.

Accordingly, when DOE conducts its annual review of the petroleum-equivalent fuel economy values of electric vehicles, as statutorily required, DOE should involve stakeholders. DOE should also consider retaining a regulation requiring DOE to involve stakeholders in a regular review and to publish its findings and any resulting adjustments to part 474.

## IV. CONCLUSION

For the foregoing reasons, our States and Cities urge DOE to adopt its Proposed Rule to update the PEF calculation consistent with the recommendations discussed herein. The current PEF value is based on outdated data and is significantly inflated, which leads to an overestimation of the petroleum-equivalent fuel economy values for electric vehicles and undermines the statutory goals of the CAFE program to conserve energy and incentivize the growth of the electric vehicle market. DOE has not updated the PEF since 2000, despite the availability of new data and the statutory requirement that it annually review and make necessary updates to the petroleum-equivalent fuel economy values for electric vehicles. Accordingly, DOE must update the PEF to ensure that the petroleum-equivalent fuel economy values for electric vehicles are set at an appropriate level to comport with and effectuate congressional intent.

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