Proposed Rules

Federal Register
Vol. 86, No. 247
Wednesday, December 29, 2021

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF ENERGY

10 CFR Part 474

[EERE–2021–VT–0033]

Petroleum Equivalence Factor, Notification of Petition for Rulemaking

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notification of petition for rulemaking; request for comments.

SUMMARY: This document announces receipt of a petition for rulemaking received by the Department of Energy (DOE) on October 22, 2021, from the Natural Resources Defense Council (NRDC) and Sierra Club requesting that DOE update its regulations concerning procedures for calculating a value for the petroleum-equivalent fuel economy of electric vehicles (EVs) for use in the Corporate Average Fuel Economy (CAFE) program administered by the Department of Transportation (DOT). This document summarizes the substantive aspects of this petition and requests public comments on the merits of the petition.

DATES: DOE will accept comments, data, and information with respect to the NRDC and Sierra Club Petition until February 28, 2022.

ADDRESSES: You may submit comments, identified by docket number ''EERE–2021–VT–0033,'' by the following method:

Federal eRulemaking Portal: www.regulations.gov. Follow the instructions for submitting comments.

Email: PEFPetition2021VT0033@ee.doe.gov. Include the docket number and/or RIN in the subject line of the message.

Although DOE has routinely accepted public comment submissions through a variety of mechanisms, including the Federal eRulemaking Portal, postal mail and hand delivery/courier, the Department has found it necessary to make temporary modifications to the comment submission process in light of the ongoing coronavirus 2019 (''COVID–19'') pandemic. DOE is currently suspending receipt of public comments via postal mail and hand delivery/courier. If a commenter finds that this change poses an undue hardship, please contact Vehicle Technologies Program staff to discuss the need for alternative arrangements. Once the COVID–19 pandemic health emergency is resolved, DOE anticipates resuming all of its regular options for public comment submission, including postal mail and hand delivery/courier.

Docket: The docket, which includes **Federal Register** notices, comments, and other supporting documents/materials, is available for review at *www.regulations.gov.* All documents in the docket are listed in the *www.regulations.gov* index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket web page can be found at: *www.regulations.gov/docket/EERE-2021-VT-0033.*

The docket web page will contain simple instructions on how to access all documents, including public comments, in the docket.

FOR FURTHER INFORMATION CONTACT: Mr. Kevin Stork, U.S. Department of Energy, Vehicle Technologies Program, EE–3V, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 586–8306. Email: *Kevin.Stork@ee.doe.gov.*

Mr. Peter Cochran, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW, Washington, DC 20585–0103. Telephone: (202) 586–9496. Email: *Peter.Cochran@hq.doe.gov.*

SUPPLEMENTARY INFORMATION: The Administrative Procedure Act (APA), 5 U.S.C. 551 *et seq.,* provides, among other things, that ''[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.'' (5 U.S.C. 553(e)) DOE received a petition for rulemaking from the Natural Resources Defense Council (NRDC) and Sierra Club requesting that DOE update its regulations at 10 CFR part 474 concerning procedures for calculating a value for the petroleum-equivalent fuel economy of electric vehicles (EVs) for use in the Corporate Average Fuel Economy program administered by the Department of Transportation (DOT). DOE last updated the petroleum equivalence factor (PEF) for EVs in 2000. 65 FR 36985 (June 12, 2000)

In their petition, the petitioners propose that DOE should update regulations for calculating the PEF for electric vehicles. Petitioners assert that the data underlying the current regulation are outdated, resulting in higher imputed values of fuel economy for electric vehicles. The petitioners assert that with this higher imputed value, a smaller number of EVs enable fleetwide compliance at lower real-world average fuel economy across an automaker's overall fleet. The petitioners assert that the PEF should be based upon statutory factors at 49 U.S.C 32904, rather than the existing regulatory approach based upon 49 U.S.C. 32905. The petitioners request that DOE review the PEF calculation and approach and work with the National Highway Traffic Safety Administration to ensure PEF regulations support the goals of the CAFE program.

The petition is available in the docket at *www.regulations.gov/docket/EERE-2021-VT-0033.* Through this document, DOE is seeking views on whether it should grant the petition and undertake a rulemaking to update the PEF. By seeking comment on whether to grant this petition, DOE takes no position at this time regarding the merits of the suggested rulemaking or the assertions made by the petitioners.

DOE welcomes comments and views of interested parties on any aspect of the petition for rulemaking and on whether DOE should proceed with the rulemaking.

Submission of Comments

DOE invites all interested parties to submit in writing by the date under the **DATES** heading, comments and information regarding this petition.

Submitting comments via/www.regulations.gov. The *www.regulations.gov* web page will require you to provide your name and contact information prior to submitting comments. Your contact information will be viewable to DOE Vehicles Technologies staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed

properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to *www.regulations.gov* information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through *www.regulations.gov* cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through *www.regulations.gov* before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that *www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email. Comments and documents submitted via email also will be posted to *www.regulations.gov.* If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information in a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide only documents that are: Not secured, written in English, and free of any defects or viruses. Documents should not contain special characters or any form of encryption and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email two well-marked copies: One copy of the document marked ''Confidential'' including all the information believed to be confidential, and one copy of the document marked ''Non-confidential'' with the information believed to be confidential deleted. Submit these documents via email, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

DOE considers public participation to be a very important part of its process for considering rulemaking petitions. DOE actively encourages the participation and interaction of the public during the comment period. Interactions with and between members of the public provide a balanced discussion of the issues and assist DOE in determining how to proceed with a petition. Anyone who wishes to be added to DOE mailing list to receive future notices and information about this petition should contact Vehicle Technologies Program staff at *PetroleumEquivalenceFactorQuestions@ee.doe.gov.*

Signing Authority

This document of the Department of Energy was signed on December 16, 2021, by Kelly J. Speakes-Backman, Principal Deputy Assistant Secretary for Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC, on December 16, 2021.

Treena V. Garrett,

Federal Register Liaison Officer, U.S. Department of Energy.

Petition for Rulemaking To Update Department of Energy Regulations at 10 CFR Part 474: Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Petroleum-Equivalent Fuel Economy Calculation Date:

October 22, 2021
Submitted via email

Natural Resources Defense Council and Sierra Club submit the following petition for rulemaking to update Department of Energy regulations at 10 CFR part 474 that contain procedures for calculating a value for the petroleum-equivalent fuel economy of electric vehicles for use in the Department of Transportation's Corporate Average Fuel Economy program, as required by 49 U.S.C. 32904(a)(2). The subject regulations have not been updated in more than twenty years and must be revised to account for the best available current data so as to not undermine the effectiveness of federal fuel economy standards.

Natural Resources Defense Council and Sierra Club submit this petition under 5 U.S.C. 553(e) for the Department of Energy (DOE) to update its regulations at 10 CFR part 474 concerning procedures for calculating a value for the petroleum-equivalent fuel economy of electric vehicles (EVs) for use in the Corporate Average Fuel Economy program administered by the Department of Transportation (DOT).[1] The existing DOE regulations were promulgated via the final rule Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Petroleum-Equivalent Fuel Economy Calculation, 65 FR 36986 (Jun. 12, 2000). As explained below, DOE is required to review these regulations annually and determine appropriate petroleum equivalent fuel economy values for EVs based on enumerated statutory factors. DOE has not revised these regulations in more than twenty

[1] 5 U.S.C. 553(e) provides that ''each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.''

years and the current values are based on outdated data and circumstances. The regulations are also based on an outdated application of the statutory factors, with the result that existing regulations undermine the CAFE program they are supposed to support. DOE should grant this petition and update the regulations.

Background

In 1975, Congress passed the Energy Policy and Conservation Act (EPCA), which required the National Highway Traffic Safety Administration (NHTSA) to set corporate average fuel economy (CAFE) standards for automobiles as part of a suite of measures to reduce energy consumption.[2] Congress also directed the Secretary of Transportation to submit a report with a recommendation on ''whether or not electric vehicles'' should be included in the CAFE program, including ''the manner in which energy requirements of [EVs] may be compared with energy requirements of [internal combustion] vehicles.'' [3] That report recommended against making EVs subject to CAFE standards.[4] As to comparing the energy requirements of EVs to internal combustion engine vehicles (ICEVs), the report observed that there were a number of different ways this question could be answered. The agency proposed comparing vehicles ''on the basis of overall energy efficiency from primary source to final utilization in the vehicle,'' but observed that this approach ''will not account for differences in the 'social value' of various primary energy sources'' and that vehicles could also be compared ''on the basis of petroleum consumption,'' which, for EVs, might include petroleum used to generate electricity.[5]

Notwithstanding DOT's recommendations, in 1980 Congress directed DOE ''to conduct a seven-year evaluation program of the inclusion of electric vehicles . . . in the calculation of average fuel economy [in the CAFE program] . . . to determine the value and implications of such inclusion as an incentive for the early initiation of industrial engineering development and initial commercialization of electric vehicles.'' [6] DOE was also directed to determine ''equivalent petroleum based fuel economy values for various classes of electric vehicles,'' taking into account:

(i) The approximate electrical energy efficiency of the vehicles considering the vehicle type, mission, and weight;

(ii) the national average electricity generation and transmission efficiencies;

(iii) the need of the Nation to conserve all forms of energy, and the relative scarcity and value to the Nation of all fuel used to generate electricity; and

(iv) the specific driving patterns of electric vehicles as compared with those of petroleum fueled vehicles.[7]

DOE promulgated procedures for calculating EV CAFE values in April 1981.[8] To account for factor 1, the agency chose test procedures to measure the electrical efficiency of an EV.[9] The remaining factors were ostensibly captured as subcomponents of a petroleum-equivalency factor (PEF), which varied annually with changes in the subcomponent terms. The PEF included generation and transmission efficiency terms to account for factor 2.[10] To account for ''the relative value'' of generation fuels required by factor 3, DOE weighted each type of input fuel in the generation efficiency term by the ratio of that fuel's marginal price to the marginal price of gasoline (per Btu).[11] The 1981 rule did not account specifically for ''the need of the Nation to conserve all forms of energy'' or for ''the relative scarcity'' of generation fuels. As to ''the specific driving patterns'' of EVs in factor 4, DOE determined that there was insufficient data available and assigned the driving pattern factor at a unity value of 1.0.[12] The agency also included an accessory factor (AF) that accounted for petroleum-powered accessories (such as cabin heaters) found in some EVs.[13]

In 1987, DOE completed the mandated seven-year evaluation, concluding that the EV CAFE provision was not effective at incentivizing early industrial development or initial commercialization of EVs.[14] The agency noted, however, that there was little apparent downside in having Congress provide for inclusion of EVs in the CAFE program in the future.[15] The calculation of the annual petroleum equivalency factors was not extended past 1987.[16]

Over time, Congress amended various aspects of the statutes governing the CAFE program,[17] and in 1994, codified the program as amended within title 49, United States Code.[18] As then codified, NHTSA was directed to set ''maximum feasible'' average fuel economy standards for each model year.[19] In carrying out that determination, however, NHTSA was prohibited from ''consider[ing] the fuel economy of dedicated automobiles,'' which, as defined, included EVs.[20] But if an automaker in fact produced any EVs, the agency was directed to include in the CAFE compliance calculation equivalent petroleum based fuel economy values determined by [DOE]'' for those EVs.[21] DOE, in turn, was required to ''review those values each year and determine and propose necessary revisions based on'' the four statutory factors listed above.[22]

In February 1994, ''[d]ue to continued technology development and a strong interest in the corporate average fuel economy of electric vehicles from

[2] Public Law 94–163 § 2(5), 89 Stat. 871, 874, 902 (1975). The statute assigns this task to the Secretary of Transportation, who has delegated it to NHTSA. 49 CFR 1.94(c).

[3] Public Law 94–163 § 301.

[4] Department of Transportation, Report, Advisability of Regulating Electric Vehicles for Energy Conservation at S–1 (August 1976). The recommendation stemmed in significant part from a determination that contemporary EVs would have a similar energy efficiency as internal combustion engine vehicles (ICEVs), but that there was less available potential technology to improve EV efficiency compared to the available potential technology to improve ICEV technology. E.g. id. at 3–8. According to the report, regulating EVs under CAFE ''would therefore reduce their already marginal competitiveness.'' Id. at 6–6.

[5] E.g. id. at 6–5 to 6–7.

[6] Chrysler Corporation Loan Guarantee Act of 1979, Public Law 96–185 § 18, 93 Stat. 1324 (Jan 7. 1980). In the late 1970s, one of the leading U.S. automakers, the Chrysler Corporation, was facing huge financial losses due in part to the company's decision ''to become specialists in large, gas-guzzling cars . . . right at the time . . . [of] oil boycotts and crises with the price of gasoline.'' Nat'l Public Radio, Examining Chrysler's 1979 Rescue, NPR.ORG (Nov. 12, 2008), available at *https://www.npr.org/templates/story/story.php?storyId=96922222*. In exchange for Chrysler committing to an operating plan that included ''an energy efficiency plan setting forth steps to be taken by the Corporation to reduce United States dependence on petroleum,'' Congress extended to Chrysler about $1.5 billion in loan guarantees. See Public Law 96–185 §§ 2(8), 4.

[7] *Id.* § 18.

[8] *See* Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Equivalent Petroleum-Based Fuel Economy Calculation, Final Rule, 46 FR 22747 (April 21, 1981).

[9] Id. at 22,748–22749.

[10] *Id.* at 22,748.

[11] *Id.* at 22,748–22,749.

[12] *Id.* at 22,750.

[13] *Id.*

[14] DOE, Electric and Hybrid Vehicles Program, 11th Annual Report to Congress at 30 (March 1988).

[15] *Id.*

[16] *See* Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Equivalent Petroleum-Based Fuel Economy Calculation, Proposed Rule, 59 FR 5336, 5337 (Feb. 4, 1994). 17 E.g. Public Law 100–494 § 6(a), 102 Stat. 2411 (Oct. 14, 1988); Public Law 102–486 § 403, 106 Stat. 2776 (Oct. 24, 1992).

[17] Public Law 103–272 §§ 1(a); (e), 108 Stat. 745 (July 5, 1994).

[18] Public Law 103–272 §§ 1(a); (e), 108 Stat. 745 (July 5, 1994).

[19] *Id.* § 1(e), adding 49 U.S.C. 32902(a), (c), (f), (g).

[20] *Id.* § 1(e), adding 49 U.S.C. 32901(a)(1), (8); 32902 (h)(1).

[21] *Id.* § 1(e), adding 49 U.S.C. 32904(a)(2).

[22] *Id.*

industry,'' DOE proposed to revive and update the method of calculating EV CAFE values.[23] The agency proposed a suite of changes from the 1981 rule, including to ''change the way the electricity generation output, input, and relative value terms are calculated,'' to ''incorporat[e] off-peak electric vehicle charging and the relative scarcity of electricity generation fuel sources,'' and to change the test procedure used to determine the electrical efficiency of EVs.[24] DOE noted that ''[w]hile the determination of the energy efficiency of an [EV] . . . is a straightforward task based on physical testing,'' the remaining required factors were ''subject to less precise quantification.'' [25] As proposed, the PEF would no longer have included the ''relative value'' weighting of fuels by marginal price per BTU, and would instead have added a ''relative scarcity'' factor derived from the U.S. share of the world reserve market and ''the rate at which the U.S. [was] depleting each fuel source's reserves.'' [26] These proposed regulations did not meaningfully account specifically for ''the need of the Nation to conserve all forms of energy'' or for ''the relative . . . value'' of generation fuels. The 1994 proposal was never finalized.

In 1999, DOE withdrew the 1994 proposal and proposed an alternative PEF methodology.[27] Noting ''criticisms related to the scarcity factor,'' ''DOE elected to perform an additional search of the literature'' and ''determined that the fuels used to produce electricity'' ''are quite abundant'' such that ''scarcity [did] not appear to be a concern'' and ''should not be a guiding factor in the rulemaking at [that] time.'' [28] ''DOE then examined existing law [at 49 U.S.C. 32905] for determining the petroleum-equivalent fuel economy of other types of alternative fuel vehicles.'' [29] ''Two of the most common liquid alternative fuels,'' M85 and E85, contained 85% alternative fuel and ''15 percent unleaded gasoline by volume,'' so the statute ''deemed'' ''[t]he petroleum equivalent fuel economy of E85 and M85 powered vehicles'' to be ''the measured fuel economy value'' divided by 0.15.[30] DOE then noted that Section 32905(c) ''extends this approach to gaseous fueled vehicles,'' ''divid[ing] by 0.15,'' even though the gaseous fuel ''contains no gasoline whatsoever.'' [31]

Observing that ''the methods specified in [Section 32905]'' ''intentionally and substantially overstated'' the ''true energy efficiency of'' those vehicles, DOE proposed an EV PEF ''conceptually based on the [provisions] at 49 U.S.C. 42905(c).'' [32] The agency contended that this approach would ''help to accelerate the early commercialization of electric vehicles'' and be ''more consistent with the regulatory treatment of other alternative fuel vehicles.'' [33] DOE thus proposed eliminating the relative value and scarcity factors from the 1981 rule and the 1994 proposal and instead including a ''fuel content'' factor of 1/0.15 in the PEF.[34] In effect, the fuel content factor added ''a multiple of 6.67'' to every EV's imputed fuel economy.[35] DOE justified this multiplier, drawn from statutory provisions applicable to gaseous fueled vehicles, as providing ''consistency,'' ''similar treatment to manufacturers of all types of alternative fuel vehicles,'' and ''simplicity and directness.'' [36]

The agency finalized the proposal in 2000 without substantial modification.[37] DOE also committed to review the regulations after five years and ''publish the findings of the review.'' [38] Petitioners have been unable to locate this publication, and it is not clear if the review occurred.

DOE Should Update Regulations for Calculating EV CAFE Values

DOE's regulations for calculating CAFE program fuel economy values for EVs are long overdue to be updated. Statute requires the agency to ''review those values each year and determine and propose necessary revisions'' based on the enumerated statutory factors.[39] The regulations have not been updated in more than twenty years and the data underlying the extant regulations are materially—and increasingly—inaccurate. Further, the statute requires that the equivalency values be ''based on'' the statutory factors.[40] The extant EV equivalency values are instead based on other statutory provisions applicable to gaseous fueled vehicles, with the consequence that EV CAFE values are driven by the seven-fold multiplier of the ''fuel content factor'' [41] rather than the statutory factors applicable to EVs. The effect is that EV CAFE values are significantly inflated beyond what the relevant statutory factors contemplate.

The consequences of outdated regulations are not academic. Because NHTSA is prohibited from considering the fuel economy of EVs when determining the maximum feasible CAFE standards for a given model year,[42] but must include EVs when calculating compliance with those standards,[43] excessively high imputed fuel economy values for EVs means that a relatively small number of EVs will mathematically guarantee compliance without meaningful improvements in the real-world average fuel economy of automakers' overall fleets.

DOE Should Update Its Regulations To Include the Best Available Data

The values for several component terms in the PEF equation are no longer accurate. For example, the ''gasoline-equivalent energy content of electricity factor'' (Eg) is determined by combining various values for the efficiency of national electricity and petroleum generation and distribution.[44] The efficiency of many of these processes has improved over the last twenty years. When DOE last updated regulations in 2000, the ''U.S. average fossil-fuel electricity generation efficiency'' (Tg) was 0.328, but the actual current efficiency is closer to 0.389.[45]

Further, the generation fuel mix has changed significantly since 2000. In 2000, fossil fuels made up about 71% of the generation mix, while renewables made up only about 9% and nuclear power provided the remaining 20%.[46] In 2020, fossil fuels made up only about 60%, and within that pool natural gas is increasingly supplanting coal and petroleum.[47] Renewables made up 20%

[23] Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Equivalent Petroleum-Based Fuel Economy Calculation, Proposed Rule, 59 FR 5336, 5337 (Feb. 4, 1994).

[24] *Id.*

[25] *Id.*

[26] *Id.* at 5338.

[27] Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Petroleum-Equivalent Fuel Economy Calculation, Proposed Rule, 64 FR 37905 (July 14, 1999).

[28] *Id.* at 37907.

[29] *Id.*

[30] *Id.*

[31] *Id.*

[32] *Id.* at 37907.

[33] *Id.* at 37906.

[34] *Id.* at 37907–908.

[35] *Id.* at 37908.

[36] *Id.*

[37] Electric and Hybrid Vehicle Research, Development, and Demonstration Program; Petroleum-Equivalent Fuel Economy Calculation, Final Rule, 65 FR 36986 (June 12, 2000).

[38] *See* 10 CFR 474.5.

[39] 49 U.S.C. 32904(a)(2)(B) (emphasis added).

[40] 49 U.S.C. 32904(a)(2)(B).

[41] 65 FR at 36987.

[42] 49 U.S.C. 32902(h).

[43] 49 U.S.S. § 32904(a)(2)(B).

[44] 65 FR at 36987.

[45] *Compare id. with, e.g.,* U.S. Energy Information Administration (EIA), *Electric Power Annual,* Data Tables, *https://www.eia.gov/electricity/annual/* (last visited October 22, 2021); EPA, *eGRID: Download Data, https://www.epa.gov/egrid/download-data* (last visited October 22, 2021).

[46] EIA, *Total Energy, https://www.eia.gov/totalenergy/data/annual/showtext.php?t=ptb0802a* (last visited October 8, 2021).

[47] EIA, *Electricity explained, https://www.eia.gov/energyexplained/electricity/electricity-in-the-us-generationcapacity-and-sales.php* (last visited October 8, 2021).

and will continue to grow, and nuclear energy made up the remaining 20%.[48] DOE should consider whether, in light of the required statutory factors, using a fossil-fuel only efficiency term is appropriate. DOE should also determine how, in light of the statutory scarcity, value, and conservation considerations, fuel sources such as wind and solar should be treated in terms of generation efficiency.

Other real-world changes since 2000 should also inform the agency's regulations. For example, data on the harms of fossil-fuel driven climate change, on the scale of petroleum consumption by regulated vehicles, and on the projected fleet share of EVs, have all changed over the past twenty years. DOE should ensure that its regulations are based on the best available data fitted to the required statutory considerations.

DOE Should Update Its Regulations To Comport With the Required Statutory Factors and To Support the Goals of DOT's CAFE Program

Existing regulations are arguably inconsistent with DOE's statutory mandate. The statute provides that EV CAFE values should be ''based on'' the statutory factors at 49 U.S.C. 32904. But current regulations are actually ''based on the existing regulatory approach at 49 U.S.C. 32905 for determining the petroleum-equivalent fuel economy of alternative [gaseous] fueled vehicles.'' [49] The result is that the magnitude of the PEF is primarily driven by the 1/0.15 multiplier applicable to those vehicles rather than being driven by the considerations mandated for EVs.

To illustrate, the value of the PEF currently attributable to the Section 32904 EV factors is only 12,307 Wh/gal.[50] But with the addition of the Section 32905 multiplier, the PEF becomes 82,049 Wh/gal.[51] In practical terms, the EV fuel economy used for CAFE compliance is seven-fold higher due to the inclusion of the Section 32905 multiplier. So, for example, for the bestselling 2021 Tesla Model Y (Standard Range RWD) measured at 260 Wh/mile,[52] the CAFE value under DOE's current treatment of the Section 32904 factors alone would be 51 mpg,[53] but with the multiplier the same vehicle is imputed a 315 mpg value for CAFE compliance purposes.[54]

The entire delta from 51 mpg to 315 mpg is virtual. It does not reflect any efficiency characteristic of the EV or of the national electricity generation system, nor does it reflect any discretionary adjustment tied to the relevant statutory factors. Because CAFE is a fleet average standard,[55] the virtual increase in EV fuel economy far above the average means that automakers do not need to improve the fleet efficiency of their below-average ICEVs nearly as much to comply with the standard. And NHTSA is constrained from fully compensating for the virtual increase because the statute prohibits NHTSA from ''consider[ing] the fuel economy of [EVs]'' when determining what average standard is maximum feasible for a model year.[56]

If the 1/0.15 multiplier was accounting for a real-world improvement in fuel conservation or had the effect of causing net improvements in real-world fuel efficiency, then the multiplier might be more defensible. But DOE justified its inclusion primarily on the basis of affording similar treatment to EVs as gaseous fueled vehicles.[57] As a purely legal matter, this justification is questionable, as the statute expressly provides for different treatment between these types of vehicles.[58]

DOE should holistically review its approach to calculating the PEF to ensure its regulations comport with the relevant statutory language. For example, the statute provides that DOE should account for ''the need of the United States to conserve all forms of energy.'' [59] But current PEF regulations do not appear to meaningfully address the need for national scale energy conservation, with DOE only citing this consideration in passing as a justification for including the ''accessory factor'' in the PEF equation.[60] It is not plausible that Congress intended the sweeping direction to consider ''the need of the United States to conserve all forms of energy'' to be satisfied merely by minor PEF adjustments for the ''minority of electric vehicles . . . in colder climates'' that ''may be equipped'' with petroleum-powered cabin heaters.[61] Particularly given the ongoing and increasing threat from fossil-fuel-driven climate change, DOE's regulations should more meaningfully address the need to conserve all forms of energy.[62]

DOE should also work with NHTSA to ensure PEF regulations further the goals of the CAFE program. By way of illustration, DOE historically suggested that EV CAFE values should be high to help with ''early commercialization'' of EVs.[63] But that idea originates from now obsolete language in the 1979 Chrysler Corporation Loan Guarantee Act that directed DOE to evaluate whether including EVs in CAFE would have such an effect.[64] The agency reported to Congress that the EV CAFE provision was not effective at incentivizing early commercialization,[65] and when Congress consolidated the CAFE program in title 49 in 1994, it did not include that language from the Chrysler Loan Act.[66] In any event, any consideration of extra-textual incentives must not undermine the CAFE program's ''overarching goal of fuel conservation'' for all light-duty vehicles.[67]

The early commercialization of EVs has already occurred and EVs comprise a significant and increasing share of new motor vehicle sales each model year.[68] DOE should account for these changed circumstances, and work with

[48] *Id.*

[49] 65 FR at 36987.

[50] Id.

[51] *Id.*

[52] DOE, *Compare Side-by-Side for 2021 Tesla Model Y Standard Range RWDhttps://www.fueleconomy.gov/feg/Find.do?action=sbs&id=43880* (last visited October 6, 2021).

[53] Updating the underlying data from the 2000 rule values and reconsidering the appropriate application of the statutory factors in light of current circumstances and program goals will likely increase this value.

[54] These values come from dividing the PEF (in Wh/gal) by the EPA-measured combined electrical energy consumption value (in Wh/mile). *See* 10 CFR part 474, App.

[55] 49 U.S.C. 32902.

[56] *See* 49 U.S.C. 32901(a)(1), (8), § 32902(h).

[57] 65 FR at 36987.

[58] *Cf., e.g., Russello* v. *United States,* 464 U.S. 16, 23 (1983) (''Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.'') (cleaned up).

[59] 49 U.S.C. 32904(a)(2)(B)(iii).

[60] 65 FR at 36987; cf. 59 FR at 5338.

[61] *Compare* 49 U.S.C. 32904(a)(2)(B)(iii) *with* 65 FR at 36987.

[62] As another example, the statute contemplates that the procedure for calculating the PEF might be different across ''various classes of electric vehicles,'' 49 U.S.C. 32904(a)(2)(B), but DOE has only issued regulations equally applicable to all classes of EVs. DOE should consider whether it is appropriate to differentiate among different classes of EVs for purposes of calculating CAFE values.

[63] 64 FR at 37906.

[64] *Id.; compare* Public Law 96–185 § 18(1) with § 18(3).

[65] DOE, Electric and Hybrid Vehicles Program, 11th Annual Report to Congress at 30 (March 1988).

[66] *See* Public Law 103–272 §§ 1(a); (e), 108 Stat. 745 (July 5, 1994).

[67] *Ctr. for Biological Diversity* v. *NHTSA,* 538 F.3d 1172, 1195 (9th Cir. 2008) (quoting *Ctr. for Auto Safety* v. *NHTSA,* 793 F.2d 1322, 1340 (D.C. Cir. 1986)).

[68] *E.g. The White House, Press Release, FACT SHEET: President Biden Announces Steps to Drive American Leadership Forward on Clean Cars and Trucks* (Aug. 5, 2021) (''President Biden Outlines Target of 50% Electric Vehicle Sales Share in 2030 . . . .''), *available at https://www.whitehouse.gov/briefing-room/statementsreleases/2021/08/05/fact-sheet-president-biden-announces-steps-to-drive-american-leadership-forward-onclean-cars-and-trucks/.*

NHTSA to ensure that the fuel economy imputed to EVs pursuant to 49 U.S.C. 32904 is not set at a level that undermines the overarching statutory goals of energy and fuel conservation. To be sure, Petitioners believe that producing significant and increasing numbers of EVs should be an available means for automakers to comply with increasingly stringent CAFE standards. But the relative energy efficiency of EVs compared to ICEVs, coupled with the ongoing shift to increasingly efficient electricity generation from renewable sources, should ensure that baseline EV CAFE values will compare favorably to leading ICEVs. The statute further provides DOE additional discretion—through consideration of factors ''subject to less precise quantification'' [69] such as ''the need of the United States to conserve all forms of energy,'' and ''the relative scarcity and value to the Nation of all fuel used to generate electricity'' [70]—to adjust that baseline value to a level that will optimize the overall real-world reduction in fuel consumption and achieve the core purpose of EPCA's fuel-economy chapter.

Conclusion

For the above reasons, Petitioners ask that DOE grant this petition and initiate a rulemaking process to revise and update the regulations at 10 CFR part 474 for calculating equivalent petroleum-based fuel economy values for EVs. Petitioners thank DOE for its consideration.

Respectfully submitted,

Pete Huffman

Natural Resources Defense Council.

Joshua Berman,

Vera P. Pardee,

Law Office of Vera Pardee, Counsel for Sierra Club.

[FR Doc. 2021–27624 Filed 12–28–21; 8:45 am]

BILLING CODE 6450–01–P

[69] 59 FR at 5337.

[70] 49 U.S.C. 32904(a)(2)(B)(iii).

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2021–1167; Project Identifier AD–2021–00823–E]

RIN 2120–AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2019–22–05, which applies to all General Electric Company (GE) CF34–8C model turbofan engines. AD 2019–22–05 requires initial and repetitive inspections of the operability bleed valve (OBV) fuel tubes, OBV bleed air manifold link rod assemblies, and the OBV fuel fittings. AD 2019–22–05 also requires replacement of OBVs or related OBV hardware that fail inspection. Since the FAA issued AD 2019–22–05, the manufacturer has redesigned the OBV, which terminates the need for the repetitive inspections. This proposed AD would require initial and repetitive inspections of the OBV fuel tubes, OBV bleed air manifold link rod assemblies, and the OBV fuel fittings. This proposed AD would also require replacement of OBVs or related OBV hardware that fail inspection. As a terminating action to the repetitive inspections, this proposed AD would require replacement of certain OBVs installed on GE CF34–8C and CF34–8E model turbofan engines. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by February 14, 2022.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to *https://www.regulations.gov.* Follow the instructions for submitting comments.
- *Fax:* (202) 493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact General Electric Company, 1 Neumann Way, Cincinnati, OH 45215; phone: (513) 552–3272; email: *aviation.fleetsupport@ge.com;* website: *https://www.ge.com.* You may view this service information at the Airworthiness Products Section, Operational Safety Branch, FAA, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222–5110.

Examining the AD Docket

You may examine the AD docket at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2021–1167; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Scott Stevenson, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7132; fax: (781) 238–7199; email: *Scott.M.Stevenson@faa.gov*.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under **ADDRESSES**. Include ''Docket No. FAA–2021–1167; Project Identifier AD–2021–00823–E'' at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to *https://www.regulations.gov,* including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as ''PROPIN.'' The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this