ALLIANCE FOR AUTOMOTIVE INNOVATION

To: expartecommunications@hq.doe.gov
From: Alliance for Automotive Innovation
Date: May 1, 2026
Subject: Ex Parte Meeting on Petroleum Equivalency Factor

Alliance for Automotive Innovation is providing this memorandum pursuant to the Department of Energy's guidance on ex parte communications (74 Fed. Reg. 52795, Oct. 14, 2009).

On April 30, 2026, Alliance for Automotive Innovation (Auto Innovators) met with the Department of Energy (DOE) regarding the petroleum-equivalent fuel economy calculation established by the Secretary of Energy under the authority of 49 U.S.C. § 32904(b)(2).

Participants for Auto Innovators were:

- Michael Hartrick, Energy and Environment Policy Department

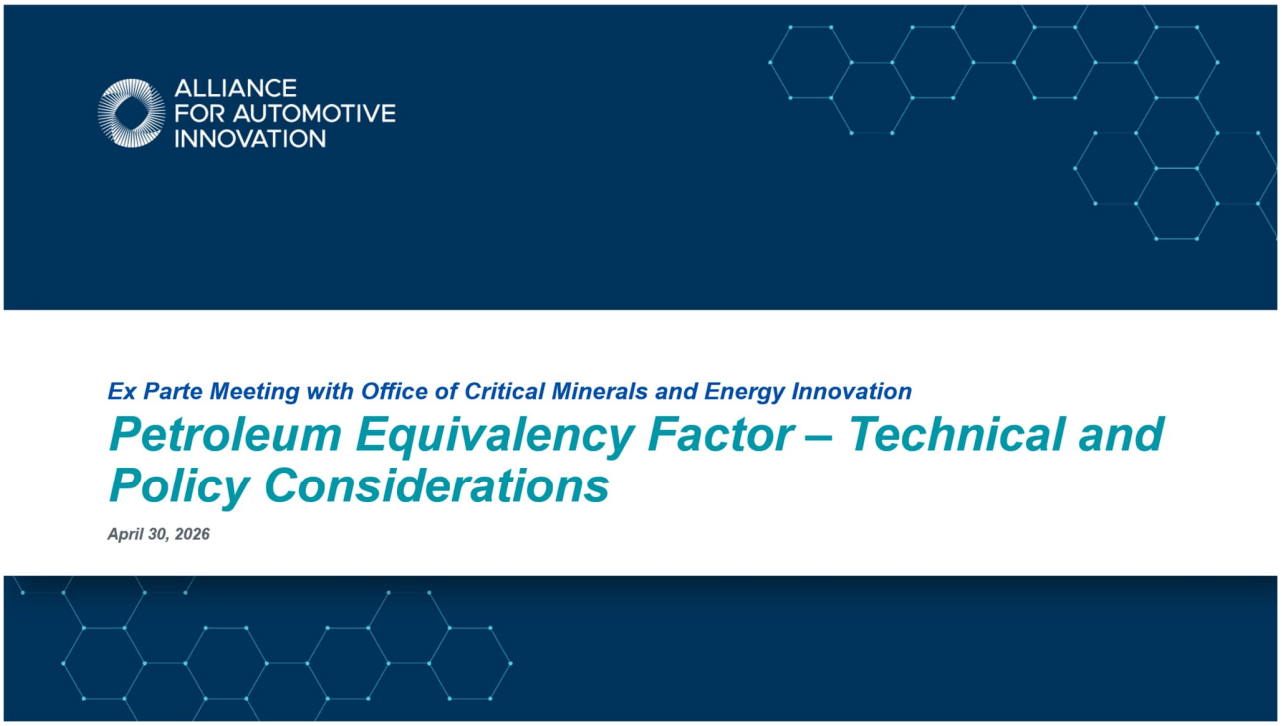
Participants for DOE were:

- Kevin Stork, Vehicle Technologies Office
- Laura Zuber, Office of the Assistant General Counsel for Legislation, Regulation & Energy Efficiency

The issues discussed during the meeting were DOE's recent Petroleum-Equivalent Fuel Economy Calculation interim final rule (91 Fed. Reg. 7810, Feb. 19, 2026), the follow-up rulemaking described therein, and the need to give full effect to all statutory considerations and to update its analysis as required under 49 U.S.C. § 32904(b)(2). Technical matters related to the four statutory factors were also discussed.

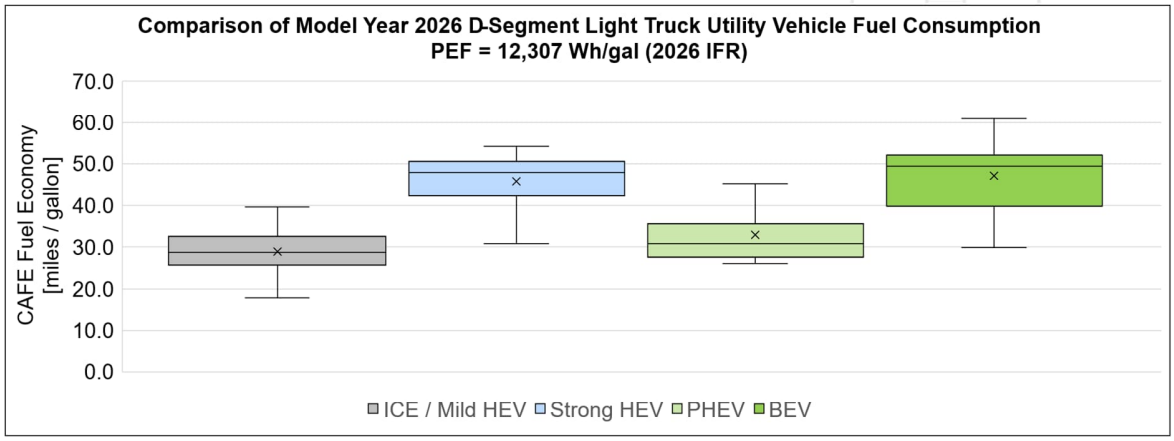
A copy of the slides discussed in the meeting are attached.

Attachment
Presentation from Alliance for Automotive Innovation
To Department of Energy
Re: Petroleum-Equivalent Fuel Economy Calculation
April 30, 2026



EV Efficiency

"A typical EV is 81 to 90% efficient compared to 30% for a conventional gasoline vehicle"
Department of Energy, Fact of the Week (Sep 16, 2024)



The IFR PEF does not reflect the higher energy efficiency of EVs
A PEF around the energy in a gallon of gasoline would better reflect the efficiency of EVs

DOE Petroleum Equivalency Factor

"If a manufacturer manufactures an electric vehicle, the Administrator shall include in the calculation of average fuel economy under paragraph (1) of this subsection equivalent petroleum based fuel economy values determined by the Secretary of Energy for various classes of electric vehicles. The Secretary shall review those values each year and determine and propose necessary revisions based on the following factors:"
49 U.S.C. 32904(a)(2)(B)

(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.

(iv) the specific patterns of use of electric vehicles compared to petroleum-fueled vehicles.

The PEF should be updated as soon as possible to reflect the modern electrical grid and to reevaluate all statutory considerations

Energy Efficiency of the Vehicle

(i) the approximate electrical energy efficiency of the vehicle, considering the kind of vehicle and the mission and weight of the vehicle.

- **Continue to use EPA test procedures to determine approximate electrical energy efficiency**
  - Consistent with DOE's statutory requirements
  - Consistent with Congressional intent to maintain consistency in test procedures over time
  - Consistent with Congressional intent to minimize additional test burdens for CAFE
  - Developed jointly by industry and agency experts; regularly updated
- **Additional adjustments are not warranted**
  - Claims that EPA test procedures do not include charging system efficiency are inaccurate
  - Claims that EPA test procedures provide an unfair bias that advantages EVs over ICE vehicles based on SAE technical paper 2023-01-0349 (Pannone and VanderWerp, 2023) misapply the authors' methods and findings
- **Any additional adjustments would require statistically significant study across a broad range of EVs and ICE vehicles**

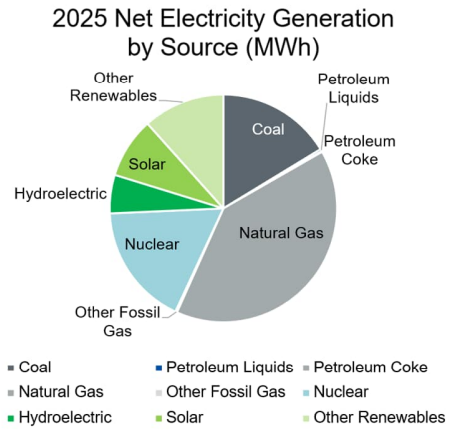
Electrical Generation and Transmission Efficiencies

(ii) the national average electrical generation and transmission efficiencies.

- **Update the national average electrical generation and transmission efficiency values**
  - Use the captured energy approach for the efficiency of solar and wind (100%)
  - Consider weighting the national average value by geographic distribution of EV sales
  - Consider projecting the national average over the lifetime of the vehicles the PEF will apply to
- **Include and update the national average petroleum refining and distribution factors to maintain petroleum equivalence**

Need to conserve energy, relative scarcity, and value

(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.



Data from https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=table_1_01

- **U.S. electricity is generated with domestically available fuels and renewables**
  - Low sensitivity to geopolitical and external market forces
- **Petroleum is abundant in the U.S. . . . but**
  - Many U.S. refineries use imported heavy crude
  - Oil prices are far more sensitive to geopolitical and external market forces
- **Suggests that any value designed to address this factor should increase the PEF**

Driving Pattern Factor

(iv) the specific patterns of use of electric vehicles compared to petroleum-fueled vehicles.

- **Maintain the driving pattern factor at a value of 1**
  - EVs are designed to provide the same utility to customers as ICE vehicles
  - EVs are designed to have the same lifetime as ICE vehicles

In short, a much deeper analysis would be needed to justify a driving pattern factor other than "1"

Other Considerations

- **Automakers have a reliance interest in the PEF's impact on CAFE compliance plans**
  - Lead time is needed if the PEF is decreased as in the 2024 rule and the 2026 IFR
- **Stability in the PEF aids long-term compliance planning**
  - Consider setting a PEF that covers multiple model years
  - The need for adjustments can be evaluated annually with the expectation that little change will be observed year to year
- **Accessory factor**
  - Maintain at "1" in general
  - Open to values greater than "1" for the installation of higher efficiency thermal control systems
- **A PEF at or near the energy content of gasoline balances multiple policy considerations**
  - Would recognize the inherent efficiency and domestic energy value of EVs through a fuel economy somewhat higher than ICEVs
  - Would not improperly benefit EVs over ICEVs
  - Would encourage manufacturers to invest in both improvements in ICE vehicles and in EV technology development, basing production on the anticipated markets for different technologies
  - Would likely satisfy the statutory criteria for the PEF

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