October 26, 2020

Administrator Andrew Wheeler
Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

RE: Docket ID EPA–HQ–OAR–2020-0104

Dear Administrator Wheeler:

On behalf of the National Corn Growers Association's (NCGA) 40,000 dues-paying corn farmers nationwide, members of the 14 state corn grower associations joining these comments and the more than 300,000 corn growers who contribute to corn checkoff programs in their states, we appreciate the opportunity to respond to the Environmental Protection Agency's (EPA) request for comments on data sources and analytical approaches on which to base an updated weighting factor (F-factor) for E85 flexible fuel vehicles (FFV) for model year (MY) 2021 and later.

As the producers of the primary feedstock for ethanol, corn farmers support a forward-looking, consistent, long-term F-factor that provides automakers with greater certainty in compliance crediting for planning vehicle production. F-factor stability for automakers will lead to greater FFV production and greater demand for E85. E85 significantly reduces greenhouse gas (GHG) and criteria pollutant emissions, offers greater choice at a lower cost for consumers and diversifies our energy supply. Additionally, E85 use increases demand for corn farmers and supports rural economies.

Corn farmers have responded to the demand for clean, renewable fuel with increased productivity. Corn production has improved on all measures of resource efficiency, including higher crop yields per acre, resulting in greater corn production using less land and fewer inputs, further fortifying ethanol as a sustainable, low-carbon renewable fuel. Corn farmers have produced, and will continue to produce, an ample supply of corn to achieve, and expand, current ethanol production levels, including filling the demand for rising E85 and low carbon fuel use, while continuing to also meet the needs of our feed, industrial, food and export customers.

The GHG reduction benefit from E85 is growing as the carbon footprint of ethanol continues shrinking due to advances in both ethanol and corn production. According to California Air Resources Board (CARB) data, the carbon intensity (CI) of ethanol under the state's Low Carbon Fuel Standard (LCFS) is more than 30 percent lower today than it was in 2011 and at least 40 percent lower than the CI of gasoline.[1] A 2019 U.S. Department of Agriculture (USDA) study shows that ethanol currently results in 39 to 43 percent fewer GHG emissions than gasoline.[2] Building on this progress, additional improvements on farms and in ethanol production supported by expanding markets for low carbon fuels would result in ethanol with up to 70 percent fewer GHG emissions than gasoline, according to USDA's analysis. Future consideration and inclusion of carbon sequestration from feedstock production and expanded

[1] California Air Resources Board, Low Carbon Fuel Standard Reporting Tool Quarterly Summaries, based on data through Q3 2019 at https://ww3.arb.ca.gov/fuels/lcfs/lrtqsummaries.htm

[2] Jan Lewandrowski, Jeffrey Rosenfeld, Diana Pape, Tommy Hendrickson, Kirsten Jaglo & Katrin Moffroid, "The Greenhouse Gas Benefits of Corn Ethanol - Assessing Recent Evidence," March 25, 2019.

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use of carbon capture technologies will drive ethanol to net zero carbon emissions, positioning higher ethanol blends, including E85, as a vital low carbon transportation solution.

F-factor for MY2020 and Avoiding F-factor Gaps

The F-factor for a given vehicle model year is used to weight the GHG emissions of a FFV operating on E85 with the GHG emissions of the vehicle operating on conventional gasoline when calculating automaker compliance with vehicle standards. Because a FFV will have lower GHG emissions when operated on E85 than when operating on gasoline, it is important to properly credit those lower emissions by projecting E85 use into the future.

We strongly agree with EPA extending the current F-factor of 0.14 to the 2020 MY and support EPA keeping the 0.14 F-factor in place until EPA adopts a new methodology based on the substantial supporting data for adjusting the F-factor upward. Certainty that the current F-factor will remain in effect for subsequent model years provides much-needed policy continuity for automakers because the F-factor influences automaker decisions regarding manufacture of FFVs.

The current 0.14 F-factor was finalized in 2014 and originally effective for the MY 2016-2018, with no plan to avoid gaps in the F-factor or a default to zero after MY 2018. The 2018 MY expiration of the F-factor, requiring a one-year extension for 2019 that didn't come until the end of the model year, is ineffective policy for manufacturers that plan vehicle production for five years or more in advance of a model year's release. Faced with the likelihood of gaps in the F-factor or a default to zero, as has been the norm since MY 2018, manufacturers are unable to plan for FFVs when they plan for vehicle standards compliance and, as a result, are producing fewer FFV models than in past years.

Going forward, we urge EPA to provide greater regulatory certainty that supports production of FFVs. EPA can best provide that stability by maintaining a constant, forward-looking F-factor without an expiration date, keeping a F-factor in place until EPA adjusts it upward through a new determination. This approach would avoid gaps and uncertainty over whether an expiring F-factor will be extended, just the same as the approach EPA is taking in this notice by extending the 0.14 F-factor to MY 2020 and later, unless and until EPA determines an adjustment. Automakers rely on a known F-factor to support FFV production and determine their vehicle standards compliance. Certainty that a F-factor will be in effect until such time as EPA issues a new determination incentivizes future decisions to invest in FFVs and new model offerings. Without that certainly, FFV choices will continue to lag, as they have in recent years.

Furthermore, we urge EPA, in subsequent, stand-alone guidance to this notice prior to undertaking a determination of a F-factor for future model years, to include a requirement for a period of advance notice in the event EPA should adjust the F-factor downward in the future. We agree with the automotive industry that a five-year advance notice requirement for any downward adjustment of the F-factor, plus three years of a production safe harbor for FFV models released during that five-year window, will provide greater regulatory predictability and encourage automaker planning and innovation in FFV production.

A stable FFV policy that avoids gaps and works with manufacturer timelines for production decisions, rather than the recent F-factor extensions that didn't come until the end of the model year, supports the long-term success of GHG and CAFE standards that help lower emissions and improve fuel economy.

Increased availability of FFV choices, supported by a predictable F-factor, leads to greater demand for E85, significantly reducing GHG emissions when drivers operate their FFVs on cost-effective E85.

A Forward-Looking F-Factor for MY2021 and Later

With EPA providing stability by ensuring the 0.14 F-factor will be available for use in compliance calculations after MY 2020, unless or until EPA increases it through a new determination, we believe any updated F-factor for MY 2021 and later must be forward looking. In 2019, NCGA and state corn grower associations supported a request from the Alliance of Automobile Manufacturers to EPA for an updated F-factor of 0.21 for MY 2020 and later. The Auto Alliance's request for an increased F-factor was justified by the 2019 Annual Energy Outlook (AEO) from the Energy Information Agency (EIA), a forward-looking projection.

EPA stated an intent to develop a "forward-looking" analysis for MY 2020 and later in this notice, referencing a letter to manufacturers extending the 0.14 F-factor to the 2019 MY.[3] We agree with EPA's intention that a new F-factor be forward looking. In response to EPA's request for comments on developing an alternative methodology that relies on historical trends, we believe it would be inappropriate for EPA to determine a new F-factor based only on backward-looking, historical E85 use data for several reasons.

The lack of national E85 data hinders this approach. Only six states track E85 sales, so determining historical use relies on uncertain estimates from averaging per-station volumes from just these six states. Additionally, reliance on historical trends for determining future use of E85 underestimates the significant growth in E85 demand underway in California, for example, the potential for a rapidly-growing FFV fleet with a stable F-factor and the potential for an increasing number of E85 stations due to recent infrastructure investments, including federal investment from the U.S. Department of Agriculture and investments supported by corn growers through our market development efforts. Finally, reliance on historical trends to predict future growth would reflect EPA's inconsistent past administration of the Renewable Fuel Standard (RFS), which has disincentivized and restrained E85 growth. Therefore, we urge EPA follow its previously stated intent of developing a forward-looking methodology for determining a future F-factor.

Concerns with EPA Methodologies to Estimate E85 Use

NCGA and state corn grower organizations have serious concerns with the two F-factor calculation methodologies EPA describes in the memorandums to the docket.[4] Both Method 1 and Method 2 are backward-looking and based on incomplete and outdated data. As concluded by an evaluation of these two EPA methods prepared by Edgeworth Economics, we agree "it is not reasonable for EPA to simply apply past, flatter E85 growth trends to project future E85 use."[5] Furthermore, neither multiple data sets that support a more robust F-factor, which we believe are more appropriate data sources for EPA to

[3] 85 Federal Register 52591, August 26, 2020

[4] For Method #1 approach, see "Final estimate of E85 consumption in 2018," memorandum from David Korotney to EPA Docket EPA-HQ-OAR-2019-0136, December 18, 2019. For Method #2 approach, see "Preliminary estimate of E85 consumption in 2018," memorandum from David Korotney to EPA Docket EPA-HQ-OAR-2019-0136, June 26, 2019.

[5] See Edgeworth Economics, *Evaluation of EPA's Estimates of Annual E85 Volume, (*October 23, 2020) Page 1, attached at Appendix A.

use, nor updated growth rates in E85 stations and per-station throughput, are included or used in either of these two methods.

Under Method 1, EPA estimates annual E85 volumes as of 2018 by extrapolating nationwide volumes from local volumes obtained from the six states that separately track E85 sales (CA, IA, KS, MN, ND, and NY). EPA calculates the average per station volume across these six states, using station counts from the Department of Energy's Alternative Fuel Data Center (AFDC) and multiplies that per station volume by AFDC's nationwide station count.

Based on the evaluation from Edgeworth Economics and E85 station counts reported by the Renewable Fuels Association at E85prices.com, it appears AFDC undercounts E85 stations, with AFDC reporting 3,605 stations and E85prices.com reporting more than 5,000 stations.[6] Iowa reported 350 E85 stations in 2019, but AFDC currently reports 315 stations.[7] Finally, CARB reports 260 retail stations offering E85 in California, and AFDC reports 179.[8]

Reliance on past station counts to determine a forward-looking F-factor overlooks the importance of continued E85 station expansion that EPA has also recognized.[9] For example, the U.S. Department of Agriculture is in the process of leveraging $100 million in biofuels infrastructure grants to retailers, with a 50 percent cost share requirement, to support offering higher blends of ethanol such as E85 through its Higher Blends Infrastructure Incentive Programs (HBIIP). HBIIP will continue to support expansion of E85 stations. State corn promotion boards also invest significant farmer dollars every year to help make E85 and other higher ethanol blends available to more consumers. We believe EPA must ensure the most accurate and updated E85 station count is used when determining a F-factor because station counts, and expansion of stations offering E85, drive E85 sales volumes.

In addition to our concerns about station undercount with Method 1, we are also concerned EPA provides no justification as to why the station sales volumes in these 6 states where E85 sales are tracked is adequate to serve as a proxy for E85 sales across the United States as a whole. Reliance on historic sales data from six states is insufficient to form the basis for a forward-looking F-factor.

According to Edgeworth Economics analysis, California has seen E85 use grow at an average compounded rate of 30 percent annually over the past five years, with growth largely backed by the stability of California's LCFS.[10] This growth is expected to continue since E85 is a low carbon fuel and supports LCFS crediting. Based on the current annual average compounded growth rates of E85 use, California would reach a 20 percent F-factor by 2025.[11]

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[6] Appendix A, Page 2

[7] Iowa Department of Revenue, 2019 Retailers Fuel Gallons Annual Report at https://tax.iowa.gov/retailers-motor-fuel-gallons-annual-report-2019 and DOE, Alternative Fuels Data Center Website, at https://afdc.energy.gov/stations/states (last viewed October 25, 2020).

[8] See California Air Resources Board letter to Graham Noyes, October 22, 2020, submitted with Pearson Fuels comment to the docket for total CA E85 stations, including 46 government sites, and Alternative Fuels Data Center Website, at https://afdc.energy.gov/stations/states (last viewed October 25, 2020).

[9] "Technical Memorandum Describing Potential Methods for Determining the Weighting Factor (F-Factor) for Testing E85 Flexible Fuel Vehicles (FFV) Light-duty Vehicles" from EPA OTAQ to Docket EPA-HQ-OAR-2020-0104, August 18, 2020, p 7-8.

[10] Appendix A, Page 2

[11] See AIR, *"F Factor" Analysis for Two States*, (October 23, 2020), attached at Appendix B.

Growing availability of E85 and increasing E85 volumes per pump demonstrate the insufficiency of making an assumption of nationwide E85 use with limited historical data. Data from Iowa shows average gallons per pump have been rising, with the 2018 average of 64,000 gallons per pump.[12] Based on the current annual average compounded growth rates of E85 use, Iowa would reach a 20 percent F-factor by 2030.[13] As detailed in separate comments submitted by the Kansas Corn Growers Association, since 2016, the Kansas Corn Commission has provided cost-share on approximately 130 fuel dispensers in 30 stations offering E85. E85 sales at these locations experienced more than 45 percent growth rates in 2017 to 2018 and a 65 percent year over year growth rate in 2019. In addition, analysis from Dr. Scott Irwin at the University of Illinois based on EIA data shows E85 use per pump in 2018 was 28,551 gallons, more than double the average per pump between 2007 and 2015.[14]

EPA's Method 2, which uses the results of a statistical analysis of 2014 data that correlates per-station E85 volumes with the price discount for E85 relative to E10 to project per station volume, also raises several concerns. In addition to the concern of station undercount in AFDC data, which reduces the E85 volume estimate in Method 2, the data used to identify the relationship between E85 discounts and sales volumes is now 4 to 10 years old. EPA's reliance on the historical relationship between price discounts and E85 sales volumes covers a period when the price discount for E85 was relatively low and price signals were hampered by inconsistent administration of the RFS, including general RFS waivers later determined to be in violation of the statute.

When EPA's methods are used with forward-looking expectations for station growth ranging from four to eight percent annually and annual per-station volume growth ranging from three to 15 percent, however, the resulting E85 volumes are consistent with F-factors in the range of 0.2.[15] According to this evaluation from Edgeworth Economics, these projections of E85 stations and volume per station are well within the range of possibility.

Concerns with AEO 2020

As EPA describes, EIA used a significantly different model to project biofuels consumption, including ethanol consumption, in AEO 2020 compared to AEO 2019. AEO 2019, as detailed in the Auto Alliance's 2019 request to EPA to update the F-factor determination, supports a F-factor of at least 0.2, a request we supported. Given the extensive changes EIA used to develop AEO 2020, we believe reliance on AEO 2020, without corrections for its deficiencies, significantly undervalues the F-factor and, alone, is an inappropriate data source for establishing an updated F-factor.

We have concerns with several changes made in AEO 2020. Most significantly, AEO 2020 no longer includes the Renewable Fuel Standard (RFS) implied conventional renewable fuel volume requirement of 15 billion gallons in the outlook. EIA reduced the total renewable fuel volumes required to be met based on the massive expansion of RFS refinery exemptions EPA has granted recently, up to and including in 2018. For the 2016-2018 RFS compliance years, EPA quadrupled the number of RFS refinery exemptions granted, issuing 85 exemptions covering 4 billion ethanol-equivalent gallons. As EPA

[12] Iowa Department of Revenue, 2018 Retailers Fuel Gallons Annual Report at https://tax.iowa.gov/reports/retailers-motor-fuel-gallons-annual-report-2018
[13] Appendix B
[14] Scott Irwin, "What's Behind Rising E85 Use?" *farmdoc daily*, v. 9, n. 13, January 14, 2019, available at https://farmdocdaily.illinois.edu/2019/01/whats-behind-rising-e85-use.html
[15] Appendix A, Page 5

describes in the technical memo to the docket, EIA in AEO 2020, after 2018, "linearly ramped down the reduced volumes, targeting 2030 as the first subsequent year in which the full RFS volumes would apply."[16]

Basing future volumes on the current abuse of RFS waivers and phasing down ethanol volumes over time as a result of these waivers, as was done in AEO 2020, does not provide solid footing for determining the future F-factor, nor is it a reasonable judgement. In January 2020, the Tenth Circuit Court of Appeals in *Renewable Fuels Association et al. v EPA* ruled that EPA exceeded the agency's authority when granting the RFS refinery waivers in question.[17] NCGA was a plaintiff in this legal challenge. The Tenth Circuit Court issued its mandate in this decision on April 15, 2020, after denying a petition for rehearing the decision *en banc*. The Tenth Circuit decision, when properly applied nationwide, would result in all but a few pending and any future RFS refinery waivers being denied. Furthermore, EPA, in the final renewable volume standards rule for the RFS for 2020, included reallocation of projected waived biofuels blending. EPA should not rely on an AEO projection for making a F-factor determination that assumes these waivers, a prior lack of reallocation in the RFS volume rule, will continue well into the future.

EPA states that because AEO 2020 aligns with limited historical E85 use data, this new projection represents future E85 production and consumption.[18] We disagree. AEO 2020 locks in assumptions about the impact of past actions, such as extensive RFS waivers, that are extremely unlikely to continue in the future. Furthermore, before considering use of the forthcoming AEO 2021, EPA must review it and correct for these same concerns.

Appropriate Data Sources Support a F-factor of 0.2

If using AEO 2020, EPA must make corrections to the data, including corrections supported by data in the materials posted to the docket, "Update to Understanding E85 in the Annual Energy Outlook 2020 6-9-20," and "F Factor projections – Review of multiple data sets 4-29-20."[19] As these data sets demonstrate, correcting AEO 2020 to remove the RFS refinery exemptions, updating E85 station counts and removing biobutanol as a competing fuel because of its prohibitively high cost result in F-factors in the range of 0.2, similar to a F-factor based on AEO 2019. These recommended data sets also account for the increased consumption of biodiesel and renewable diesel as competing renewable fuels, as projected using AEO 2020, which also results in a F-factor at or near 0.2.

NCGA and state corn grower associations support a F-factor of at least 0.2. We strongly urge EPA to rely on these data sets that correct the serious deficiencies of AEO 2020. Multiple data sources, including AEO 2019, a corrected AEO 2020 that eliminates RFS waivers and allows for biodiesel growth, and using EPA's Method 1 applying growth in E85 stations and per-station throughput, all support a higher F-factor of at least 0.2. We believe these are most appropriate data sources for EPA to use when establishing an updated F-factor of at least 0.2 for MY 2021 and later vehicles.

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[16] Technical Memorandum, Page 10

[17] *Renewable Fuels Association et al. v. EPA*, 948 F.3d 1206 (10th Cir. 2020)

[18] Technical Memorandum, Page 10

[19] "Update to Understanding E85 in the Annual Energy Outlook 2020 6-9-20," available in docket EPA-HQ-OAR-2020-0104 and "F Factor projections – Review of multiple data sets 4-29-20," available in docket EPA-HQ-OAR-2020-0104

NCGA and State Corn Grower Association Recommendations

- We support EPA maintaining the current F-factor of 0.14 unless and until EPA adopts an updated, forward-looking, higher F-factor determination.

- Any future F-factor determination should remain current guidance until EPA adopts a new determination to avoid gaps in the F-factor and prevent a default to zero, supporting certainty for manufacturer decision making.

- We agree with the automotive industry that a five-year advance notice requirement in the event of any future downward adjustment of the F-factor, plus three years of a production safe harbor for FFV models, will provide greater regulatory predictability and encourage automaker planning and innovation in FFV production.

- We believe it is inappropriate for EPA to determine a new F-factor based only on backward-looking data or limited historical data, as outlined in Method 1 and Method 2. Use of updated and forward-looking growth in station numbers and per station E85 throughput with EPA's Method 1, however, supports a F-factor of 0.2.

- We have serious concerns with the problematic changes EIA made in AEO 2020, compared to AEO 2019, including the treatment of RFS refinery waivers, which make AEO 2020 unsuitable for F-factor determination without corrections. The forthcoming AEO 2021 must be reviewed for these same concerns and corrections.

- Multiple data sources cited in our comments, including those found in the docket materials, "Update to Understanding E85 in the Annual Energy Outlook 2020 6-9-20," and "F Factor projections – Review of multiple data sets 4-29-20," support an updated F-factor of at least 0.2.

- We urge EPA to rely on these data sources when determining a F-factor for MY 2021 and later, and we believe the data justifies a F-factor of 0.2.

Thank you for considering these comments from NCGA and the undersigned state corn grower associations.

Sincerely,

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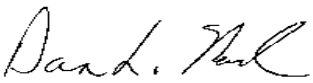

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