

Memorandum

To: Vinay Nagabhushana, NHTSA, Contracting Officer Representative

From: ICF, Energy Team

Date: 28 August 2023

Re: Draft EIS – Energy ICF Generated Data Administrative Record (AR) Files

Comments: This memo is intended to explain the use of the energy team’s ICF generated data files included as part of the Draft EIS AR.

Data Used in Draft EIS:

1. **Draft EIS Energy Figures based on 2022 AEO.xlsx:** This Excel file shows how values reported in Draft EIS Chapter 3, Energy, reflect separate AEO 2022 tables for Energy Supply and Disposition, Energy Consumption by Sector and Source, and Renewable Consumption by sector and source. Chapter 3 combines data from separate AEO 2022 tables to provide supply and demand values that are comparable within fuel categories in the CAFE Compliance and Effects Model. The data presented in Chapter 3 also include electricity losses, again to provide supply and demand values that are comparable. The British thermal unit (Btu) amounts used in electricity generation include electricity losses because those losses are part of the supply Btus (coal, natural gas, etc.) used to deliver electricity for consumption. This Excel file highlights values referenced in Section 3.1 Introduction and contains the data for Figure 3.1.1 in the Section 3.1 Introduction and Figure 3.3.2-1 in Section 3.3.2 Cumulative Impacts.
2. **Draft EIS Energy LCA Calcs 2023-2023.xlsx:** This Excel file contains data extracted from the AEO 2022 to calculate various life-cycle statistics for the U.S. energy sector used in Chapter 3. Data gathered from the AEO 2022 includes energy consumption in the transportation sector, light-duty vehicle fuel consumption as a share of total transportation energy consumption, oil and natural gas production, U.S. electricity generating capacity, and biofuels production and consumption.
3. **Draft EIS CAFE Model Fuel Consumption Stats.xlsx:** This Excel file contains the outputs of the CAFE Model projecting the fuel consumption of light-duty vehicles and HDPUVs. From this data, percentages were calculated for fuel consumption by fuel types,

including diesel, E85, electricity, gasoline, and hydrogen. This information was inserted into the text and various tables in Chapter 3 of the Draft EIS.

4. **Draft EIS Energy Oil_Imports_and_Carbon_Intensity.xlsx:** This Excel file contains data from EIA on U.S. Crude Oil imports as well as values of estimated emissions intensities of crude oil production from Masnadi et al. (2018). From this data the percent of characterization of countries of origin for U.S. crude oil imports is calculated for reference in Section 3.2.1.4 Petroleum Imports in Chapter 3 of the Draft EIS. The data on country of origin for U.S. crude oil imports and the Masnadi et al (2018) emission intensities are also used to produce Figure 3.2.1-8 in Section 3.2.1.4 Petroleum Imports.