United States Court of Appeals for the District of Columbia Circuit

No. 22-1080 (Consolidated with Nos. 22-1144 and 22-1145)

NATURAL RESOURCES DEFENSE COUNCIL,

Petitioner,

 ν .

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION; STEVEN CLIFF, in his official capacity as Deputy Administrator of the National Highway Traffic Safety Administration; PETE BUTTIGIEG, in his official capacity as Secretary of the United States Department of Transportation,

Respondents,

CLEAN FUELS DEVELOPMENT COALITION, et al.,

Intervenors.

On Petition for Review of Action of the National Highway Traffic Safety Administration

BRIEF OF AMICI CURIAE CALIFORNIA BUSINESS ROUNDTABLE AND CALIFORNIA MANUFACTURERS & TECHNOLOGY ASSOCIATION IN SUPPORT OF PETITIONER AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS AND STATE PETITIONERS

DALE STERN
PATRICK VEASY
DOWNEY BRAND LLP
621 Capitol Mall, 18th Floor
Sacramento, California 95814
(916) 444-1000
pveasy@downeybrand.com

Counsel for Amicus Curiae California Manufacturers & Technology Association RONALD C. COHEN LEVATO LAW, LLP 2601 Main Street, Suite 1300 Irvine, California 92614 (310) 734-2039 rcohen@levatolaw.com

Counsel for Amicus Curiae California Business Roundtable

November 29, 2022

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Amici California Business Roundtable and California Manufacturers & Technology Association respectfully submit this Certificate as to Parties, Rulings, and Related Cases:

A. Parties and Amici

All parties, intervenors, and amici appearing in this Court are listed in the initial brief of Petitioner American Fuel & Petrochemical Manufacturers and State Petitioners.

B. Rulings Under Review

The agency action under review is the final rule of the National Highway Traffic Safety Administration (NHTSA) entitled *Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks*, 87 Fed. Reg. 25,710 (May 2, 2022), amending model year 2024-2026 fuel-economy standards.

C. Related Cases

Three consolidated cases in this Court challenge the rule under review: Natural Resources Defense Council v. NHTSA (No. 22-1080); Texas v. NHTSA (No. 22-1144); and American Fuel & Petrochemical Manufacturers v. NHTSA (No. 22-1145).

Seven consolidated cases in this Court challenge a related rule promulgated by the Environmental Protection Agency (EPA): *Texas v. EPA* (No. 22-1031); *Competitive Enterprise Institute v. EPA* (No. 22-1032); *Illinois Soybean Ass'n v. EPA* (No. 22-1033); *American Fuel & Petrochemical v. EPA* (No. 22-1034); *Arizona v. EPA* (No. 22-1035); *Clean Fuels Development Coalition v. EPA* (No. 22-1036); and *Energy Marketers of America v. EPA* (No. 22-1038).

CORPORATE DISCLOSURE STATEMENT

California Business Roundtable ("CBRT") is a California non-profit trade association within the meaning of D.C. Circuit Rule 26.1(b). Its members are companies, including major employers across the state, with a shared concern for California's economy and the creation of jobs. CBRT has no parent company, and no other company has an ownership interest in the organization.

The California Manufacturers and Technology Association ("CMTA") is a non-profit statewide trade association within the meaning of D.C. Circuit Rule 26.1(b). Its members are companies engaged in the manufacturing and technology sectors in California who focus on improving and enhancing a strong business climate for California's manufacturing, processing and technology-based companies. CMTA has no parent company, and no other entities have an ownership in, or voting control over the association.

CERTIFICATE REGARDING SEPARATE AMICUS BRIEF

Amici CMTA and CBRT certify, pursuant to Circuit Rule 29(d), that this separate amicus brief is necessary to provide their unique perspective on the issue of whether and how the challenged action of the National Highway Traffic Safety Administration (NHTSA), including its resulting impacts on the California (and nation's) economy, implicates the "major questions doctrine" and mandates that Congress speak clearly if it wishes to assign to the agency decisions of such vast economic and political significance.

Please note: This brief is substantially similar to the corrected amicus brief filed by CMTA and CBRT on November 10, 2022, in the related case, *Texas v. EPA* (No. 22-1031).

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GLOSSARY

CBRT California Business Roundtable

CMTA California Manufacturers and Technology Association

DRC Democratic Republic of the Congo

EPA U.S. Environmental Protection Agency

EPCA Energy Policy and Conservation Act

NHTSA National Highway Traffic Safety Administration

OPEC Organization of the Petroleum Exporting Countries

I. IDENTITY, INTEREST, AND AUTHORITY OF AMICI CURIAE

The California Business Roundtable ("CBRT") is a nonpartisan organization comprised of senior executive leadership of major employers throughout the state of California, with a combined workforce of over 750,000 employees. For more than 40 years, CBRT has identified the issues critical to a healthy business climate and provided the leadership needed to strengthen California's economy and create jobs. Among other things, CBRT concerns itself with policies and conditions that undermine economic efficiency and structural stability, diminish the total economic surplus created by California's economy for the collective benefit of all its participants, and place California at a competitive disadvantage in the U.S. and global economies. Of particular importance to CBRT are the (often overlooked) economic implications and consequences of various public policies and laws.

The California Manufacturers & Technology Association ("CMTA") is a non-profit statewide trade association representing the manufacturing and technology sectors in California. CMTA works to improve and enhance a strong business climate for California's 30,000 manufacturing, processing and technology-based companies. Since 1918, CMTA has worked with the state government to develop balanced laws, effective regulations and sound public policies to stimulate economic growth and create new jobs while safeguarding the state's environmental resources. CMTA represents 400 businesses from the entire manufacturing community – an

economic sector that generates more than \$300 billion every year and employs more than 1.3 million Californians.

Among their responsibilities, CMTA and CBRT file amicus briefs in cases of importance to their members, such as the pending action.

Amici submit this brief to assist the Court in its review of NHTSA's action entitled *Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks*, 87 Fed. Reg. 25,710 (May 2, 2022), with reference to the "major questions doctrine" that mandates "Congress to speak clearly if it wishes to assign to an agency decisions of 'vast economic and political significance." In short, as discussed below, NHTSA's assertion of authority under Section 32902 of the Energy Policy and Conservation Act (EPCA) to mandate the deliberate and directed restructuring of major sectors of the U.S. economy has economic and associated political implications that are deep, multi-layered, comprehensive, and unprecedented.

Amici submit this brief not as an argument about the appropriate public policy to address air quality or climate change, but simply to assist the Court in its review by explaining why the "major questions doctrine" must be applied here to examine the scope of NHTSA's statutory authority. Indeed,

"None of this is to say that the policy the agency seeks to pursue is unwise or should not be pursued. It is only to say that the agency seeks to resolve for itself the sort of question normally reserved for Congress. As a result, we look for clear evidence that the people's representatives in Congress have actually afforded the agency the power it claims."

West Virginia v. EPA, 142 S. Ct. 2587, 2622 (2022) (Gorsuch, J., concurring).

All parties – the Petitioners, Respondents, Petitioner-Intervenors, and Respondent-Intervenors – have been asked and consent to CBRT's and CMTA's filing of an amicus brief.¹

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¹ No party or party's counsel authored this amicus brief in whole or in part. No party or party's counsel contributed money that was intended to fund preparing or submitting this brief. No person other than amici CBRT and CMTA, their members, or their counsel contributed money that was intended to fund preparing or submitting this amicus brief.

Petitioner-Intervenors Valero Renewable Fuels Company, LLC and Diamond Alternative Energy, LLC are subsidiaries of Valero Energy Corporation. Another subsidiary, Valero Services, Inc., is a member of CBRT and pays annual membership dues to the organization. Neither Valero Services, Inc. nor Valero Energy Corporation, nor any counsel for those companies, authored this amicus brief in whole or in part or made a monetary contribution intended to fund the preparation or submission of this brief, and they did not participate in CBRT's decision to submit this amicus brief.

II. ARGUMENT

A. The Major Questions Doctrine

The challenged action of NHTSA – amending model year 2024-2026 fuel-economy standards – has effectively mandated, as one of the means of addressing global climate change, that there be a rapid and comprehensive transformation of the vehicles driven in the U.S. from those vehicles which are powered by the internal combustion engine to electric vehicles primarily powered by lithium-ion batteries.

The economic and political implications of such a deliberate and directed restructuring of major sectors of the economy, and the economic risks that are created thereby, are unprecedented in the nation's history. Construing Section 32902 to authorize NHTSA to regulate in this manner raises issues of vast economic and political significance. Under the "major questions doctrine," courts "expect Congress to speak clearly if it wishes to assign to an agency decisions of 'vast economic and political significance." *Utility Air Regul. Grp. v. EPA*, 573 U.S. 302, 324 (2014) (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 159 (2000)); *see West Virginia*, 142 S. Ct. at 2605.

The obvious effects of NHTSA's decision on the nation's automobile market, petroleum industry, agricultural sectors, and electric grid, are themselves of "vast economic and political significance." But even those effects only scratch the surface. As an illustrative example of the deep and multi-layered nature of the

economic and political impacts, we here discuss the critical role of a single chemical element – cobalt – in a restructured vehicle economy based on lithium-ion batteries.

Furthermore, our focus on California is appropriate for this discussion. The NHTSA action under review here should be viewed in the context of two actions by the U.S. Environmental Protection Agency (EPA) that are presently being challenged in this Court: EPA's setting of revised greenhouse-gas emission standards for light-duty vehicles for model years beginning with 2023 (*See* 86 Fed. Reg. 74,434 (Dec. 30, 2021); *Texas v. EPA* (No. 22-1031)); and EPA's grant to California of a federal preemption waiver for that state's own green-house gas emissions standards and aggressive zero-emissions vehicle sales mandate, which other states may adopt (*See* 87 Fed. Reg. 14,332 (Mar. 14, 2022); *Ohio v. EPA* (No. 22-1081)). To date, 17 other states and the District of Columbia – representing over 40% of the nation's vehicle market – have adopted California standards and policies.

The economic conditions that California (itself, the largest economy of any of the United States and fifth largest economy in the world) is facing and creating are illustrative for the rest of the country, and those conditions both exacerbate and are exacerbated by the national economic impacts of the NHTSA action under review here. Indeed, the impacts on the California economy *alone* are sufficiently vast to invoke the major question doctrine.

Nor are these observations surprising. Globally:

"The economic transformation required to achieve netzero emissions by 2050 will be massive in scale and complex in execution. The transition would bring substantial shifts in demand, capital allocation, costs, and jobs, which will be challenging to a wide range of stakeholders, not least because they will be distributed unevenly."

"The net-zero transition: What it would cost, what it could bring," McKinsey Global Institute (January 2022), p. 50.²

"Reaching net-zero emissions will thus require a transformation of the global economy."

Id., p. 11.

B. Cobalt's Role in a Transformed Vehicle Economy Based on Lithium-Ion Battery Technology

While a range of vehicle technologies are viable to reduce greenhouse-gas emissions, NHTSA has effectively selected electric vehicles powered primarily by lithium-ion batteries to be the favored technology going forward, and to rapidly force manufacturers to produce such electric vehicles in place of traditionally-powered vehicles. NHTSA did this by setting fuel-economy standards that effectively

² https://www.mckinsey.com/capabilities/sustainability/our-insights/the-net-zero-transition-what-it-would-cost-what-it-could-bring.

mandate electric vehicles. In violation of express restrictions that Congress imposed on NHTSA's authority under Section 32902(h) of the Energy Policy and Conservation Act (EPCA),³ NHTSA considered the fuel economy of electric vehicles and the fuel economy of plug-in hybrids when operating on electricity,⁴ and, in order to make compliance with the amended fuel-economy standards appear feasible, NHTSA considered the availability of compliance credits.⁵

Cobalt is the raw material most critical to the lithium-ion battery technology that is presently commercially available in electric vehicles, and which will be for the foreseeable future.⁶ While battery technologies that are less dependent on cobalt will likely develop over time, they will not be sufficiently prevalent in electric vehicles to meet the aggressive timelines for NHTSA's forced electrification of vehicle fleets.⁷ That makes the existing lithium-ion battery technology – and its

³ 49 U.S.C. § 32902(h).

⁴ See 87 Fed. Reg. 25,735; 25,744-45; 25,474; 25,756-59; 25,762-65; 25,725; 25,747; 25,780; 25,809-11; 25,896; 25,916; 25,922; 25,924.

⁵ See 87 Fed. Reg. 25,747; 25,749; 25,779.

⁶ "A Closer Look At California's Cobalt Economy," California Center for Jobs & the Economy (January 2019), https://www.cobalt-economy.centerforjobs.org/, pp. 3, 9, 16, 20, 52. The California Center for Jobs & the Economy (centerforjobs.org) provides an objective and definitive source of information pertaining to job creation and economic trends in the United States.

⁷ See id., pp. 4, 5, 8, 16, 20, 91.

cobalt dependence – the de facto technology on which increased electric vehicle production will be based.⁸

Reliance on this specific vehicle technology that depends on a single energy source has widespread consequences for the economy, and significant, associated social and political consequences.

C. The Economic Consequences of Other Industries' Competing Demand for Available Cobalt Supplies

Cobalt is widely used across numerous sectors of the economy. Therefore, as electric vehicles and electricity storage batteries ramp up their demand, they will be competing against other, also expanding, uses of cobalt, including:

- Traditional chemical applications such as animal feed additives, catalysts, paint drying agents, pigments, polyester, recording media, tires, and vitamin B12.9
- Emerging and rapidly expanding use of rechargeable and non-rechargeable batteries in smartphones, tablets, laptops, tools, equipment such as forklifts, household equipment, other consumer products, and medical applications.¹⁰

⁸ See id., pp. 8, 29, 88.

⁹ See id., pp. 3, 11, 83, 91.

¹⁰ See id., pp. 3, 11, 83, 91.

• Metallurgical applications such as superalloys for aerospace parts, defense, power generation, and prosthetics; high-speed steel for cutting tools and maraging steels; carbide and diamond tools; and magnets including those used in electric vehicles, alternative energy generation, and a wide range of other product applications.¹¹

Indeed, by 2025, cobalt use for *non*-battery applications alone is projected to grow to a level that exhausts the total amount of cobalt mined in 2017.¹² And by 2025, the demand for cobalt for battery applications *other than* electric vehicles and electricity storage batteries is, by itself, estimated to be 5-30% higher than total mining production in 2017.¹³

D. The Economic Consequences of Expected Cobalt Supply Shortages

Cobalt shortages are expected by 2025.¹⁴ A substantial expansion of mining will be required to meet most of the massive increase in demand for cobalt.¹⁵ Even if presently-planned mining expansion proceeds without delay and without encountering unanticipated barriers, this increased and accelerated demand for cobalt for electric vehicles will likely result in supply and price pressures on *other*,

¹¹ See id., pp. 3, 11, 83, 91.

¹² *Id.*, pp. 53, 83.

¹³ *Id.*, pp. 53, 83-84.

¹⁴ *Id.*, pp. 6, 10, 12, 69-70, 86-87, 91.

¹⁵ *Id.*, pp. 5, 11, 84.

non-vehicle manufacturing, sectors of the economy, with the most significant impacts likely to be in those industries where cobalt is also an especially critical element – consumer electronics, metallurgical, and medical applications. ¹⁶ In the manufacturing sector alone (*i.e.*, excluding related wholesale, retail, and service businesses), the non-vehicle industries most likely to be negatively affected employed over 560,000 Californians as of 2017. ¹⁷

If there are significant cobalt supply shortages they will likely result in production delays of those products and applications where cobalt is a critical component, and such production delays have the greatest potential to result in significant price increases to consumers and other end users.¹⁸ Even without a significant supply shortage, any cobalt price increase will increase product prices and result in higher costs for consumers, businesses, and public services such as transportation, facilities, and healthcare.¹⁹

Of course, the effect on individual companies will vary depending on the extent to which they rely on cobalt-dependent components. For consumers, the most significant impact would likely be the prices for consumer electronics.²⁰ It is

¹⁶ See id., pp. 84-85.

¹⁷ *Id.*, pp. 84-85.

¹⁸ *Id.*, p. 85.

¹⁹ *Id.*, p. 85.

²⁰ See id., p. 86.

estimated that a 1% increase in the prices for consumer electronics would cost California consumers around \$400 million annually.²¹ While some consumer electronics companies would absorb higher costs in the short run, longer term cobalt supply issues would be more likely to translate into higher consumers prices.²²

E. The Economic and Political Consequences of Reliance On, and Expansion of, Existing Cobalt Supplies

Cobalt is the battery-critical material that is most likely to be in short supply.²³ As of 2019, mining in the Democratic Republic of the Congo (DRC) supplied more than half of the world's cobalt, and it is expected to supply three-quarters by 2025.²⁴ Because, as discussed above, projections through 2025 indicate that all or more of the world's current mining output will be required to meet the cobalt demands of *non*-vehicle applications, the additional cobalt necessary to supply electric vehicles will have to depend on expanded mining, almost all of which will also be located in the DRC.²⁵ However, decades of civil unrest and war in the DRC, which shows no sign of abating, have led to frequent disruption of mining operations and global minerals supplies.²⁶ While China-based companies have moved to invest and assert

²¹ *Id.*, p. 86.

²² *Id.*, p. 86.

²³ *Id.*, pp. 10, 52.

²⁴ *Id.*, pp. 5, 11, 58-60, 86, 91.

²⁵ *Id.*, pp. 5, 60, 64, 69, 91-92.

²⁶ *Id.*, pp. 13, 75-76, 86-87, 92.

increasing control over DRC mines, that circumstance introduces a different risk of harm to the U.S. economy if China's national policies lead to monopolistic practices.²⁷

Further, the unavoidable reliance on DRC-based mines as the critical supplier of cobalt necessarily entails acceptance of, if not tacit support for, the prevailing mining conditions in the DRC. A substantial component of the DRC's cobalt production comes from subsistence, artisanal mining in unsafe working conditions utilizing child labor, which are also associated with other worker and human rights abuses.²⁸ While foreign governments and companies may make efforts to get future cobalt from the DRC under "ethical" and child-labor-free conditions, the effectiveness of these efforts will depend on the unlikely emergence of administrative and political conditions in the DRC, including control of corruption, that have not existed for several decades.²⁹ Corruption, in particular, has drained the DRC of mineral revenues necessary for basic mine maintenance, leading to the physical collapse of mines.³⁰ And with two-thirds of the DRC population living in extreme poverty (with income of less than \$1.50 a day), and with most other income

²⁷ See id., pp. 64, 70-73, 87.

²⁸ *Id.*, pp. 3, 5, 13, 66-67, 92.

²⁹ *Id.*, pp. 6, 11, 67, 76-77, 92.

³⁰ *Id.*, pp. 6, 13, 86.

options having been destroyed by decades of civil unrest and war, the economic incentives to retain the DRC's cobalt supply industry in its present form will only increase.³¹

Further compounding the risks of cobalt reliance, is the fact that cobalt is mined as a co-product of copper and nickel.³² Therefore, an additional, significant barrier to the expansion of cobalt mining capacity is the influence of global price and supply conditions for nickel and copper. Even large increases in cobalt prices will likely have little effect on the total amount produced by mines.³³ Illustrating this phenomenon, production of cobalt declined in 2017 due to a slump in Chinese demand for copper and nickel, even as the prices for cobalt rose dramatically.³⁴

F. The Economic and Political Consequences Undermining Protection of Marine Resources, Human Rights, Energy Independence, and National Security

While ample, alternative cobalt resources exist to meet the needs of electric vehicles, they are located in deep seabed deposits.³⁵ Even if those marine resources could be tapped on an economical basis (which they presently cannot be), any such efforts on or near the coast would most certainly generate, and have to overcome,

³¹ *Id.*, pp. 6, 11, 65, 67, 85, 92.

³² *Id.*, pp. 58, 63.

³³ *Id.*, pp. 11, 63-64, 91.

³⁴ *Id.*, pp. 11, 63, 64, 91.

³⁵ *Id.*, pp. 12, 61-63, 93.

considerable environmental opposition.³⁶ Ironically, these electric vehicle policies have caused other nations to consider exploiting marine cobalt deposits in the same sorts of marine environments that a number of U.S. states, including California, have historically sought to protect.³⁷

The U.S. has long been willing to passively consume products that have been produced elsewhere under conditions – humanitarian and environmental – that the U.S. would not allow to occur within its jurisdiction. But cobalt supply for electric vehicles will present a dramatically different scenario where it is actually the U.S.'s own policies that drive the occurrence of these objectionable practices around the globe.

Forced electrification of the automobile industry will not only require expanded mining, but also the expansion of the capacity to refine the materials and produce battery cells. Such facilities will need to be quickly sited, permitted, and constructed – on expedited timelines that California and other states do not allow for even for their most urgent economic problems, such as housing.³⁸ Battery cell production has become highly concentrated in East Asia countries as a result of aggressive industrial policies to develop that capacity, including government

³⁶ See id., pp. 12, 93.

³⁷ See id., pp. 12, 63, 93.

³⁸ *See id.*, p. 93.

subsidies.³⁹ Thus, while China and the other East Asian nations are expanding their materials refining and battery cell capacity, U.S. jurisdictions will need to make substantial changes to their environmental, permitting, and other regulations to shorten delays.⁴⁰

The cost efficiencies that have been created in East Asia's battery supply clusters likely means that this concentration of the battery cell industry in East Asia will endure, if not expand.⁴¹ The net result of this unprecedented commitment to, and impending reliance on, a single and increasingly-foreign energy source is to reverse the U.S.'s steady progress towards energy independence and greater national security.⁴² By comparison, when U.S. dependence on OPEC oil production peaked in 1977 it accounted for only one-third of U.S. consumption, and it had dropped to only 17% by 2017.⁴³

G. The Economic Consequences of Mineral Shortages are Not Limited to Cobalt

Finally, it should be noted that while this amicus brief has focused on cobalt as a key battery-critical mineral, similar production constraints and impacts also

³⁹ *Id.*, pp. 4, 8, 18, 20-23, 92.

⁴⁰ See id., p. 92.

⁴¹ *Id.*, pp. 8, 21, 23-25.

⁴² *Id.*, pp. 25, 92.

⁴³ *Id.*, pp. 6, 86.

exist for other minerals. A recent study by the International Energy Agency anticipates that by 2026 for copper and 2028 for lithium (as well as cobalt) demand will exceed production from both current mining operations and those now under construction. "The Role of Critical Minerals in Clean Energy Transitions," International Energy Agency (March 2022) ("Minerals Study 2022"), p. 119.44 Other assessments expect nickel demand (Class 1 nickel) to also exceed supply as soon as 2026. "Nickel shortage spells trouble for EVs – report," E&E News (October 13, 2021).⁴⁵ The International Energy Agency study further noted:

> "Our analysis suggests that it has taken on average over 16 years to move mining projects from discovery to first production. These long lead times raise questions about the ability of suppliers to ramp up output if demand were to pick up rapidly. If companies wait for deficits to emerge before committing to new projects, this could lead to a prolonged period of market tightness and price volatility."

Minerals Study 2022, p. 12.

⁴⁴ https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-2b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf.

⁴⁵ https://www.eenews.net/articles/nickel-shortage-spells-trouble-for-evs-report/.

III. CONCLUSION

For the foregoing reasons, the Court should determine that NHTSA's action to use fuel-economy standards effectively to mandate electric vehicle production and phase out conventionally-powered vehicles implicates the "major questions doctrine" requiring Congress to first speak clearly on the subject, and set aside NHTSA's rule.

November 29, 2022

Respectfully submitted,

/s/ Patrick Veasy

DALE STERN
PATRICK VEASY
DOWNEY BRAND LLP
621 Capitol Mall, 18th Floor
Sacramento, California 95814
(916) 444-1000

Counsel for Amicus Curiae California Manufacturers & Technology Association

Ronald C. Cohen LEVATOLAW, LLP 2601 Main Street, Suite 1300 Irvine, California 92614 (310) 734-2039

Counsel for Amicus Curiae California Business Roundtable

CERTIFICATE OF COMPLIANCE

This brief complies with the word limit of Fed. R. App. P. 29(a)(5) and this Court's September 22, 2022 Order, because it contains 3,288 words, excluding the parts of the document exempted by Fed. R. App. P. 32(f) and Circuit Rule 32(e)(1), according to the word count function of Microsoft Word.

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally-spaced typeface using Microsoft Word in Times New Roman type of 14-point font size.

/s/ Patrick Veasy
PATRICK VEASY

November 29, 2022

CERTIFICATE OF SERVICE

I hereby certify that on November 29, 2022, I caused the foregoing to be electronically filed with the Clerk for the United States Court of Appeals for the District of Columbia Circuit using the Court's CM/ECF system. I further certify that service will be accomplished by the Court's CM/ECF system for all participants in this case who are registered CM/ECF users.

/s/ Patrick Veasy
PATRICK VEASY

November 29, 2022