

ORAL ARGUMENT NOT YET SCHEDULED

NOS. 21-1048, 21-1055, 21-1056, 21-1179, 21-1227, 21-1229, 21-1230 and
21-1231

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

DON'T WASTE MICHIGAN, SIERRA CLUB, CITIZENS' ENVIRONMENTAL
COALITION, CITIZENS FOR ALTERNATIVES TO CHEMICAL
CONTAMINATION, NUCLEAR ENERGY INFORMATION SERVICE,
PUBLIC CITIZEN, INC., SAN LUIS OBISPO MOTHERS FOR PEACE,
SUSTAINABLE ENERGY AND ECONOMIC DEVELOPMENT COALITION,
and LEONA MORGAN,

Petitioners,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION and UNITED
STATES OF AMERICA,

Respondents.

On Petition for Review of a Decision of the United States Nuclear Regulatory
Commission

**AMICUS BRIEF OF THE CITY OF FORT WORTH IN SUPPORT OF
PETITIONERS**

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RULE 29(a)(2) STATEMENT

Pursuant to Circuit Rule 29(d), undersigned counsel for amicus curiae certifies that a separate brief is necessary because the City of Fort Worth (“City”) and Natural Resources Defense Council (“NRDC”) represent distinct interests with diverse knowledge bases. Whereas the City of Fort Worth is a local government concerned with the local impacts of transporting nuclear waste through its city and its effect on its citizenry, NRDC is a nationwide environmental organization with expertise of the history of U.S. nuclear waste policy. The City is able to file this brief because all parties in the above-referenced case consent to their participation as amicus curiae in support of Petitioners.

RULE 29(a)(4)(D) STATEMENT

The City of Fort Worth is a home-rule municipality in the State of Texas. The City has an immediate interest in this litigation because it is concerned that spent nuclear fuel will be transported by rail through Fort Worth to be stored at Interim Storage Partners’ Consolidated Interim Storage Facility in Andrews County in West Texas. Fort Worth has a population of over 950,000, is the 12th largest city in the United States and has an extensive rail system.

The City is able to file this brief because all parties in the above-referenced case consent to their participation as amicus curiae in support of Petitioners.

RULE 29(a)(4)(E) STATEMENT

Pursuant to Fed R. App. P. 29(a)(4)(E), undersigned counsel for amicus curiae City of Fort Worth certifies that the author of this brief is a salaried assistant city attorney for the City of Fort Worth. Other than normal salary, no fee has been paid or will be paid for preparation of this brief. No party or party's counsel or any other person or entity contributed money that was intended to fund preparing or submitting the brief.

GLOSSARY

BNSF	Burlington Northern and Sante Fe
CISF	Consolidated Interim Storage Facility
DFW	Dallas Fort Worth
DOE	Department of Energy
EIS	Environmental Impact Statement
ISP	Interim Storage Partners
NEPA	National Environmental Policy Act
NRC	U.S. Nuclear Regulatory Commission
NRDC	Natural Resources Defense Council
rr-GTCC	reactor-related Greater-Than-Class C
SNF	Store Spent Nuclear Fuel
TRE	Trinity Rail Express
UP	Union Pacific

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STATEMENT OF INTEREST

The City of Fort Worth (“City”) is a home-rule municipality in the State of Texas. The City has an immediate interest in this litigation because it is concerned that spent nuclear fuel will be transported by rail through Fort Worth to be stored at Interim Storage Partners’ Consolidated Interim Storage Facility in Andrews County in West Texas. Fort Worth has a population of over 950,000, is the 12th largest city in the United States and has an extensive rail system.

ARGUMENT

A. Fort Worth is Concerned

In September 2021, the U.S. Nuclear Regulatory Commission (NRC) granted license approval for Interim Storage Partners’ (ISP) controversial Consolidated Interim Storage Facility (CISF) in Andrews County in West Texas, on the New Mexico border. The facility would store spent nuclear fuel (SNF) and reactor-related Greater-Than-Class C (rr-GTCC) radioactive waste from nuclear power plants across the U.S. Up to 40,000 metric tons of this lethal waste would be stored eventually in dry casks on surface concrete pads.¹ If the facility opens, it would be the first private consolidated interim storage facility in the U.S.

A second consolidated interim storage facility some 40 miles away in New Mexico, proposed by Holtec International, is expected to be licensed sometime this

¹ <https://www.neimagazine.com/news/newsnrc-grants-licence-for-used-fuel-storage-in-texas-sparking-opposition-9086726>

year. It would have the capacity to store an additional 173,600 metric tons of irradiated fuel in shallowly buried canisters.² Consolidated interim storage facility owners assert they will start accepting consolidated interim storage facility shipments as soon as 2023.

Construction of consolidated interim storage facilities would trigger thousands of shipments of store spent nuclear fuel and reactor-related Greater-Than-Class C through 44 states to consolidated interim storage facility sites in Texas and/or New Mexico. Transportation of this waste poses dangers to populations along transportation routes, as well as to transportation infrastructure itself. This is of great concern to Fort Worth as the toxic material would likely travel through Fort Worth.

Store spent nuclear fuel is a deadly radiotoxic material and each transport cask will contain considerably more radioactivity than was dispersed by the Hiroshima nuclear bomb.³ Store spent nuclear fuel “poses a dangerous, long-term health and environmental risk. It will remain dangerous ‘for time spans seemingly beyond human comprehension.’” *Nuclear Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1258 (D.C. Cir. 2004) (*per curiam*). Fort Worth is concerned for its citizenry of risk of exposure to store spent nuclear fuel from being stuck in traffic proximate to rail loads, leakage from transport vehicles, downwind exposure from defective transport

² <https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2237/index.html>

³ <https://www.nrc.gov/docs/ML2030/ML20308A728.pdf>

cars, and the possible radioactive contamination of water sources caused by accidents. Further, Cesium-137, an isotope in the store spent nuclear fuel, could volatilize and escape with the smoke if there is a fire or surface radioactive contamination on a transport cask or vehicle. Radionuclides could be inhaled by emergency responders or the public which could result in damage to the heart or thyroid.⁴

B. Fort Worth Citizenry Would be Affected by the Transport of SNF

Fort Worth is known for its unique combination of cowboys and culture. Famous for its stock show and rodeo and as the place “where the West begins”, it also is home some of the finest art museums in the world: the Kimbell, Amon-Carter, and Modern. In 2020, Fort Worth had a population of 958,692 and is now the 12th largest city in the United States. Fort Worth is also one of the fastest growing cities in the country.⁵ Fort Worth is a vibrant, thriving, modern city that embraces its history.

Pertinent to this appeal, Fort Worth is a national railroad hub. Fort Worth is the home to Tower 55, the crossing of double-track Union Pacific and single-track BNSF Railways. Mainline freight operate on both lines, including unit and intermodal trains. Passenger trains include Trinity Rail Express (TRE), commuter

⁴ *Id.*

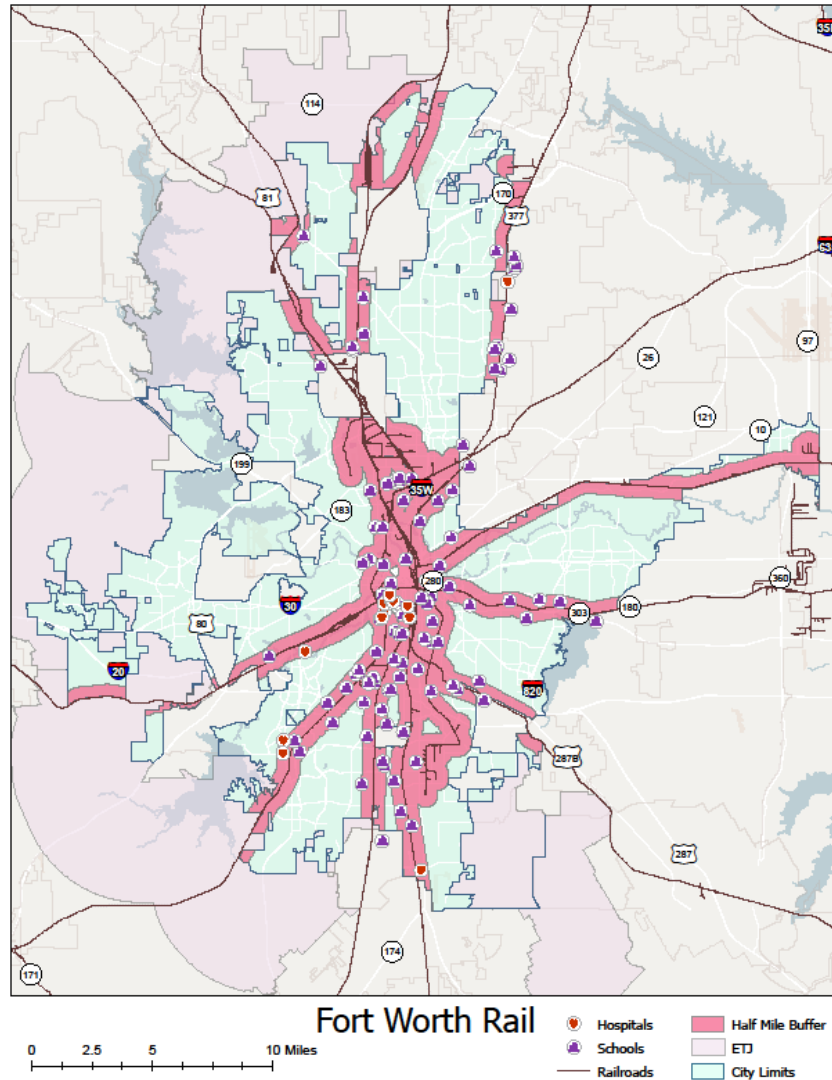
⁵ <https://worldpopulationreview.com/us-cities/fort-worth-tx-population>

trains from Dallas to Fort Worth's Intermodal Transportation Center, and the T&P Passenger Terminal. Amtrak's *Texas Eagle* and *Heartland Flyer* also stop at the Fort Worth Intermodal Transportation Center. BNSF and Union Pacific (UP) local switchers serve nearby customers. The approximate daily train frequency for BNSF is 30 freights, 50 for Union Pacific, 30 trains on weekdays and 18 on Saturday for the TRE, and Amtrak runs 4 trains. Major interstate highways cross near Tower 55.⁶

The map below shows the rail system in Fort Worth.⁷

⁶ <https://www.trains.com/trn/railroads/hotspots/fort-worth-texas-tower-55/>

⁷ Map created by Natalie Watkins, Sr. IT Programmer/Analyst, City of Fort Worth



The shading on the map depicts a $\frac{1}{2}$ mile area on both sides of the rail throughout the City. In the “Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, Volume I” (February 2002), the U.S. Department of Energy pronounced that the “region of influence for public health and safety along existing transportation routes is 800 meters (0.5 mile) from the centerline of the transportation rights-of-way and from the boundary of rail yards

for incident-free (non-accident) conditions. The region of influence was extended to 80 kilometers (50miles) to address potential human health and safety impacts from accident scenarios.” §§ 3.2.1, p. 3-119.

This ½ mile is a critical, vital part of Fort Worth; in some ways this is Fort Worth’s heart. Within this ½ mile one will find such important things as: portions of downtown including the Fort Worth Convention Center, Water Gardens, City Hall, Federal Courthouse, and the Bass Performance Hall. The ½ mile also encompasses the Botanic Garden, Trinity Park, and Colonial Country Club. Because this “region of influence” is heavily populated and active, the City is concerned about store spent nuclear fuel transports and its effects. The map clearly shows many hospitals and schools within the ½ mile of rail. Of course, if there was a disaster, it would be catastrophic for Fort Worth.

C. Interim Storage Partner’s Lack of Transparency with Respect to Transportation Routes is Troubling

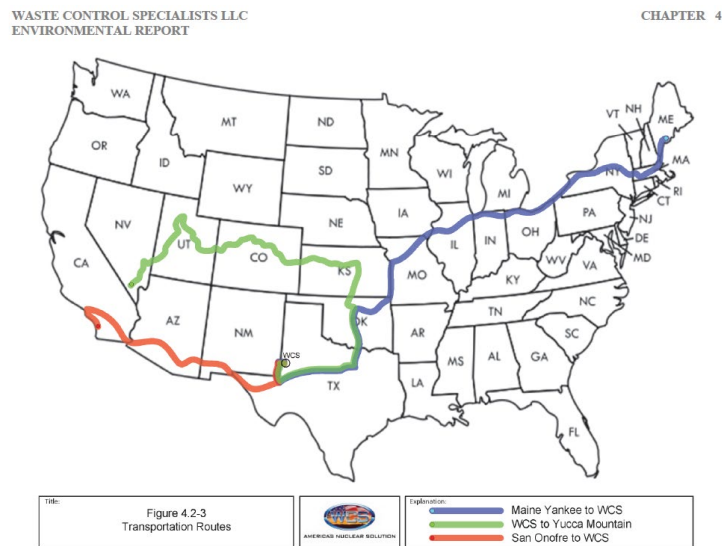
Interim Storage Partners proposes to transport dangerous nuclear waste via rail throughout the country.⁸ Under federal regulations, a proposed nuclear waste storage facility “must be evaluated with respect to the potential impact on the environment of the transportation of spent fuel, high-level radioactive waste, or reactor-related GTCC waste within the region.” 10 C.F.R. § 72.108. However,

⁸ ISP License Application, Docket 72-1050 (July 19, 2018)

evaluation of the environmental impact of transportation of store spent nuclear fuel to the Andrews County facility would be impossible because transportation routes are not clearly defined.

Interim Storage Partner's licensing application names 12 shutdown decommissioned nuclear reactor sites from which it expects nuclear waste will be shipped to the storage site in Andrews County.⁹ However, Interim Storage Partner's application is lacking in meaningful information in regard to the transportation route from these sites. Failing to identify routes denies communities such as Fort Worth meaningful notice that they will have trains carrying nuclear waste passing through and affecting the citizenry.

Interim Storage Partner only mapped three of the routes in their application as shown below:¹⁰

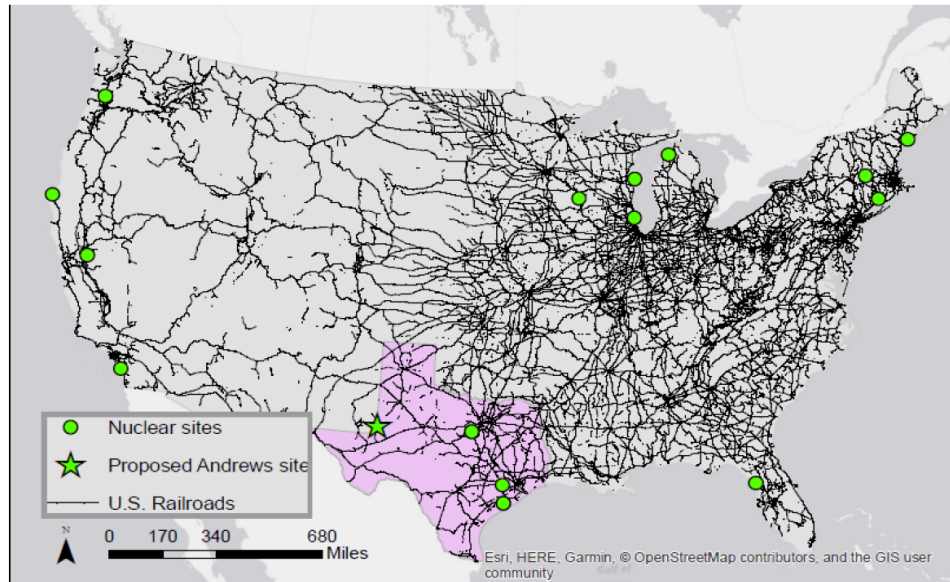


⁹ ER, Table 2.2-1, Page 2-6.

¹⁰ ER, Figure 2.6-1, Page 2-78.

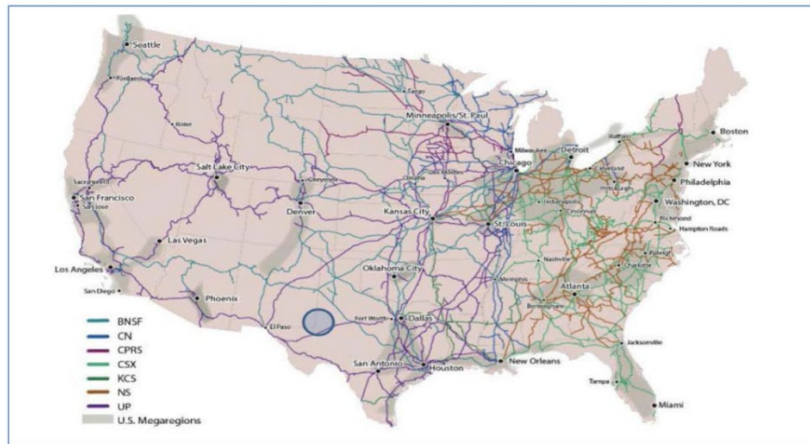
The map below shows the twelve decommissioned sites named in Interim Storage Partner’s application as well as the three nuclear sites located in Texas in relation to where these are located along US railroads.¹¹


Figure 8: Nuclear Sites and Railroad Routes



INTERIM STORAGE PARTNERS LLC
ENVIRONMENTAL REPORT

CHAPTER 2



Title: <p style="text-align: center;">RAIL LINES MAP</p>	Figure: <p style="text-align: center;">2.2-4</p>	Date: 11/18/2015 Scale: NONE	
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¹¹ From a to the NRC from Texas Rio Grande Legal Aid, Inc., page 10

While Interim Storage Partner lacks transparency with respect to transportation routes, it is clear from these maps that Fort Worth will be affected. The Fort Worth citizenry should have access to transport route information so that the public will know about the possible exposure to hazardous waste.

Further, Interim Storage Partner notes that by the year 2053, which is within its licensing period, there will be 71 shutdown reactor sites in the U.S.¹² Interim Storage Partner explicitly expects to receive store spent nuclear fuel from “approximately 51 shutdown sites.”¹³ However, there is as little transparency with respect to identifying the location of these sites as there is with stating how the waste from these sites will be transported. Again, entire communities affected by the transport of waste from these sites are left in the dark. With respect to Fort Worth, because it is a railway hub, it will likely be affected by the transport from these additional sites which will result in additional exposure to its citizenry.

D. Fort Worth is Concerned that there has not been an Adequate Calculation of the Risk of Accidents and Exposure Levels

An agency conducting a National Environmental Policy Act (NEPA) process must examine both the probability of a given harm occurring and the consequences of that harm if it does occur. “Only if the harm in question is so “remote and speculative” as to reduce the effective probability of its occurrence to zero may the

¹² ER, Page 7-4

¹³ Id.

agency dispense with the consequences portion of the analysis.” *State of New York v. Nuclear Regulatory Comm’n*, 681 F.3d 471, 482 (D.C. Cir. 2012). Under the regulations, an agency must assess the “reasonably foreseeable significant adverse effects” of its action, including “impacts that have catastrophic consequences, even if their probability of occurrence is low.” See 40 C.F.R. § 1502.21(d). There is a risk of radiologic harm from an accident caused by shipments of spent nuclear fuel being transported to the consolidated interim storage facility.

Fort Worth believes that at a minimum, the following should be studied: SNF Storage options (shouldn’t the waste be stored near the facility until there is a permanent solution so that waste is moved only once?), common sense shipment restrictions, temperature of casks, the duration of casks, the necessity of emergency cooling equipment, the necessity of certain fire suppression equipment, and an analysis of population densities.

E. Fort Worth is Troubled by the Spector of a Terrorist Attack Related to the Transport of Nuclear Waste

Under the applicable regulations, an agency must assess significant adverse effects such as terrorist attacks. See 40 C.F.R. § 1502.21(d) (requiring an agency to assess “reasonably foreseeable significant adverse effects” including “impacts that have catastrophic consequences, even if their probability of occurrence is low”). In *San Luis Obispo Mothers for Peace*, the Ninth Circuit held that it was unreasonable

for the Nuclear Regulatory Commission to categorically dismiss the possibility of terrorist attack as too remote and highly speculative to warrant consideration. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1032 (9th Cir.2006). Specifically, the Ninth Circuit found that NRC's historical actions to combat terrorist threats could not be reconciled with its position that terrorist attacks are too remote and speculative. *Id.* at 1030-31 & n.8 (finding inconsistencies with NRC's position that terrorist attacks are too remote and speculative and the agency's post 9/11 security procedures requiring security plans to protect against a "design basis threat" for radiological) (citing NRC: Oversight of Security at Commercial Nuclear Power Plants Needs to Be Strengthened, GAO-030752 (2003) at 6).

Fort Worth is vulnerable to terrorist attack without trains filled with store spent nuclear fuel running through it. It is the home of Lockheed Martin, an American aerospace, arms, defense, information security, and technology corporations with worldwide interests. It is also home to Alliance Airport and DFW Airport, according to Wikipedia, the world's fourth busiest airport by passenger traffic. But Fort Worth would be much more vulnerable to attack with trains carrying store spent nuclear fuel running through it. Indeed, the trains themselves are vulnerable to terrorist attack. A deliberate attempt to trigger a catastrophe could result in grave consequences, of course. The potential for disaster is too great and

the cost is too high: Fort Worth asserts that it is simply unwise to transport store spent nuclear fuel through its city limits on rail.

F. Fort Worth is Concerned that Transportation of Store Spent Nuclear Fuel will Cost Local Taxpayers

The Nuclear Regulatory Commission should consider the cost to local taxpayers before issuing a permit. The risks of wear and tear and geologic instability, adverse impacts on regional industries' use of the transportation infrastructure and inevitable need for infrastructure improvement costs, and substantial funding needed for training, equipment and providing first responder, fire and emergency services in the event of a radiological incident should all be taken into account. The administrative process, and the appeal from that process, should seek to protect cities like Fort Worth that are going to be affected most by an accident or incident. Under such foreseeable circumstances, Fort Worth and other cities should not be left to shoulder the costs of a disaster.

CONCLUSION AND PRAYER

The City is concerned that every aspect of transporting highly dangerous material should be considered carefully. An environmental impact statement must contain a reasonably thorough discussion of the significant probability of environmental consequences and must discuss the environmental impacts, including transportation impacts, of the proposed action—which requires Department of

Energy (DOE) to take a hard look at the potential environmental consequences of the proposed action. See *Northwest Ecosystem Alliance v. Rey*, 380 F. Supp. 2d 1175, 1185 (W.D. Wash. 2006); and *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1519 (9th Cir. 1992). 10 C.F.R. § 63.31 (c) provides that a construction authorization will not issue until the Nuclear Regulatory Commission weighs the environmental, economic, technical, and other benefits against environmental costs, and considers available alternatives contained in the Environmental Impact Statement (EIS).

In this regard, Fort Worth is concerned about the lack of designation of transportation routes, the risk of accidents during transport, costs to Fort Worth that have not been identified and are not funded. Fort Worth is also concerned with the risk of canister failure during transport, the risk of accident during transport, and the general uncertainty regarding canister performance and lifespan. In short, Fort Worth does not want nuclear waste transported through it.

The City of Fort Worth prays the Court rule for Petitioners.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rule of Appellate Procedure Rule 32(a)(7)(C), I certify that the attached Amicus Brief is proportionately spaced, has a typeface of Times New Roman, 14 points, and contains less than 6,500 words. This figure includes footnotes and citations, but excludes the Cover Page, Table of Contents, Table of Authorities, signature blocks, Certificate of Compliance, Certificate of Service, Addendum of Statutes, Rules, and Regulations, and Standing Addendum. I have relied on Microsoft Word's calculation feature for this calculation. The Brief contains 2,299 words.

/s/ Christopher B. Mosley

CHRISTOPHER B. MOSLEY

CERTIFICATE OF SERVICE

Pursuant to Fed. R. App. P. 25(d) and Cir. R. 25(a) I hereby certify that on the 25th day of March 2022, a true and correct copy of the foregoing instrument has been filed electronically using the Court's electronic case filing system, which will send a notification to the attorneys of record in this matter who are registered with the Court's CM/ECF system.

/s/ Christopher B. Mosley

CHRISTOPHER B. MOSLEY