ORAL ARGUMENT NOT YET SCHEDULED

Case No. 21-1162

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OHIO NUCLEAR-FREE NETWORK and BEYOND NUCLEAR,
Petitioners,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,
Respondents

On Petition for Review of Action by the
Nuclear Regulatory Commission

PETITIONERS' PROOF BRIEF

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to Circuit Rule 28, Petitioners Ohio Nuclear-Free Network and Beyond Nuclear ("Petitioners") hereby certify as follows:

1. Parties and *Amici Curiae*

The Petitioners are Ohio Nuclear-Free Network and Beyond Nuclear. The Respondents are the United States Nuclear Regulatory Commission (NRC or Commission) and the United States of America. There are no *amici*.

2. Rulings Under Review

- "Environmental Assessment and Finding Of No Significant Impact for the American Centrifuge Plant HALEU Demonstration Program License Amendment" (NRC ADAMS ML21085A705). The EA/FONSI was published at 86 Federal Register 31539 (June 14, 2021) and is reproduced at Apx. ____.
- Nuclear Regulatory Commission Approval Letter dated June 11, 2021 (NRC ADAMS ML21138A827). By the Approval Letter, the NRC approved amendments to two NRC licenses, SNM-7003 and SNM-2011, respectively. There is no other official citation to the ruling. The Approval Letter is reproduced at Apx. _____.
- Nuclear Regulatory Commission Materials License issued on June 11, 2021 (ADAMS ML21138A828). There is no other official citation to the ruling. The Materials License is reproduced at Apx. _____,

3. Related Cases.

There are no related cases. This matter has not been litigated in any court prior to this Petition for Review proceeding.

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RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Fed. R. App. P. 26.1 and D.C. Cir. Rule 26.1, Petitioners provide the following corporate disclosure statement.

Petitioner Ohio Nuclear-Free Network is an unincorporated association of persons located in Ohio whose members have no ownership interests. None of its members have issued shares or debt securities to the public.

Beyond Nuclear is a non-profit corporation organized and existing under the laws of the State of Maryland as a Section 501(c)(3) membership organization that aims to educate and activate the public about the connections between nuclear power and nuclear weapons and the need to abandon both to safeguard our future. Petitioner Beyond Nuclear does not have any parent companies, nor outstanding shares or debt securities in the hands of the public, nor any parent, subsidiary, or affiliates that have issued shares or debt securities to the public.

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GLOSSARY

ACO - American Centrifuge Operating LLC
ACP - American Centrifuge Plant
AEA - Atomic Energy Act
AEC - Atomic Energy Commission
APA - Administrative Procedure Act
CEQ - Council on Environmental Quality
DOE - Department of Energy
EA - Environmental Assessment
EIS - Environmental Impact Statement
FONSI - Finding of No Significant Impact
HALEU - High-Assay Low-Enriched Uranium
HEU - High Enriched Uranium
LAR - License Amendment Request
LEU - Low Enriched Uranium
NEPA - National Environmental Policy Act
NRC - Nuclear Regulatory Commission
ONFN - Ohio Nuclear Free Network
PEIS - Programmatic Environmental Impact Statement
PORTS - Portsmouth Gaseous Diffusion Plant
SMR - Small Modular Reactor
SNM - Special Nuclear Material
Uranium-235 or U-235 - A naturally-occurring isotope of Uranium
USEC - U.S. Enrichment Corporation, Inc.

JURISDICTIONAL STATEMENT

Petitioners seek judicial review of the determination by the Nuclear Regulatory Commission (NRC) to allow a license amendment contemporaneously to issuance of an Environmental Assessment and Finding of No Significant Impact (EA/FONSI). A request by American Centrifuge Operating LLC (ACO) to amend its current NRC license was granted by the NRC pursuant to the Atomic Energy Act (42 U.S.C. § 2011 *et seq*.). The purpose of the amendment was to allow enrichment of uranium above the U-235 enrichment limits specified in the existing license.

The NRC issued the EA/FONSI pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq*. Judicial review of the sufficiency of an EA/FONSI is available under the Administrative Procedure Act (APA), 5 U.S.C. § 706. Because the Environmental Assessment and the Finding of No Significant Impact are ancillary to the license amendment, jurisdiction to review them lies exclusively with the courts of appeals. *Citizens Awareness Network, Inc. v. Nuclear Regulatory Commission,* 854 F.Supp. 16, 17 (D.Mass. 1994) (under the Hobbs Act, "decisions that are ancillary to licensing decisions may be challenged only in the court of appeals") (citing *Florida Power & Light v. Lorion*, 470 U.S. 729, 743, 84 L.Ed.2d 643 (1985)); also, *Foti v. INS*, 375 U. S. 217, 227, 232

(1963) (review of orders resolving issues preliminary or ancillary to the core issue in a proceeding should be reviewed in the same forum as the final order resolving the core issue).

The Court has jurisdiction of this Petition for Review pursuant to 28 U.S.C. § 2342(4), which confides review jurisdiction in the circuit courts of all final determinations of the Nuclear Regulatory Commission (as successor to the Atomic Energy Commission) which are made reviewable under 42 U.S.C. § 2239 (including "the . . . amending of any license.").

This Petition was timely brought, and venue is proper, under the Hobbs Act, 28 U.S.C. § 2344. The EA/FONSI was issued on June 7, 2021. Petitioners filed their Petition for Review on August 2, 2021, within the 60-day time period allowed by statute.

STATEMENT OF ISSUES PRESENTED FOR REVIEW

1) Whether the Petitioners are proper parties with organizational standing to bring this action pursuant to NEPA.

2) Whether the requirements of the National Environmental Policy Act (NEPA) are subsumed into the Atomic Energy Act (AEA), which requires the filing of a petition for leave to intervene and imposes standards for the admissibility of contentions raised by the intervenor, or whether NEPA is an

ancillary decision made as part of the overall license determination rendered by the Nuclear Regulatory Commission.

3) Whether the NRC violated NEPA when it issued an Environmental Assessment and Finding of No Significant Impact (EA/FONSI) instead of compiling an Environmental Impact Statement (EIS) or Programmatic Environmental Impact Statement (PEIS).

4) Whether the alleged facts and circumstances of NEPA violations may be remedied by preparation of an EIS or a PEIS for the underlying License Amendment application.

STATEMENT OF THE CASE

The core issue of this Petition for Review is whether the U.S. Nuclear Regulatory Commission (NRC) properly discharged its obligations under the National Environmental Policy Act (NEPA) concerning an obscure license amendment to allow the manufacture of a wholly new, more energy-dense uranium fuel for next-generation commercial nuclear power reactors – a new fuel type that raises concerns over the possibilities of nuclear weapons proliferation and terrorism, as well as questions about the environmental impacts on the U.S. domestic nuclear mining and processing supply chain.

The American Centrifuge Operating LLC plant (American Centrifuge Plant,

or ACP), located on U.S. Department of Energy-owned land near Piketon, Ohio at the site of the PORTS facility (formerly known as the Portsmouth Gaseous Diffusion Facility), is the location of industrial uranium enrichment processing going back many years.

In May 2019, the Department of Energy (DOE) and American Centrifuge Operating, LLC (ACO), a subsidiary of Centrus Energy Corp. (Centrus), signed a 3-year letter contract worth $115 million for the purpose demonstrating production of high-assay low-enriched uranium (HALEU) at the ACP PORTS facility.[1] In April and May 2020, ACO applied to the U.S. Nuclear Regulatory Commission (NRC) to amend Special Nuclear Materials (SNM) License Number SNM-2011 (SNM) for the American Centrifuge Plant (ACP). (EA/FONSI, Index[2] 81 p. 1; Apx. __). The purpose of the amendment was to obtain NRC authorization to allow ACO to enrich uranium fuel to a higher proportion of the isotope U-235 for use in advanced or small modular reactors (SMRs), which are presently in the design stage and not yet operational. Several, perhaps most, SMR designs will require HALEU fuel. *Id.*

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[1]https://www.nrc.gov/materials/fuel-cycle-fac/usecfacility.html#high

[2]"Index" refers to the Certified Index to the Record, Doc. #1914865 filed in this case by Respondents on September 20, 2021.

The contract with DOE stipulates that ACO will provide DOE with up to 600 kilograms (kg) of HALEU in the form of uranium hexafluoride (UF6) for use in research and development for the civilian nuclear energy sector. (Index 81, p. 4; Apx. __). The NRC originally licensed the ACP at the request of the United States Enrichment Corporation, Inc. (USEC), which after business restructuring became Centrus. The NRC license was transferred to a subsidiary of Centrus and is now maintained by Centrus. ACO will operate the HALEU cascade in existing buildings on grounds at PORTS that are owned by DOE and leased by USEC. *Id.*

The ultimate size and timing of the HALEU project, according to the EA/FONSI, is somewhat open-ended. Centrus expects to achieve commercial success from the venture, and in order to have adequate HALEU inventories for commercial sale, will seek another NRC license amendment to manufacture HALEU for up to 10 years beyond the initial three-year demonstration contract with DOE. The NRC deemed that expectation to be "reasonably foreseeable" and covered by the Environmental Assessment:

> If operation of the cascade supports the feasibility of commercial production of HALEU, ACO anticipates requesting a license amendment for commercial production to meet the potential market demand. Although the commercial demand for HALEU is uncertain at this time, ACO has indicated an interest in operating the HALEU cascade beyond the 3-year DOE contract. To obtain approval for additional operation, ACO anticipates submitting a license amendment request (LAR) during calendar year 2021.

> While the time period for the extension is not certain, ACO has indicated that it would not be more than 10 years (ACO, 2021). *Because this action is reasonably foreseeable, the impacts of operation beyond the expiration of the contract in May 2022 are considered during this review.*

(EA/FONSI, Index 81, p. 1; Apx. __) (Emphasis added). Consequently, the EA purports to cover 13 years of enriching HALEU project activity.

This anticipated ten-year extended operation period is repeatedly referenced in the EA/FONSI:

> Although the LAR requests authorization to operate the HALEU cascade to enrich uranium-235 to a higher enrichment level over a three-year period, ACO has stated that it will submit an additional license amendment for authorization to operate the HALEU cascade for an additional period of up to 10 years. (2020 LAR, 2021 consolidated ER). Because this action is reasonably foreseeable, *the environmental impacts from up to an additional 10 years of operation are considered in this EA.*

(Index 81, p. 4; Apx. __) (Emphasis added).

> For the anticipated license amendment request, impacts due to radiological emissions or potential onsite or offsite doses are not expected to change *due to an additional period of operation of up to 10 years.* Therefore, the extended period of operation would not result in a significant increase in estimated radiological doses or in emissions.

(Index 81, p 18; Apx. __). (Emphasis added).

> The licensee expects to submit a LAR in 2021 to extend operation of the HALEU cascade for a period of up to 10-years. The purpose of this extension would be to continue to produce HALEU fuel product in preparation for commercial sales. Although the LAR requests authorization to operate the HALEU cascade to enrich uranium-235 to a higher enrichment level over a three-year period, ACO has stated that it will submit

> an additional license amendment for authorization to operate the HALEU cascade *for an additional period of up to 10 years*. (2020 LAR, 2021 consolidated ER). *Because this action is reasonably foreseeable, the environmental impacts from up to an additional 10 years of operation are considered in this EA.*

(Index 81, p. 21; Apx. __) (Emphasis added).

ACO's Revised License Application (RLA) request reveals that while the scope of the HALEU project is supposedly limited to the construction and operation of 16 total centrifuges, that it's much broader. ACO has the capability of installing centrifuges in increments in the American Centrifuge Plant up to a capacity of 3.8 million Work Units (SWU) of production annually. (License Application, Index 29, p. 1; Apx. __). Centrus intends "to deploy portions of the [American Centrifuge Project] in a modular fashion to accommodate market demand on a scalable, economical gradation. This modular deployment will encompass utilization of cascades of LEU production for customer product or feed material into HALEU cascades." (Index 29, p. 1-2; Apx. __).

The major departure in fuel enrichment activities at PORTS is that HALEU will have much more Uranium-235 content than is found in today's conventional commercial nuclear reactors. ACO's current NRC license authorizes the enrichment of uranium to less than 10% U-235 content, but the license amendment for the DOE contract to produce HALEU allows ACO to enrich uranium up to

25% U-235 content. (Index 81, p. 3; Apx. _).

Citing to no authority at all, the NRC inaccurately stated as a conclusion in the EA that "25 percent is far below the level required to make weapons or to power U.S. submarines and aircraft carriers, and for these reasons the enrichment level does not raise any security or proliferation concerns." *Id.* There is no further reference to nuclear weapons proliferation in the EA/FONSI.

However, Uranium enriched to greater than 20% Uranium-235 content is classified by the NRC as "high enriched uranium" (HEU).[3] HEU can be directly used to make thermonuclear weapons and poses commensurately greater nuclear weapons proliferation concerns than nuclear fuel enriched to a level below 20%. Petitioners argue – and commented in written form to the NRC before the EA and FONSI were published – that since the ACO HALEU being manufactured will actually be HEU, the NRC must conduct a nuclear weapons proliferation assessment under NEPA. (Comment Letter, Index 55, pp. 2-3; Apx. __). The rationale for Petitioners' request is that the HALEU may be attractive for theft and trafficking by countries or organizations desirous of having HEU, which is either directly usable in a thermonuclear weapon, or can be enriched and thus concentrated even further with comparatively little effort (Index 55, pp. 2-3; Apx.

[3]https://www.nrc.gov/reading-rm/basic-ref/glossary/high-enriched-uranium.html

__) (citing Union of Concerned Scientists analysis).

The NRC issued the HALEU EA/FONSI on June 7, 2021. (Index 81; Apx. ___). The agency gave no public notice that it was compiling the document, did not circulate it publicly to any other federal agencies for comment, and did not solicit public comments on the EA/FONSI before publishing it as final. The resulting EA/FONSI is apparently the first and only assessment of direct and indirect environmental impacts that will be conducted before there is large-scale production of HALEU using hundreds or thousands of centrifuges at the ACP.

In the FONSI, the NRC "concluded that the proposed action, amendment of NRC license SNM-2011 for the American Centrifuge Co., LLC, located in Piketon, Ohio, will not significantly affect the quality of the human environment. Therefore, the NRC has determined, pursuant to 10 CFR 51.31, that preparation of an EIS is not required for the proposed action and a FONSI is appropriate." "American Centrifuge Operating, LLC; American Centrifuge Plant," 86 Fed. Reg. 31,539 (June 14, 2021). (Index ___; Apx. __). The NRC issued an approval letter along with redacted and unredacted versions of the amended license to ACO on June 11, 2021. (Index 83, 88, 89; Apx. __).

Petitioners' counsel learned only by chance, in February 2021, that ACO had submitted a license amendment request to the NRC. Because the Petitioners

had no idea whether the NRC would seek public comment on its NEPA documentation, Petitioners sent their lengthy comment letter to the NRC on March 30, 2021, expressing concerns on issues of nuclear proliferation and terrorism and calling for attention under NEPA to the probable environmental impacts on the U.S. uranium mining industry as a consequence of the switch to HALEU as a primary reactor fuel. (Comment Letter, Index 55; Apx. __). The letter was cosigned by some 100 environmental, social justice and nuclear weapons abolition organizations from across the United States. *Id.*

As noted, Petitioners asserted that uranium enriched to 20%-25% is "highly enriched uranium" (HEU), which is directly usable in nuclear weapons. The Petitioners cited weapons proliferation potential as a possible outcome of HALEU production because of the anticipated design and construction of small modular reactors (SMRs, also called advanced nuclear reactors) by U.S. and global entrepreneurs for global export. (Index 55, pp. 1-2; Apx. __). The Petitioners also pointed out the scoping inconsistency that Centrus was starting out with 16 centrifuges but sought to "have a fully licensed, operable HALEU production capability at a small scale that could be expanded modularly to meet commercial and/or government requirements for HALEU." *Id.*

The Petitioners also requested the NRC to include in the NEPA document

an investigation into public health and environmental justice burdens caused by expected increased domestic uranium mining which would be caused by DOE's planned governmental incentives. Petitioners maintain that a major government-led commitment to the production of HALEU would result in generation of large volumes of uranium mining and mill tailings along with depleted uranium waste in the western United States, and that renewed extraction would have particular effects on indigenous peoples and others. (Index 55, p. 1; Apx. __). The letter's authors also called for an EIS or Programmatic EIS (PEIS) for the project. (*Id*., pp. 2-3; Apx. __).

The NRC did not consider Petitioners' comments and request for an EIS or PEIS. On May 28, 2021, the agency sent an e-mail to Petitioners' counsel, stating its intention to issue the EA and to make a final decision on the license amendment in June 2021. There was no mention of any plan to involve the public prior to its final issuance and no response to Petitioners' request for an EIS or PEIS. (Faraz Email, Index 62; Apx. __). Neither the NRC's Environmental Assessment nor the Finding of No Significant Impact refer to the issues raised by the Petitioners' comment letter (Index 81; Apx. __).

The EA/FONSI, NRC approval letter, and amended license were issued on June and after June 7, 2021. Petitioners Ohio Nuclear-Free Network and Beyond

Nuclear filed their Petition in this Court under the Administrative Procedure Act on August 2, 2021, within the 60-day period allowed by statute.

SUMMARY OF THE ARGUMENT

I. Petitioners are Proper Parties to Bring This Action Pursuant to NEPA

The NRC maintains that the only type of proceeding that could have been brought to challenge the EA/FONSI was a petition for leave to intervene brought pursuant to 10 CFR § 2.309, a regulation promulgated on the authority of the Atomic Energy Act. That is the gravamen of the NRC/United States' Motion to Dismiss.

Ohio Nuclear-Free Network and Beyond Nuclear urge that under the Hobbs Act, 28 U.S.C. § 2344, they must seek judicial review of the NRC's licensing action and ancillary proceedings in the federal courts of appeal, and that the Court, not the NRC, has the sole power to determine its own jurisdiction based on the facts and law. NEPA, they say, is a separate statute from the AEA which involves identification and analysis of direct and indirect environmental impacts foreseeable from HALEU manufacturing.

Petitioners argue that the AEC is attempting to thwart the aims of NEPA. NEPA involves publication of a draft environmental document by the agency for the public to comment on, and if the agency declines to modify the NEPA

document in response to the comments, then members of the public who have established "party" status by commenting can challenge the adequacy of the agency's compliance with NEPA as a "party aggrieved" under the Hobbs Act.

The Petitioners in this case submitted a lengthy comment letter endorsed by over 100 grassroots groups, principally environmentalists and nuclear weapons activists, requesting that an Environmental Impact Statement or a Programmatic EIS be prepared, but the NRC issued an Environmental Assessment with a Finding of No Significant Impact. The entire NRC compilation of the EA/FONSI was conducted out of public view and the EA/FONSI was published as a final agency determination. There was no public comment opportunity at all, but Petitioners assert that by taking considerable steps to provide comments to the agency, they may now challenge the NEPA conclusion in this Court.

By contrast, the NRC's petitioning process, claim the Petitioners, requires submission of NEPA-related contentions which must meet exacting requirements of pleading and may be rejected by the NRC's internal administrative licensing boards and adjudication denied, which excuses the agency from having to reconsider the adequacy of the NEPA document. The NRC appears to be an outlier in terms of the unique barriers its regulations pose to the public's conducting of NEPA-related litigation before the agency.

II. The NRC Violated NEPA By Issuance of the EA/FONSI Instead of Compiling an Environmental Impact Statement

High-assay low-enriched uranium (HALEU) poses a nuclear weapons proliferation risk which may become very important if Small Modular Reactors that use HALEU fuel are exported in large numbers from the U.S. The Petitioners provided explicit comments on this prospect also asked the NRC to consider under NEPA the effects of a potentially burgeoning HALEU production industry on domestic uranium supplies and extraction.

HALEU fuel is part of a planned major redirection of the U.S. nuclear reactor industry, with an entirely new generation of SMRs anticipated to be marketed globally. Because the potential environmental impacts are different from earlier NEPA studies of nuclear fuel enrichment at the PORTS facility, an EIS is warranted. The U-235 content of HALEU will be at least four times more concentrated than in current nuclear reactor fuel. HALEU may be immediately adapted to make thermonuclear weapons. That different characteristic represents a clear departure from prior federal government-sponsored uranium enrichment.

III. The NRC Should Be Required to Prepare an EIS or Programmatic EIS for the ACO License Amendment Application

An Environmental Impact Statement (EIS) for every "major federal action" significantly affecting the quality of the human environment. "Major federal

actions" include projects, programs and plans entirely or partly financed, assisted, regulated, or approved by Federal agencies. The ACO license amendment represents implementation of a DOE policy to support development of HALEU fuel for use in research and development for the civilian nuclear energy sector. The project further is controlled by NRC licensing procedures. The degree of federal involvement plus the "reasonably foreseeable" prospect of a decade of commercial production following the initial three-year demonstration, is a "major federal activity."

The NRC's Programmatic EIS (PEIS) authorizes PEIS's to be compiled for "broad" or "programmatic Federal actions, such as the adoption of new agency programs." If development of new technologies could significantly affect the quality of the human environment, a PEIS should be compiled, before the program has reached a stage of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives.

HALEU likely will significantly affect environmental quality, contributing additional industrial chemicals and isotope emissions to the local environment at PORTS, consuming considerably more uranium ore per unit of fuel produced (with direct effects on U.S. uranium mining and extraction), and expanding the availability of weapons-ready HEU for global trafficking once the SMR industry

gets off the ground.

The NEPA consideration of the HALEU project was invisible to the public and the NRC has "segmented" the project into three stages – development, expanded manufacturing, and ongoing commercial manufacturing – without any rationale basis to break the project into such components. Addressing cumulative impacts in a systematic way is crucial also for assessing the economic viability of the HALEU project. The HALEU experiment signals the start of a much larger industrial production campaign that may extend over many decades. It is much more than a 16-centrifuge cascade, since Centrus admits that it "foreseeably" will follow up the initial demonstration by a decade-length expansion to meet expected commercial demand. This is the point in the initiation of a HALEU program directed by governmental policy where investigation of direct and indirect probable effects is warranted. There must be analysis of alternative means of meeting the professed need for electricity, and scrutiny of HALEU manufacturing impacts on the physical environment, as well as upon global energy policies and nuclear nonproliferation efforts among nations.

STANDING

The Ohio Nuclear-Free Network (ONFN) was formed in 2020 when a dozen experienced nuclear weapons and nuclear power activists came together to work

against new U.S. weapons and power generation programs. They chose to use public education, scientific advocacy and litigation strategies in Ohio's only statewide activist organization that challenges the need for nuclear power and weapons. ONFN has about 25 across Ohio, and is headquartered in Toledo, Ohio.

Beyond Nuclear is a nonprofit, nonpartisan membership organization located in Takoma Park, Maryland that aims to educate and activate the public about the connections between nuclear power and nuclear weapons, and the need to abolish both to protect public health and safety, prevent environmental harms, and safeguard our future. Beyond Nuclear has a nationwide membership of approximately 12,000 people.

A petitioning organization establishes legal standing by showing (1) at least one of its members would have standing to sue in his or her own right; (2) the interests the petitioner seeks to protect are germane to its purpose; and (3) neither the claim asserted nor the relief requested requires that an individual member of the Petitioner organization participate in the lawsuit. *Sierra Club v. EPA*, 292 F.3d 895, 898 (D.C. Cir. 2002). In this case, all three factors are satisfied as to Petitioners ONFN and Beyond Nuclear.

To confer standing on the organizations the members must show an injury-in-fact, causation, and redressability. *Id*. An injury-in-fact is "'a concrete

and particularized harm' that is 'actual or imminent.'" *Id*. Proximity to the project and a reasonable concern that impacts an organization member's life or activities is sufficient to satisfy injury-in-fact. *NRDC v. EPA*, 755 F.3d 1010 (D.C. Cir. 2014).

ONFN member Tressie Hall lives within one mile of the American Centrifuge Plant. ONFN Declaration (Apx.); Hall Declaration (Apx.). Beyond Nuclear member Vina Colley lives within twelve miles of the Plant. Beyond Nuclear Declaration (Apx. __); Colley Declaration (Apx. __). Ms. Hall asserts that she is aware of radiation releases from the Portsmouth Site, also known as "PORTS" and formerly named the Portsmouth Gaseous Diffusion Plant site, where American Centrifuge is located, for many years. She further states concern that she could be killed or sickened by radiation from the proposed HALEU project as an industrial uranium enrichment process that would emit radioactive isotopes.

Ms. Colley declared that she is a former nuclear worker at the Portsmouth Gaseous Diffusion Plant site. (Apx. __). Her declaration documents multiple paths of radiation exposure to PORTS workers and the public over the years. She is familiar with the effects of occupational radiation exposure and suffers from chronic beryllium disease neuropathy along with chronic bronchitis from radiation exposure at work. Ms. Colley states in her declaration that she is greatly concerned

that she would be killed or sickened by radiation from the proposed HALEU project because of the increased radioactivity that would result from uranium enriched to a higher level.

The Petitioners' organizational standing in this case is legally supported by the Supreme Court decision in *Friends of the Earth v. Laidlaw*, 528 U.S. 167, 120 S.Ct. 693 (2000). In *Laidlaw*, the plaintiff organization had members who were concerned about pollution in a river into which Laidlaw had been discharging pollutants. The Court emphasized that the concerns expressed by the plaintiff members were injuries to persons who use and enjoy an area for whom the aesthetic and recreational values will be adversely affected.

The *Laidlaw* court also emphasized that the plaintiffs' reasonable concern that pollution in the Tyger River would adversely impact their personal use and enjoyment of the river and its environs were not general conclusory allegations. Similarly here, the reasonable concerns of Ms. Hall and Ms. Colley about impacts from the nuclear facility confer standing on the Petitioners. Hall and Colley have established the three elements comprising the "irreducible constitutional minimum of standing" in *Lujan v. Defenders of Wildlife*, 112 S.Ct. 2130, 504 U.S. 555, 561, (1992). First, they depicted sufferance of an "injury in fact" which is concrete and particularized, "actual or imminent, not 'conjectural' or 'hypothetical.'" *Warth v.*

Seldin, 422 U.S. 490, 508 (1975); *Sierra Club v. Morton*, 405 U.S. 727, 740-741, n. 16 (1972); *Los Angeles v. Lyons*, 461 U.S. 95, 102 (1983). Second, they demonstrated a causal connection between the injury and the conduct complained of, injury "fairly . . . trace[able] to challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court." *Simon v. Eastern Kentucky Welfare Rights Org*., 426 U.S. 26, 41-42 (1976). Third, they explained that it is "likely," as opposed to merely "speculative," that the injury will be "redressed by a favorable decision." *Id.* at 38, 43.

The Hall and Colley declarations also fulfill the elements of the "proximity-plus" test for standing by showing that the enrichment activities at issue involve geographical closeness to a "significant source of radioactivity producing an obvious potential for offsite consequences." *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 75 n. 22 (1994). See, also, *Shaw Areva MOX Services*, 66 NRC 169, LBP-07-14 (2007) (petitioners living 20 to 32 miles from mixed oxide fuel fabrication facility have standing because NRC Staff included residents as far away as 50 miles from the facility in its calculation of potential population doses). A showing of proximity to a source of dangerously radioactive materials excuses the burden of articulating a plausible means through which those materials could cause harm; the inherent

dangers of the radioactive materials comprise the obvious potential for offsite consequences. *U.S. Army Installation Command* (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 71 NRC 216, 218 (2010), citing *USEC, Inc.* (American Centrifuge Plant), CLI-05-11, 61 NRC 309, 311 (2005). "[T]he emission of non-natural radiation into appellees' environment would also seem a direct and present injury, given our generalized concern about exposure to radiation and the apprehension flowing from the uncertainty about the health and genetic consequences of even small emissions like those concededly emitted by nuclear power plants." *Duke Power Co. v. Carolina Environmental Study Group,* 438 U.S. 59, 74 (1978). "A threatened unwanted exposure to radiation, even a minor one, is sufficient to establish an injury." *Dominion Nuclear Connecticut, Inc*. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 216 (2003).

Petitioners ONFN and Beyond Nuclear have demonstrated the requisite organizational standing to proceed with this Petition.

ARGUMENT

I. Petitioners are Proper Parties to Bring This Action Pursuant to NEPA

A. Standard of Review

The Hobbs Act, 28 U.S.C. § 2344, requires petitioners seeking judicial

review of the licensing actions and ancillary actions of certain administrative agencies, such as the NRC, to initiate the petition for review in a court of appeals.

Petitioners assert that the D.C. Circuit Court of Appeals has jurisdiction. The Court has the power to determine its own jurisdiction, based on the facts and the law. *Olivares v. Trans. Sec. Admin*., 819 F.3d 454 (D.C. Cir. 2016).

B. Petitioners Are "Parties" Under the Hobbs Act Who Participated in the Proceedings Below By Commenting

The Respondents NRC and United States brought a Motion to Dismiss the Petition (Record Doc. #1914862, 9/20/2021; Apx. __), claiming that the Petitioners are not "parties" as contemplated by the Hobbs Act, 28 U.S.C. § 2344, because the Petitioners did not intervene in or petition for a hearing pursuant to 10 C.F.R. § 2.309. Petitioners responded with their Memorandum in Opposition. (Rec. Doc. #1917780, 10/21/2021; Apx. __). The Court ordered the parties to include their respective arguments on the Motion within their briefs. (Rec. Doc. #1931569, 1/20/22; Apx.__).

The NRC asserted in its Motion that Petitioners can raise NEPA issues only via the intervention procedure specified in 10 C.F.R. § 2.309, which is a regulation promulgated under the Atomic Energy Act. Petitioners, however, assert that it is not up to the NRC to decide who is a "party" to a Hobbs Act petition for review.

Rather, it is the province of the Court to determine its own jurisdiction. Although under the Hobbs Act, only a "party aggrieved" by a final order may petition for review, the determination of whether an entity is an aggrieved party is not dependent upon the agency's labeling of an entity as a "party." *Clark & Reid Co. v. United States*, 804 F.2d 3, 6 (1st Cir. 1986) (this Court does "not equate the regulatory definition of a 'party' in an [agency] proceeding with the participatory party status required for judicial review under the Hobbs Act."). If an agency's labeling of participants were controlling, as the NRC ventures here, any agency could cut off a person's right to judicial review by simply not denominating such a person a party. Obviously, this cannot be the case. Rather, under the Hobbs Act, the courts, not the agencies, construe the term "party" to encompass "those who directly and actually participated in the administrative proceedings." *Id.* At 5; *ACLU v. FCC*, 774 F.2d 24, 26 (1st Cir. 1985); *Reyblatt v. NRC*, 105 F.3d 715, 720 (D.C. Cir. 1997). Participation can include submission of comments if that avenue is available for participation. *Id.; Water Transp. Ass'n. v. ICC*, 819 F.2d 1189, 1192-1193 (D.C. Cir. 1987) (An entity becomes a "party aggrieved" under the Hobbs Act by presenting its views to the agency, typically through a comment or other written submission on a proposed rule, citing *Simmons v. ICC*, 716 F.2d 40, 43 n. 26 (1983)).

Submitting a comment in a rulemaking proceeding confers "party" status under the Hobbs Act. *Reyblatt,* 105 F.3d at 720; see also, *Am. Trucking Ass'ns, Inc v. FMCSA,* 724 F.3d 243, 246 (D.C. Cir. 2013); *NASUCA v. FCC*, 457 F.3d 1238, 1250 (11th Cir. 2006). The same is true for "commenting on a petition in agency proceedings that resulted in a declaratory ruling." *ACA Int'l v. FCC,* 885 F.3d 687, 711-12 (D.C. Cir. 2018).

Thus, Petitioners' commenting on the EA/FONSI constituted participation in the NEPA process for two reasons. First, the Hobbs Act makes no distinction between adjudicative and rulemaking proceedings in determining party status. *Gage v. AEC*, 479 F.2d 1214 (D.C. Cir. 1973). In *Gage*, the petitioners challenged a rulemaking decision of the Atomic Energy Commission wherein they had neither filed comments nor taken any other action while the matter was before the agency. The court ruled that the Hobbs Act applies to proceedings where persons can, or must, participate only by commenting. Second, the Hobbs Act requirement that a party participate in agency proceedings ensures that the agency is aware of the objections to its eventual decision so that it can develop and compile a complete administrative record for appellate review. See, *e.g., ACA Int'l*, 885 F.3d at 711-12 (emphasizing the importance of having presented a view to the agency to qualify as an aggrieved party); *Gage*, 479 F.2d at 1219-21 (describing the difficulty of

appellate review absent such a developed record). In this case, just by sheer coincidence since the NRC did not publish a draft EA or give notice that the EA was being prepared, the Petitioners did submit extensive comments, explaining their objections in detail, including legal authority and technical justification.

In *Massachusetts v. United States*, 522 F.3d 115 (1st Cir. 2008), the state was concerned about the management of spent fuel rods at two nuclear reactors and wanted to participate directly in the relicensing proceedings as a party in a formal adjudicatory proceeding. The state had also filed a separate rulemaking petition. The NRC denied the state's request to intervene and seek a formal hearing. The NRC argued that the state should not be a formal party in the licensing proceedings, but instead should participate as an interested governmental entity. The First Circuit decided that the state could participate as an interested governmental entity. Respecting NEPA procedures in nuclear relicensing proceedings, the court said:

> In such a situation, the regulations provide channels through which the agency's staff may receive new and significant information, namely from a license renewal applicant's environmental report or from *public comments on the draft SEIS, ...*

Id. at 127. (Emphasis added).

If commenting on a draft supplemental EIS is a recognized way to

participate in the NEPA process in a nuclear relicensing case, it follows that commenting on an EA would also comprise participation in the NEPA phase of licensing.

The *Massachusetts* court further explicitly discussed who is a party:

> "Party" can both be defined in one context as a term of art, e.g., as one who has demonstrated standing and whose contention has been admitted for hearing in a licensing adjudication, see 10 C.F.R. § 2.309(a), and deployed in its more general sense of one who participates in a proceeding or transaction, ... The NRC has not defined the term "party" uniformly throughout its regulations.

Id. at 129.

The First Circuit then addressed the core issue raised in this Court by Respondent's Motion to Dismiss:

> This court applies a functional test to determine whether one is a "party aggrieved" for Hobbs Act purposes. That test asks whether the would-be petitioner "directly and actually participated in the administrative proceedings." . . . Because "we do not equate the regulatory definition of a 'party' in an [agency] proceeding with the participatory party status required for judicial review," . . . it matters not here whether NRC regulations label the Commonwealth as a "party" or an "interested governmental entity."

Id. The *Massachusetts* court unequivocally stated that the agency's interpretation of who is a party does not control the court in determining party status for purposes of 28 U.S.C. § 2344, and that participating means taking part in the administrative proceedings in any way available.

Here, the NRC did not provide a formal comment period, violating the spirit if not the letter of Council on Environmental Quality (CEQ) regulations. *Cf.* 40 C.F.R. §§ 1501.4(b) and 1506.6. Those CEQ regulations clearly promote public involvement. 40 C.F.R. § 1501.4(b) states that in preparing an EA, the agency "shall involve environmental agencies, applicants, *and the public*, to the extent practicable." (emphasis added). Likewise, 40 C.F.R. § 1506.6 provides that:

> Agencies shall:
> (a) Make diligent efforts to *involve the public* in preparing and implementing their NEPA procedures.
> (b) Provide public notice of NEPA-related hearings, public meetings, and *the availability of environmental documents so as to inform those persons and agencies who may be interested or affected*.

(emphasis added).

Despite the NRC's decision here not to include the public at any stage of the EA/FONSI preparation, the Petitioners did submit comments well in advance of the final EA/FONSI issuance. The Petitioners did, in sum, participate in the agency proceedings. That is all § 2344 requires.

It is important to emphasize that Petitioners' claim is governed by NEPA, not the AEA. As the Respondents made clear in their Motion to Dismiss, the requirement for intervention in agency proceedings is established by the AEA, which cannot limit the NRC's obligations under NEPA to the public. Petitioners'

comments on the NRC's proposal to issue an EA made them parties to the obligatory NEPA process.

In *Limerick Ecology Action, Inc. v. Nuclear Regulatory Commission*, 869 F.2d 719 (3d Cir. 1989), the NRC contended that by making decisions under the Atomic Energy Act, it precluded the need for consideration of environmental implications under NEPA. But the Third Circuit reversed:

> The language of NEPA indicates that Congress did not intend that it be precluded by the AEA. Section 102 of NEPA requires agencies to comply "to the fullest extent possible." 42 U.S.C. § 4332. Although NEPA imposes responsibilities that are purely procedural, [citation omitted], there is no language in NEPA itself that would permit its procedural requirements to be limited by the AEA. Moreover, there is no language in AEA that would indicate AEA precludes NEPA.
>
> The legislative history of the phrase "to the fullest extent possible" indicates that Congress intended that NEPA not be limited by other statutes by implication.
>
> ***** ***** *****
>
> On the basis, therefore, of the language of NEPA and AEA, the legislative history of NEPA, and the existing case law, we find no intent by Congress that the AEA preclude application of NEPA.

Id. at 729-730.

The thrust of the NRC's regulations is to limit parties to intervening via its procedures for intervention and submitting contentions. See generally 10 C.F.R. § 2.309. The intervention procedure is an adversary proceeding in which the party

who requests leave to intervene must overcome procedural and evidentiary hurdles erected by the NRC regulations and agency interpretation. Petitioners are not aware of any other federal agency that restricts the public's participation in the NEPA process in this way. The D.C. Circuit has previously noted that the NRC improperly adds barriers to public participation in the NEPA track. See *Oglala Sioux Tribe v. U.S. Nuclear Regulatory Comm'n,* 896 F.3d 520, 532 (D.C. Cir. 2018), commenting negatively on *Strata Energy, Inc*., 83 NRC 566, 595 n.188 (2016) ("It is well settled that parties challenging an agency's NEPA process are not entitled to relief unless they demonstrate harm or prejudice."); and *Crow Butte Resources, Inc.*, 83 NRC 340, 413-14 (2016) (keeping a license in effect although the NRC staff had not complied with NEPA, and repeating the "irreparable injury" requirement).

NEPA contemplates that the public will participate in the NEPA process by commenting on the documents required by NEPA. That is the only means by which an administrative record can be made in a NEPA case. NEPA is not subsumed to the Atomic Energy Act, but is a separate, ancillary permitting track in the process of NRC licensing. By submitting extensive comments in this case, the Petitioners properly participated, and consequently are aggrieved parties under the Hobbs Act.

II. The NRC Violated NEPA By Issuance of the EA/FONSI instead of compiling an Environmental Impact Statement

A. Standard of Review

The Court of Appeals for the District of Columbia Circuit has adopted the arbitrary and capricious standard in the review of an agency decision to issue an EA and FONSI, rather than an EIS. *Nevada v. Department of Energy*, 457 F.3d 78, 87 (D.C. Cir. 2006); *Sierra Club v. Peterson*, 717 F.2d 1409 (D.C. Cir. 1983). This Court also uses *Peterson's* four-part test to review an agency's finding of no significant impact (FONSI) to the environment. The court determines:

(1) whether the agency took a 'hard look' at the problem;

(2) whether the agency identified the relevant areas of environmental concern;

(3) as to the problems studied and identified, whether the agency made a convincing case that the impact was insignificant; and

(4) if there was an environmental impact of true significance, whether the agency convincingly established that changes in the project sufficiently reduced it to a minimum.

The agency's threshold determination must meet all of these factors to pass review in the D.C. Circuit. *Id.*

It is possible for the Court to find that the agency has taken the requisite NEPA "hard look" at the environmental impacts, yet determine that the record does not support a finding of no significant impact. *Sierra Club v. Peterson* ("hard look" taken but there was a small possibility that some of the oil and gas leases at issue might permit a level of exploratory activity that could produce significant adverse impacts).

B. The EA/FONSI Neither Recognized Nor Addressed the Issues of Nuclear Proliferation and Terrorism Nor Anticipated Impacts on the Domestic U.S. Uranium Supply Chain from Switching to HALEU Fuel

1. Nuclear Proliferation and Terrorism

Petitioners made the below comments to the NRC respecting terrorism and weapons proliferation:

> According to a report issued in the past week by the Union of Concerned Scientists, "[w]hile HALEU is considered impractical for direct use in a nuclear weapon, it is more attractive for nuclear weapons development than the LEU [low-enriched uranium] used in LWRs[light water reactors]." (Emphasis added). U.S. reactor development has implications for proliferation, "both because US vendors seek to export new reactors to other countries and because other countries are likely to emulate the US program. The United States has the responsibility to set a good international example by ensuring its own nuclear enterprise meets the highest nonproliferation standards."
>
> Under the AEA, the Commission has a legal and non-discretionary duty to consider whether when granting a license, such an action could be inimical to the common defense and security of the United States or the health and safety of the public. See, *e.g.*, 42 U.S.C. § 2077(c)(2) or § 2099. Moreover, the Commission's NEPA analysis must consider the full range of

> risks to the common defense and security potentially arising from its licensing decision, and must consider all reasonable alternatives that could eliminate or mitigate those risks. See, *San Luis Obispo Mothers for Peace v. NRC,* 449 F.3d 1016 (9th Cir. 2006).
>
> The Commission, then, has a legal and non-discretionary duty to consider whether a decision to grant a first-of-a kind commercial license for HALEU enrichment could abet the proliferation of this fuel to domestic terrorists or foreign governments. Saudi Arabia, for example, is acquiring SMRs for the unabashed purpose of developing nuclear weapons. In some contexts, SMR commerce could be indirectly if not directly inimical to the common defense and security of the United States or the health and safety of its public. The Commission's NEPA analysis of HALEU must consider the full range of defense and security risks implicated by this licensing decision, and must consider all reasonable alternatives that could eliminate or mitigate those risks. These alternatives should be compiled in a Programmatic Environmental Impact Statement, evoking considerable public participation before the decision is made, instead of the planned Environmental Assessment/Finding of No Significant Impact (EA/FONSI), which completely cuts the public out.

(Index 55, pp. 2-3; Apx. __).

Nuclear proliferation and security issues have been part of NEPA decision making since the inception of NEPA. See*, Scientists' Institute for Public Information, Inc. v. AEC*, 481 F.2d 1079 (D.C. Cir. 1973) (court required the AEC to prepare a programmatic EIS on the AEC's Liquid Metal Fast Breeder Reactor Program; nonproliferation and terrorism were addressed in the resulting EIS). At the preliminary injunction hearing in the 1974 case*, West Michigan Environmental Action Council v. AEC*, Dkt . No . G-58-73 (W.D. Mich. 1974) the Atomic Energy Commission (AEC) settled the litigation by preparing a generic

Programmatic EIS on plutonium recycle, known as the "Generic Environmental Statement on Mixed Oxide Fuel" (GESMO), No. RM-50-1. The GESMO expressly addressed issues related to protecting plutonium from theft, diversion, or sabotage.

The Ninth Circuit, in *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006) (*SLOMFP*), held that an NRC licensing decision must consider terrorism as a likely occurrence and assess the implications and impacts of that. Certainly, highly enriched uranium, which could be used to make a nuclear bomb, is a prime target for terrorists. The *SLOMPF* court determined that a terrorist attack was not so remote and speculative that it should not be considered in an environmental review. This was especially true when the NRC itself undertook a terrorism review after the September 11 attacks. *Id.* at 1031. The court also held that "It is therefore possible to conduct a low probability-high consequence analysis without quantifying the precise probability of risk." *Id*. at 1031. The court continued, "If the risk of a terrorist attack is not insignificant, then NEPA obligates the NRC to take a "hard look" at the environmental consequences of that risk." *Id.* at 1032. The court dismissed NRC arguments that consideration of terrorist attacks would be a worst-case scenario or that revealing any information in addressing terrorist attacks would implicate security concerns. The

court concluded:

> The application of NEPA's requirements, under the rule of reason relied on by the NRC, is to be considered in light of the two purposes of the statute: first, ensuring that the agency will have and will consider detailed information concerning significant environmental impacts; and, second, ensuring that the public can both contribute to that body of information, and can access the information that is made public.
>
> ***** ***** *****
>
> The NRC simply does not explain its unwillingness to hear and consider the information that Petitioners seek to contribute to the process, which would fulfill both the information-gathering and the public participation functions of NEPA.

Id. at 1034.

In the present matter, the EA/FONSI does not analyze or consider the impacts of terrorism or nuclear weapons proliferation at all. The EA/FONSI does not even mention the word "terrorism," and mentions "proliferation" only once, in its unsupported conclusion that "the [25%] enrichment level does not raise any security or proliferation concerns." The EA relies almost exclusively on the results of environmental reviews in previous licensing decisions for previous activities at the Piketon site. But those reviews did not analyze or consider the impacts of terrorism as related to the prospects for weapons proliferation, because HEU was not being produced at PORTS. The fact that HALEU that is also HEU will be produced at PORTS ignores the reasoning of the *SLOMFP* case, and underscores

the conclusion that the NRC's issuance of a HALEU license for activity to implement a DOE policy is a "major federal activity" with significant impacts. The NRC's EA/FONSI also omits entirely to assess and analyze the likely impacts to domestic uranium mining as a consequence of the turn to the higher enrichment levels of HALEU.

2. Impacts on Domestic Uranium Supply Chain

In the comment letter, Petitioners stated to the NRC:

> A PEIS would also explicate the prospective effects on uranium extraction, which bears considerable portents for Environmental Justice, given the extent to which indigenous lands are affected by mining. Per unit of HALEU produced, there will be much larger volumes of uranium mining and mill tailings waste generated, and much more waste depleted uranium created. There are environmental justice impacts regardless of whether uranium is mined domestically or imported, but since proposed federal policy includes incentives to source uranium domestically (and to limit sourcing from Russia), there are significant EJ impacts that the NRC can't ignore.

(Index 55, p. 1; Apx. __).

If the demand for HALEU in national and international markets reaches the heights Centrus seems to anticipate, there will be significant effects on the moribund domestic uranium mining industry. HALEU requires four times the concentration of U-235, or more, than conventional reactor fuel. This means that considerably more low-grade uranium ore will be needed from which to

concentrate U-235 in the new fuel.

The principal flaw in the EA/FONSI is that the NRC has treated its licensing action as merely allowing a limited production run of a different reactor fuel, without accounting for the implications that follow. HALEU is a necessary enhanced fuel type needed for the initiation of a new generation of technologically diverse SMRs. The nuclear industry expects to sell many SMRs globally. The fuel is controversial because of the global nature of marketing expectations. Hence the "agency's Environmental Assessment 'must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a vacuum.' *Grand Canyon Trust v. FAA*, 290 F.3d 339, 342 (D.C. Cir. 2002). The 'incremental impact of the action [at issue] must be considered when added to other past, present, and reasonably foreseeable future actions.' *Id.* 'It makes sense to consider the 'incremental impact' of a project for possible cumulative effects by incorporating the effects of other projects into the background data base of the project at issue.'" *Coalition on Sensible Transp., Inc. v. Dole,* 826 F.2d 60, 70-71 (D.C. Cir. 1987) .

"When a federal agency decides whether to prepare an impact statement, the issue is not whether it has adequately considered the significance of the federal action; the issue is whether an impact statement must be prepared because

significant environmental impacts could occur. . . . In order to decide whether an impact statement is required, a court must decide whether the environmental assessment is adequate. . . . In order to determine whether an action is significant, an agency or court must have a point of comparison or 'baseline.' . . . If an agency prepares an environmental assessment without identifying an environmental baseline, a court may remand on the basis that it did not take the requisite hard look at the consequences of its proposed action." Daniel Mandelkar, *et al.*, NEPA Law and Litigation (2021 Edition).

The significant baseline fact here is that the American Centrifuge license currently limits the enrichment of uranium to less than 10 percent. The license amendment allows ACO to more than double that limit. Increasing the enrichment to 20%-25% presents new, hitherto unaddressed considerations for next-generation uranium fuel. HALEU will consume multiples of the volume of uranium ore required to produce conventional reactor fuel. And HALEU is HEU; HEU is readily adapted for use in thermonuclear weapons. These aspects of HALEU production render inapplicable the prior so-called "bounding" NEPA documents cited by the NRC.

The sharp turn into High-Assay Low-Enriched Uranium, particularly those batches of it that surpass the supposed 19.75% U-235 level for HALEU

enrichment, represents a significant change in commercial nuclear fuel, and it must be analyzed within an EIS or PEIS because of these significant impacts.

III. The NRC Should Be Required to Prepare an EIS or Programmatic EIS for the ACO License Amendment Application

A. Standard of Review

The D.C. Circuit applies an arbitrary and capricious standard of review to a NEPA challenge. *Nevada v. Department of Energy*, 457 F.3d 78, 87 (D.C. Cir. 2006). The Court's role is to "ensure that the agency has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious." *Baltimore Gas & Electric Co. v. NRDC*, 462 U.S. 87, 97–98, 103 S.Ct. 2246 (1983). The question is whether the agency "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action[,] including a rational connection between the facts found and the choice made." *Motor Vehicle Manufacturers Ass'n, Inc. v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 43, 103 S.Ct. 2856 (1983) (internal quotation marks omitted). *Birckhead v. FERC*, 925 F.3d 510 (D.C. Cir. 2019).

Federal agencies are required to prepare an Environmental Impact Statement (EIS) for every "major federal action" significantly affecting the quality of the human environment. NEPA § 102(2)(C); 42 U.S.C § 4332(2)(C). According to

40 CFR §1508.1(q)(2) and (3) of NEPA regulations, major federal actions may include: "projects and programs entirely or partly financed, assisted, . . . regulated, or approved by Federal agencies; . . . [a]doption of formal plans . . . ; [a]doption of programs, such as a group of concerted actions to implement a specific policy or plan;" and "[a]pproval of specific projects, such as construction or management activities located in a defined geographic area."

The ACO license amendment represents implementation of a DOE policy via contract, whereby ACO would provide DOE with up to 600 kilograms (kg) of HALEU for use in research and development for the civilian nuclear energy sector. (Index 81, p. 4; Apx. __). The DOE is supporting the commercial feasibility of HALEU and in doing so is implementing a policy by having its contractor obtain approval of a specific project.

"The touchstone of major [F]ederal activity constitutes a [F]ederal agency's authority to influence nonfederal activity. 'The [F]ederal agency must possess actual power to control the nonfederal activity.'" *United States v. S. Fla. Water Mgmt. Dist.*, 28 F.3d 1563, 1572 (11th Cir. 1994) (*quoting Sierra Club v. Hodel*, 848 F.2d 1068, 1089 (10th Cir. 1988).

Here, the HALEU project is funded by the DOE contract with ACO and the enrichment process requires a license from the NRC. So not one, but two federal

agencies possess power to control the nonfederal activity of centrifuge operations. Moreover, DOE exerts *de facto* control over HALEU manufacturing because the management and disposal of radiological waste generated during the HALEU cascade operation is the sole responsibility of the DOE. (Index 81, p. 12; Apx. __). Certainly the HALEU project's significant federal intrusions, coupled with the "reasonably foreseeable" prospect of a decade of commercial production following the initial three-year demonstration, is a "major federal activity."

The HALEU project also heralds a "broad federal action." A Programmatic EIS (PEIS) may be required for "broad Federal actions." According to 40 C.F.R. § 1502.4(b), "Environmental impact statements may be prepared for programmatic Federal actions, such as the adoption of new agency programs." When preparing statements on programmatic actions, agencies evaluate the proposals:

> By stage of technological development including Federal or federally assisted research, development or demonstration programs for new technologies that, if applied, could significantly affect the quality of the human environment. Statements on such programs should be available before the program has reached a stage of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives.

40 C.F.R. § 1502.4(b)(1)(iii).

The Centrus HALEU contract is for a demonstration project. Commercial reactor fuel typically contains only 4%-5% U-235, so creating LEU requires only

about 1/4 as much U-235 as HALEU. (Index 81, p. 4, 5; Apx. __). The SMRs in which HALEU fuel will be fissioned have not yet been built, even as prototypes. In the Environmental Assessment, the NRC found that Centrus's anticipated request for a 10-year extension of its HALEU license beyond the three years granted in 2021 "is reasonably foreseeable" and that "the environmental impacts from up to an additional 10 years of operation are considered in this EA." In other words, two separate stages of operations and development (the 600-kg. demonstration and the ensuing decade of presumably higher-volume production) were merged by the NRC for NEPA purposes. Given Centrus's optimism that HALEU will be successfully commercialized by the end of those 13 years, the treatment of the project in the EA suggests that the HALEU project is a demonstration of a new technology "that, if applied, could significantly affect the quality of the human environment." 40 C.F.R. § 1502.4(b)(1)(iii). As the PEIS regulation advises, "Statements on such programs should be available before the program has reached a stage of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives." In other words, an EIS or Programmatic EIS is needed now, before governmental investment or commitment is determinative of future decisions and/or causes alternatives to be discarded.

In *Kleppe v. Sierra Club*, the Supreme Court recognized that NEPA may mandate a comprehensive EIS "in certain situations where several proposed actions are pending at the same time." *Kleppe*, 427 U.S. 390, 409 (1976). The Court noted that "when several proposals . . . that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental impacts must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate different courses of action." *Id.* at 410.

Appellate courts have defined a two-pronged inquiry to establish whether a Programmatic EIS is appropriate: "(a) Could the Programmatic EIS be sufficiently forward looking to contribute to the decision makers' basic planning of the overall program? and, (b) Does the decision maker purport to 'segment' the overall program, thereby unreasonably constricting the scope of primordial environmental evaluation?" *Churchill County v. Norton*, 276 F.3d 1060, 1076 (9th Cir. 2001) (citing *Nat'l Wildlife Fed'n v. Appalachian Reg'l Comm'n*, 677 F.2d 883, 889 (D.C. Cir. 1981)). See also *Foundation on Economic Trends v. Heckler*, 756 F.2d 143, 159 (D.C. Cir. 1985).

In the present matter, a PEIS would contribute to the NRC's (and the public's) understanding of the true scope of the reasonably foreseeable uranium

supply chain effects from expansion of uranium fuel enrichment to meet the requirements for significantly concentrated HALEU. Similarly, assessment of potential for nuclear proliferation as HALEU manufacturing becomes normalized at a high volume of production can be best understood by a programmatic approach. The NRC cannot dodge the existence of a comprehensive program with cumulative environmental effects by "disingenuously describing it as only an amalgamation of unrelated smaller projects." *Churchill County*, 276 F.3d at 1076 (citing *Nat'l Wildlife Fed'n*, 677 F.2d at 890.

Addressing cumulative impacts in a systematic way is crucial also for assessing the economic viability of a project. In *Blue Mountains Biodiversity Project v. Blackwood,* 161 F.3d 1208, 1215 (9th Cir.1998), the Ninth Circuit held that a single environmental impact statement should have been prepared by the Forest Service for five separate contracts for the sale of salvage timber which were all part of one large project (a timber salvage and re-vegetation project in an eastern Oregon national forest following an extensive fire). *Id.* at 1209. The court found the sales were cumulative actions because they were part of a single project, were announced simultaneously, and were reasonably foreseeable. *Id.* at 1514-15. See also, *LaFlamme v. FERC*, 852 F.2d 389, 401-03 (9th Cir. 1988) (finding that agency consideration of specific facts in isolation is insufficient to replace

comprehensive analysis of the impact of the program as a whole).

Moreover, the HALEU Environmental Assessment describes the potential for airborne radiation emissions, both from the HALEU project as well as from legacy contamination at the PORTS site. The approach in the HALEU EA reflects segmentation or piecemealing of the project because it lacks an adequate analysis of the possible synergism between longtime and new isotopic emissions. In its EA, the NRC states:

> Soil, surface water, sediment, groundwater, and air in and around the DOE reservation contain radionuclides and chemicals that are both naturally occurring and anthropogenic (i.e., human made), the latter from historical and current operations at the site (NRC 2006b). . . . Gaseous effluents released to the air are the primary cause of public dose and are well within regulatory limits.

(Index 81, p. 11; Apx. __). But the EA fails to identify and analyze cumulative effects on the HALEU plan from other nuclear material production, enrichment and remediation activities taking place at PORTS, such as the processing of depleted uranium, the ongoing demolition of contaminated structures, and disposal of radioactively contaminated material in an onsite landfill, which is geologically connected to the water table beneath. (Index 81, pp. 17, 20, 27; Apx. __; ACO Env. Report, Index 33, pp. 3-4, 3-24; Apx. __). A comprehensive EIS or PEIS must take account of the potential for the new enrichment activities compounding

the historic contamination from the former industrial enrichment at PORTS.

In *Natural Resources Defense Council, Inc. v. Callaway*, 524 F.2d 79, 88 (2d Cir. 1975), the Second Circuit imposed some obligations on the U.S. Navy to include other proposed projects in its EIS for a Long Island Sound dumping project, but generally declined to require the production of a full-fledged PEIS. The Second Circuit noted that "an agency may [treat] a project as an isolated 'single-shot' venture in the face of persuasive evidence that it is but one of several substantially similar operations, each of which will have the same polluting effect in the same area. To ignore the prospective harm under such circumstances could be to risk ecological disaster." *Id.* (discussing "comprehensive evaluation").

Petitioners submit that a Programmatic EIS should be undertaken because the HALEU experiment signals the start of a much larger industrial production campaign that may extend over many decades. The NRC's NEPA document treats the 16-centrifuge cascade as the sole activity for NEPA analysis even as it admits that it "foreseeably" will be followed by a decade-length production of HALEU for full commercialization. There is no discussion of the terrorism and nuclear proliferation potential of these stages. There is no acknowledgment of the possibly dramatic increases in uranium ore and the need for considerable other raw

materials necessary to support global marketing of an ostensibly more flexible modular nuclear power technology. And this new industrial campaign will itself take place in a physical environment at PORTS where there is pre-existing, legacy radiological and chemical contamination that is admitted but not investigated nor quantified in the EA.

CONCLUSION

It is Petitioners' contention that the determination of the NRC here to issue an EA/FONSI was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971); 5 U.S.C. §706(2)(A) (Administrative Procedure Act). Under the Administrative Procedure Act, the Court must "compel agency action unlawfully withheld or unreasonably delayed" in these circumstances. 5 U.S.C. § 706(1).

WHEREFORE, Petitioners pray the Court find and declare that Respondents Nuclear Regulatory Commission and United States of America have violated the National Environmental Policy Act in the particulars cited hereinabove, and that by way of relief the Court remand this matter back to the NRC with instructions to compile either an Environmental Impact Statement or a Programmatic Environmental Impact Statement, the decision to be made following scoping as required by NEPA regulations. Further, Petitioners pray the Court grant

such other and further relief, at law and in equity, as may be necessary in the premises.

Dated: March 15, 2022

Respectfully submitted,
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CERTIFICATE OF SERVICE

I hereby certify that on this 15th day of March, 2022, I filed the foregoing Petitioners' Proof Brief in the Court's electronic case filing system, which according to its protocols would automatically be served upon all counsel of record.

/s/ Terry J. Lodge
Terry J. Lodge
Co-Counsel for Petitioners

CERTIFICATE OF COMPLIANCE

The foregoing Petitioners' Proof Brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5); the type-style requirements of Fed. R. App. P. 32(a)(6); the length limitation set forth in F.R.App.P. 27(d)(2)(a); and the applicable rules for the U.S. Court of Appeals for the District of Columbia Circuit. The Memorandum was prepared in 14-point, double spaced Times New Roman font using Wordperfect 4X. The Brief contains 10, 244 words.

/s/ Terry J. Lodge
Terry J. Lodge
Co-Counsel for Petitioners

PETITIONERS' DESIGNATION OF ITEMS FOR INCLUSION IN DEFERRED APPENDIX

ACO License Application, Index 29, pp. 1, 1-2
Env. Report, Index 33, pp. 3-4 and 3-24
Comment Letter, Index 55, all
Faraz Email, Index 62, all
EA/FONSI, Index 81, all
NRC Approval letter, Index 83, all
Amended ACO Materials License, redacted, Index 88, all
EA/FONSI public notice, 86 Fed. Reg. 31,539 (June 14, 2021) (not listed in Index), all
Petitioners' Petition for Review, all
Respondents' Motion to Dismiss (9/20/2021), all
Petitioners' Opposition to Motion to Dismiss (10/20/2021), all
Court Order Per Curiam on Briefing (1/20/2021), all

Case No. 21-1162

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OHIO NUCLEAR-FREE NETWORK and BEYOND NUCLEAR,
Petitioners,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,
Respondents

On Petition for Review of Action by the
Nuclear Regulatory Commission

PETITIONERS' ADDENDUM OF STATUTES, REGULATIONS AND STANDING DECLARATIONS

ADDENDUM TABLE OF CONTENTS

(NEPA) 42 U.S.C. § 4332(C)

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall-

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on-

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, and shall accompany the proposal through the existing agency review processes. . . .

40 CFR § 1502.4 – Major Federal actions requiring the preparation of environmental impact statements.

(a) Agencies shall define the proposal that is the subject of an environmental impact statement based on the statutory authorities for the proposed action. Agencies shall use the criteria for scope (§ 1501.9(e) of this chapter) to determine which proposal(s) shall be the subject of a particular statement. Agencies shall evaluate in a single environmental impact statement proposals or parts of proposals that are related to each other closely enough to be, in effect, a

single course of action.

(b) Environmental impact statements may be prepared for programmatic Federal actions, such as the adoption of new agency programs. When agencies prepare such statements, they should be relevant to the program decision and timed to coincide with meaningful points in agency planning and decision making.

(1) When preparing statements on programmatic actions (including proposals by more than one agency), agencies may find it useful to evaluate the proposal(s) in one of the following ways:

(i) Geographically, including actions occurring in the same general location, such as body of water, region, or metropolitan area.

(ii) Generically, including actions that have relevant similarities, such as common timing, impacts, alternatives, methods of implementation, media, or subject matter.

(iii) By stage of technological development including Federal or federally assisted research, development or demonstration programs for new technologies that, if applied, could significantly affect the quality of the human environment. Statements on such programs should be available before the program has reached a stage of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives.

(2) Agencies shall as appropriate employ scoping (§ 1501.9 of this chapter), tiering (§ 1501.11 of this chapter), and other methods listed in §§ 1500.4 and 1500.5 of this chapter to relate programmatic and narrow actions and to avoid duplication and delay. Agencies may tier their environmental analyses to defer detailed analysis of environmental impacts of specific program elements until such program elements are ripe for final agency action.

(AEA) 42 U.S.C. § 2239(a)(1)(A)

(A) In any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees, and in any proceeding for the payment of compensation, an award or royalties under sections [1] 2183, 2187, 2236(c) or 2238 of this title, the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.

10 CFR § 2.309 Hearing requests, petitions to intervene, requirements for standing, and contentions.

(a) General requirements. Any person whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing and a specification of the contentions which the person seeks to have litigated in the hearing. In a proceeding under 10 CFR 52.103, the Commission, acting as the presiding officer, will grant the request if it determines that the requestor has standing under the provisions of paragraph (d) of this section and has proposed at least one admissible contention that meets the requirements of paragraph (f) of this section. For all other proceedings, except as provided in paragraph (e) of this section, the Commission, presiding officer, or the Atomic Safety and Licensing Board designated to rule on the request for hearing and/or petition for leave to intervene, will grant the request/petition if it determines that the requestor/petitioner has standing under the provisions of paragraph (d) of this section and has proposed at least one admissible contention that meets the requirements of paragraph (f) of this section. In ruling on the request for hearing/petition to intervene submitted by petitioners seeking to intervene in the proceeding on the HLW repository, the Commission, the presiding officer, or the Atomic Safety and Licensing Board shall also consider any failure of the petitioner to participate as a potential party in the pre-license application phase under subpart J of this part in addition to the factors in paragraph (d) of this section. If a request for hearing or petition to intervene is filed in response to any notice of hearing or opportunity for hearing, the applicant/licensee shall be deemed to be a party.

(b) Timing. Unless specified elsewhere in this chapter or otherwise provided by the Commission, the request or petition and the list of contentions must be filed as follows:

(1) In proceedings for the direct or indirect transfer of control of an NRC license when the transfer requires prior approval of the NRC under the Commission's regulations, governing statute, or pursuant to a license condition, twenty (20) days from the date of publication of the notice in the Federal Register.

(2) In proceedings for the initial authorization to construct a high-level radioactive waste geologic repository, and the initial licensee to receive and process high level radioactive waste at a geological repository operations area, thirty (30) days from the date of publication of the notice in the Federal Register.

(3) In proceedings for which a Federal Register notice of agency action is published (other than a proceeding covered by paragraphs (b)(1) or (b)(2)

of this section), not later than:

(i) The time specified in any notice of hearing or notice of proposed action or as provided by the presiding officer or the Atomic Safety and Licensing Board designated to rule on the request and/or petition, which may not be less than sixty (60) days from the date of publication of the notice in the Federal Register; or

(ii) If no period is specified, sixty (60) days from the date of publication of the notice.

(4) In proceedings for which a Federal Register notice of agency action is not published, not later than the latest of:

(i) Sixty (60) days after publication of notice on the NRC Web site at http://www.nrc.gov/public-involve/major-actions.html, or

(ii) Sixty (60) days after the requestor receives actual notice of a pending application, but not more than sixty (60) days after agency action on the application.

(c) Filings after the deadline; submission of hearing request, intervention petition, or motion for leave to file new or amended contentions—

(1) Determination by presiding officer. Hearing requests, intervention petitions, and motions for leave to file new or amended contentions filed after the deadline in paragraph (b) of this section will not be entertained absent a determination by the presiding officer that a participant has demonstrated good cause by showing that:

(i) The information upon which the filing is based was not previously available;

(ii) The information upon which the filing is based is materially different from information previously available; and

(iii) The filing has been submitted in a timely fashion based on the availability of the subsequent information.

(2) Applicability of §§ 2.307 and 2.323.

(i) Section 2.307 applies to requests to change a filing deadline (requested before or after that deadline has passed) based on reasons not related to the substance of the filing.

(ii) Section 2.323 does not apply to hearing requests, intervention petitions, or motions for leave to file new or amended contentions filed after the deadline in paragraph (b) of this section.

(3) New petitioner. A hearing request or intervention petition filed after the deadline in paragraph (b) of this section must include a specification of

contentions if the petitioner seeks admission as a party, and must also demonstrate that the petitioner meets the applicable standing and contention admissibility requirements in paragraphs (d) and (f) of this section.

(4) Party or participant. A new or amended contention filed by a party or participant to the proceeding must also meet the applicable contention admissibility requirements in paragraph (f) of this section. If the party or participant has already satisfied the requirements for standing under paragraph (d) of this section in the same proceeding in which the new or amended contentions are filed, it does not need to do so again.

(d) Standing.

(1) General requirements. A request for hearing or petition for leave to intervene must state:

(i) The name, address and telephone number of the requestor or petitioner;

(ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;

(iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and

(iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.

(2) Rulings. In ruling on a request for hearing or petition for leave to intervene, the Commission, the presiding officer, or the Atomic Safety and Licensing Board designated to rule on such requests must determine, among other things, whether the petitioner has an interest affected by the proceeding considering the factors enumerated in paragraph (d)(1) of this section.

(3) Standing in enforcement proceedings. In enforcement proceedings, the licensee or other person against whom the action is taken shall have standing.

(e) Discretionary Intervention. The presiding officer may consider a request for discretionary intervention when at least one requestor/petitioner has established standing and at least one admissible contention has been admitted so that a hearing will be held. A requestor/petitioner may request that his or her petition be granted as a matter of discretion in the event that the petitioner is determined to lack standing to intervene as a matter of right under paragraph (d)(1) of this section. Accordingly, in addition to addressing the factors in paragraph (d)(1) of this section, a petitioner who wishes to seek intervention as a matter of discretion in the event it is determined that standing as a matter of right

is not demonstrated shall address the following factors in his/her initial petition, which the Commission, the presiding officer or the Atomic Safety and Licensing Board will consider and balance:

(1) Factors weighing in favor of allowing intervention—

(i) The extent to which the requestor's/petitioner's participation may reasonably be expected to assist in developing a sound record;

(ii) The nature and extent of the requestor's/petitioner's property, financial or other interests in the proceeding; and

(iii) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest;

(2) Factors weighing against allowing intervention—

(i) The availability of other means whereby the requestor's/petitioner's interest will be protected;

(ii) The extent to which the requestor's/petitioner's interest will be represented by existing parties; and

(iii) The extent to which the requestor's/petitioner's participation will inappropriately broaden the issues or delay the proceeding.

(f) Contentions.

(1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted, provided further, that the issue of law or fact to be raised in a request for hearing under 10 CFR 52.103(b) must be directed at demonstrating that one or more of the acceptance criteria in the combined license have not been, or will not be met, and that the specific operational consequences of nonconformance would be contrary to providing reasonable assurance of adequate protection of the public health and safety;

(ii) Provide a brief explanation of the basis for the contention;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue and on which the petitioner intends to rely at hearing, together with references to the

specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue;

(vi) In a proceeding other than one under 10 CFR 52.103, provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief; and

(vii) In a proceeding under 10 CFR 52.103(b), the information must be sufficient, and include supporting information showing, prima facie, that one or more of the acceptance criteria in the combined license have not been, or will not be met, and that the specific operational consequences of nonconformance would be contrary to providing reasonable assurance of adequate protection of the public health and safety. This information must include the specific portion of the report required by 10 CFR 52.99(c) which the requestor believes is inaccurate, incorrect, and/or incomplete (i.e., fails to contain the necessary information required by § 52.99(c)). If the requestor identifies a specific portion of the § 52.99(c) report as incomplete and the requestor contends that the incomplete portion prevents the requestor from making the necessary prima facie showing, then the requestor must explain why this deficiency prevents the requestor from making the prima facie showing.

(2) Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, participants shall file contentions based on the applicant's environmental report. Participants may file new or amended environmental contentions after the deadline in paragraph (b) of this section (e.g., based on a draft or final NRC environmental impact statement, environmental assessment, or any supplements to these documents) if the contention complies with the requirements in paragraph (c) of this section.

(3) If two or more requestors/petitioners seek to co-sponsor a contention, the requestors/petitioners shall jointly designate a representative who shall have the authority to act for the requestors/petitioners with respect to that

contention. If a requestor/petitioner seeks to adopt the contention of another sponsoring requestor/petitioner, the requestor/petitioner who seeks to adopt the contention must either agree that the sponsoring requestor/petitioner shall act as the representative with respect to that contention, or jointly designate with the sponsoring requestor/petitioner a representative who shall have the authority to act for the requestors/petitioners with respect to that contention.

(g) Selection of hearing procedures. A request for hearing and/or petition for leave to intervene may, except in a proceeding under 10 CFR 52.103, also address the selection of hearing procedures, taking into account the provisions of § 2.310. If a request/petition relies upon § 2.310(d), the request/petition must demonstrate, by reference to the contention and the bases provided and the specific procedures in subpart G of this part, that resolution of the contention necessitates resolution of material issues of fact which may be best determined through the use of the identified procedures.

(h) Requirements applicable to States, local governmental bodies, and Federally-recognized Indian Tribes seeking party status.

(1) If a State, local governmental body (county, municipality or other subdivision), or Federally-recognized Indian Tribe seeks to participate as a party in a proceeding, it must submit a request for hearing or a petition to intervene containing at least one admissible contention, and must designate a single representative for the hearing. If a request for hearing or petition to intervene is granted, the Commission, the presiding officer or the Atomic Safety and Licensing Board ruling on the request will admit as a party to the proceeding a single designated representative of the State, a single designated representative for each local governmental body (county, municipality or other subdivision), and a single designated representative for each Federally-recognized Indian Tribe. Where a State's constitution provides that both the Governor and another State official or State governmental body may represent the interests of the State in a proceeding, the Governor and the other State official/government body will be considered separate participants.

(2) If the proceeding pertains to a production or utilization facility (as defined in § 50.2 of this chapter) located within the boundaries of the State, local governmental body, or Federally-recognized Indian Tribe seeking to participate as a party, no further demonstration of standing is required. If the production or utilization facility is not located within the boundaries of the State, local governmental body, or Federally-recognized Indian Tribe seeking to participate as a party, the State, local governmental body, or Federally-recognized Indian Tribe

also must demonstrate standing.

(3) In any proceeding on an application for a construction authorization for a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, or an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area under parts 60 or 63 of this chapter, the Commission shall permit intervention by the State and local governmental body (county, municipality or other subdivision) in which such an area is located and by any affected Federally-recognized Indian Tribe as defined in parts 60 or 63 of this chapter if the requirements of paragraph (f) of this section are satisfied with respect to at least one contention. All other petitions for intervention in any such proceeding must be reviewed under the provisions of paragraphs (a) through (f) of this section.

(i) Answers to hearing requests, intervention petitions, and motions for leave to file new or amended contentions filed after the deadline. Unless otherwise specified by the Commission, the presiding officer, or the Atomic Safety and Licensing Board designated to rule on the request, petition, or motion—

(1) The applicant/licensee, the NRC staff, and other parties to a proceeding may file an answer to a hearing request, intervention petition, or motion for leave to file amended or new contentions filed after the deadline in § 2.309(b) within 25 days after service of the request, petition, or motion. Answers should address, at a minimum, the factors set forth in paragraphs (a) through (h) of this section insofar as these sections apply to the filing that is the subject of the answer.

(2) Except in a proceeding under § 52.103 of this chapter, the participant who filed the hearing request, intervention petition, or motion for leave to file new or amended contentions after the deadline may file a reply to any answer. The reply must be filed within 7 days after service of that answer.

(3) No other written answers or replies will be entertained.

(j) Decision on request/petition.

(1) In all proceedings other than a proceeding under § 52.103 of this chapter, the presiding officer shall issue a decision on each request for hearing or petition to intervene within 45 days of the conclusion of the initial pre-hearing conference or, if no pre-hearing conference is conducted, within 45 days after the filing of answers and replies under paragraph (i) of this section. With respect to a request to admit amended or new contentions, the presiding officer shall issue a decision on each such request within 45 days of the conclusion of any pre-hearing conference that may be conducted regarding the proposed amended or new

contentions or, if no pre-hearing conference is conducted, within 45 days after the filing of answers and replies, if any. In the event the presiding officer cannot issue a decision within 45 days, the presiding officer shall issue a notice advising the Commission and the parties, and the notice shall include the expected date of when the decision will issue.

(2) The Commission, acting as the presiding officer, shall expeditiously grant or deny the request for hearing in a proceeding under § 52.103 of this chapter. The Commission's decision may not be the subject of any appeal under § 2.311.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OHIO NUCLEAR-FREE NETWORK and BEYOND NUCLEAR,	)	
	)	Case No.
Petitioners,	)	
v.	)	
	)	
UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,	)	
	)	
Respondents.	)	
	)	
	)	

* * * * *

DECLARATION OF PAT MARIDA, OHIO NUCLEAR-FREE NETWORK

Now comes Pat Marida, Declarant herein, and states the following under penalty of perjury:

1) My name is Pat Marida. I am an adult citizen of the State of Ohio, not under disability and am authorized to make the within statements.

2) I am the Convenor of the Ohio Nuclear-Free Network (ONFN), an unincorporated association of about 25 nuclear weapons and nuclear power opponents who use public education, scientific advocacy and litigation strategies in Ohio's only statewide anti-nuclear power and weapons organization. ONFN is headquartered in Toledo, Ohio.

3) Tressie Hall is a member of ONFN. Ms. Hall lives at 643 Big Run Road, Piketon, OH, 45661, which is located approximately one mile from the industrial complex at the Portsmouth

Site, also known as "PORTS" and formerly known as the Portsmouth Gaseous Diffusion Plant site.

4) Ms. Hall has designated ONFN to protect her interests in maintaining her physical health and safety, the integrity of her real and personal property, and the health and stability of the physical environment proximate to PORTS.

5) ONFN accepts Ms. Hall's designation as her representative in these proceedings.

6) Further Declarant saith naught.

3-6-2022
Date

Pat Marida
Pat Marida

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OHIO NUCLEAR-FREE NETWORK and BEYOND NUCLEAR,	)	
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v.	)	
	)	
UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,	)	
	)	
Respondents.	)	

* * * * *

DECLARATION OF TRESSIE HALL

Now comes Tressie Hall, Affiant herein, and states the following under penalty of perjury:

1) My name is Tressie Hall. I am a homemaker, an adult citizen of the State of Ohio and not under disability.

2) My residence is located at 643 Big Run Road, Piketon, OH, 45661, which is located approximately one mile from the industrial complex at the Portsmouth Site, also known as "PORTS" and formerly known as the Portsmouth Gaseous Diffusion Plant site.

3) I am aware that years of gaseous diffusion uranium enrichment activity at PORTS has spread radioactive contamination across the countryside. In 2019, Zahn's Corner Middle School, located 4 miles from the industrial buildings at PORTS, was closed after tests showed the presence of enriched uranium on desks and other surfaces, and Neptunium-237 and Americium-241 in the air just outside. I have learned that the isotope Technetium-99 from PORTS has been

found in a DOE air monitor in Otway, about 14 straight-line miles from PORTS.

4) The Piketon County Health Department has been conducting a cancer study of residents who live within seven miles of the plant, seeking cases of thyroid cancer, aggressive breast cancer, and multiple myeloma. Many lawsuits have been filed by residents who link their health issues to radioactive exposure from PORTS. In recent years, children living near PORTS have been diagnosed with cancer, and several have died.

5) Since 2001, the U.S. Department of Energy ("DOE") has been decommissioning PORTS. Decommissioning has generated 2.2 million cubic yards of hazardous wastes. There are tens of thousands of cylinders full of depleted uranium, and thousands of feet of piping and compressors still caked with radioactive material. Trichloroethylene, a cancer-causing industrial chemical, contaminates on-site groundwater and Little Beaver Creek, which flows through PORTS and ultimately to the Ohio River. DOE plans to bury up to 1.3 million cubic yards of radioactive materials and chemically toxic waste onsite. There are bedrock fractures under that new landfill that could let the waste go into the groundwater, into the Scioto River, and ultimately, into the Ohio River.

6) Right now, a large radioactive industrial building at PORTS is being demolished in open air, allowing the blowing of radioactive particles and debris for miles downwind.

7) The Centrus company plans to create High-Assay Low-Enriched Uranium ("HALEU") at PORTS, and the U-235 content will be as high as 25%, using new centrifuge technology.

8) I oppose the NRC's permit to Centrus to manufacture HALEU because there was no public notice or participation in the decision. The existing public health dangers at PORTS have not been taken into account alongside the new HALEU project. There is a potential for theft or

terrorist use of HALEU that has not been studied.

9) I am elderly and concerned that my family members or I might be killed or sickened by continuing radiation released from PORTS either from the production of HALEU or the movement and storage of HALEU wastes. My family and I also might suffer damage to our real and personal property and its commercial value from the HALEU project.

10) I want my opposition to the HALEU project represented in court by the Ohio Nuclear-Free Network, a group of Ohio citizens. My interests will not be adequately represented unless the Ohio Nuclear-Free Network is made a full party in the court review of the NRC permit given Centrus. I hereby designate Ohio Nuclear-Free Network as my representative.

11) Further Affiant saith not.

July 29, 2021
Date

Tressie Hall
Tressie Hall

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OHIO NUCLEAR-FREE NETWORK and BEYOND NUCLEAR,	)	
	)	Case No.
Petitioners,	)	
v.	)	
	)	
UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,	)	
	)	
Respondents.	)	
	)	
	)	

* * * * *

DECLARATION OF KEVIN KAMPS, BEYOND NUCLEAR

Now comes Kevin Kamps, Declarant herein, and states the following under penalty of perjury:

1) My name is Kevin Kamps. I am an adult citizen of the State of Maryland and not under disability.

2) I am the Radioactive Waste Specialist for Beyond Nuclear and am authorized to make the within statements. Beyond Nuclear is, a not-for-profit public policy, research, education organization based in Takoma Park, Maryland that advocates the immediate expansion of renewable energy sources to replace commercial nuclear power generation, and which opposes the proliferation of materials which can be used or incorporated into nuclear weapons. Beyond Nuclear's web address is www.beyondnuclear.org and its phone, (301) 270-2209.

3) Beyond Nuclear has over 12,000 members. One Beyond Nuclear member is Vina Colley, who has designated Beyond Nuclear to intervene to protect her interests in maintaining her physical health and safety, the integrity of her real and personal property, and the health and stability of the physical environment proximate to the Portsmouth Site (aka PORTS), a U.S. Department of Energy industrial facility near Piketon, Ohio. Ms. Colley is a former PORTS nuclear worker and lives about 12 miles from the facility.

4) Beyond Nuclear accepts Ms. Colley's designation as her representative in these proceedings.

5) Further Affiant saith naught.

March 8, 2022
Date

Kevin Kamps
Kevin Kamps

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

OHIO NUCLEAR-FREE NETWORK and BEYOND NUCLEAR,	)	
	)	Case No.
Petitioners,	)	
v.	)	
	)	
UNITED STATES NUCLEAR REGULATORY COMMISSION and the UNITED STATES OF AMERICA,	)	
	)	
Respondents.	)	
	)	
	)	

* * * * *

DECLARATION OF VINA COLLEY

Now comes Vina Colley. Affiant herein, and states the following under penalty of perjury:

1) My name is Vina Colley. I am an adult citizen of the State of Ohio and not under disability.

2) My residence is located at 3683 McDermott Pond Creek, McDermott, OH 45652, which is located approximately twelve (12) straight-line miles, and about fifteen (15) highway miles, from the main industrial buildings at the Portsmouth Site, also known as “PORTS” and formerly known as the Portsmouth Gaseous Diffusion Plant Site.

3) I am a retired former employee at PORTS and I coordinate two organizations, one that address health and safety effects of living near or working there, named Portsmouth-Piketon

Residents for Environmental Safety and Security (PRESS), and an advocacy group for injured former workers at PORTS named National Nuclear Workers for Justice (NNWJ).

4) I have closely followed controversies involving PORTS for decades. I am personally well aware from my employment as an electrician there of years of gaseous diffusion uranium enrichment activity at PORTS, which has caused contamination of the countryside around PORTS. In 2019, Zahn's Corner Middle School in Piketon, Ohio, located 4 miles from the industrial complex at PORTS, abruptly shut its doors soon after environmental tests showed the presence of enriched uranium on desks and other surfaces, and neptunium-237 and americium-241 in the air just outside. I also know that the transuranic isotope technetium-99 from PORTS has been found in a DOE air monitor in Otway, about 14 straight-line miles from PORTS.

5) The Piketon County Health Department has been conducting a cancer study of residents who live within seven miles of the plant, in particular seeking cases of thyroid cancer, aggressive breast cancer, or multiple myeloma. Multiple lawsuits have been filed by residents who link their health issues to radioactive exposure from PORTS and in recent years, children living near PORTS have been diagnosed with cancer, and several have died.

6) Since 2001, the U.S. Department of Energy has been deactivating and decommissioning PORTS. The half-century of enrichment has generated 2.2 million cubic yards of hazardous wastes and 415 contaminated facilities and structures. This includes tens of thousands of depleted uranium cylinders, and thousands of feet of piping and compressors still caked with radioactive material. Five plumes of trichloroethylene, a carcinogenic industrial chemical, have been found contaminating on-site groundwater and local Little Beaver Creek, which flows directly through PORTS to the Ohio River. DOE is initiating a landfill for the burial of up to 1.3 million

cubic yards of radioactive materials and chemically toxic waste, the biggest nuclear waste dump east of the Mississippi. In 2014, I noticed that DOE's own documents showed that the bedrock was fractured beneath the dump site. I gave the information to the Mayor of Piketon and the village of Piketon hired a consultant in 2017 who agreed that the DOE's own data shows bedrock fractures that could lead the waste into the groundwater, allowing seepage into the Scioto River, and ultimately, the Ohio River.

7) Presently, one of the most radioactive of the huge industrial buildings at PORTS is being demolished in open air, which allows the blowing of radioactive debris for miles downwind of the site.

8) I am familiar with the Centrus Corporation's project to create High-Assay Low-Enriched Uranium at the PORTS site, and that the degree of enrichment might be as high as 25% U-235. I also know that a new centrifuge technology is being installed at PORTS to create this new material. Prior to this time, there has not been uranium enrichment at Piketon to greater than 10% levels.

9) I oppose the NRC permit that has been granted to Centrus to manufacture HALEU because there was no opportunity for public notice about, or participation in, the licensing process. The cumulative effects of existing public health dangers at PORTS have not been analyzed alongside the new Centrus enrichment project. There is a potential for theft or terrorist use of HALEU that hasnot been properly investigated or considered by the NRC. A nuclear weapons proliferation study should be done before HALEU manufacturing is considered.

10) I have chronic beryllium disease, neuropathy, and chronic bronchitis and have been awarded compensation under the EEOICPA program. I am greatly concerned that I might be

killed or sickened by continuing radioactive releases from PORTS, including potential leakage either from the production of HALEU or the movement and storage of wastes generated by HALEU production. I also anticipate that I might suffer irreparable damage to real and personal property located at my residence from the HALEU project.

11) I wish to challenge in court the NRC approvals granted to Centrus, and to have my interests advanced and represented by Beyond Nuclear, a Takoma Park, Maryland nonprofit organization. My interests will not be adequately represented without the opportunity of Beyond Nuclear to participate as a full party in the court review of this license amendment proceeding on my behalf.

12) I hereby designate Beyond Nuclear as my representative in this proceeding.

13) Further Affiant saith naught.

July 23, 2021
Date

Vina Colley
Vina Colley