## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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In the Matter of:

UniTech Service Group, Inc.

Case No. NRC-2017-0054 Docket Nos. 11006248 and 11006249 License No. XW023 May 5, 2017

# PETITION FOR LEAVE TO INTERVENE AGAINST SPECIFIC EXPORT LICENSE ISSUANCE TO UNITECH SERVICE GROUP, INC. AND REQUEST FOR ADJUDICATORY HEARING

Now come Nuclear Information and Resource Service, Beyond Nuclear, the Nuclear Energy Information Service, Tennessee Environmental Council and Citizens for Alternatives to Chemical Contamination, all nonprofit environmental organizations (collectively, "Petitioners") which, on behalf of their respective members, pursuant to 10 C.F.R. § 2.309, hereby request a hearing and seek leave to intervene in the Nuclear Regulatory Commission's ("NRC's") proceeding concerning a proposed specific export license sought by UniTech Service Group, Inc. ("UniTech"). Unitech seeks a license for the purpose of exporting unknown quantities of radioactive waste material, which is related to the importation of an inadequately- characterized 10,000 metric tonnes of radioactive waste material from Canada into the United States under general license provisions of the Nuclear Regulatory Commission ("NRC"). Petitioners hereby request a public adjudication hearing before a duly constituted Atomic Safety and Licensing Board on the export license to ship up to 10,000 metric tonnes of radioactive waste to Canada, on its own and in light of the NRC Staff interpretation by which the NRC declined to treat the import scheme as requiring a specific import license.

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#### I. INTRODUCTION

On October 27, 2016, the NRC received an application for a specific import license (IW034) from UniTech to import 10,000 metric tons of byproduct material in the form of radioactively contaminated tools, metals, and other solid materials, along with increments of special nuclear material (ostensibly less than fifteen grams per shipment). Also on October 27, 2016, the NRC received an application for a specific export license (XW023) from UniTech to export 10,000 metric tons of byproduct material, along with increments of special nuclear material (ostensibly less than fifteen grams per shipment).

By letter dated March 30, 2017 (ADAMS Accession No. ML17086A272) from David Skeen, Deputy Director of the NRC Office of International Programs, to Glenn Roberts, Corporate Health Physicist, UniTech, the NRC ruled that the requested import activities are authorized under an NRC general import license, and returned UniTech's special license application to the company, without acting upon it. According to the NRC, that ruling left UniTech's application for a specific export license (XW023) to export low-level radioactive waste to Canada as the only regulatory request pending before the NRC.

UniTech expects to recover and recycle materials from the 10,000 tons of radioactive waste that can be released for unrestricted disposal or use, and to conditionally release other materials in accordance with its Tennessee facility licenses. Far from exporting 10,000 tons back to Canada, UniTech and/or Toxco will retain and release from radioactive regulatory control a large share of the radioactive material in the United States.

## **II. PETITIONERS AND LEGAL STANDING**

Five nonprofit organizations spread across several states and the District of Columbia are

petitioning for standing to oppose UniTech's export license. There are several zones of harm involved because of the multistate, sprawling nature of this waste import/export scheme. UniTech states in its application that there are potentially five different crossing points on the Canada/United States border which are likely to be used by UniTech trucks to import and later, to export radioactive wastes. These are located at Port Huron, MI/Sarnia, ON; Lewiston, NY/Queenston, ON; Buffalo, NY/Fort Erie, ON; Alexandria Bay, NY/Landsdowne, ON; and Calais, ME/Saint Stephen, NB.

There are three identified facilities which UniTech expects to use for sorting, processing, cleaning, *etc.*, located at Morris, IL; Oak Ridge, TN; and Royersford, PA.

Finally, there are four Class I landfills in Tennessee authorized to receive wastes under the BSFR program which UniTech has stated it is likely to use for landfilling some of the wastes: Chestnut Ridge landfill facility in Heiskell (Anderson County), North Shelby County, South Shelby County, and Carter Valley in Hawkins County.

Generally, the harms or threats cited by the individual members of the Petitioner groups include exposures from being physically stuck in traffic proximate to, or in chance highway encounters with UniTech cargo trucks; spills and runoff from accidents or leakage from those vehicles; downwind vapors from processing or sorting facilities; possible dumping of irradiated water into local sewage systems from the facilities; the potential that radioactive metals recycled by UniTech are used in consumer products and other metal uses in civic life; and landfilling in Tennessee landfills of discarded UniTech wastes which contain radiation. Tennessee regulators allow the public to be exposed to up to 1millirem per year per member of the public of radiation

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from Tennessee landfills.<sup>1</sup> Unitech's trucks potentially will contain widely-varying levels or amounts of radioisotopes from shipment to shipment, and there appear to be no provisions for protective shielding tailored to the characteristics of individual loads.

To have standing, an organization must show injury either to its organizational interests or to the interests of members who have authorized it to act for them. Philadelphia Electric Co. (Limerick Generating Station, Units 1 & 2), LBP-82-43A, 15 NRC 1423, 1437 (1982), citing Warth v. Seldin, 422 U.S. 490, 511 (1975); Sierra Club v. Morton, 405 U.S. 727, 739-740 (1972). A presumption of standing based on geographic or physical proximity may be applied in cases involving facilities using or handling radioactive material where there is a determination that the proposed action involves a significant source of radioactivity producing an obvious potential for offsite consequences. Whether and at what distance a petitioner can be presumed to be affected must be judged on a case-by-case basis, taking into account the nature of the proposed action and the significance of the radioactive source. *George Institute of* Technology (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 116 (1995); Pa'ina Hawaii, LLC, LBP-06-4, 63 NRC 99, 105-106 (2006). This proximity presumption may apply if the petitioner lives within, or otherwise has frequent contacts with, the zone of possible harm from the nuclear reactor or other source of radioactivity. Pa'ina,, LBP-06-4, 63 NRC at 105 (citing Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 & 4), LBP-01-6, 53 NRC 138, 146 (2001), aff'd on other grounds, CLI-01-17, 54 NRC 3 (2001)).

Petitioner Nuclear Information and Resource Service ("NIRS") is a nonprofit § 501(c)(3) organization situated at 6930 Carroll Avenue, Suite 340, Takoma Park, MD 20912. Founded in

<sup>&</sup>lt;sup>1</sup>https://tn.gov/environment/article/rh-bulk-survey-for-release#sthash.LDEdYZoj.dpuf

1978, NIRS is a national information and networking center for citizens and environmental activists concerned about nuclear power, radioactive waste, radiation and sustainable energy issues. NIRS brings this petition on behalf of three members, Nora Natof, Lynda Schneekloth and Pamela Hughes, who live, work and recreate in Pottstown, PA; Buffalo, NY; and Lewiston, NY, respectively. NIRS has attached declarations from those five members, all of whom have authorized NIRS to bring this legal action on their behalves. The averments contained in those declarations are hereby incorporated by reference as though fully rewritten herein.

Plaintiff Beyond Nuclear is a nonprofit 501(c)(3) organization which educates and activates the American public about the connections between nuclear power and nuclear weapons and the need to abolish both to safeguard our future. Located at 6930 Carroll Avenue, Suite 400, Takoma Park, MD 20912, Beyond Nuclear advocates for an energy future that is sustainable, benign and democratic. The organization brings suit on behalf of two of its approximately 15,000 members. One is Michael Keegan, who lives, works and recreates in Monroe, Michigan. Mr. Keegan lives within two miles of Interstate Highway 75, a likely transport route for UniTech truck cargoes. He authored comments on the UniTech licenses in 2016, as a member of the grassroots group Don't Waste Michigan. The other Beyond Nuclear member is Jessica Azulay Chasnoff, who lives, works and recreates in Syracuse within one mile of Interstate 81, a likely route for UniTech cargo haulers. Syracuse is 100 miles south of the Alexandria Bay, NY border crossing, and I-81 proceeds through Syracuse to connect to the south with other major highway arteries. Beyond Nuclear has attached declarations from Michael Keegan and Jessica Azulay Chasnoff, both of whom have authorized Beyond Nuclear to bring this legal action on their behalves. The averments contained in his declaration are hereby incorporated by reference as

though fully rewritten herein.

Petitioner Citizens for Alternatives to Chemical Contamination (CACC) is a grassroots environmental education and advocacy organization headquartered in central Michigan at 8735 Maple Grove Rd., Lake, MI 48632. CACC is dedicated to the principles of social and environmental justice, pollution prevention, citizen empowerment, and protection of the Great Lakes ecosystem. CACC sues on behalf of its members, Connie Beauvais, who lives, works and recreates in Bath, MI in central lower Michigan, about four miles from the interchange of Interstate 69 and U.S. Highway 127, either of which might be used as a truck hauling route by UniTech en route to the Morris, IL UniTech facility. Another CACC member, Elizabeth Zimmer-Lloyd, lives, works and recreates in Port Huron, MI and is frequently found socializing or conducting business within a mile or less of the Blue Water Bridge crossing from Canada. CACC has attached declarations from these two members, both of whom have authorized CACC to bring this legal action on their behalves. The averments contained in those declarations are hereby incorporated by reference as though fully rewritten herein.

The Nuclear Energy Information Service ("NEIS"), located at 3411 W. Diversey Avenue, #16, Chicago, IL 60647-1245, is a 36-year old safe-energy organization. NEIS has over 650 members throughout the State of Illinois, including several in or near Morris, IL, and along the possible shipping routes for the low-level radioactive waste shipments, who could be adversely affected should an accident or release of radioactive or contaminated materials occur during UniTech's proposed shipments. NEIS is petitioning on behalf of April Gerstung,, who lives, works and recreates in and around Morris, IL, on occasion within a mile or so of the UniTech plant. NEIS proffers a declaration from Ms. Gerstung, who has authorized NEIS to bring this legal action on her behalf. The averments contained in the declaration are hereby incorporated by reference as though fully rewritten herein.

The Tennessee Environmental Council ("TEC") is a nonprofit organization located at One Vantage Way, Suite E-250, Nashville, TN 37228. Its mission is education and advocacy for the conservation and improvement of Tennessee's environment, communities, and public health. The organization has existed since 1970 and is consistently capable of turning out literally tens of thousands of volunteers for such efforts as widespread tree plantings and other mass endeavors, as well as legislative monitoring and advocacy. TEC proffers declarations from two members among its membership of over 2,000, Daniel Stephenson and David Collins Wasilko, live, work and recreate in Kingston, TN and Knoxville, TN, respectively. The two have authorized TEC to bring this legal action on their behalves. The averments contained in the declarations are hereby incorporated by reference as though fully rewritten herein.

## **III. CONTENTIONS**

# <u>CONTENTION 1:</u> The specific export license request is a legal nullity which does not comply with NRC regulation

#### <u>A. Explanation of the basis for the contention</u>

Petitioners oppose the export of UniTech radioactive waste to Canada because it proposes unnecessary transport of 10,000 metric tonnes - the return of up to 10,000 tonnes imported under a general import license - as a stand-alone regulatory request. If the radioactive waste/material were adequately characterized in a specific import license, a reasoned determination of what material may be expected for export could be established.

The export license request is insufficient and a legal nullity. It does not adequately define or characterize the waste materials to be returned to Canada in such a way as to allow measurement, calculation or prediction of types and amount of radioactivity or the volume or the chemical and physical for, of the radioactive waste. Since the radionuclides being imported are not fully characterized and the processes that originally generated the radionuclides in Canada are not revealed, and since the processing options the radionuclides will undergo while in the US are variable and the radionuclides will not be tracked but rather potentially rearranged, dispersed and concentrated into many forms, paths and destinations, the export license request does not afford a reasonable opportunity for the assessment of the actual content of the shipments being exported to Canada.

## B. Demonstration that the contention is within the scope of the proceeding

Under the Atomic Energy Act (42 U.S.C. 2239(a)(1)(A)), "[i]n any proceeding under this chapter, for the granting, . . . or amending of any license . . . , and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees . . ., 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."

As demonstrated *infra*, this contention addresses the sufficiency of the specific export license request against the pertinent requirements of 10 C.F.R. Part 110. Alleged noncompliance with explicit NRC regulations goes to the heart of regulatory adequacy.

## C. Demonstration that the issue raised is material to the findings the NRC must make

Under 10 C.F.R. § 110.32(f), the applicant for a specific export license must provide a "[d]escription of the equipment or material including . . . (1) Maximum quantity of material in grams or kilograms (terabecquerels or TBq for byproduct material) and its chemical and physical form." The export license application states that as much as 10,000 tons - the precise amount to

be imported - might have to be returned to Canada, which if accurate, constitutes a basis to deny the export license. If the maximum estimate is inaccurate, it reflects suspect or inaccurate character-ization of the radioactive waste expected for import. The export license application does not characterize the waste in terms of radionuclides, it does not provide the TBq of the material to be exported, nor does it depict the chemical or physical form that all of the radioactive waste that would be export ed.

According to 10 C.F.R. § 110.32(5), the following description must be given for proposed exports of radioactive waste and proposed exports of incidental radioactive material: "the volume, classification (as defined in § 61.55 of this chapter), physical and chemical characteristics, route of transit of shipment, and ultimate disposition (including forms of management) of the waste." The export application fails to provide essentially any of this information except to pledge that any resulting waste sufficiently radioactive to require disposal according to 10 C.F.R. Part 61 were it to remain in the United States will be returned to Canada.

The export regulations at 10 C.F.R. § 110.32(7) further require provision of the "[d]escription of end use by all consignees in sufficient detail to permit accurate evaluation of the justification for the proposed export. . . , including the need for shipment by the dates specified." Given the 10,000 ton maximum volume stated for export, and the few details which characterize the import of the tonnage, there remains insufficient detail for accurate evaluation of the justification for the export. Overall, the export application does not explain why radioactive waste material should be brought into the United States, sorted, handled and processed in ill-explained or unexplained ways (subject to Agreement State licenses which are not provided as part of the public record and for which insufficient time and access have been provided to

acquire) and some (or all) of it packaged and returned to Canada.

## <u>D. Demonstration that the issue raised in the contention</u> is material to the findings the NRC must make

Petitioners have alleged specific omissions and failings of insufficient information being provided on the NRC Form 7 required by 10 C.F.R. 110.32. Moreover, 10 C.F.R. § 110.7a(a) mandates that "(a) Information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects." Petitioners state that the export license application is neither complete nor accurate in all material respects - well within the scope of the finding which the NRC must make.

# <u>E.</u> Concise statement of the alleged facts which support the Petitioners' position and on which the petitioner intends to rely at hearing

Under 10 C.F.R. § 110.32(f), the applicant for a specific export license must provide a "[d]escription of the equipment or material including . . . (1) Maximum quantity of material in grams or kilograms (terabecquerels or TBq for byproduct material) and its chemical and physical form." The export license application states that as much as 10,000 tons - the precise amount to be imported - might have to be returned to Canada, which if accurate, constitutes a basis to deny the export license. If the maximum estimate is inaccurate, it reflects suspect or inaccurate characterization of the radioactive waste expected for import. The export license application does not characterize the amount and type of radioactivity, the TBq of the waste to be exported, nor does it depict the chemical or physical form the radioactive waste for export will take.

According to 10 C.F.R. § 110.32(5), the following description must be given for proposed

exports of radioactive waste and proposed exports of incidental radioactive material: "the volume, classification (as defined in § 61.55 of this chapter), physical and chemical characteristics, route of transit of shipment, and ultimate disposition (including forms of management) of the waste." The export application fails to provide essentially any of this information except to pledge that any resulting waste sufficiently radioactive to require disposal according to 10 C.F.R. Part 61 were it to remain in the United States will be returned to Canada.

The export regulation at 10 C.F.R. §110.32(7) further requires provision of the "[d]escription of end use by all consignees in sufficient detail to permit accurate evaluation of the justification for the proposed export. . . , including the need for shipment by the dates specified." Given the 10,000 ton maximum volume for export, there is insufficient detail for accurate evaluation of the justification for the export. Overall, the export application does not explain why radioactive waste material should be brought into the United States, sorted, handled and process in ill-explained ways, and some (or all) of it packaged and returned to Canada.

Finally, given that UniTech admittedly will be transporting Pu-239 and Pu-240, the fact that it has not applied for a general license affords the inference that some shipments of radioactive waste for export to Canada will contain special nuclear material, other than Pu–238, in excess of 0.001 effective kilogram," the cutoff limit for general licenses found in 10 C.F.R § 110.21(b)(1). This inferred level of plutonium in excess of 1.0 gram per shipment is inconsistent with, and may not be reconcilable with, the lower ceiling for importing plutonium isotopes under a general license.

There is another dimension to the proposed export license: the threats to the public health and environment. Communities along the transport routes from and to processors will be exposed to routine and irregular shipments of radioactive wastes and materials which will unnecessarily increase economic and physical harm from incremental, unregulated, unlimited, undefined radioactive exposure, from normal as well as accidental conditions. Especially in light of increased allowable radioactive contamination under the EPA Protective Action Guides, there is no guarantee or requirement that spills will be fully cleaned up and drinking water brought back to its pre-contamination levels of purity. The expense and burden of verifying compliance is an unacceptable externality which petitioners reject. These unacceptable, expensive-to-prove, yet physically real burdens could result from the exports and from the imports if the export license is granted.

Processors cannot and do not fully clean all radioactivity from the materials they receive. Tennessee has licensed clearance levels based on the limits of detection of detectors from the 1960s and 1970s, not fully removing man made nuclear power radioactivity from the metals, tools and other materials. Petitioners represent those in communities of the processors and those at the landfills and recipients of the deregulated, cleared, "beneficially reused," recycled materials. They object to importing foreign radioactive waste and materials that can result in exposing them, their families, pets, communities and environments to additional radioactivity from foreign nuclear power reactors and demand a hearing also for the presentation of evidence on these threats and harms.

# **CONTENTION 2:** The NRC granted a de facto general import license to import 'radioactive material' containing 'radioactive waste,' which violates regulatory criteria

#### <u>A. Explanation of the Contention</u>

The NRC Staff declared in its March 30, 2017 letter that UniTech's import activities would not require a specific import license but would instead be allowed under a general license.

However, the Staff ignored significant evidence to declare that the 10,000 tons is not "radioactive waste," which may be imported only under a specific import license. By proceeding to an administrative determination that the imported tonnage requires only a general license, the NRC Staff effectively transformed an import project of several hundred truckloads from radioactive waste import to radioactive material import, contradicting information provided by UniTech in support of its specific import license request.

Petitioners demonstrate below that there is considerable legal precedent supporting the view that the Staff's description of the radioactive waste should not be deemed to be controlling. Petitioners maintain that an atomic safety and licensing board may inquire into, and adjudicate, the intrinsic nature of the material being imported in order to meaningfully assess the adequacy of UniTech's export license application.

### B. Demonstration that the contention is within the scope of the proceeding

Under the Atomic Energy Act (42 U.S.C. § 2239(a)(1)(A)), "[i]n any proceeding under this chapter, for the granting, . . . or amending of any license . . . , and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees . . ., 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."

The evidence in support of the import and export of the 10,000 tons, and controversies over its interpretation, revolve around the granting or amending of a license. Also, this proceeding involves the issuance of rules or regulations dealing with the activities of UniTech, a matter which § 2239 (§ 189a) also confides to a hearing.

The proposed waste will, by UniTech's admission,<sup>2</sup> contain several radioisotopes which do not appear on the NRC's 10 CFR 110 Appendix P list of general license byproduct material. UniTech states in its export license application that "incidental" amounts of special nuclear material will be found in the waste. UniTech's specific import license application states that three radioisotopes of plutonium are likely to be found in the waste. Since the material will contain these radioisotopes, regulations require the export material to be characterized and handled as radioactive waste. So retrospectively, the 10,000 tons for import, as the source of the radioactive waste for export, must be subject to a specific import license in order for there to be legal support for the export license. The inquiry of the Atomic Safety and Licensing Board must encompass the adequacy of the import license terms because they are fundamental to the sufficiency of the export license scheme.

### C. Demonstration that the issue raised is material to the findings the NRC must make

UniTech's import/export proposal is fraught with logical and practical fallacies. Some of the planned 10,000 tons of material will be treated as "radioactive waste" and exported, yet the tonnage is regulated solely under a general license, the legal implication of which is that the imported material contains insufficient quantities of radioactivity to be handled and processed as radioactive waste. The import license is flagrantly incongruent with the export license. The "specific" export license is not "specific enough;" the characterization of the radioactive waste is completely insufficient to ascertain how much radioactivity contaminates or is present within the

<sup>&</sup>lt;sup>2</sup>From the import application: "No materials imported under this license shall be transferred to any land disposal facility subject to 10 CFR Part 61 Licensing Requirements for Land Disposal of Radioactive Waste, or equivalent Agreement State regulations. Such radioactive waste shall be returned to the customer under the export permit. . . ."

10,000 tons. UniTech's admission that no 10 C.F.R. Part 61 waste will be disposed of in the United States prompts the conclusion that such low-level radioactive waste will be one of the end products of this import/export scheme. UniTech's additional admission that 10 C.F.R. Part 61 waste will be returned to Canada exposes the fact, as UniTech itself admits in its December 20, 2016 email to the NRC Staff, that the material as imported must be regulatorily viewed as "radioactive waste" and subjected to the NRC's specific import licensing regulations.

Petitioners contend that the NRC Staff ruling allowing import of the waste under a general license has improperly caused the bureaucratic transformation of what is actually "radioactive waste" into "radioactive material." The result is a *de facto*, unlawful, general license for the import of 10,000 tons of radioactive waste, parts, components and items that are themselves radioactive, and/or contaminated with radionuclides from nuclear power operations and potentially decommissioning. Petitioners seek adjudication of the issue of whether a specific import license is required here, as a necessary prerequisite to the determination of adequacy of the export permit. The export permit application's contingent wording about the presence of radioactive waste content retrospectively proves the necessity of accurate characterization of the imported material for there to be a reasonable understanding of the various waste and disposal streams from each UniTech and Toxco facility through which the waste will be channeled.

The determination of whether the general import license finding is an *ad hoc, de facto* misinterpretation of agency regulations "is a highly fact-specific question." *Southern California Edison Co.* (San Onofre Nuclear Generating Station, Units 2 and 3), LBP-13-07 at 21, 77 NRC 307 (May 13, 2013) (deciding whether NRC's confirmatory action letter process at San Onofre amounted to a de facto operating license amendment). A licensing board's inquiry into the facts

is necessary to get behind the NRC Staff's conclusion that the import of 10,000 tons of radioactive waste would be adequately regulated under general licensing requirements.

Petitioners seek a hearing on the adequacy of the protections of the public via general license in order to adjudicate whether a specific license is required. The scrutiny must involve pertinent facts and not the agency's labeling of the situation. "The particular label placed upon [an order] by [an agency] is not necessarily conclusive, for it is the substance of what the [agency] has purported to do and has done which is decisive." *E.g., Brodsky v. U.S. Nuclear Regulatory Com'n.* 578 F.3d 175, 182 (2009), quoting *Columbia Broadcasting System, Inc. v. United States*, 316 U.S. 407, 416 (1942) While the federal courts often defer to an agency's procedural determinations, they will not permit an agency to ignore its own regulations. *Auer v. Robbins*, 519 U.S. 452, 461 (1997) (an agency's application of its own regulations is "controlling unless plainly erroneous or inconsistent with the regulation[s]"). "[I]t is the substance of the NRC action that determines entitlement to a § 189a hearing, not the particular label the NRC chooses to assign to its action." *Citizens Awareness Network, Inc. v. NRC*, 59 F.3d 284, 295 (1st Cir.1995).

# D. Demonstration that the issue raised in the contention is material to the findings the NRC must make

There is an established analytical framework for assessing the relevant facts, *see Cleveland Elec. Illum. Co.* (Perry Nuclear Power Plant), CLI-96-13, 44 NRC 315, 326-327 (1996). A factor material to determining whether the NRC Staff has improperly undertaken a *de facto* amendment of the agency's regulations is whether the challenged NRC authorization has effected a license amendment within the meaning of § 189a. Did the challenged approval grant the licensee any "greater operating authority," or otherwise "alter the original terms of a license"? If so, hearing rights likely were implicated. For example, in *Citizens Awareness Network, Inc. v. NRC*, 59 F.3d 284, 295 (1st Cir. 1995), the court held that the challenged NRC approval "undeniably supplement[ed]" the original license by allowing the licensee to dismantle major structural components, an activity that the court found unauthorized by the original license and agency rules. Similarly, in *San Luis Obispo Mothers for Peace v. NRC*, 751 F.2d 1287 (D.C. Cir. 1984), where the NRC Staff extended the duration of a low-power license, the court saw the Staff approval as a license amendment changing a term of the license, and therefore triggering an opportunity for a hearing under §189a. Guided by *Citizens Awareness* and *San Luis Obispo*, the Commission in Perry formulated the inquiry of whether the Staff's action (1) "alter[ed] the . . . license," or (2) "permit[ted] the licensee to operate 'in any greater capacity' than [the original license pre-scribes]." 44 NRC at 326-27 (footnotes omitted).

The Commission must make a finding as to whether the NRC Staff altered the requirements for a specific import license by selectively picking through evidence in the UniTech import license application and making an *ad hoc* determination that the applicable licensure is a general license.

# E. Concise statement of the alleged facts which support the Petitioners' position and on which the petitioners intend to rely at hearing

The 10,000 tons must be classified as "radioactive waste" within the meaning of 10 C.F.R. § 110.2 because the import material it is "material that contains or is contaminated with source, byproduct, or special nuclear material that by its possession would require a specific radioactive material license in accordance with this Chapter." UniTech's contemplation that up to 100% of it might have to be returned to Canada is a non sequitur that tends to prove that the import material is "radioactive waste" per § 110.2. UniTech stated in its "Answer to Nuclear Information and Resource Service's & Beyond Nuclear's 'Objection and Request for Reconsideration'" that the company

.... plans to import tools, metals, and other solid materials that are contaminated with byproduct material and incidental amounts (less than 15 grams per shipment) of special nuclear material ("SNM") from Canada in order to recover and recycle materials that can be released for unrestricted use. UniTech would conditionally release other materials in accordance with its Tennessee facility licenses, and then repackage and export back to Canada (not to a disposal facility) any articles or items not amenable to treatment.

*Id.* at 6. This statement is buttressed by UniTech's December 20, 2016 email to the NRC, wherein UniTech stated that "All materials that would require transfer to a land disposal facility subject to 10 CFR Part 61 shall be returned to Canada under the associated export license XW023." Additionally, an NRC issuance on February 2, 2017 entitled "United States Nuclear Regulatory Commission Request to Amend a License to Import Radioactive Waste," No. 7590-01-P contains a table which calls the 10,000 tonnes "low-level radioactive waste consisting of tools, metals, and other solid materials" the "end use" of which is stated to be "for land disposal in the originating country, Canada."

The NRC's subsequent March 30, 2017 ruling that the import falls under general, not specific, license requirements relies in large part on UniTech's intention to not dispose of any material in a 10 C.F.R. Part 61 facility in the United States and thus to avoid triggering the classification of the imported material as "radioactive waste" under § 110.2, which could mean increased information disclosures about the materials being imported, and would also trigger the Atomic Energy Act's hearing requirements. UniTech has putatively violated 10 C.F.R. §110.27( c), which prohibits importation of "radioactive waste" under a general license.

As defined in 10 C.F.R. § 110.2, a general license is:

[A]n export or import license effective without the filing of a specific application with the Commission or the issuance of licensing documents to a particular person. A general license is a type of license issued through rulemaking by the NRC and is not an exemption from the requirements in this part. A general license does not relieve a person from complying with other applicable NRC, Federal, and State requirements.

The General Import License is codified at 10 C.F.R. § 110.27 and allows importation of

"byproduct, source, or special nuclear material if the U.S. consignee is authorized to receive and

possess the material under the relevant NRC or Agreement State regulations." § 110.27(a).

"Radioactive waste" is defined as :

... any material that contains or is contaminated with source, byproduct, or special nuclear material that by its possession would require a specific radioactive material license in accordance with this Chapter and is imported or exported for the purposes of disposal in a land disposal facility as defined in 10 CFR part 61, a disposal area as defined in Appendix A to 10 CFR part 40, or an equivalent facility; or recycling, waste treatment or other waste management process that generates radioactive material for disposal in a land disposal facility as defined in 10 CFR part 61, a disposal area as defined in Appendix A to 10 CFR part 40, or an equivalent facility. [Subject to six exclusions]

The NRC Staff's ruling that the proposed waste import falls under general license requirements fails to consider UniTech's undisputed admission that it would be exporting radioactive material which, if retained in the U.S., would have to be disposed of in a 10 C.F.R. Part 61 facility. Axiomatically, when material must be disposed of in such a facility, it is by definition 10 C.F.R. § 110.2 "radioactive waste." In its December 20, 2016 email correspondence with the NRC, UniTech asserted that "materials subject to this specific license application are classified as waste at the time they are imported. Given that UniTech's processes are effective to render the materials suitable for release and beneficial reuse does not redefine them as non-waste materials at the time they were imported." The NRC cannot pretend that the processors will be

able to convert nuclear power waste into uncontaminated materials, let alone make this

assumption before it even crosses the border.

Another reason that the proposed 10,000 tons of radioactive material is "radioactive waste" is because it is not "nuclear equipment or material . . covered by the NRC general licenses described in §§ 110.21 through 110.27." Importation or radioactive waste under a general license violates 10 C.F.R. § 110.20(a). UniTech's specific license application is not covered by any NRC general license conditions described in §§ 110.21 through 110.27.

There are radionuclides listed in the import documents that require the shipments to be considered radioactive waste. The following isotopes listed in UniTech's October 27, 2016 Form 7 import application are not enumerated in 10 C.F.R. Part 110, Appx L, the "Illustrative List of Byproduct Materials Under NRC Export/Import Licensing Authority:"

Lanthanum, unspecified as to isotope

Neptunium 239

Silver 108

Petitioners state that a specific import license rulemaking is necessary in order for them to be added to the illustrative list.

Moreover, UniTech proposes to import under general licensing authority Plutonium-238, Plutonium-239 and Plutonium-240. Plutonium is classified as "special nuclear material," but the presence of plutonium in radioactive shipments requires that the material be deemed

"radioactive waste," which is defined by the NRC as

... any waste that contains or is contaminated with source, byproduct, or special nuclear material, including any such waste that contains or is contaminated with "hazardous waste" as defined in section 1004(5) of the Solid Waste Disposal Act, 42 U.S.C. 6903(5), but such term does not include radioactive material that is—

(1) Contained in a sealed source, or device containing a sealed source, that is being returned to any manufacturer qualified to receive and possess the sealed source or the device containing a sealed source;

(2) A contaminant on service equipment (including service tools) used in nuclear facilities, if the service equipment is being shipped for use in another nuclear facility and not for waste management purposes or disposal; . . .

10 C.F.R. § 110.2.

Because of the likelihood that one or more of the plutonium radioisotopes is likely to be present in literally any of the 300+ truckloads UniTech plans to import into the United States (a portion of which is likely to be exported), a specific import license is required to provide congruence with the specific export license for this wide-ranging project

## **IV. CONCLUSION**

Petitioners call on NRC to reject the Export license for 10,000 tons of nuclear power waste. Approval of the UniTech scheme puts them, their environments, work and living spaces, air, water and consumer items at involuntary, unnecessary risk from routine and accidental exposures to man-made nuclear power radioactivity above pre-existing background and above that from US activities. The radioactive exposures could result from the exports and from the accompanying imports which the export license enables. Petitioners object to exposures that the NRC would be allowing from radioactive transportation, loading and unloading, processing and release into both regular trash for unregulated disposal, and release into the commercial marketplace as well as production of consumer items made from radioactively contaminated materials, and the resale and reuse of incompletely cleaned radioactive materials, equipment, tools, *etc.* 

For the export application to be meaningfully understood by the public, it must be attended by full disclosure of the materials, wastes, processes, transport routes and alternative routes, plans for emergency response and admission of the legal level of cleanup that will be

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provided along with clarification of liability for all costs - environmental and medical - in case of release, as well as guarantee and procedures for notification of any release. Disclosure should include all information on the sources, types, amounts and schedule of exposures from the export, and its accompanying import of 10,000 tons of Canadian nuclear power waste.

The ruling that UniTech need not possess a specific import license for the 10,000 tons of radioactive material to be shipped into the U.S. is based on an unreasonable and arbitrary interpretation of 10 C.F.R. § 110.27. The modification of the specific import license requirement to the requirement only of a general license legally constitutes either a license modification or an amendment, for which the Atomic Energy Act requires a hearing be convened. Petitioners have demonstrated proper legal standing and entitlement to that hearing.

WHEREFORE, Petitioners Nuclear Information and Resource Service, Beyond Nuclear, Nuclear Energy Information Service, Tennessee Environmental Council and Citizens for Alternatives to Chemical Contamination request that they be granted leave to intervene in these proceedings and that as a consequence thereof, the NRC require a specific import license and commensurate additional review prior to approval of the pending specific export license, all together with such other and further relief, at law and in equity, which the Commission may deem necessary and proper.

Respectfully,

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## **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing "PETITION FOR LEAVE TO INTERVENE AGAINST SPECIFIC EXPORT LICENSE ISSUANCE TO UNITECH SERVICE GROUP, INC. AND REQUEST FOR ADJUDICATORY HEARING" were served by me upon the parties to this proceeding via my deposit of the document in the NRC's Electronic Information Exchange system this 5th day of May, 2017. I further certify that on this date, I served a paper copy via regular U.S. Mail, postage prepaid, upon Executive Secretary, U.S. Department of State, Washington, DC 20520 and via email to Patricia Lacina, Deputy Executive Secretary, Department of State.

> /s/ Diane D'Arrigo Diane D'Arrigo, NIRS