

**Testimony of Val Christensen
President, EnergySolutions
Energy and Environment Subcommittee
House Energy and Commerce Committee
October 16, 2009**

Mr. Chairman, Members of the Subcommittee, I am Val Christensen, President of EnergySolutions. I appreciate the opportunity to appear before the subcommittee to provide testimony on this very important issue.

EnergySolutions, headquartered in Salt Lake City, Utah, is a nuclear services company with operations throughout the United States and around the world. We are a world leader in providing safe and responsible integrated services and solutions to the nuclear industry, the federal government, doctors, hospitals, and research facilities. The company specializes in recycling radioactive materials, decommissioning nuclear power plants, transporting radioactive material, managing spent fuel, processing and disposing of low level radioactive waste (LLRW) and cleaning up the environment. EnergySolutions also provides critical non-proliferation services under the National Nuclear Security Administration's Global Threat Reduction Initiative (GTRI).

One of our missions is to help the United States achieve energy independence, reduce carbon emissions and protect the environment by cleaning up contaminated sites.

Nuclear energy, a safe and non-carbon emitting source of energy, plays a key role in addressing the energy crisis that the world faces today and EnergySolutions plays a vital role in managing nuclear material in order to make that possible.

EnergySolutions believes H.R. 515 is unnecessary and problematic for two principal reasons: First, there is not, as has been asserted, a Class A LLRW waste disposal capacity problem in this country; and second, the bill erects an anti-nuclear/anti-business trade barrier that hinders American companies from competing with foreign owned companies participating in nuclear new build around the world and restricts U.S. companies from helping the United States reassert its leadership role in the nuclear renaissance.

Proponents of the legislation have argued that the bill is necessary because there is a domestic disposal capacity problem. At the hearing before this subcommittee in May 2008 on the issue of the importation of internationally generated material, the General Accountability Office (GAO) testified that “disposal availability for domestic class A waste is not a problem in the short or longer term.”¹ The GAO also testified that the volume of Class A waste disposed had declined by two-thirds primarily due to the Department of Energy (DOE) completing several large cleanup projects. As a result of the general decrease in the disposal Class A waste, the projected disposal capacity of the Clive facility in Utah, at the time of the GAO testimony, had been extended to over 30 years. When we testified before this subcommittee in May 2008, the projected remaining licensed capacity of the Clive facility was 150 million cubic feet and we anticipated future annual volumes to be 5 to 6 million cubic feet. Due to decreased commercial disposal volumes, along with the declines in DOE waste, we now expect future annual volumes to be 4 to 5 million cubic feet.

¹ Statement of Gene Aloise, Director Natural Resources and Environment, Before the Subcommittee on Energy and Air Quality, May 20, 2008, page 4.

The total remaining overall site capacity of Clive is over 485 million cubic feet, with 140 million cubic feet currently licensed. Based on current waste generation rates, the site has a potential remaining capacity of over 120 years should the site be licensed to utilize its maximum capacity. Whether we will seek to utilize additional potential capacity will depend largely on the volumes of LLRW generated in the years to come. Another factor impacting domestic disposal capacity is the recent granting of a license to a company in Texas to construct a disposal facility which, if all of the license conditions are met, could accept Class A, B and C LLRW from both compact and non-compact generators.

While the GAO and the Nuclear Regulatory Commission (NRC) have stated previously that there is a domestic disposal capacity issue for Class B and Class C disposal, they concluded, as stated above, that there is no Class A LLRW disposal capacity issue. The Clive facility only accepts Class A waste for disposal and there is ample Class A domestic disposal capacity for many decades.

Some have expressed fear that “the United States is destined to become the world’s dumping ground for foreign nuclear waste.” *EnergySolutions* has stated very clearly, including in Mr. Creamer’s testimony here in May 2008, that it will preserve Clive’s capacity principally for the domestic nuclear industry and the federal government. We committed to this Subcommittee, and the citizens of Utah, that we will use no more than five percent of Clive’s remaining licensed capacity for the disposal of internationally generated material. The remaining licensed capacity at the time this commitment was made was 150 million cubic feet. We stand by that commitment and have stated our willingness to make this an express condition of our license at the Clive facility. Using

4.3 acres of disposal capacity for internationally generated material will not turn the United States into “the world’s dumping ground.” In addition, I make the further commitment today that we will not dispose of internationally generated material at Clive for a period of greater than 10 years, which will give us ample time to establish, or assist in the establishment of, LLRW disposal facilities abroad. We are exploring opportunities with several European and Asian countries to site LLRW facilities.

For more than nine years, internationally generated materials, such as booties and gloves and other articles of clothing worn by workers at nuclear power plants, as well as metals, paper, and plastics used in the nuclear industry, have been safely processed at our state-of-the-art facilities in Tennessee with the residuals safely disposed at Clive. This international material is identical to the domestic material we process and dispose of each day. The NRC has confirmed that there is no difference between domestic and internationally generated Class A LLRW. Our own highly trained staff is on hand at the point of origin of the internationally generated material to characterize the material to ensure that it meets the processing and disposition requirements set forth in our licenses. Only material that meets our license requirements is imported. It is important to recognize that there simply are no health or safety issues associated with the importation, processing, and disposal of LLRW. State and federal regulators have concluded that the processing and disposal of domestic or internationally generated material by *EnergySolutions* poses no health or safety issues. Once again, Class A LLRW, the only type of waste disposed at Clive, is the lowest in radioactivity. Smoke detectors from your homes and exit signs in this building are not disposed at Clive because they contain a

sealed source of radioactive material that exceeds Class A. Ironically, these products are often disposed in commercial landfills in your districts.

I would also like to clarify another point on which there has been some confusion. No internationally generated waste will ever be disposed or orphaned in Tennessee. In the many years that the company has been processing and disposing of internationally generated material, no waste ever has been orphaned in Tennessee. We have never imported material that was non-conforming and had to be returned to the generating country. Any material we have imported has been properly processed in Tennessee with the residuals safely disposed of in Utah.

We understand the concern that some have to one country managing and disposing of even a limited amount of another country's waste. In today's global economy, however, hazardous and radioactive materials cross our nation's borders on a daily basis.

Computer screens and other computer components containing mercury, toxic metals and other hazardous waste, plastic bottles and other waste materials are shipped from the United States to other countries for recycling and disposal. Over 80 percent of the nuclear fuel and uranium used in domestic nuclear reactors is imported. Spent nuclear fuel, which represents over 99% of the aggregate radioactivity in the nuclear power industry, crosses the borders into the United Kingdom (UK) and France from other European countries. After the recycling process, unusable spent fuel is stored in the UK and France for decades.

We live in an era in which the United States is trying to knock down trade barriers rather than erect them, as evidenced by the recently signed Joint Declaration and Agreement between the governments of the United States and Italy concerning industrial and commercial cooperation in the nuclear energy sector. The Declaration and Agreement states that the two countries will cooperate, among other things, in the construction of nuclear power plants, overcoming economic obstacles to the expanded peaceful use of nuclear energy, and advanced waste treatment, storage and disposal technologies.

Finally, I would like to address suggestions that the recent decision by the U.S. District Court for the District of Utah threatens the overall compact system created by the Low Level Radioactive Waste Disposal Act. This simply is not the case. On May 15, 2009, the District Court ruled, consistent with the Act, that the Clive facility, a privately owned commercial facility that was not created as a compact "regional disposal facility," is not part of the compact system. The court therefore concluded that the Northwest Compact does not have the authority to restrict the Clive facility's receipt of waste generated outside of the Northwest Compact region. The court's ruling neither weakens nor undermines the compact system. In fact, the court affirmed, consistent with the Act, that a compact has the right to exclude out-of-compact waste from its own regional disposal facility. The court also affirmed a compact's right to regulate the disposal of waste generated within the compact's boundaries. The compact system and all compact regional disposal facilities created under the compact system are unaffected by the court's ruling.

We respectfully suggest that H.R. 515, by restricting the issuance of import licenses for the safe and responsible handling of small quantities of international nuclear materials, would violate the spirit of the Administration's policy of nuclear cooperation as evidenced by the U.S. - Italian Joint Declaration. It would restrict the opportunities of U.S. companies to participate globally in reasserting America's worldwide leadership role in the nuclear field. It would erect a trade barrier to an essential industry in the global nuclear field.

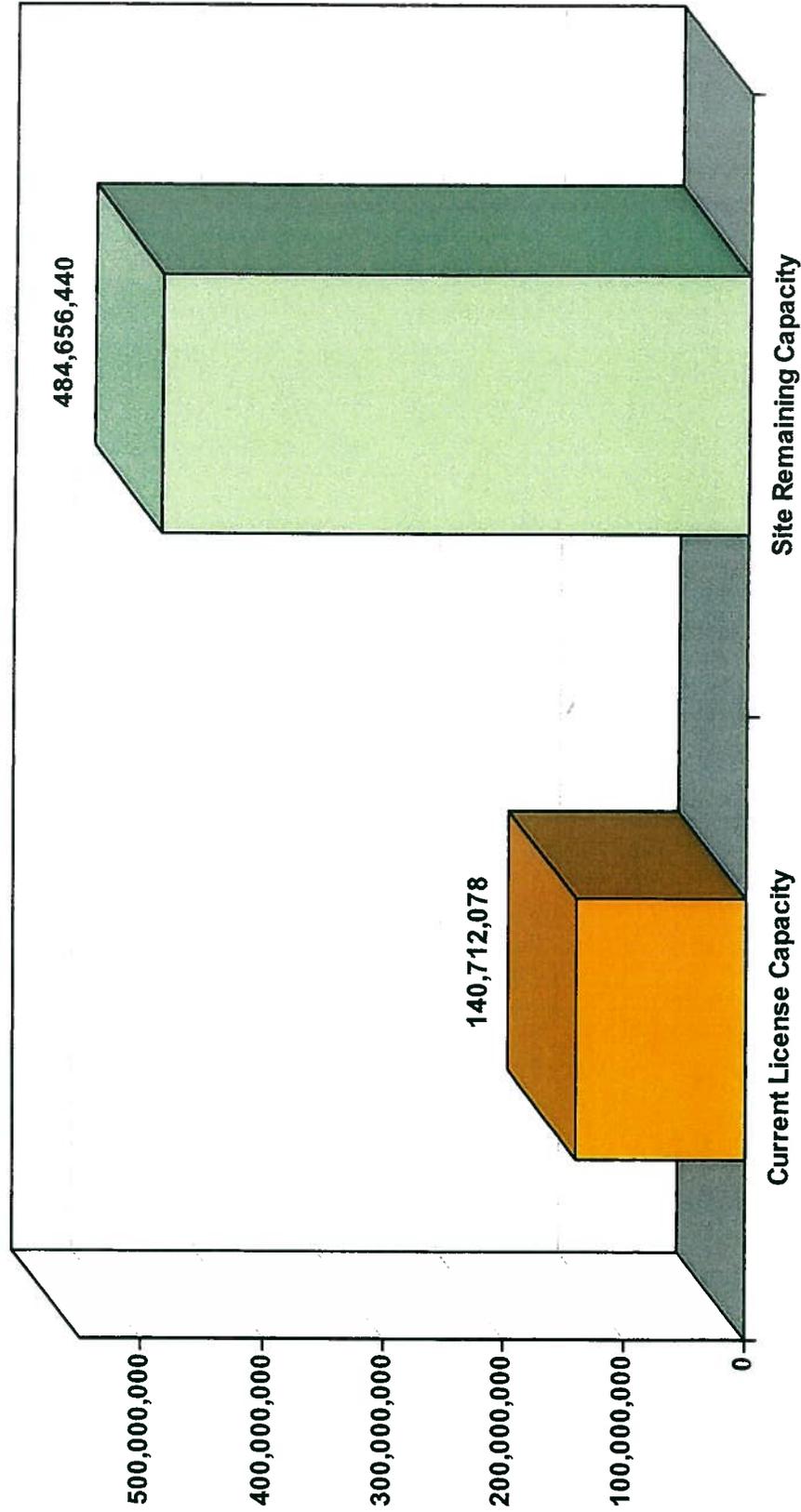
There is ample disposal capacity for domestic Class A LLRW in the short and long term despite the importation of a small amount of international material for processing and disposal. All activities associated with the management of Class A LLRW are effectively regulated by the U.S Nuclear Regulatory Commission and state licensing agencies.

There are no health or safety issues related to the management of international or domestic waste. There are no advantages gained by erecting this barrier to international trade. The legislation would prevent American companies from playing an international role in a vital part of the nuclear fuel cycle that is essential to the global nuclear energy industry, and would be doing so based on emotions and perceptions, rather than on facts and sound science.

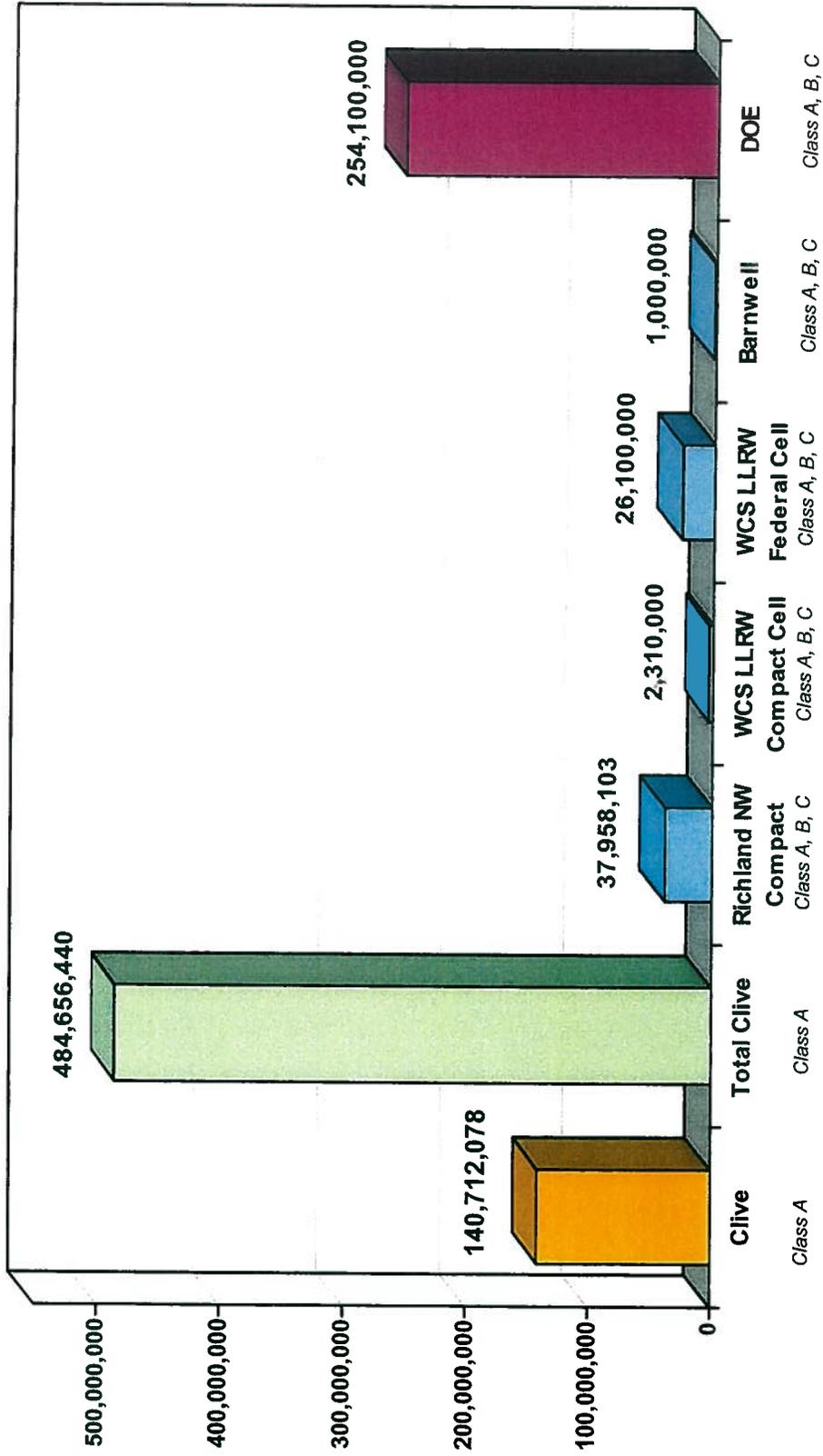
I am happy to answer your questions. Thank you.

Attachments

Clive Remaining Disposal Capacity (cubic feet)



U.S. Remaining Disposal Capacity (cubic feet)



- Hanford
- Idaho National Lab
- Los Alamos National Lab
- Nevada Test Site
- Oak Ridge
- Savannah River

Note: The amount of Class B & C waste generated annually is estimated at 10,000 – 12,000 cubic feet based on MIMS Report

Myths vs Facts on International Waste

Myth: We should not grant import licenses because it would represent an unprecedented reversal in this nation's approach to disposal of its own LLRW.

Fact: The NRC has issued import licenses to companies including *EnergySolutions*, Perma-Fix, Westinghouse, Areva, and Eastern Technologies for many years. Contaminated metals have been imported into the U.S. for over a decade.

Myth: No other country in the world takes another country's nuclear waste.

Fact: The United Kingdom and France take spent fuel, which contains over 99 percent of the radioactivity, from other countries. Taking a small amount of material that contains far less than 1 percent of the radioactivity allows *EnergySolutions* to compete against government owned companies from these countries.

Myth: The U.S. has limited disposal capacity of domestic waste.

Fact: The GAO stated on May 20, 2008 that "disposal for the nation's class A waste does not appear to be a problem in either the short or long term." The *EnergySolutions'* Clive facility only disposes of Class A waste. However the GAO has stated that there is in fact a disposal capacity problem regarding Class B and C low-level waste, but the problem does not relate to the kind of waste at which H.R. 515 is directed. Since the GAO made the statement about Class A waste, the State of Texas granted a license to a private enterprise to construct a new compact regional disposal facility that intends to dispose of both compact and non-compact Class A, B, and C waste, thus creating additional domestic disposal capacity. *EnergySolutions* has been processing and disposing low-level radioactive waste for over 20 years. There are not technical issues with treating and disposing radioactive waste.

Myth: Allowing the NRC to issue an import license despite the objection of the Northwest Compact will destroy the compact system.

Fact: The Federal District Court in Utah ruled that the Compacts have the authority to restrict or prohibit the importation of out-of-region waste to the region's compact facility. However, the Court ruled that the Northwest Compact could not restrict waste at the Clive facility because it is not a regional disposal facility and therefore not part of the compact system.

Myth: The United States will become the world's nuclear dumping ground.

Fact: *EnergySolutions* has voluntarily restricted the amount of internationally generated material to be disposed at Clive to up to 5 percent (4.3 acres of a 640 acre site) of its remaining capacity. Disposing of a small amount of material enables a U.S.

owned company to compete internationally against foreign government owned companies.

Myth: Some have stated that waste would be disposed in Tennessee.

Fact: Materials imported from Italy will be processed and recycled in Tennessee with all residual waste being disposed of at the Clive disposal facility in Utah. No waste will be orphaned in Tennessee.

Myth: This material is very harmful stuff that requires it to be stored with a big fence and lots of dogs.

Fact: The material that will be disposed at the Clive facility is the lowest of low-level radioactive waste. Exit signs and the source in smoke detectors are too radioactive to be disposed at the Clive facility. Should this material be recycled in Europe, it would be free released for use in products such as automobiles.

No Impact on the Compact System

EnergySolutions v. Northwest Interstate Compact

On May 15, 2009, the U.S. District Court for the District of Utah issued an order granting in part the plaintiff's motion for summary judgment in *EnergySolutions, LLC v. Northwest Interstate Compact on Low-Level Radioactive Waste Management, et al.* ("the Order"). The Order concludes that, because the low-level radioactive waste ("LLRW") disposal facility owned by EnergySolutions in Clive, Utah ("Clive Facility") is not a "regional disposal facility," as defined by the Low-Level Radioactive Waste Policy Act, 42 U.S.C. § 2021b *et seq.* ("LLRW Act"),¹ the Northwest Compact lacks authority to restrict the Clive Facility's receipt of waste generated outside the Northwest Compact region. As explained below, the Court's Order does not weaken the authority of interstate compacts to exclude from their own regional disposal facilities LLRW generated *outside* their respective compact regions. Moreover, the Court's Order does not undermine the authority of interstate compacts to channel to their own regional disposal facilities all LLRW generated *within* their respective compact regions or disrupt the compact system generally.

The Order acknowledges that "[a]ll parties [to this litigation] agree that the [LLRW] Act granted [the] Northwest [Compact], and every other compact [approved by Congress], the authority to restrict or prohibit the importation of out-of-region [waste] to the compact's regional disposal facilities." Thus, the Order does not weaken the unchallenged, firmly established authority of an approved compact to exclude out-of-region waste from the compact's own regional disposal facilities.

The Order does not undermine the authority of compacts to channel all in-region waste to their own regional disposal facilities. To the contrary, the Order concludes that compacts *have such authority*, explaining that the LLRW Act contains an "unambiguous expression of Congressional intent to allow [the] Northwest [Compact] to regulate the disposal of waste generated within [the Compact's] regional boundaries." This holding—which EnergySolutions does not challenge on appeal—should be welcomed by LLRW compacts.²

The Order cannot fairly be characterized as weakening or undermining the compact system generally. The Order does, of course, clarify that the Northwest Compact lacks authority to restrict the flow of out-of-region waste to the Clive Facility because Clive is not a "regional disposal facility" under the LLRW Act. But that clarification does not amount to a change in law; it simply acknowledges what was already true, based on statutory text adopted by Congress nearly 25 years ago.

The Order will have *no* impact on the LLRW compact system because, as the district court properly concluded, the Clive Facility is not (and never has been) a "regional disposal facility" and therefore does not operate within the compact system. In other words, the Order leaves the compact system completely intact.

¹ The LLRW Act defines "regional disposal facility" as any "non-Federal low-level radioactive waste disposal site in operation on January 1, 1985, or subsequently established and operated under a compact." 42 U.S.C. § 2021b(11). The Clive Facility falls outside that definition because it (1) "was not in operation in 1985," (2) "was not established" by a compact," and (3) "is not operated *under*" a compact.

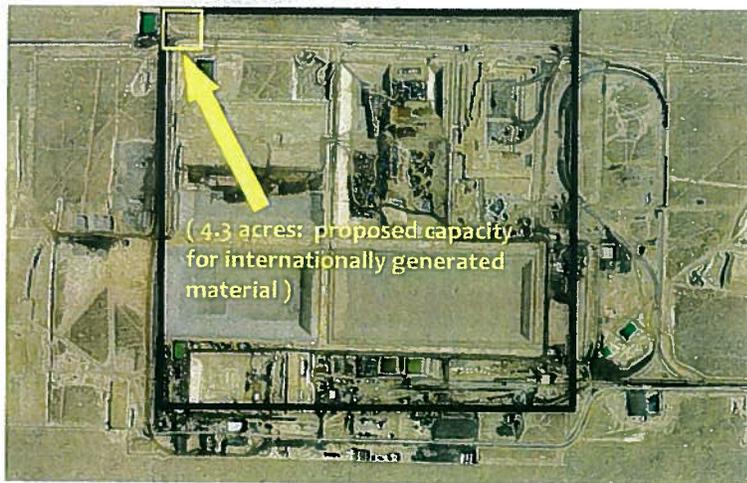
² Even if the district court had not concluded that Congress authorized compacts to channel in-region waste exclusively to their own regional disposal facilities, such channeling would be deemed non-discriminatory under the dormant Commerce Clause (and thus lawful even in the absence of congressional authorization) under *United Haulers Ass'n v. Oneida-Herkimer Solid Waste Management Auth'y*, ___ U.S. ___, 127 S.Ct. 1786 (2007). *See id.* at 1795.

FACT SHEET

- *EnergySolutions*, a world leader in the recycling, processing and disposal of nuclear material, is committed to U.S. energy independence, reduced carbon emissions, environmental protection and safety.
- *EnergySolutions* employs more than 5,500 dedicated professionals worldwide. Safety is *EnergySolutions* first priority - safety for our employees, safety for the environment, and safety for our communities. *EnergySolutions* has been recognized for safety excellence and transports nuclear material safely over 8 million miles per year.
- *EnergySolutions* recognizes that energy security is essential to our nation's national security. Our nation must reduce its dependence on foreign oil and diversify its energy supply. Nuclear power is a clean, safe, reliable source of energy that must play a vital part in helping the United States achieve this important national objective.
- *EnergySolutions* has a pending application with the Nuclear Regulatory Commission (NRC) to import up to 20,000 tons of low-level radioactive waste from Italy, process it at the state-of-the-art Bear Creek facility and dispose of a small amount of residual waste (approximately 8 percent) at the Clive disposal facility in Utah.
- The NRC has granted several licenses similar to this request in the past. In fact, *EnergySolutions* was granted one in 2006 to import up to 6000 tons of similar material from Canada.
- The Bear Creek facility has been processing internationally generated material for over 12 years. This material – metals, paper, plastic, resins – is identical to the material that *EnergySolutions* processes and disposes each day from the domestic nuclear industry.
- The NRC issues an import license if it deems that the material would be handled in accordance with its regulations to protect public health, safety and the environment, and an appropriate facility is able to accept the material.
- The Utah Division of Radiation Control informed the NRC on March 26, 2008 that "Utah Radiation Control Rules do not prohibit the disposal of low-level radioactive waste from foreign generators."
- In a letter dated March 4, 2008, the Tennessee Division of Radiological Health, Department of Environment and Conservation, informed the NRC that the "Division finds no technical reason to prohibit processing of [the] described waste at the Duratek [*EnergySolutions*] facilities in Tennessee."
- On May 15, 2009, the U.S. District Court of Utah ruled that the Northwest Compact lacks authority to restrict *EnergySolutions*' receipt of waste generated outside the Compact region. The Northwest Compact has appealed the Court's ruling.
- If *EnergySolutions* uses just 4.3 acres of the 640 acre Clive facility for disposal of internationally generated material, it will help America reestablish its leadership in the global nuclear renaissance. It also shows countries that low-level waste can be handled in a safe manner thus creating opportunities to site low-level waste disposal facilities abroad.
- The company is self-imposing a 5% limit and a 10 year timeframe for disposal of internationally generated waste at Clive. Even without this limit, Clive would have more than enough capacity to dispose of all of the low-level radioactive waste from the operations and eventual decommissioning of the 104 U.S. nuclear reactors.

- In 2008, The General Accountability Office (GAO) testified that there was no short-term or long-term disposal issue with Class A LLRW disposal. In fact, the GAO stated that since 2005 the capacity of the Clive facility had extended from 20 years to 33 years. This is due in part to the reduced levels of LLRW that are being generated and increased operational efficiencies achieved by EnergySolutions.
- On September 29, 2009, the U.S. Secretary of Energy and the Italian Minister for Economic Development signed a nuclear declaration and an agreement that lay out areas of cooperation between the two countries. The parties included the following objectives in the declaration:
 - Encourage the nuclear industry to seek contractual opportunities for the construction of nuclear power plants, and for the provision of supporting services and infrastructure.
 - Seek elimination of obstacles to the development of bilateral industrial and commercial cooperation
 - Advance the principle that contractual awards for the construction of nuclear power plants, and the provision of related parts and services, should be based on the commercial and technical merits of the different proposals and industrial partnerships

Clive Facility



- 640-acre Utah facility (above) safely disposes of **only** Class A low-level material

JOINT DECLARATION
BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA
AND
THE GOVERNMENT OF THE ITALIAN REPUBLIC
CONCERNING INDUSTRIAL AND COMMERCIAL COOPERATION IN THE
NUCLEAR ENERGY SECTOR

The Government of the United States of America and the Government of the Italian Republic, hereinafter the "Participants,"

ACKNOWLEDGING the need to consider an appropriate mix of environmentally sustainable, safe, and secure sources of energy, including nuclear power, to meet the needs of their respective countries' populations;

RECOGNIZING the need to address challenges of growing energy needs facing both Participants' countries, as well as the broader international community, in a manner that contributes to reducing the harmful effects of greenhouse gases on climate;

OBSERVING that both Participants are parties to the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968, and strongly support the safeguards system of the International Atomic Energy Agency (IAEA), including the Additional Protocol;

NOTING that both Participants are signatories to the Convention on Supplementary Compensation for Nuclear Damage (CSC);

HAVING REGARD to the Agreement for Cooperation in the Peaceful Uses of Nuclear Energy between the United States of America and the European Atomic Energy Community of November 7, 1995, and in particular to the scope of cooperation set out in Article 1 of that Agreement; and

RECOGNIZING both countries' role in the development of nuclear power,

HAVE REACHED THE FOLLOWING UNDERSTANDING:

The Participants intend to cooperate, subject to their respective national laws and regulations, to:

- encourage nuclear industry to seek contractual opportunities for the construction of nuclear power plants, and the provision of related supporting infrastructures and services;
- seek the elimination of obstacles to the development of such bilateral industrial and commercial cooperation;
- promote fair, open, and transparent contract bid and award processes for nuclear energy industrial entities in their respective countries;
- advance the principle that contractual awards for the construction of nuclear power plants, and the provision of related parts and services, should be based on the commercial and technical merits of the different proposals and industrial partnerships;
- encourage the establishment of the CSC as a global nuclear liability treaty regime to which both countries are parties;
- promote the establishment of international arrangements that would help future civilian light water reactors deployed in Italy obtain access to reliable nuclear fuel supply and services; and
- encourage the development of civilian nuclear energy infrastructure, including training and human resource development, as well as appropriate application of civilian nuclear energy and related energy technology, in accordance with evolving IAEA guidance and standards on infrastructure development.

Either Participant may cease cooperation under this Joint Declaration, but should endeavor to provide at least 30 days advance written notice to the other Participant.

Signed at Washington, in duplicate, on the twenty-ninth day of September, 2009, in the English and Italian languages.

**FOR THE GOVERNMENT OF THE
UNITED STATES OF AMERICA:**

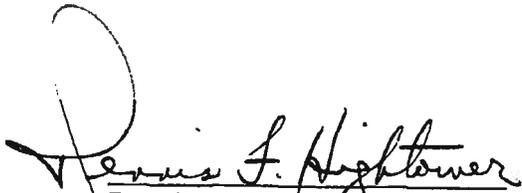


Steven Chu
Secretary of Energy

**FOR THE GOVERNMENT OF THE
ITALIAN REPUBLIC:**



Claudio Scajola
Minister of Economic Development



Dennis F. Hightower
Deputy Secretary of Commerce

AGREEMENT

BETWEEN

**THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA
AND
THE MINISTRY OF ECONOMIC DEVELOPMENT
OF THE ITALIAN REPUBLIC**

**FOR COOPERATION IN CIVILIAN NUCLEAR ENERGY RESEARCH AND
DEVELOPMENT**

The Department of Energy of the United States of America (DOE) and the Ministry of Economic Development of the Italian Republic (MISE) (hereinafter collectively the "Parties");

NOTING the Agreement between the Government of the United States of America and the Government of the Italian Republic for Scientific and Technological Cooperation of April 1, 1988, as amended and extended (the "S&T Agreement");

NOTING their mutually beneficial cooperation in the field of energy research and development;

DESIRING to facilitate joint activities of common interest in the field of advanced nuclear systems, the fuel cycle and nuclear safety, including proliferation-resistant nuclear materials and technologies; promote collaboration between United States and Italian agencies and research organizations to advance the development of nuclear energy; develop advanced concepts and scientific breakthroughs in nuclear fission and reactor technology to address and overcome the principal technical, societal, and economic obstacles to the expanded peaceful use of nuclear energy; and promote and maintain the nuclear science and engineering infrastructure of each Party's country to sustain the capabilities necessary for the development and utilization of nuclear energy;

SEEKING to advance achievement of the goals of the Agreement for Cooperation in the Peaceful Uses of Nuclear Energy between the European Atomic Energy Community and the United States of America of November 7, 1995;

NOTING the Generation IV International Forum, a framework for international cooperation in research and development for the next generation of nuclear energy systems, whose membership includes DOE and the European Atomic Energy Community (Euratom); and

NOTING FURTHER that MISE will implement this Agreement in close co-ordination with Euratom, which harmonizes participation in Generation IV International Forum activities of the European Union Member States,

Have agreed as follows:

Article 1 Objective

The objective of this Agreement is to establish a framework for collaboration between the Parties on research and development (R&D) focused on advanced technologies for improving the cost, safety, waste management, and proliferation-resistance of nuclear power systems for civil use. All cooperative activities carried out under this Agreement shall involve peaceful uses of nuclear energy, exclusively.

Article 2 Areas of Cooperation

- 2.1 The technical areas of collaboration under this Agreement may include, but are not limited to, the following:
 - 2.1.1 Next-generation reactor power plant designs with higher efficiency, lower cost, and improved safety and proliferation resistance;
 - 2.1.2 Innovative nuclear plant design, manufacturing, construction, operation, maintenance, and decommissioning technologies;
 - 2.1.3 Advanced nuclear fuels;
 - 2.1.4 Fundamental nuclear science areas;
 - 2.1.5 Advanced waste treatment, storage, and disposal technologies;
 - 2.1.6 Nuclear safety analysis, standards and criteria; and
 - 2.1.7 Such other areas as the Parties may agree to in writing.
- 2 Sensitive nuclear technology is specifically excluded from cooperation under this Agreement. As used herein, sensitive nuclear technology means any information, including information incorporated in equipment or an important component, that is not available to the public and is important to the design, construction, fabrication, operation or maintenance of any facility designed or used primarily for uranium enrichment, reprocessing of irradiated nuclear material, heavy water production, or fabrication of nuclear fuel containing plutonium.

Article 3 Forms of Cooperation

The forms of cooperation carried out under this Agreement may include:

- 3.1 Exchange of scientists, engineers and other specialists for agreed periods of time for participation in agreed research, development, analysis, design and experimental activities conducted in research centers, laboratories, engineering offices and other facilities and enterprises of each Party, each Party's contractors or each participating institution. Such exchanges of personnel shall be conducted in accordance with Article 6 of this Agreement;
- 3.2 Exchange or loan of equipment, samples, materials, instruments and components for testing, as set forth in Articles 7 and 8;
- 3.3 Exchange, on a current basis, of unclassified scientific and technical information, and results and methods of research and development in accordance with Article 9 of this Agreement;
- 3.4 Organization of, and participation in, seminars, workshops, and other meetings on specific mutually agreed topics in the fields listed in Article 2 of this Agreement;
- 3.5 Joint projects in which the Parties agree to share the work and/or costs;
- 3.6 Such other forms of cooperation as may be mutually agreed by the Parties in writing.

Article 4 Project Annexes

- 4.1 Cooperative activities under this Agreement may be undertaken by the Parties or, as appropriate, laboratories or contractors of the Parties. Each cooperative activity that may involve the sharing of costs or that may give rise to the creation of intellectual property shall be described in writing in a Project Annex, which shall be subject to approval by the Bilateral Steering Committee (as provided for in Article 5).
- 4.2 Each Project Annex shall include detailed provisions for carrying out the specified forms of cooperation, including such matters as technical scope, work plan, exchange of business-confidential information, management, total costs, cost sharing and schedule. Each Project Annex shall be subject to and shall refer to this Agreement.

Article 5
Bilateral Steering Committee

- 5.1 The Parties hereby establish a Bilateral Steering Committee (BSC) to provide programmatic direction and oversight of the bilateral cooperative program. Each Party will appoint up to two representatives to serve on the BSC. The general duties of the BSC are to:
- 5.1.1 Establish procedures to identify, review and select joint cooperative tasks and associated schedules;
 - 5.1.2 Determine criteria and organize reviews to evaluate tasks;
 - 5.1.3 Monitor progress of all selected tasks;
 - 5.1.4 Issue periodic/annual status reports for tasks; and
 - 5.1.5 Propose to the Parties either continuation of selected tasks, programmatic modifications as appropriate, or termination of a task if warranted by lack of reasonable progress.
- 5.2 Decisions of the BSC shall be made on the basis of consensus.
- 5.3 The BSC shall meet once each year, alternately in the United States and in Italy, or at such other times and places as agreed. At its meetings, the BSC shall evaluate the status of cooperation under this Agreement. This evaluation shall include a review of the past year's activities and accomplishments and of the activities planned for the coming year. In addition, the BSC shall consider and act on any major new proposals for collaboration.

Article 6
Assignment and Exchange of Personnel

Each Party agrees to ensure that, whenever an assignment or exchange of staff is contemplated under this Agreement:

- 6.1 Each Party shall endeavor to ensure that qualified staff with skills and competence necessary to conduct the activities planned under this Agreement are selected for exchanges or assignments to the host institution. Each such exchange or assignment shall be agreed in advance by an exchange of letters between the Parties referencing this Agreement.
- 6.2 Each Party shall be responsible for the salaries, insurance, and allowances to be paid to its staff or its contractors.

- 6.3 Each Party shall pay for the travel and living expenses of its staff or contractors while on assignment to the host Party, unless otherwise agreed in writing.
- 6.4 The host Party shall help identify adequate accommodations for the other Party's staff or contractors (and their families) on a mutually agreeable, reciprocal basis.
- 6.5 The host Party shall provide all necessary assistance to the staff of the other Party or its contractors (and their families) as regards administrative formalities, such as assistance in making travel arrangements and visa applications.
- 6.6 The staff and contractors of each Party shall conform to the general and special rules of work and safety regulations in force at the host establishment.
- 6.7 The host Party shall grant assigned staff of the other Party access to unclassified information to the extent necessary to allow the staff to perform assigned duties.

Article 7

Exchange of Equipment

By mutual agreement, a Party may provide equipment to be utilized in a joint activity. In that event, the following provisions shall apply:

- 7.1 The sending Party shall supply, as early as possible, a detailed list of the equipment to be provided, together with the relevant specifications and appropriate technical and informational documentation related to use, maintenance, and repair of the equipment.
- 7.2 Title to the equipment and necessary spare parts supplied by the sending Party for use in joint activities shall remain with the sending Party, and the equipment shall be returned to the sending Party upon completion of the joint activity, unless otherwise agreed.
- 7.3 Equipment provided pursuant to this Agreement shall be brought into operation at the host establishment only by mutual agreement of the Parties.
- 7.4 The host establishment shall provide the necessary premises and shelter for the equipment; utilities such as electric power, water and gas; and normally, shall provide materials to be tested, in accordance with all technical requirements, which shall be as mutually agreed upon.
- 7.5 Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the original location in the country of the sending Party to the place of entry in the country of the receiving Party shall rest with the sending Party. If the sending Party elects to have the equipment returned, it shall be responsible for expenses, safekeeping, and insurance during the transport of the

equipment from the original point of entry in the country of the receiving Party to the final destination in the country of the sending Party.

- 7.6 Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the place of entry in the country of receiving Party to the final destination in the country of the receiving Party shall rest with the receiving Party. If the sending Party elects to have the equipment returned, the receiving Party shall be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the final destination in the country of the receiving Party to the original point of entry in the country of the receiving Party.
- 7.7 Responsibility for expenses, safekeeping, and insurance during the time period that the equipment is in use in the country of the receiving Party shall rest with the receiving Party unless otherwise agreed in writing.
- 7.8 Equipment provided by the sending Party for use in carrying out joint activities shall be considered to be scientific, not having a commercial character, and the receiving Party shall work toward obtaining duty free entry.

Article 8 Samples and Materials

Unless otherwise agreed in writing, the following provisions shall apply to the transportation and use of samples and materials provided by one Party to the other Party under this Agreement:

- 8.1 All samples and materials provided by the sending Party to the receiving Party shall remain the property of the sending Party, and shall be returned to the sending Party on request.
- 8.2 Where one Party requests that the other Party provide a sample or material, the Party making the request shall bear all costs and expenses associated with the transportation of the sample or material from the location of the sending Party to the final destination.
- 8.3 Each Party shall promptly disclose to the other Party all information arising from the examination or testing of samples or materials exchanged under this Agreement. The Parties agree that business-confidential information (as defined in Section III of the Intellectual Property Annex attached as Annex I to the S&T Agreement), which was developed prior to or outside the scope of this Agreement, shall remain business-confidential even though it is contained in the results of an examination or testing of samples or materials. Such information shall be identified as business-confidential by the Party asserting its business-confidential nature as soon as possible after disclosure of all information arising from the examination or testing is made to such Party and the other Party shall be

immediately advised of that identification. All information identified as business-confidential shall be controlled as provided in Section III of Annex I to the S&T Agreement.

- 8.4 A Party providing samples or materials to the other Party may also provide a partial or complete list of the types of information that may result from the examination or testing of such samples or material and which are to be treated as business-confidential as defined in Section III of Annex I to the S&T Agreement. All such business-confidential information is to be controlled as set out in Section III of that Annex.

Article 9

Transfer of Information and Equipment

- 9.1 The Parties may exchange, as agreed on a mutually beneficial basis, scientific and technical information, documents, and results of research and development of work carried out under this Agreement. Such information shall be limited to that which the Parties have the right to disclose, either in their possession or available to them, relating to the areas of cooperation described in Article 2.
- 9.2 Seminar proceedings and reports of joint activities carried out under this Agreement shall be published as joint publications, as agreed by the Parties.
- 9.3 The Parties agree that information developed and exchanged under this Agreement should be given wide distribution. Except as provided in Section III of Annex I to the S&T Agreement, such information may be made available to the public by either Party through customary channels and in accordance with normal procedures of the Parties.
- 9.4 Any information transmitted by one Party to the other Party under this Agreement and any related Project Annexes shall be accurate to the best knowledge and belief of the transmitting Party. Any equipment transferred by one Party to the other Party under this Agreement shall be suitable for its intended use to the best knowledge and belief of the transmitting Party. The transmitting Party does not warrant the suitability of the information or equipment transmitted for any particular use or application by the receiving Party or by any third party.
- 9.5 Information developed jointly by the Parties shall be accurate, and jointly developed information shall be suitable for its intended use, to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly-developed information or the appropriateness of equipment, nor its suitability for any particular use or application by either Party or by any third party.
- 9.6 Information and equipment protected for national security reasons shall be governed by Annex II (Security Obligations) of the S&T Agreement.

Article 10
Intellectual Property; Business-Confidential Information

The protection and allocation of intellectual property and the treatment of business-confidential information created or furnished in the course of cooperative activities under this Agreement shall be governed by the provisions of Annex I (Intellectual Property) to the S&T Agreement.

Article 11
Funding

- 11.1 Unless otherwise agreed, all costs resulting from cooperation pursuant to this Agreement shall be the responsibility of the Party that incurs them.
- 11.2 Each Party shall conduct the activities provided for in this Agreement and its Project Annexes subject to its applicable laws and regulations. Activities under and pursuant to this Agreement and related Project Annexes shall be subject to the availability of appropriated funds.

Article 12
Additional Organizations

By mutual agreement, the Parties may invite other organizations in the public and private sectors to participate in cooperative activities under this Agreement, at their own expense and upon such terms as the Parties jointly decide.

Article 13
Contracts

In the event a Party awards contracts for the acquisition of articles and services to implement this Agreement, such contracts shall be awarded in accordance with the laws and regulations of that Party's country.

Article 14
Dispute Resolution

Except as provided in Section II.D. of the Intellectual Property Rights Annex, any question or dispute arising under this Agreement shall be resolved by consultation between the Parties.

Article 15
Entry into Force, Duration, Amendment and Termination

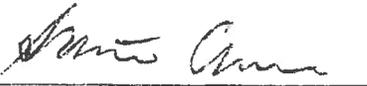
- 15.1 This Agreement shall enter into force upon signature, shall remain in force for five years, and shall be automatically renewed for additional five-year periods unless terminated pursuant to Article 15.3.
- 15.2 This Agreement may be amended by written agreement of the Parties.
- 15.3 The Parties may terminate this Agreement by mutual written agreement. Either Party may terminate this Agreement at any time after providing six months written notice to the other Party.
- 15.4 Joint activities not completed upon termination of this Agreement may continue until completion under the terms of this Agreement.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective governments, have signed this Agreement.

DONE at Washington , in duplicate, this twenty-ninth day of September, 2009.

**FOR THE DEPARTMENT OF ENERGY
OF THE UNITED STATES OF AMERICA:**

**FOR THE MINISTRY OF ECONOMIC
DEVELOPMENT OF THE ITALIAN
REPUBLIC:**



Steven Chu
Secretary of Energy



Claudio Scajola
Minister of Economic Development

From: Dane Finerfrock [mailto:DFINERFROCK@utah.gov]
Sent: Wednesday, March 26, 2008 3:29 PM
To: Stephen Dembek
Cc: Brooke Smith
Subject: License Application IW023

Dear Mr. Dembek:

This refers to your letter dated February 19, 2008. I appreciate the opportunity to comment on the EnergySolutions license application to import radioactive materials, some of which is expected to be disposed of at the EnergySolutions disposal site in Utah as low-level radioactive waste(LLRW).

We are providing the following comments:

- * The Utah Radiation Control Rules do not prohibit the disposal of low-level radioactive waste from foreign generators.
- * All LLRW sent to EnergySolutions for disposal must meet the license conditions of the current Radioactive Materials License, #UT2300249, issued by the Utah Division of Radiation Control.
- * Please be aware that the Utah Radiation Control Board and Utah Governor Jon Huntsman wrote to Commissioner Klein requesting the NRC license deliberations take into account several national policy issues relating to the application.

Please contact me at 801-536-4250 if you have any questions.

Sincerely,

Dane Finerfrock, Director
Utah Division of Radiation Control



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF RADIOLOGICAL HEALTH
L&C ANNEX - THIRD FLOOR
401 CHURCH STREET
NASHVILLE, TENNESSEE 37243

March 4, 2008

Mr. Stephen Dembek, Branch Chief
Export Controls and International Organizations
Office of International Programs
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Dembek:

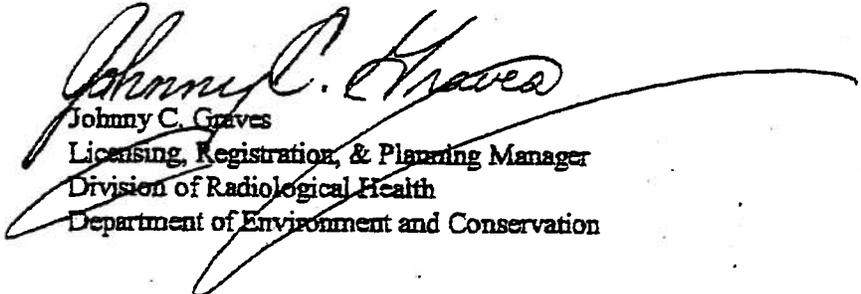
SUBJECT: Applications for NRC Import License IW023 and NRC Export License XW013

This letter acknowledges your letter dated February 19, 2008, with attachments, concerning the import and export license applications from EnergySolutions for the transfer of radioactive waste from Italy to Duratek (EnergySolutions) facilities in Tennessee.

Upon review of this information and the references to the authorizations granted by the Tennessee Radioactive Material Licenses issued to Duratek, the Division finds no ~~technical basis to prohibit the processing~~ of this described waste at Duratek facilities in Tennessee.

Thank you for the opportunity to comment on these applications.

Sincerely,



Johnny C. Graves

Licensing, Registration, & Planning Manager
Division of Radiological Health
Department of Environment and Conservation