

Tennessee Environmental Council ♦ Tennessee Conservation Voters
 Citizens to ENDIT (End Nuclear Dumping In Tennessee) ♦ Friends of the Earth
 Southern Alliance for Clean Energy ♦ Nuclear Watch South
 Tennessee Chapter Sierra Club ♦ Delta Chapter Sierra Club
 South Carolina Chapter Sierra Club
 Radiation Committee Sierra Club ♦ Nuclear Task Force Sierra Club
 Bellefonte Efficiency and Sustainability Team
 American Environmental Health Studies Project, Inc.
 Nuclear Information and Resource Service

UNITED STATES OF AMERICA
 NUCLEAR REGULATORY COMMISSION (NRC)
BEFORE THE COMMISSIONERS)

In the Matter of:)	License Nos. IW023 and XWO13
)	Docket No. 11005711 (import)
ENERGYSOLUTIONS)	and No. 11005710 (export)
(Radioactive waste import/export)	
licenses for Italian waste))	July 21, 2008

Corrected
RESPONSE TO EnergySolutions’ RESPONSE to REQUEST FOR HEARING

Our organizations have members who live, work and recreate in vicinity of the EnergySolutions radioactive waste processing facilities in Tennessee and/or along the transport routes to those sites from the Ports of New Orleans and Charleston. We also have members along routes from EnergySolutions sites that radioactive waste and processed radioactive materials will travel and members who live near and on route to some of the solid waste landfills that would receive radioactive waste released from regulatory controls at the EnergySolutions sites.

Our organizations and members have clear and vital health, economic and environmental interests that would be affected by approval of the EnergySolutions import/export licenses.

Bringing in nuclear waste from Italy will inevitably increase the amount of radioactivity released into the environment and available to expose those in proximity and downwind and downstream. The Nuclear Regulatory Commission relies on the LNT Linear No Threshold model which holds that any additional amount of radiation increases risks to the recipient. The risk of getting cancer from exposure to ionizing radiation was raised in the last National Academy of Sciences BEIR VII report, 2005.¹ There is a growing wealth of documentation² about dangers of chronic and low

¹ *Health Risks from Exposure to Low Levels of Ionizing Radiation BEIR VII Phase 2, National Academy of Sciences, June 29, 2005, page 283, Table 12-9. Table 12-9 indicates that the average risk (cancer incidence for males and females) of getting leukemia or solid cancers is 1141 out of 100,000 exposed to 10 r. The risk of getting cancer from radiation (in BEIR VII) is increased by about a third from previous government risk figures (EPA FGR13): BEIR VII estimates that 11.41 people will get cancer if 10,000 are each exposed to a rad (1,000 millirads). The US Environmental Protection Agency Federal Guidance Report 13 estimates that 8.46 people will get cancer if 10,000 are each exposed to a rad.*

dose and dose rate exposure to ionizing radiation. Those of us who will be exposed or are most likely to be exposed because of this license want the opportunity for a hearing on the projections and realities.

Increasing the amount of radioactive waste coming in to the US for transport, processing, licensed and unlicensed disposal and "recycling" puts our organizations and members of organizations at increased exposure and increased real risks. The risks are unnecessary. Denying the licenses protects us from that risk. The risk is to health and property. Contaminated property values and values along radioactive transport routes can decrease as happened along the major route for nuclear waste to the Waste Isolation Pilot Plant in New Mexico.

In requesting a hearing we seek to gain and share information on how import/export licenses would affect our organizations' and individual members' health and financial interests.

To clarify these interests we are providing declarations of 2 individuals who are also members of our groups who reside near the Memphis and Oak Ridge/Kingston EnergySolutions facilities who have requested the hearing. We also refer to documentation and reference regarding the Ports of New Orleans and Charleston³ which had been entered into the record (by Tom Clements in his comments on behalf of Friends of the Earth dated June 9, 2008 ADAMS Accession number ML081680415) raising concerns about whether the ports can or are willing to accept the radioactive waste from Italy based on insurance concerns and ability to handle this kind of waste. Part of the comment was an attachment, an April 18, 2008 report entitled "**Importation of Low**

²Some references that there is no safe dose of ionizing radiation include: "Cancer and low level ionizing radiation" *The Bulletin of the Atomic Scientists*. September 1978; *No Immediate Danger? Prognosis for a Radioactive Earth*. Women's Educational Press, Toronto, Ontario. 1985: 45. isbn 0-88961-092-4; Caufield, Catherine. *Multiple Exposures: Chronicles of the Radiation Age*. Harper and Row, New York. 1989: 48. isbn 0-06-015900-6; *Radiation-Induced Cancer from Low-Dose Exposure: An Independent Analysis*. Committee for Nuclear Responsibility, Inc.1990:18-16, 18-18. Isbn 0-932682-89-8.; Garloch, Karen. "Repeated low radiation doses hike leukemia risk, UNC study finds." *The Charlotte Observer*. Wednesday, March 20, 1991.; "Reanalysis of Hanford Data: 1944-1986 Deaths." *American Journal of Industrial Medicine*. 23:371-389 (1993).; "Curvilinearity in the Dose-Response Curve for Cancer in Japanese Atomic Bomb Survivors." *Environmental Health Perspectives*.105 (6): 1505. (1997); "Chromosomal instability in the descendants of unirradiated surviving cells after alpha particle irradiation." *Proc. Natl. Acad. Sci. USA*.95: 5730 (1998).; **Epidemiology**: Stewart, A.M., et al. "Radiation Exposures of Hanford Workers Dying from Cancer and Other Causes." *Health Physics*. Nov (1977). ; Stewart, A.M, et al. "Delayed Effects of A-bomb radiation: a review of recent mortality rates and risk estimates for five-year survivors." *Journal Epidemiology and Community Health*. 36(2):80-6 (1982). ; Morgenstern, H., et al. "Epidemiologic Study to Determine Possible Adverse Effects to Rocketdyne/Atomic International Workers from Exposure to Ionizing Radiation" Report by the UCLA School of Public Health. September, 1997. ;Wing S., et al. "Mortality Among Workers at Oak Ridge National Laboratory." *JAMA*, 26 (11):1397 (1991); **Cell studies**: Lorimore S. A., et. al. "Chromosomal Instability in the descendants of unirradiated surviving cells after alpha particle irradiation." *Proc. Natl. Acad. Sci. USA*. 95: 5730-5733 (1998). (Eric Wright is co-author); Kadhim M. A., et al. "Transmission of chromosomal instability after plutonium alpha particle irradiation." *Nature*. 355:738 (1992). (Eric Wright is co-author)

³ *In a message from June 3, 2008 to Tom Clements, FOE asking SC State Ports Authority if they had submitted comments to the NRC on the Italian waste import issue: "The South Carolina State Ports Authority has not submitted comments on this matter as we have nuclear exclusions on all of our insurance policies and therefore do not handle such shipments at our public marine terminals in Charleston."*
Byron D. Miller, Director, Public Relations, S.C. State Ports Authority, Phone: 843-577-8197
E-mail: bmiller@scspa.com

Level Radioactive Waste through the Port of New Orleans,” by the Louisiana Department of Environmental Quality which states

“Due to the strategic location and large population surrounding the Port, granting the license may be harmful to national security and may pose an unreasonable risk to the environment, human health and safety.”

Pages 5-6 states:

“If a release of LLRW were to occur in the Port of New Orleans, either by terrorist activity or human folly, the closing of the Port of New Orleans would be catastrophic to the U.S. economy. The Port of New Orleans is the largest inland port in the U.S. and serves as a major hub for the importation and exportation of agricultural products, iron and steel, manufactured products and petrochemicals. Remediation of the contamination could result in long-term closure of the Port, and damage to the U.S. economy would take years to correct. The economic damage could severely undermine U.S. security.”

The report continues: *“The granting of the license to import through the Port of New Orleans would represent an unreasonable risk to the environment, human health and safety. The Port of New Orleans is unique in its size, location, and is recovering from the devastation caused by Hurricanes Katrina and Rita in 2005. Moreover, south Louisiana contains the largest concentration of wetlands in the U.S. Citizens, wildlife and the wetlands would be adversely impacted should a release in the Port of New Orleans occur.”*

The State of Utah has provided documentation indicating that there is no final disposal facility that may accept the waste after it is processed in Tennessee because both Utah and the Northwest Compact have refused to accept the waste into their region and have the authority to do so. Thus, 10 CFR 110.43 (d) is not satisfied.

In addition to the declarations, we have one hearing requester (Tom Clements, Friends of the Earth) who lives within 2-3 miles of I-26, the obvious route from Charleston to Tennessee. Nuclear Watch South, another hearing requester, has at least one member in Asheville near I-40 and members who live in Columbia, SC, again near I-26.

Mr. Clements also provided, in his above referenced comments, a copy of the resolution in the South Carolina legislature opposing the import of waste from Italy. Similar resolutions were introduced in the Tennessee House and Senate as soon as the legislators became aware of the import/export proposal. We understand that at least one other state legislature addressed this issue.

The Northwest Compact opposes the import of Italy's waste into its compact region as does the State of Utah. Louisiana DEQ has raised serious concerns and we are not aware of the Central States Compact, of which Louisiana is a member, approving or supporting the import/export applications. The Southeast Compact has not officially taken up and voted on the import/export license applications as appears to be required in its rules, thus there is not official approval of all affected states and compacts. There are bipartisan-sponsored bills in both the US House and Senate to prevent importation of international radioactive waste (HR 5632 and S 3225) motivated by the EnergySolutions import/export application for Italy's waste under review here.

So the issues of public health, safety and security as well as final place for disposition are of concern to our groups and to our state and federal legislators.

The application is not routine. It is for an enormous amount of radioactive waste. EnergySolutions is requesting to import a high percentage, if not more than the total amount of low and intermediate level radioactive waste in storage in Italy. We question whether all of the waste will be from Italy or whether other countries could funnel waste into the US via this license. Importing the majority of another (formerly) nuclear nation's nuclear waste is not a routine application. To

characterize it as such is a distortion. Compared to previous importations, none of which were publicly noticed, thus not necessarily publicly approved or supported, this is an enormous amount of material and sets a serious precedent as EnergySolutions competes for cleanup contracts for the nuclear power and weapons industries around the world. Will UK cleanup waste be coming to the US next as EnergySolutions “cleans” up some of the dirtiest nuclear sites in the world?

A hearing at which our concerned, potentially affected parties and EnergySolutions participate will help clarify how our interests would be affected and seek to answer as-yet-unanswered questions and identify areas where answers are simply not known. This will help NRC make its decision on public health and safety, common defense and security and the consequences of lack of final disposal capacity. A hearing would help identify how the license would affect those issues and the interests of those requesting the hearing including public health and safety, quality of life, economic and financial impacts, property values, security, and safety.

We maintain that the NRC is not charged with protecting the financial viability of any waste disposal and processing company, especially the one with a near- monopoly on “low-level” radioactive waste services in the country. EnergySolutions states that “There is a global marketplace for nuclear services, including waste processing and disposal services, and the viability of U.S. commercial disposal companies is significantly enhanced by participation in this global market. Significant delay in the issuance of this routine import license could establish a climate of regulatory uncertainty that would be detrimental to the viability of the commercial LLRW disposal industry in this country.” This has nothing to do with the import at hand as nobody is pushing in this instance to close the disposal site.

Finally, EnergySolutions’ state licenses have provisions allowing the company to send some of the radioactive waste from processing nuclear waste to unregulated destinations such as solid waste landfills in the state. Since this became public knowledge about one year ago, public concern is growing. The fact that some of the Italian nuclear waste, or the allegedly “slightly” radioactive byproducts of processing the Italy waste, could go to regular solid waste landfills in Tennessee raises additional questions. Which landfills and how much radioactive material? One of the hearing requesters, Chris Ford of Tennessee Conservation Voters and his wife live very close to the Carter Valley landfill in Church Hill, Tennessee. They are concerned about their health and property. How much if any of EnergySolutions waste from this license could be disposed in that landfill? Or transported past their home and property? How much of the released radioactive waste will go to other landfills? Which ones?

How is EnergySolutions guaranteeing that the radioactive metal it would import from Italy and melt for recycling will not get out into general commerce in its first or second or subsequent reuse?

EnergySolutions has not adequately responded to our stated concerns and those provided during the comment period. We continue to ask that NRC hold a hearing and deny licenses.

Sincerely,

Nuclear Information and Resource Service
Diane D'Arrigo, Radioactive Waste Project Director
6930 Carroll Ave #340
Takoma Park, MD 20912
301 270 6477 x 16
dianed@nirs.org

Tennessee Environmental Council
John McFadden, Executive Director
One Vantage Way, Suite D-105
Nashville, TN 37228

615-248-6500
john@tectn.org

Citizens to ENDIT (End Nuclear Dumping In Tennessee)
Kathleen Ferris, Co-Founder
Murfreesboro, TN
k.r.ferris@comcast.net

Tennessee Conservation Voters
Chris Ford, Executive Director
2021 21st Ave. So., Ste. 431
Nashville, TN 37212
615-269-9090
cford@tnconservationvoters.org

Tom Clements
Friends of the Earth
1112 Florence Street
Columbia, SC 29201
803 834 3084
tomclements329@cs.com

Sierra Club

Steven Sondheim, Energy Chair
Tennessee Chapter
271 N Rose
Memphis, TN 38117
901 761-1793
stevensondheim@yahoo.com

Leslie March, Conservation Chair
Delta Chapter
67017 Dolan St.
Mandeville, Louisiana 70471
lesliemarch@hotmail.com

Susan Corbett, Executive Committee
South Carolina Chapter
Columbia, SC
jscorbett@mindspring.com

Ann Harris National Committee
Nuclear Task Force
341 Swing Loop
Rockwood, TN 37854
apickle@aol.com

Linda Modica, Chair
Radiation Committee
Jonesborough, TN
linda.c.modica@mac.com

Louise Gorenflo
Bellefonte Efficiency and Sustainability Team

185 Hood Drive
Crossville TN 38555
931/484-2633
lgorenflo@gmail.com

American Environmental Health Studies Project, Inc.
Dr. Paul Connett
Ellen Connett, former editor, Waste Not
82 Judson St
Canton, NY 13617
315-379-9200
paul@fluoridealert.org

Sara Barczak, Safe Energy Director
117 S. Gay Street
Knoxville, TN 37902
sara@cleanenergy.org

Glenn Carroll, Coordinator
Nuclear Watch South
P.O. Box 8574
Atlanta, GA 31106
404-378-4263
atom.girl@mindspring.com

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSIONERS

In the Matter of:)
) License Nos. IW023 and XWO13
) Docket No. 11005711 (import)
ENERGYSOLUTIONS) and No. 11005710 (export)
(Radioactive waste import/export)
licenses for Italian waste)) July 21, 2008

CERTIFICATE OF SERVICE

I hereby certify that a copy of 14 ORGANIZATIONS' RESPONSE to EnergySolutions' RESPONSE TO our REQUEST FOR A HEARING was served on the persons listed below:

Emile L. Julian, Assistant for
Rulemakings and Adjudications Rulemaking & Adjudication Staff
Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington D.C. 20555
E-mail: hearingdocket@nrc.gov

Office of Commission Appellate Adjudication
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
E-mail: ocaamail@nrc.gov

Office of the General Counsel
Mail Stop - O-15 D21
Nuclear Regulatory Commission
Washington D.C. 20555-0001
E-mail: ogcmailcenter@nrc.gov

Denise Chancellor
State of Utah
Assistant Attorney General
dchancellor@utah.gov

Hearing Docket

E-mail: hearingdocket@nrc.gov

Emile L. Julian, Esq.

E-mail: elj@nrc.gov

Rebecca L. Gütter

E-mail: rll@nrc.gov

Evangeline S. Ngbea

E-mail: esn@nrc.gov

Linda Lewis

linda.lewis@nrc.gov

OCAAMAIL

E-mail: ocaamail@nrc.gov

OGCMail Center

E-mail: ogcmailcenter@nrc.gov

Christine Pierpont

E-mail: cmp@nrc.gov

Brooke Smith

E-mail: bgs@nrc.gov

Tom Ryan

E-mail: tpr@nrc.gov

Nancy Greathead

E-mail: nsg@nrc.gov

Tye Rogers

Mark LeDoux

EnergySolutions

423 West 300 South, Suite 200

Salt Lake City, Utah 84101

Gloria Griffith, WATAUGA Group Sierra Club

Tennessee Chapter of the Sierra Club

E-mail: gla4797@earthlink.net

/Signed (electronically) by/

Diane D'Arrigo dianed@nirs.org

Radioactive Waste Project Director

Nuclear Information and Resource Service

6930 Carroll Avenue, Suite 340

Takoma Park, Maryland 20912

E-mail: dianed@nirs.org

This **Corrected RESPONSE TO EnergySolutions' RESPONSE to REQUEST FOR HEARING** is being served on the EIE July 22, 2008 due to technical difficulties with Declarations of Steven Sondheim and Ann Harris which were emailed to the hearing docket on July 21, 2008.

/Signed (electronically) by/

Diane D'Arrigo dianed@nirs.org

Radioactive Waste Project Director

Nuclear Information and Resource Service

6930 Carroll Avenue, Suite 340

Takoma Park, Maryland 20912

E-mail: dianed@nirs.org