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June 10, 2008

U.S. Nuclear Regulatory Commission  
Office of the Secretary  
Attention: Rulemaking and Adjudications  
Washington, D.C. 20555

**Re: EnergySolutions' Request for Import License (NRC-2008-0074)**

Dear Sir or Madam:

On behalf of the Metals Industries Recycling Coalition ("MIRC")<sup>1</sup>, I am writing to express our opposition to EnergySolutions' request for a U.S. Nuclear Regulatory Commission ("NRC") license for the importation of radioactive material from Italy.

EnergySolutions' application is for the importation of approximately 20,000 tons of radioactive waste, 33-40 percent of which is presumed to be scrap metal. The waste which presently is in Italy, is believed to come from the Italian nuclear industry. EnergySolutions intends to reprocess the scrap metal into new products and to treat and volumetrically-reduce the remaining waste for disposal at its Clive, Utah facility. MIRC's opposition is based on the fact that a large percentage of the material to be imported is scrap metal that EnergySolutions is proposing to reprocess into new products that ultimately could threaten the safety of, and consumer confidence in, the metals recycling industry.

**I. Background**

MIRC members comprise a major sector of the nation's economy. Companies that are members of the associations that comprise MIRC consume scrap metal to make new metal products. These companies are the largest recyclers by volume in the country.

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<sup>1</sup> MIRC is an *ad hoc* coalition of metals industry trade associations and companies comprised of the Copper and Brass Fabricators Council ("CBFC"), the International Metals Reclamation Company, Inc. ("Inmetco"), the Nickel Institute ("NI"), the Steel Manufacturers Association ("SMA"), and the Specialty Steel Industry of North America ("SSINA").

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Each year steel mills operating electric arc and basic oxygen furnaces recycle more than 75 million tons of scrap into new steel products. Steel products contain, on average, 66 percent recycled content. These products have wide-ranging applications including many consumer products such as food and beverage containers, automobiles, homes, and even surgical implants. Similarly, in 2006 the copper industry recycled approximately 900,000 tons of scrap into new products. Copper and brass products contain, on average, 65 percent recycled content. Additionally, nickel is a highly valued metal that is recycled at an exceptionally high rate. Increasingly, nickel is not only recycled as scrap, but is recovered from waste materials such as used batteries and electric arc furnace ("EAF") pollution control dust.

The recycling of scrap metal has become a sophisticated, technology-based industry, involving highly-controlled scrap selection and blending processes necessary to meet detailed customer specifications, including specifications and certification regarding radioactivity.

Over the past twenty-five years, an industry-wide problem has emerged involving scrap metal contaminated with radioactive material. Some of this contamination in scrap is the result of background radiation absorbed by steel products, such as oil and gas transmission pipes. A more dangerous and potentially life-threatening form of contamination, however, is the presence of shielded radioactive sources – typically Cs-137 or Co-60 - in the scrap supply.

In order to protect employees and operations from the inadvertent melt of a shielded radioactive source, metals recycling facilities typically employ a number of radiation detection devices at the points where scrap is received into the facility. In order to detect small, but potentially dangerous, sealed sources in a load of scrap the size of a tractor-trailer or a rail car, facilities must calibrate the sensitivity of their detection equipment to extremely low levels – often just above background. As such, minor variables such as a void in the cargo container, weather changes, or the presence of naturally-occurring radioactive material ("NORM") can cause a false positive reading or alarm. Often these false positives are the result of low-level radioactive material such as contaminated metals.

A conservative estimate, based on conversations with MIRC member companies, indicates that a typical mill may sound between 20-50 false positives – *per month*. Each of these requires a response. MIRC's concern is that if larger volumes of radioactive scrap metal enter the stream of commerce, mills may be forced to decrease the sensitivity of their equipment so that the number of false positive alerts becomes more manageable and fewer process interruptions occur. However, by "turning up the dial" on their radiation detection equipment, mills expose themselves to a greater risk of melting a high-level source.

The downstream customers of MIRC member companies are also extremely concerned about radioactivity in recycled metal products. The metals industry has worked diligently for many years to build consumer confidence in the safety and utility of products made from

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recycled metal. However, the public, often fueled by sensationalized news reports, remains concerned about the safety of recycled metals in products that they use. The mere perception that metal products are unsafe because they are made from potentially radioactive scrap metal may lead to massive customer de-selection. Notwithstanding government assurances that the scrap is safe or that low levels of radiation are safe, consumers simply do not want any added radiation in their homes, automobiles, or workplaces. Rightly or wrongly, consumer confidence would be severely undermined if even small amounts of low-level radioactive materials were found in the scrap feedstock.

## **II. Impact of the Proposed Importation on MIRC Member Companies**

EnergySolutions estimates that between 33 and 40 percent of the 20,000 tons of radioactive material it seeks to import (6,600-8,000 tons) is scrap metal, and, presumably accounting for metals not suitable for recycling, EnergySolutions assumes that 7,000 tons will be recycled. EnergySolutions represents that 5,000 of the estimated 7,000 tons of recyclable radioactive scrap will be used to fulfill contracts to provide shield block for the Japanese nuclear industry. While EnergySolutions has stated that the Japanese customer has an option to increase the volume of shield block it takes under the contract, in reality, 2000 tons of radioactive metal scrap has no clear customer and no clear end use. EnergySolutions' import application provides some possible disposition avenues for the 2000 tons of uncommitted radioactive scrap but provides no assurances with regard to restricted reuse.

Even with appropriate restricted use limitations in place, those limitations only truly protect the initial use of the recycled scrap metal. While metals recycling facilities would not initially face a risk of receiving this material, scrap metal and the products in which it is used, are infinitely recyclable. At best, NRC only has the ability to track the use of the material during its processing and first use. Following the end of the useful life of the product in which the contaminated scrap was used, that material may then be cleared and freely-released into the recycling stream. MIRC members would have no way of knowing whether the scrap metal in their scrap stream originated in the 7000 tons of radioactive metal imported from Italy by EnergySolutions. Moreover, in order for the scrap to be put to a beneficial (and presumably profitable) use in a commercial/governmental radiological application, it would need to be processed from its present (unknown) condition. These processing steps will likely lead to radiological contamination of the process facility and its equipment and tools, thereby creating a risk that these materials/equipment/tools may enter the metals recycling stream as well.

Finally, any disposition option that does not segregate and track the radioactive scrap metal through its initial reuse and all potential future uses will exacerbate an established public perception problem in the metals recycling industry. MIRC member companies believe that this action will be seized upon by citizen groups and some news organizations, which will cause consumers irrationally to fear the safe products produced by MIRC member companies.

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**III. EnergySolutions' Import License Request Does Not Meet the Import Licensing Criteria in 10 C.F.R. § 110.43.**

The import licensing criteria in 10 C.F.R. § 110.43 require that: (1) the proposed import is not inimical to the common defense and security; (2) the proposed import does not constitute an unreasonable risk to the public health and safety; (3) any applicable requirements of the National Environmental Policy Act ("NEPA") are met; and, (4) with respect to radioactive waste, an appropriate facility has agreed to accept the waste for management or disposal.

EnergySolutions' application is fundamentally flawed because it does not contain sufficient information to enable the NRC to make an informed judgment about whether the material meets any of the licensing criteria. We do not suggest that EnergySolutions is being purposefully evasive. We believe that EnergySolutions itself is not meaningfully informed on the amount and nature of the materials it is proposing to import.

EnergySolutions provides only estimates as to the volume and weight of the materials based on an arbitrary assumed density of 40 pounds per cubic foot of material. EnergySolutions provides a listing of the types and amount of materials it proposes to import but no information on how it assessed the makeup of the materials.

In addition to its unexplained estimates as to the amount and makeup of the materials, EnergySolutions provides only estimates as to the type and extent of the radiation contamination. Thus, its application shows an assumed (but unexplained) total activity level and then states: "Some of the material to be imported may be free from contamination, some may only be superficially contaminated, and some may be volumetrically contaminated."<sup>2</sup> Indeed, ***EnergySolutions does not even know the source of the material it proposes to import.*** Despite lacking this most fundamental information, ***this material has not yet been characterized by EnergySolutions,*** which says it will do so only after its import license has been granted and the material is ready to be shipped from Italy.

MIRC believes that NRC has shockingly little information on which to base a licensing decision. It is simply not possible to effectively evaluate critical national security, public safety, and environmental concerns for *uncharacterized* radioactive materials *from unknown* sources and of unknown volume, makeup, and activity – particularly since a significant portion of the radioactive scrap metal that is to be imported has, as yet, no identified end use.

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<sup>2</sup> Cover Letter to EnergySolutions September 14, 2007 application.

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#### **IV. Requested Action**

MIRC strongly urges NRC to deny EnergySolutions' application to import an unknown amount of uncharacterized radioactive material from unknown sources. If, at some point in the future, EnergySolutions is able to provide sufficient information upon which NRC can base an analysis, we strongly urge NRC to look closely at the environmental and public health and safety aspects of the licensing criteria – particularly from the perspective of the metals recycling industry.

In order to maintain the efficacy of the metals recycling industry's radiation detection systems and in order to preserve consumer confidence in our products, the metals recycling industry requires the assurance of long-term use restrictions. If EnergySolutions' importation application is approved, MIRC believes that the contaminated scrap metal should not be released for any use that would allow the material ever to enter the stream of commerce. If released, even for a restricted governmental use, the material should be tracked from cradle to grave. The metals recycling industry needs to know anytime a component that was made from EnergySolutions' imported scrap metal is scrapped, and there needs to be mechanisms to insure that those materials are never freely-released. NRC must be in a position to know when products made from the recycled scrap metal are themselves scrapped and recycled for other uses, and it must provide that information to the metals recycling industry. MIRC believes it will be a significant challenge for the NRC to provide long-term assurances of restricted use for material of this sort.

Furthermore, if a mechanism to assure long-term restricted use can be devised, it should first be applied to the U.S. Department of Energy's ("DOE's") stockpiles of domestic radioactive scrap. Given the massive amount of radioactive scrap DOE has in storage, it seems eminently reasonable to reduce our domestic stockpile of radioactive scrap before accepting additional radioactive scrap from other countries. Such a move could reduce the pressure to freely release DOE's radioactive scrap stockpiles – an effort MIRC has opposed since its inception. Similarly, at a time when options for disposal of domestic low-level radioactive waste are being significantly trimmed back as a result of the new limitations on access to the Barnwell, South Carolina low-level radioactive waste disposal facility (which will accept waste only from South Carolina, Connecticut, and New Jersey as of July 1, 2008),<sup>3</sup> it seems unwise to authorize the importation of low-level radioactive waste for disposal at EnergySolutions' facility in Clive, Utah.

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<sup>3</sup> See 73 Fed. Reg. 32054 (June 5, 2008).

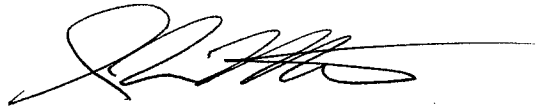
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**V. Conclusion**

EnergySolutions' application for the importation of radioactive material is missing some of the information most critical to the NRC's analysis of the proposal under the applicable criteria for importation. MIRC opposes issuance of any importation license unless EnergySolutions first provides accurate information with regard to the source of the material, the amount and content of the material, and the activity levels of the various components of material. Furthermore, with respect to metals, NRC should require a restricted use limitation that follows these materials from cradle to grave, including all intermediate stages of use and recycling. Even then, the wisdom of issuing the import license to EnergySolutions would be questionable – given the enormous domestic stockpile of contaminated scrap metal in the hands of DOE, which should be depleted before importing additional radioactive material from overseas.

If you have any questions, please feel free to contact me at 202.342.8514 or [jwittenborn@kelleydrye.com](mailto:jwittenborn@kelleydrye.com).

Sincerely,



John L. Wittenborn  
Counsel to the Metals Industries Recycling  
Coalition