FINAL REPORT OF THE INTERNATIONAL ATOMIC ENERGY AGENCY

I. Safeguards and Verification

Pursuant to the Non-Proliferation Treaty (NPT), Non Nuclear Weapon States (NNWS) are required to have a comprehensive safeguards agreement with the IAEA. Each of these agreements requires a State to agree to Agency safeguards on all source or special fissionable material in all peaceful activities within the territory of the State. 42 states have not concluded a safeguards agreement with the Board of Governors. There are 28 of these that have not even submitted comprehensive safeguards agreements to the Board of Governors for its consideration. In 1993, after nuclear weapons programs were discovered in Iraq, the Board of Governors asked the Director-General to submit suggestions on how the safeguards agreements could be strengthened. As a result, the Secretariat developed the Model Additional Protocol, approved by the Board in May of 1997. These would allow for environmental sampling, short notice access, and access to all of a State's nuclear fuel cycle. While these are legally binding agreements with the IAEA after their negotiation, they are not required by the NPT. 94 countries are in some status of additional protocol, of these 61 are in force.

Exports/Imports

In the safeguards adopted by the Agency in January of 1961, it states that safeguards will be attached to nuclear material whenever the total amount of peaceful nuclear (PN) material in a State exceeds a certain minimum, and will also be attached to special fissionable material produced in or by the use of material to which the Agency safeguards are thus attached. Agency safeguards will be attached to nuclear material used, produced or processed in a principal nuclear facility to which the Agency safeguards are attached. In circumstances where PN material exceeds the Agency's minimums, different levels of inspections would be required. With this in mind, it is important to know how much PN material is going into and out of a state. We are also aware that the IAEA can trace the destination of military nuclear technology only if that technology is declared by an importer or exporter or both.

A great number of nations would like to express their concerns of the importance of import/export controls.

In dealing with exports and imports concerns of nuclear wastes and technology, the IAEA has adopted Resolutions I/1 and I/3. In Resolution I/1, IAEA has recommended that computers systems be updated to help better facilitate verification, which will benefit tremendously after the adoption of Resolution I/3. In Resolution I/3, clause 1 recommends that NPT members adopt the Additional Protocol. Without the Protocol, IAEA cannot verify stocks of fissile materials nor track undeclared nuclear technology even if they know the stocks to be present and the destinations of nuclear technology known. Additional Protocol makes it considerably easier for countries that support the protocol to allow the IAEA to verify these undisclosed or undeclared stocks and/or technologies. Additionally, Clause 3 of this resolution deals directly with

recommendations of additional oversight with regards to compliance with export agreements of nuclear materials.

This body further recommends, in light of passing the Additional Protocol, that this transparency be fully undertaken in status quo verification of undisclosed stockpiles and undeclared nuclear technology to further aid the verification process of the IAEA. We urge countries that sign the Additional Protocol 93+2 to, if needed, tighten import and export securities concerning the matters of nuclear waste and technology import/export.

The Agency would like to further remind the GA Plenary of the imperative nature of dual use technology. Dual technology can be used for both peaceful civilian uses as well as military uses. Such technologies can easily slip under the radar of those international agencies attempting to monitor nuclear trafficking. This issue came to the world's attention after a rogue agent in South Africa attempted to buy Spark Gaps, which are used for both medical purposes of breaking up kidney stones as well as it is a vital component of an intercontinental ballistic missile in the missile's stages progression as well as its warhead detonation.

NPT

Recognizing the goal of the Non-Proliferation Treaty (NPT) as nuclear disarmament and the prevention of nuclear proliferation, the Agency, in order to better meet these goals, recommends the adoption of the additional protocols by those forty-two nations that do not have these protocols in force, in order to allow for the verification of the entire nuclear fuel cycle. In the past, the IAEA has been very successful in bringing members of the IAEA into compliance with appropriate protocols when appropriate levels of access are granted. Multilateral talks may be beneficial in supplementing the hard work that the IAEA will continue to perform.

In dealing with the Non Proliferation Treaty, the IAEA body has adopted Resolution I/3 and I/4. Clause two of resolution I/3 calls upon NPT members to fulfill their NPT obligations by calling upon members to regulate the nuclear activities of non-governmental corporations to prevent illegitimate nuclear transfer. Resolution I/4, Clause one, calls for the forty-two member-states of the NPT which have not yet brought into force their comprehensive safeguards agreements to do so. Additionally, Clause 4 and 5 urged the DPRK to comply with the NPT. Commends the DPRK and Islamic Republic of Iran for their recent commitment to full transparency and increased degree of cooperation with the Agency.

II. The Code of Conduct on Research Reactors

In the early 1990's the Convention on Nuclear Safety was passed addressing the code of conduct pertaining to power reactors, however research reactors were excluded from this convention. The need for an overarching Code of Conduct came to a head in a resolution at the 2000 IAEA General Conference, prompted by safety concerns as many of the world's research reactors approached the end of their originally planned life spans. This, coupled with the September 2001 attacks in the U.S., helped to fuel desire for a Code of Conduct. The Code of Conduct on the Safety of Research Reactors was adopted by the IAEA General Conference in September of 2004. The Code is a non-binding international legal agreement, where States determine their own level of commitment to its guidance.

Peaceful Power

Research reactors are used for research purposes such as medical and chemical

research, satellites, and generation of electrical power. The byproduct generated from such reactors can be used for less than peaceful purposes. In order to minimize the risk of rogue organizations obtaining these nuclear materials capable of inflicting mass destruction, the IAEA has endorsed the conversion process from Highly Enrichment Uranium (HEU) to Low Enrichment Uranium (LEU). Due to the difference in the level of enrichment, LEU is unusable for purposes of a fissionable weapon.

In dealing with the promotion of peaceful power as a source of sustainable energy beneficial to the developing world, the IAEA has adopted resolutions II/2 and II/3. Clause four of Resolution II recommends fusion research for development of alternative fuel sources which if successful, would reduce nuclear waste and virtually cut out all the materials necessary for states or organizations wishing to pursue offensive nuclear weapons. Resolution II/3, clauses one, two, three, and five, addresses the code with regard to developing nations. It calls for developed nations to assist developing countries in pursuit of nuclear energy through technical assistance and cooperation.

Waste Management

The U.S. and Russian Federation are the two States of origin, approximately 99 percent of HEU was provided by the U.S. and what is now Russia. Acknowledgment of the willingness of states to accept the return of the nuclear waste products sold to other countries through a Nuclear Waste Take-Back program, for storage in some of the world's best underground final storage sites. While the U.S. continues to take back nuclear waste that it can store in temporary sites, it wishes to complete its Yucca Mountain facility before any massive take backs are instituted. The only issue with such programs is that the long distances of transport are required to get these materials to their final resting place.

Radioactive material can be stored in three main ways. Storage at the reactor is only temporary, but usually serves a purpose of holding nuclear waste as it awaits transport to a final storage installation. Storage at the site involves placing waste in special water pools with a specific mixture of chemicals that inhibit fission and contain most environmental radiation. Packaging in special containers for transport to final location is another form of nuclear storage. These containers consist of heavy duty flasks and need to meet the utmost safety standards. Such flasks can withstand a direct hit from a train, and a fully fueled 737 commercial jet. Reprocessing is the break down of nuclear waste into plutonium, uranium, and other waste which is highly radioactive. Lastly, final storage is undertaken deep underground in relatively unpopulated areas.

Major concerns consist of public and environmental hazards in storage and transportation. Temporary pools at the site, are of limited size, have a limited time of storage and are highly insecure. In transportation, containers can leak radioactive radiation if they are weak or damaged. There is a huge concern about the final storage installations being ecologically unsound. Erosion from ground water over a long period of time as well as seismic faults, for example, have become real concerns for those operating the Yucca Mountain Facility. Also, recounting the horrific problems that happened in the wake of the Chernobyl disaster, the failure of any one of these containment or transportation systems could result in massive destruction of local wild life as well as serious health risks to local populations.

With regards to waste Management, the IAEA body adopted resolutions II/1, II/2, and II/3. Clause two of Resolution II/1 calls upon responsible parties to comply with legal and regulatory requirements, including criteria for waste management and discharges established for remediation programs. Clause two of Resolution II/2 requests that

member states of the IAEA increase funding for the purpose of aiding those nations which are having difficulty shouldering the burdens of the proper management and disposal of radioactive waste, through more training and infrastructure support. Clause two of resolution II/3 urges openness in atomic research in order to provide the latest techniques in nuclear waste disposal to the developing world.

The IAEA body is very pleased at having addressed the issue of HEU conversion to LEU by adopting resolution I/6. We strongly believe that this conversion guarantees sustainable nuclear power for peace while making the fuel unavailable for production in nuclear weapons.