Introduction and Procedure

Greetings Distinguished Delegates,

Welcome to the thirteenth annual Regional Training Conference hosted by Florida State University! My name is Jake Hunter and I will be your Chair and Crisis Director for the International Atomic Energy Agency committee. I am ecstatic to have been granted the opportunity to write and lead my first collegiate committee in only my second year on the college circuit, and even more excited to be able to meet and interact with all of you, the future leaders of this amazing program. As I mentioned before, this is my second year at Florida State, majoring in International Affairs and History, and my sixth year participating in Model UN. In my short time participating in this program I've befriended some of the greatest minds I've ever had the opportunity of knowing, and learned and experienced more than I ever could have guessed. It is my belief that the best way to truly understand history is live it, Model UN not only gives us a taste of what it's like to experience history in the making, but also what it's like to truly be a part of crafting it. This committee is the culmination for my love of this program, international politics, nuclear energy policy, and sharing my passion for Model UN with new delegates. I hope you all have half as much fun participating in it as I did creating it.

This committee will likely operate in way that is fairly different from any committee you've ever been in or will see on the circuit. I've designed it this way in order to help delegates that are new to Model United Nations learn the components of a crisis committee while maintaining general assembly elements in order to run committee at a slower pace so it will be less overwhelming than most crises you will encounter. The flow of debate will operate at the discretion of the delegates, there will be an open speaker's list, but moderated caucuses will be allowed to partially or wholly replace it if the committee so desires. The end goal of this committee will be to write a GA style resolution to reach a conclusion to the crisis presented to you, which will be directly based on the topic the committee decides to debate. There will be no crisis notes; however delegates will be allowed to act laterally through directives and press releases.

Additionally, as a twist on the traditional GA style, the topic decided at the beginning committee will be continuous and the committee will have strict deadlines for when all working papers must be submitted and we enter voting procedure (there will be no vote to enter voting procedure). Following voting procedure, there will be short intermission followed by a crisis update that will respond based on committee's actions during voting procedure and the content of any resolutions passed. The committee will then be expected to write new resolutions to respond to the updates within a new deadline. This process will continue until the end of committee.

Every Model UN committee requires some degree of research, this committee is no exception. You are expected to be knowable on the International Atomic Energy Agency's powers and purpose, the two topics designated for this committee, the history of these topics, your country's past and current actions relating to these topics, and your countries relationships with other countries in regards to both topics. This background guide is meant to serve as a guide for your research, not as your only source. I am willing to slow down the pace of committee if a majority of delegates are struggling with procedure or feel like topics need to be further expanded upon; I will not slow down this committee if I feel there has been a lack of research done by delegates.

Creativity and ingenuity will be rewarded in this committee; however ideas need to remain realistic. This committee will be run in real-time in the present day, with time only being accelerated at the chair's discretion after each voting procedure in order to account for crisis updates.

Joint directives, private directives, and press releases will be accepted and encouraged in order for countries to respond to the crisis on a domestic level. These private directives will carry the weight as if they were coming as direct orders from a country's leader in order to give delegates the freedom to respond as they wish to crisis, however, if used incorrectly this power can be dampened or wholly revoked. Any actions they make outside of a country's jurisdiction will be interpreted as suggestions that will only be implemented at the chair's discretion. Press releases will be read immediately upon reaching the Chair's desk, unless indicated otherwise, given during a crisis update, or during voting procedure. Joint directives and private directives will be transparent to the entire committee unless clearly labeled as being secretive (though secretive actions may be revealed by the actions of other delegates or at the chair's reasonable discretion).

History of the International Atomic Energy Agency

The mysteries surrounding nuclear energy have persisted for nearly two and a half decades, staring with German chemist, Martin Klaproth's discovery of uranium in the late 18th century. It would be almost 150 years until nuclear power was effectively utilized to create energy, but since then technology and innovation has advanced at an exponential rate. Every day we are finding new uses for this powerful and plentiful alternative energy.

The International Atomic Energy Agency (IAEA) was established in 1957 as a response to U.S. president Dwight D. Eisenhower's "Atoms for Peace" address to the General Assembly in 1973 in which he called for global collaboration in nuclear disarmament in favor of focusing on the more constructive and progressive uses for nuclear science and technology.

Today, 57 years later, the IAEA remains the chief authority on international nuclear policy and boasts 162 member states, making it one of the largest UN organizations.

The IAEA functions based on the 4 points of its mission statement:

- is an independent intergovernmental, science and technology-based organization, in the United Nations family, that serves as the global focal point for nuclear cooperation;
- assists its Member States, in the context of social and economic goals, in planning for and using nuclear science and technology for various peaceful purposes, including the generation of electricity, and facilitates the transfer of such technology and knowledge in a sustainable manner to developing Member States;
- develops nuclear safety standards and, based on these standards, promotes the achievement and maintenance of high levels of safety in applications of nuclear energy, as well as the protection of human health and the environment against ionizing radiation;
- verifies through its inspection system that States comply with their commitments, under the Non-Proliferation Treaty and other non-proliferation agreements, to use nuclear material and facilities only for peaceful purposes.

Guided by this outline, the IAEA has paved the way for the "peaceful atom" to exponentially improve the lives of the world's people. Evidence of this progress can be found as far away as the wheat fields of south Africa, where scientists have introduced disease resistant and more resilient crops, to France, where nuclear energy supplies nearly 75% of the entire power grid, to as close to home as your local hospital, where IAEA regulated radiopharmacy has saved millions of lives.

The potential for nuclear science seems limitless; it can feed the poor, heal the sick, provide jobs, stimulate trade, grow the economy, power our energy grid, and reduce net pollution! At first glance, nuclear science appears to be the solution for all of humanities most pressing issues! What could possibly go wrong?

Case Studies:

#1 The Goiânia Accident

On September 13th ,1987 a caesium-137 capsule from a radiotherapy device was stolen from an abandoned hospital by two looters looking for scrap. Oblivious of what they had stumbled upon, the thieves dismantled the equipment and shortly thereafter developed a severe case of acute radiation poisoning. A local scrapyard owner purchased the contaminated scrap from the two thieves 5 days later and exposed the hazardous substance to several dozen friends and family members before selling a majority of the contaminated materials to a second scrapyard. 16 days after the initial theft of the caesium-137 capsule a visiting medical physicist was able to identify the cause of the mass sickness that had stricken the town and was able to alert authorities. An estimated 1,000 people received abnormally high radiation exposure, 249 people were exposed to enough radiation to cause acute radiation poisoning, and 4 received a lethal dosage. Cleanup efforts provided by the IAEA and local government lasted months and involved the removal and disposal of hundreds of tons of topsoil, multiple houses, and countless objects that had been in the direct vicinity of the radioactive substance. At the time, this was widely considered to be one of the most disastrous nuclear accidents in history. This event is believed to have been able to be prevented though increased public education on the dangers of radioactive substances if not handled by trained professionals as well as stricter regulation on the disposal of radioactive materials.

14. The same site after removal of the contaminated rubble.

IAEA

#2 The Chernobyl Disaster

On April 26th, 1986 an explosion, caused by human and mechanical error occurred at Chernobyl Nuclear Power Plant in Pripyat Ukraine (then a part of the USSR) during a regular systems test of a Boiling Water Reactor. The resulting fallout lead to the immediate death of 31 people, the displacement of over 50,000 people, the spread of radiation to much of central and eastern Europe, and an estimated eventual death toll ranging from 50,000 to 200,000 people as a result from overexposure to radiation. An ongoing cleanup effort continues to this day, over 28 years later and the true natures of the accident's effects are only now becoming apparent to us in the form of birth mutations in plants, children, and animals. This disaster could have been prevented by stricter guidelines on those who are qualified to work in nuclear power plants, more frequent and thorough inspections by nuclear energy regulatory agencies, a safer plant design, and a pre-made and more coherent emergency action plan.

#3 The Ndrangheta Dumpings

A number of crime syndicates are believed to be involved in racketeering the improper disposal of the byproducts of nuclear energy generation, most notably the Ndrangheta (an organized crime organization from Italy) is believed to have been cooperating with the ENEA (Italian National Agency for New Technology Energy and Sustainable Economic Development) and the Somalian government to dispose of thousands of tons of toxic and radioactive waste into the Mediterranean and off the coast of Somalia. This practice is believed to continue today across the globe and has proven to be extremely difficult to combat. Measuring the effects of this dumping may be even more difficult since the exact quantity of waste dumped and its potency are largely left to speculation. Additionally, a majority of this waste is presumed to be sealed in lead casings or steel drums and is likely yet to be released.

#4 The Fukushima Daiichi Nuclear Disaster

On March 11th, 2011 Japan was hit with a tsunami caused by one of the largest earthquakes in recorded history. Over 15,000 people were killed and millions were displaced, but a possibly even more disastrous event occurred as a result. The Fukushima Nuclear Power Plant had a meltdown of 3 out of its 6 Boiling Water Reactors and began releasing high levels of radiation into the Pacific Ocean. No immediate deaths were caused, but some estimate the long term health and economic effects on the Japanese and even global population could be significant. Investigations into the plant's security protocol deemed the disaster to be the result of human error magnified by natural disasters. The plant was not able to withstand the tsunami and earthquake and failed to shut down in an efficient and safe way in order to prevent a meltdown, but had basic safety regulations been followed, and a coherent plan for a foreseeable disaster been established a meltdowns and radiation leakage could have been prevented. To this day, Japan with ample aid from the international community and the IAEA continues its attempts to contain the release of radiation. Research on the long term effects the plant has had on the Pacific and bordering countries is still very limited and largely speculation.

(Important Note: These case studies are briefings on important events that may relate to the topic and crisis. If you intend to do well in this committee I advise you do further research on these and other similar events if you intend to excel in this committee.)

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Topic I: Ensuring the Proper Handling and Disposal of the By-Products of Nuclear Power Generation

In this topic we will be discussing regulation regarding nuclear waste including how it must be tracked, transported, stored, and possibly further utilized.

There are 3 main categories that nuclear waste is divided into:

- Low-Level Waste (LLW)
- Intermediate-Level Waste (ILW)
- High-Level Waste (HLW)

Waste is classified based on radioactivity and duration of potency.

Low-level waste is typically generated in industry and hospitals. LLC is the easiest to dispose of, usually only needing shallow burials and rarely requiring shielding. Intermediate-level waste includes containment facilities, effluent, and other that come into the direct vicinity of radioactive elements. ILC is significantly more dangerous than LLC and must be shielded when disposed of. High-level waste is the most commonly produced waste in reactors, the most dangerous, and typically very hot, by far making it the most pressing issue to address when discussing radioactive waste. 12,000 metric tons of HLW is produced every year by the global production of energy through radiation, and must be shielded when being stored. Most reactors store their HLW on the reactor site, but some countries have been known to sink it to the bottom of the ocean which is largely frowned upon by the international community. Many countries have attempted to pass legislation to establish a deep geological burial site, but so far none have passed of the bids have been successful.

Resolutions in this committee should focus on fixing or improving old legislation to reduce the chance of future accidents such as those that occurred in case studies 1 and 3 and preparing an action plan to contain radiation spills in emergency situations like the one in case study 4. Delegates should be sufficiently knowledgeable in their country's domestic policy and practices and how they've interacted with other countries in the past. As always, creativity is welcome in creating solutions, but needs to stay relatively on topic and realistic to be successful.

The crisis aspect of this committee (directives and press releases) will challenge delegates to think about problems on a larger scale and finding solutions to more complex situations that react in real time. Crisis has the potential to stretch outside of the regular jurisdiction of IAEA, so delegates should be mentally prepared for that, but since this is an IAEA committee failing to excel in situations that deviate from the topic will not come with a penalty, especially for those that have never done Model UN before.

Topic II: Expanding the Global use of Nuclear Energy for the Purpose of Reducing Dependency on Fossil Fuels

It has been estimated that each year the world burns nearly 8 billion tons of coal each year and 32 billion barrels of oil resulting in 25.8 billion tons of carbon dioxide emissions from coal alone. Our current methods of energy production are far from sustainable; most estimates project our fossil fuel deposits will exhaust within the next 100 years. We are in a race against time to find and improve upon methods of energy production that can feed humanity's growing hunger for power without depleting and poisoning our environment.

It is the IAEA's firm belief that nuclear energy is that alternative. The secrets of the power of the atom have gradually been reviled in the last century, leading to nuclear power becoming the largest non-fossil fuel source of energy production in the world. However, much of nuclear energy's potential remains untapped. Nuclear power facilities are often too expensive for most countries to be able to supply the initial investment needed for infrastructure. A negative public opinion of nuclear energy, fueled by the extensive media coverage of the disasters at Fukushima and Chernobyl, has also slowed nuclear's development and expansion. International security is another concern as we have recently seen in the IAEA's recent debate regarding Iran's nuclear program.

A number of ideas and innovations in recent years have been encouraging in stimulating a switch to a more nuclear reliant global energy grid. Pressurized heavy-water reactors, thorium reactors, research and experimentation into utilizing nuclear fusion, enhanced failsafe systems, tighter regulation, and more thorough employee background checks and training among other things have brightened the future outlook for the field, but have yet to fully unlock its potential and break free of its negative connotation.

Delegates will likely face opposition from blocs that oppose their country's view on how prolific a dependence on nuclear energy should be given the risk/reward involved. Reform created by the committee should keep in mind the baselines set by millennium development goal 7 and how it can be accomplished with or without nuclear power. This topic will also require knowledge of the 4 case studies (and hopefully more from your own research!) and how they can be prevented in the future in order to continue sustainability, or how they are too much of a risk to take in order to transition to a non-fossil fuel energy source.

The crisis aspect of this topic will focus on public relations, conflict between countries, and reacting to disaster situations. Like the first topic, topic 2 may include slight deviations from the typical jurisdiction of the IAEA.

I hope this committee will fuel your passion for thinking, debating, and competing and though the trials and tribulations you will face you will find the strength to rise to the challenge of bettering yourself and the people around you.

If you have any questions about this background guide or committee, please feel free to contact myself or the other members of the RTC staff.

~Jake Hunter

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