Sophie Wruble

SPECPOL: Topic #2- Enhancing and Guaranteeing the Security of Nuclear Energy Generation

YUNMUN XXXIV

During World War II scientists aimed to harness the energy from radioactive materials as a

weapon, leading to the successful development of the atomic bomb. A 2005 study by the National

Cancer 11 Institute indicated for the population of Marshall Islands that following the numerous

nuclear tests, "... the risk of contracting cancer for those exposed to fallout was greater than one in

three."1

Two examples of safety being compromised at nuclear testing sites are: Chernobyl and Fukushima,

Japan. Both areas experienced major crises and resulted in deaths, radiation poisoning, a spike in

thyroid cancer, and a complete evacuation of the towns.<sup>2</sup>

In 1957 the "International Atomic Energy Agency (IAEA) was formed to promote the peaceful

uses of nuclear energy, provide international safeguards 12 and an inspection system to ensure

nuclear materials aren't diverted from peaceful to military uses." Due to the cost-effectiveness

and cleaner energy production (compared to fossil fuels) nuclear power has been adopted by many

countries and now is the "world's second largest source of low carbon power." Currently, 32

countries have active nuclear power plants attributing to 10% of the world's electricity.<sup>4</sup>

The nuclear sector is defined by international commerce. There are many uses for nuclear

technology; it controls the spread of disease, assists doctors in their diagnosis and treatment of

patients, and powers space exploration."<sup>5</sup>

<sup>1</sup> https://ahf.nuclearmuseum.org/ahf/location/marshall-islands/

<sup>2</sup>https://www.nei.org/resources/fact-sheets/comparing-fukushima-and-

<u>chernobyl#:~:text=The%20accident%20at%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20Fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20fukushima%20occurred,released%20after%20the%20the%20fukushima%20occurred,released%20after%20the%20the%20fukushima%20occurred,released%20after%20the%20the%20fukushima%20occurred,released%20after%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%20the%2</u>

<sup>3</sup> http://www.radiochemistry.org/history/nuclear\_timeline/50s.html

<sup>4</sup> https://world-nuclear.org/information-library/current-and-future-generation/nuclear-power-in-the-world-today.aspx

<sup>5</sup> Ibid

The United Nations supports countries in peaceful nuclear energy production and monitoring nuclear-armed states to prevent further weapons development and testing through the Nonproliferation Treaty and the Comprehensive Test Ban Treaty. International organizations like the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and IAEA regulate nuclear power to ensure safety and proper usage. UNSCEAR works to "assess and report levels and effects of exposure to ionizing radiation." The IAEA "works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security."

## Ouestions to consider:

- How can SPECPOL promote the peaceful use of nuclear energy while ensuring the safety of its applications and preventing the use of nuclear materials for military purposes?
- Should the production of nuclear plants and weapons continue despite the negative impacts, or are clean pol OL Topic 2OLenergy alternatives more beneficial?
- What policies has your country put in place to oversee, enhance, and guarantee the safety of nuclear facilities and testing procedures?

Use these questions as a guideline to begin your research but make sure not to limit yourself. You should be well researched on this topic and prepared for debate. Please be sure to represent the position of your country. YUNMUN has a zero-tolerance policy for plagiarism, please use your own work and cite the information you use. I look forward to reading your position papers and meeting you soon!

Feel free to reach out to me <a href="mail.yu.edu"><u>swruble@mail.yu.edu</u></a> with any questions or concerns. Good luck!

Sophie Wruble
Chair, SPECPOL
YUNMUN XXXIV

<sup>6</sup> https://www.unscear.org/unscear/en/about-us/index.html

<sup>&</sup>lt;sup>7</sup> https://www.iaea.org/about/overview