

Opening Statement

Lacey M

I would like to start by expanding upon a point that my partner touched upon at the beginning of his statement. Namely, I would like to address the gamut of security problems that face the operations of nuclear power plants. As our esteemed colleagues will assure you, some of the most devastating nuclear events in the world have been the direct or indirect results of design flaws and carelessness. They will attest to the fact that every day we find new ways to make the designs of nuclear reactors just a bit safer. We make it just a bit less likely that a nuclear cataclysm will take place. I find it astonishing though, just how many lives may be destroyed when our systems fail. The combination of a single overlooked design flaw coupled with a single human error can destroy thousands of lives. Is it worth the risk? I believe not.

While nuclear power may be clean in terms of greenhouse gas emissions, the waves of radiation that a single nuclear meltdown may spread can cause enough damage to affect people nations away. Radiation poisons everything: Earth, water, crops, air. It creeps into the very bones of any who brush too closely by. Look to Chernobyl. Look to the Fukushima Daiichi reactor. Many investigations have shown that the latter plant was being operated on too low of a power level when a test was being run on that fateful morning. Through one unexpected power surge and a failure of safety systems, an entire country was flooded with nuclear radiation. Not just that, the countries surrounding Russia were also flooded with this deadly pool of radiation.

Studies have shown that the radiation levels released by the Fukushima daiichi reactor are already 168 times higher than what was released by the Hiroshima atom bomb in this level 7 disaster. It is not possible to have an accident which is worse on the scale of nuclear meltdown severities. 18 square miles of the had to be cleared around the plant, in the areas that suffered devastating loss from the tidal wave.

There are so many possibilities that can't be prepared for because we haven't thought of them yet. Yet each mistake adds to the millions of lives lost to cancer. Millions of children born with dangerous and life-threatening birth defects. To marginalize these numbers is to look the other way with an inhumane sort of effort.

Closing Statement

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Before we spend time worrying about expanding our energy production processes, we should first consider improving the efficiencies of our current production processes. Energy conversion efficiency measures the amount of energy on a scale from 0-100% that is put toward the actual intended use of a machine. For instance, a typical incandescent light bulb uses around 5-10% of its energy to actually create light. That is a large amount of energy lost in heat which could be used so much more conservatively. Of course, as in fluorescent light bulbs, there have been developments to create more energy efficient processes, but so much more can be done with what we already have. We should spend our time working on preserving as much energy as we can as it moves and changes. That alone will exponentially increase the effectiveness of the nuclear power plants that we already have and decrease our need for more sources of energy, at least until we can truly compensate for inadequacies within our nuclear power plants.