The Risk of a Nuclear Accident at Zaporizhzhya is Zero

The war in Ukraine has been going on for more than 2 years now with unimaginable suffering to its people. Yet somehow the press continues to focus on the risks at Europe's largest nuclear plant, Zaporizhzhya. On April 11, 2024, the IAEA director general reported that "direct attacks against Zaporizhzhya Nuclear Power Plant marked a major escalation of the nuclear safety and security dangers in Ukraine, significantly increasing the risk of a **nuclear accident**". We respect the IAEA and the excellent work they are doing to ensure the safety and security of this plant. But words matter and should anything go wrong at the plant as a result of this terrible war, it is anything but an "accident".

Merium Webster defines accident as "an unforeseen and unplanned event or circumstance". Damage to a facility from an act of war is in no way an accident. It is a direct result of an attack, not an unforeseen circumstance.



Source: Pexels.com

Why is this important? If the concern is radioactive releases, what does it matter, accident or not? It matters, because labelling any negative outcome a nuclear accident gives the perception of industry responsibility. It suggests that nuclear plants are just not safe enough creating great risk to both people and the environment. Lack of safety – not consequence of war.

Hans Rosling discussed this in his fantastic book, "Factfulness". The press often reports on things that are "frightening" to get public attention, i.e. things that create a high level of fear — like the potential for a nuclear accident. In his book he clearly distinguishes between things that are "frightening" and things that are "dangerous". "Something frightening poses a perceived risk. Something dangerous poses a real risk." In this case, the thought of a nuclear accident is frightening, but it is war that is truly dangerous. In fact, in addition to the ongoing suffering to the people in Ukraine, the war is also creating an environmental disaster, having caused about \$60 billion in environmental damage. For example, the destruction of the Nova Kakhovka Dam has washed away vegetation, eroded riverbanks and contaminated drinking water sources with 150 tons of heavy fuel oil.

Yet somehow the fear of a nuclear event is what captures the global public's imagination. As we said in our post two years ago, this comes down to the narrative that nuclear plants are just a whole different level of risk compared to other things that can, and often do, cause serious consequences. Nothing can be further from the truth. People don't die from nuclear plant accidents. They do die from plane crashes, bombings, exploding gas from leaks and natural disasters. To date, many thousands have perished during this terrible war. Yet fear is greatest when thinking about what may happen should a nuclear plant be damaged and release radiation to the environment.

Yes, there can be consequences from attacking a nuclear plant and it is important that the plants in Ukraine are maintained and operated safely. The IAEA is doing great work in supporting plant safety and security. But one thing is for sure, should this plant be damaged, it would be the opposite of an accident – it would be an "**on purpose**". And the responsibility lies in one place alone, to those who caused the damage. What is really needed for people to feel safe is for this horrible war to come to an end.