NRC chairman says SILEX needs a careful look

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As global leaders discuss ridding the world of nuclear weapons, the chairman of the Nuclear Regulatory (NRC) Commission has acknowledged that a new laser technology— which could lead to even more global proliferation - deserves a closer examination.

Commonly known as SILEX (Separation of Isotopes by Laser Excitation), the laser technology carries significant proliferation risks because of its small size and low energy use. GE-Hitachi plans to use the technology in a fuel facility in North Carolina. The NRC must approve the license for the facility. GE-Hitachi has stated that the NRC shouldn't consider the proliferation risks associated with SILEX because the commission has never considered such issues in the past.

But NRC Chairman Gregory Jaczko, in a recent interview with National Public Radio, dismissed the claim. Jaczko said the proposed facility is "not similar to anything we've licensed in the past. So, I certainly think there may be some things we need to take a look at and make sure we've got the right approach to ensuring that kind of protection of the technology and material."

Scientific experts have warned that the proliferation of SILEX could lead to even more nuclear bombs as global efforts to reduce the weapons ramp up.

"It's potentially a proliferation game changer," said Francis Slakey, a physics professor at Georgetown University, who published a recent

article in *Nature* magazine identifying the risks of SILEX. "If this proliferates, a country could develop material for a nuclear weapon without anyone being able to detect their activity."

The American Physical Society, a leading organization of physicists, which recently released the report, Technical Steps to Support Nuclear Downsizing, also calls on the NRC to "adequately address the non-proliferation threats of new technologies in its licensing process."

More information: APS report: www.aps.org/link/downsizing

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