Session 8: Russia's Nuclear Energy

Mwita Chacha

Center for International Trade and Security

Summary

The state of Russia's nuclear energy sector was the focus of this panel. In his opening remarks, Leonid Ryabinkhin acknowledged that Russia has been a pioneer in the peaceful use of nuclear energy. However, recent events such as the accident at Fukushima and the renewed interest in nuclear energy through the nuclear renaissance raises the need to assess the current state of Russia's nuclear energy sector, particularly nuclear energy development. Three panelists addressed various facets of the Russian nuclear energy sector: its development and evolution over the years, its improvement of safety and production capacities, and the importance of US-Russian relations to global nonproliferation efforts.

Viacheslav Amirov commenced with a brief overview of Russia's nuclear industry by noting that although Russia has been a pioneer in the peaceful use of nuclear energy, it has experienced various problems over the years including the Chernobyl accident in the 1980s and economic downturn following the collapse of the Soviet Union. However, there has been a revival in nuclear energy in Russia and Russia is now considered a pioneer in technological innovation for production and supply of nuclear energy. Currently, Russia maintains 32 nuclear power plants that account for 15% of all of Russia's electricity. However, Russia is developing even more efficient nuclear power generating technology that should boost the share of electricity generated from nuclear reactors to 23% by the year 2020.

Mikhail Kobrinskiy provided a detailed assessment of nuclear safety in Russia and its evolution over the years. Safety issues have gained prominence following major accidents such as the Three Mile Island accident in the United States and Chernobyl in Russia. Such

events have led to more attention being paid to nuclear safety issues internationally, leading the development of a nuclear security culture. Nuclear security culture takes into serious consideration the human element in nuclear energy and the need to develop and enhancing human capacity to improve nuclear power plant safety. Nuclear accidents are not only caused by natural disasters such as Fukushima in Japan, but also human error that can be remedied through educational and various other programs that target individuals who deal with nuclear materials. Through training of those who deal with nuclear and radiological materials, security culture would be improved. This has been the case in Russia whereby the government and industrial actors have developed safety mechanisms that address both group and individual perceptions of nuclear safety. Additionally, recent technological advances that Russia has been at the forefront of have resulted in more safe and efficient power generation technologies through public-private initiatives.

Jonathan George however brought Russia's nuclear energy industry under the context of US-Russia relations. The resetting of relations that the Obama administration initiated are premised on enhancing cooperation between the United States and Russia in various policy areas including global nonproliferation efforts to combat the likely threat of nuclear terrorism while promoting the peaceful use of nuclear energy. The renewal and sustenance of US-Russia relations is key to the enforcement and durability of multilateral nonproliferation regimes such as the NPT.