



# **Nuclear, Missile & Space Digest**

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## India

### **Investment in Atomic Energy**

Press India Bureau, September 16, 2020

There are presently twenty-two (22) reactors with a capacity of 6780 MW in operation in the country. In addition, nine (9) reactors, with a total capacity of 6700 MW are presently under construction. The Government has also accorded administrative approval and financial sanction for twelve (12) more reactors with an aggregate capacity of 9000 MW in June, 2017. The Capital investment for the nuclear power projects is being funded with a debt to equity ratio of 70:30. The equity part is funded from internal resources of Nuclear Power Corporation of India Limited (NPCIL) and Government Budgetary Support.

The present policy (Consolidated FDI Policy of Government) puts atomic energy in the list of prohibited sectors. However, there is no restriction on FDI in the nuclear industry for manufacturing of equipment and providing other supplies for nuclear power plants and related other facilities.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1655136>

### **New Atomic Power Plants**

Press India Bureau, September 16, 2020

During the last three years and the current year, the Government has accorded administrative approval and financial sanction for construction of twelve (12) nuclear power reactors - ten (10) indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) to be set up in fleet mode & two (02) units of Light Water Reactors (LWRs) to be set up in cooperation with Russian Federation to enhance nuclear power capacity in the country.

Presently, two public sector companies of the Department of Atomic Energy, Nuclear Power Corporation of India Limited (NPCIL) and BharatiyaNabhikiyaVidyut Nigam Limited (BHAVINI) are involved in nuclear power generation. There is no proposal under consideration at present to permit non-Government sector in the area of nuclear power generation. However, the private sector participates in the nuclear power sector by providing core reactor components, equipment, materials and services in areas that include construction, fabrication & erection of equipment, piping, electrical, instrumentation, consultancy, auxiliary and logistical services.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1655139>

### **32 Earth Observation Sensors currently in orbit, providing space based information**

Press India Bureau, September 17, 2020

The Union Minister of State (Independent Charge), Development of North Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh said in a written reply in Rajya Sabha today that there are 32 earth observation sensors with advanced capabilities, currently in orbit, providing space-based information. Five earth observation satellites and five communication payloads were realized since January, 2018. Information support was provided for all the major disaster events viz. floods, cyclones and forest fires occurred since January 2020.

About 2,51,000 value added data products were disseminated to users since April 2020. The value added products comprise of geophysical & remote sensing data products derived using the data from meteorological, oceanographic and land remote sensing satellites. The total number of satellites launched by ISRO that are no longer operational (life ended) and currently in orbit are 47 (26 satellites are in LEO/Low-Earth-Orbit and 21 are in GEO/Geosynchronous-Equatorial-Orbit).

<https://pib.gov.in/PressReleasePage.aspx?PRID=1655665>

### **Government to set up Neutrino Observatory in the country: Dr.Jitendra Singh**

Press India Bureau, September 21, 2020

Union Minister of State (Independent Charge), Development of North Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh today said in a written reply in Lok Sabha that Government has a proposal to set up Neutrino Observatory in the country.

India based Neutrino observatory (INO) will observe neutrinos produced in the atmosphere of the Earth. This observation will tell us more about the properties of neutrino particles, whose main source is the Sun and the Earth's atmosphere. The neutrino detector will be a magnetized iron calorimeter, which will be the heaviest one made by any country. The site identified is in Bodi West Hills, in Theni district, Tamil Nadu.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1657311>

**Indian Space Promotion and Authorisation Centre (IN-SPACe) to promote private investment and innovation in the space sector: Dr Jitendra Singh**

Press India Bureau, September 22, 2020

The Union Minister of State (Independent Charge), Development of North Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh said in a written reply to Rajya Sabha that the Government has launched the Indian Space Promotion and Authorisation Centre (IN-SPACe) to promote private investment and innovation in the space sector.

IN-SPACe will facilitate and support the Private Sector in the following ways:

- i. Provide technical support
- ii. Share cash intensive facilities
- iii. Allow to establish temporary facilities in DOS premises
- iv. Allow to bid for requirements coming from NSIL
- v. Partner in science and space exploration missions

<https://pib.gov.in/PressReleasePage.aspx?PRID=1657766>

**Prototype Fast Breeder Reactor (PFBR) likely to be commissioned in 2022: Dr Jitendra Singh  
PFBR will add 500 MW of electrical power to the national grid.**

Press India Bureau, September 22, 2020

The Union Minister of State (Independent Charge), Development of North Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space, Dr Jitendra Singh said in a written reply to Rajya Sabha that Prototype Fast Breeder Reactor (PFBR) being constructed by Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI) is expected to get commissioned by October 2022. On completion of commissioning, PFBR will be adding 500 MW of electrical power to the national grid.

Presently there are technical issues which have resulted in delay in commissioning of PFBR. In the last three years, while commissioning activities of the various Systems, Structures & Equipment of PFBR are progressing, a large number of technical challenges as well as design inadequacies (owing to the first-of-a-kind status of the PFBR) are being encountered at each stage, thereby resulting into delay in commissioning. These issues are being attended in close coordination with the designers and the experts within Department of Atomic Energy (DAE).

<https://pib.gov.in/PressReleasePage.aspx?PRID=1657768>

## **Terrorism, clandestine nuclear trade constitute Pakistan's only 'crowning glory', says India at UN**

Firstpost, September 26, 2020

The "only crowning glory" that Pakistan has to show to the world for the last seven decades is terrorism, ethnic cleansing, majoritarian fundamentalism and clandestine nuclear trade, India said in a scathing response on Friday, slamming Pakistani Prime Minister Imran Khan's "incessant rant" and "venom" in the UN General Assembly.

Slamming Pakistan for its record as a nation, Vinito said, "The only crowning glory that this country has to show to the world for the last 70 years is terrorism, ethnic cleansing, majoritarian fundamentalism and clandestine nuclear trade."

<https://www.firstpost.com/india/terrorism-clandestine-nuclear-trade-constitute-pakistans-only-crowning-glory-says-india-at-un-8853381.html>

## **1998 Nuclear tests, Kargil: How Jaswant Singh redefined India vis-à-vis US, world**

Shubhajit Roy

The Indian Express, September 28, 2020

On a winter evening of December 1999, I had the first encounter with the then External Affairs Minister Jaswant Singh. As a city reporter, I managed to get inside a private meeting between Singh and the relatives of the hijacked passengers of the IC-814 plane. As one of the passengers made an impassioned plea, "Sir, please do something for the sake of our children", Singh told them, "If by keeping my son as the hostage, I could release those passengers, I am willing to offer my son."

What I did not know back then was that he had even discussed this with his son, a fact Singh recorded in one of his books. That Singh's long and eventful career as India's Minister for External Affairs, Defence and Finance is remembered for this Kandahar hijack episode, which culminated with his accompanying the three terrorists, including Masood Azhar, is something that rankled him.

<https://indianexpress.com/article/india/1998-nuclear-tests-kargil-how-jaswant-singh-redefined-india-vis-a-vis-us-world-6618425/>

## China

### **Long March rocket sends 9 satellites into orbit from sea**

China Daily, September 16, 2020

China launched nine satellites on Tuesday with a Long March 11 solid-propellant carrier rocket that blasted off from a ship in the Yellow Sea, achieving the country's first commercial launch at sea. Developed by Changguang Satellite Technology in Changchun, Jilin province, these satellites, each weighing about 42 kilograms, are tasked with providing remote-sensing products to users in industries such as agriculture, forestry, land resources and environmental protection.

The Long March 11's first launch from a ship took place in the Yellow Sea in June 2019 and put seven satellites into orbit. It was China's first space mission launched at sea. That mission was more experimental than commercial as its major task was to test and verify seaborne launch technologies and equipment rather than serve a commercial purpose, said Jin Xin, the rocket's deputy project manager. Therefore, Tuesday's launch should be seen as the rocket's, and China's, first sea-based commercial flight operation, he noted. In addition to its commercial purpose, the mission also helped to optimize seaborne launch procedures and improve the safety and reliability of those operations, paving the way for future sea-based launches that will be conducted frequently, Jin said. The new type will be able to send a 2-ton satellite into low orbit. It is expected to perform its first launch at sea around 2022, they said. China is now the only nation that is independently able to conduct sea-based space launches.

[http://english.chinamil.com.cn/view/2020-09/16/content\\_9903603.htm](http://english.chinamil.com.cn/view/2020-09/16/content_9903603.htm)

### **Seaborne rocket launches key to future of China's space programme, experts say**

Minnie Chan

South China Morning Post, September 16, 2020

Seaborne rocket launches like the one that shot nine satellites into orbit on Tuesday are set to become a major feature of China's space programme as it seeks to keep pace with the United States and industry leaders like SpaceX, experts said. Chinese state newspaper Global Times reported that a Long March-11 rocket carrying new satellites for the Jilin-1 remote sensing constellation lifted off from a floating platform in the Yellow Sea on Tuesday morning. Observers said the development of a seaborne version of the Long March rocket was in line with industry trends, as borne out by SpaceX's chief executive Elon Musk, who said in June the company planned to build more ports to accommodate them.

<https://www.scmp.com/news/china/military/article/3101819/seaborne-rocket-launches-key-future-chinas-space-programme>

### **China-India border dispute: PLA raised combat readiness after exchange of gunfire, sources say**

Minnie Chan

South China Morning Post, September 16, 2020

Chinese troops on the country's disputed border with India raised their combat readiness to the second-highest possible last week after an exchange of gunfire, but the alert was lowered after a meeting of the nations' foreign ministers, military sources said. The increase, to second level, meant more weapons and troops were deployed to the front line, and training exercises were ramped up for commanders, officers and soldiers, a military source told the South China Morning Post. The last time such a high level was employed by troops in the restive region was in 1987, when a skirmish in the Sumdorong Chu valley pushed the two sides to the brink of war, said the person, who asked not to be named. The People's Liberation Army (PLA) has four grades of combat readiness. The first level is used only when military leaders are convinced an armed conflict is inevitable. The PLA's Central Theatre Command said on Weibo on September 8 – the day after the exchange of gunfire – that they had received orders to deploy more weapons and troops to the plateau, and begin a series of physical and technical exercises. "Since the combat readiness level was raised, commanders, officers and soldiers have been working around the clock, carrying out extra training and drills," the source said. "The PLA mobilised more troops and weapons systems to the Line of Actual Control [the formal name for the disputed China-India border] in preparation for the worst."

<https://www.scmp.com/news/china/military/article/3101663/china-india-border-dispute-pla-raised-combat-readiness-after>

### **Shandong to establish new rocket factory**

Zhao Le

China Daily, September 18, 2020

The State-owned space conglomerate China Aerospace Science and Technology Corp is working with local authorities in Shandong province to set up a manufacturing complex for solid-propellant carrier rockets, according to a project insider. Jin Xin, deputy project manager of the Long March 11 solid-propellant rocket at the China Academy of Launch Vehicle Technology, said on Wednesday in

Shandong's Yantai that his academy and the city government of Haiyang, a city administered by Yantai, are cooperating to construct the 800-hectare complex that will be capable of producing 20

solid-propellant rockets each year. The Beijing-based academy is China's dominant maker of carrier rockets and a subsidiary of China Aerospace Science and Technology Corp. "It will be tasked with manufacturing our Long March 11 and Smart Dragon series solid-fuel rockets," he said. "Construction work is underway and is expected to be done before May 2021." The complex will be able to make and test all types of major parts on a solid-propellant rocket, including its engines. Furthermore, it will also hold satellite production and testing facilities, according to Jin. The project is intended to facilitate sea-based launch missions and nurture local space-related industries in Shandong. It was initiated by the provincial and Yantai governments in June 2019 after a Long March 11 carried out China's first seaborne launch from a submersible in the Yellow Sea that month, Jin said. On Tuesday morning, China conducted its second sea-based launch, firing a Long March 11 rocket from a ship in the Yellow Sea to deploy nine small satellites.

<https://global.chinadaily.com.cn/a/202009/18/WS5f640a3ca31024ad0ba7a4ab.html>

### **China issues white paper on its armed forces' participation in UN peacekeeping operations**

Xinhua, September 18, 2020

China on Friday released a white paper on the participation of the country's armed forces in the United Nations (UN) peacekeeping operations. The white paper, titled "China's Armed Forces: 30 Years of UN Peacekeeping Operations," was released by the State Council Information Office.

[http://www.xinhuanet.com/english/2020-09/18/c\\_139378152.htm](http://www.xinhuanet.com/english/2020-09/18/c_139378152.htm)

### **Space science and technology take center stage in Fujian**

Zhao Lei

China Daily, September 18, 2020

The 2020 China Space Conference opened in Fuzhou, capital of Fujian province, on Friday morning. The four-day conference is hosted by the Chinese Society of Astronautics and the China Space Foundation and will consist of 16 events such as forums and themed exhibitions. High-ranking officials from the Fujian provincial and Fuzhou city governments, executives from State-owned space contractors and leaders from the private space sector are taking part in the event, the largest of its kind in China this year.

At the opening ceremony, Chinese researchers announced 10 most challenging subjects in space science and technology such as nuclear-powered spacecraft, heat-resistant materials for reusable aerospace vehicle and space debris clearance. In addition, State-owned space enterprises inked agreements with Fujian province on cooperation in aviation and space industries.



<https://www.chinadaily.com.cn/a/202009/18/WS5f647235a31024ad0ba7a76a.html>

### **China launches new satellite to monitor ocean environment**

Xinhua, September 21, 2020

China on Monday sent a new ocean-monitoring satellite into orbit from the Jiuquan Satellite Launch Center in Northwest China. A Long March-4B rocket carrying the Haiyang-2C (HY-2C) satellite took off at 1:40 pm (Beijing Time), according to the launch center. The HY-2C, the country's third ocean dynamic environment satellite, can provide all-weather and round-the-clock observation of wave height, sea surface height, wind and temperature. Onboard equipment enables the new satellite to provide information on the identification of vessels, and to receive, store and transmit buoy measurement data in China's offshore and other marine areas.

Developed by the China Aerospace Science and Technology Corporation, the HY-2C will form a network with the previous HY-2B and subsequent HY-2D, scheduled for launch next year, to carry out high-precision maritime environment monitoring. The planned satellite network will be capable of carrying out 80 percent of the world's sea surface wind monitoring within six hours, said sources with the China National Space Administration.

<https://global.chinadaily.com.cn/a/202009/21/WS5f684c0da31024ad0ba7ace3.html>

### **Mars probe makes midcourse maneuver**

Zhao Lei

China Daily, September 22, 2020

China's Tianwen 1 Mars probe carried out its second midcourse correction maneuver on Sunday night, according to the China National Space Administration. The robotic spacecraft ran its four 120-Newton thrusters for 20 seconds at around 11 pm after receiving control signals from its ground controllers, the administration said in a statement on Monday morning. By Monday morning, Tianwen 1 had traveled 160 million kilometers in an Earth-Mars transfer trajectory toward the red planet and was nearly 19 million km from Earth, it added. China launched Tianwen 1, the country's first independent

Mars mission, on July 23 at the Wenchang Space Launch Center in Hainan province, opening the nation's planetary exploration program.

<https://global.chinadaily.com.cn/a/202009/22/WS5f683e9ea31024ad0ba7acab.html>

### **Lunar mission due by end of this year**

Zhao Lei

China Daily, September 22, 2020

Chang'e 5, the next mission in China's lunar exploration program, will demonstrate and test the country's technological and engineering capabilities in space, according to a key figure in the project. Yu Dengyun, deputy chief designer of China's lunar exploration program, said on Sunday that Chang'e 5 will be launched by a Long March 5 heavy-lift carrier rocket at the Wenchang Space Launch Center in Hainan province by the end of 2020. The 8.2-metric-ton robotic probe has four components—an orbiter, lander, ascender and re-entry module. After the probe reaches lunar orbit, the components will separate into two parts, with the orbiter and re-entry module remaining in orbit while the lander and ascender descend to the lunar surface.

The lander and ascender will make a soft landing and then get to work on tasks such as using a drill to collect underground rocks and a mechanical arm to gather lunar soil. After the surface operations are completed, the ascender's rocket will lift it to lunar orbit to dock with the re-entry module. It will transfer lunar samples to the module, which will carry them back to Earth.

<https://global.chinadaily.com.cn/a/202009/22/WS5f693171a31024ad0ba7ae1e.html>

### **China's space-tracking ship departs for new monitoring mission in Pacific Ocean**

Xinhua, September 24, 2020

Space-tracking ship Yuanwang-5 has departed from a port in east China's Jiangsu Province on Thursday for a maritime monitoring mission in the Pacific Ocean. This is the third voyage of the ship this year. It will spend more than 100 days at sea and is scheduled to return in early 2021. Yuanwang 5 has spent 143 days at sea in 2020 carrying out four maritime monitoring missions, providing support for China's first Mars probe and the APSTAR-6D telecommunication satellite.

[http://www.xinhuanet.com/english/2020-09/24/c\\_139393936.htm](http://www.xinhuanet.com/english/2020-09/24/c_139393936.htm)

### **China's Chang'e-4 probe switches to dormant mode**

Xinhua, September 24, 2020

The lander and the rover of the Chang'e-4 probe have been switched to dormant mode for the lunar night after working stably for a 22nd lunar day, according to the Lunar Exploration and Space Program Center of the China National Space Administration. The lander was switched to dormant mode at 7:30 a.m. on Thursday (Beijing Time) as scheduled, and the rover, Yutu-2 (Jade Rabbit-2), at 11:18 p.m. on Wednesday, said the center on its official social media platform accounts.

A lunar day is equal to 14 days on Earth, and a lunar night is the same length. The Chang'e-4 probe, switching to dormant mode during the lunar night due to the lack of solar power, has survived 630 Earth days on the far side of the moon as of Thursday, and the rover has traveled 547.17 meters. During the 22nd lunar day, Yutu-2 explored an impact crater about 1.3 km northwest of the landing site.

[http://www.xinhuanet.com/english/2020-09/24/c\\_139394069.htm](http://www.xinhuanet.com/english/2020-09/24/c_139394069.htm)

### **Nation demonstrates third-generation nuclear reactor CAP1400**

Huang Lanlan and Chu Daye

Global Times, September 28, 2020

The research and development work for China's domestic third-generation nuclear reactor project called CAP1400 (Guo He One) has been completed, State Power Investment Corp (SPIC) announced on Monday. The US-launched trade war and Washington's technological restrictions on Chinese companies won't contain the development of the advanced CAP1400, SPIC said at a press conference on Monday. Based on the third-generation nuclear technology AP1000, imported from the US in 2007, CAP1400 has made great technological innovations through 12 years of hard work by more than 26,000 Chinese technology engineers, said Zheng Mingguang, chief designer of CAP1400 nuclear reactors.

Equipment is also essential to the sustainable development of nuclear projects, apart from the technologies. Some 90 percent of CAP1400's equipment is domestically made, with all its key parts and materials including the main pump being domestically designed and produced, Zheng said. CAP1400 has broken overseas technology monopolies in many areas and owns independent intellectual property and export rights, said Lu Hongzao, assistant general manager of SPIC. Compared with second-generation reactor, it extends the non-manual intervention time from 30 minutes to 72 hours, and dramatically improves safety performance against natural disasters including earthquakes and floods by 100 times, Lu said. SPIC is promoting the Guo He One brand for export. It is discussing potential partnerships with countries including Turkey and South Africa, Hao Hongsheng, general manager of the SPIC's nuclear energy department, told the Global Times

on Monday, saying the technology will be competitive in the global market with relatively high degree of safety and low costs.

<https://www.globaltimes.cn/content/1202353.shtml>

## Pakistan

### **Pakistan benefitting immensely from use of nuclear technology: PAEC Chairman**

Pakistan Observer, September 23, 2020

Pakistan is benefitting immensely from the use of nuclear technology, this was stated by Chairman of the PAEC while addressing the 64th IAEA General Conference being held in Vienna. He said that Pakistan has the mutually beneficial relationship with IAEA. Due to the Covid-19 pandemic, many delegates are attending the event through video link. During the first day of the Conference, Director General IAEA Rafael Mariano Grossi highlighted the role of the IAEA in the monitoring and verification of nuclear activities across the globe. He also highlighted various steps taken by the IAEA to help Member States contain the spread of COVID-19 such as providing testing kits etc.

In a video recorded national statement, Chairman Pakistan Atomic Energy Commission Mr. Muhammad Naeem congratulated Ambassador Azzeddine Farhane on his election to become the President of the 64th GC and assured him and the IAEA of Pakistan's full support and cooperation. Mr. Muhammad Naeem stated that as a clean, affordable and reliable source, nuclear energy can play a key role in fighting climate change and achieving Sustainable Development Goals (SDGs). He told the audience that two 1100 MWe Nuclear Power Plants are near completion and are expected to be connected to the national grid by the next year. Chairman PAEC highlighted the role of PAEC in generating electricity through nuclear power plants, while also helping Pakistan attain socio-economic development goals outlined by the United Nations Sustainable Development Goals (SDGs) through application of nuclear technology in diverse fields like Agriculture, Healthcare, Engineering and Manufacturing, Human Resource Development and many more.

<https://pakobserver.net/pakistan-benefitting-immensely-from-use-of-nuclear-technology-paec-chairman/>

### **Pakistan's Chashma 4 officially accepted**

World Nuclear News, September 28, 2020

A ceremony has been held to mark the final official acceptance of unit 4 at the Chashma nuclear power plant in Pakistan's Punjab province. Constructed by China National Nuclear Corporation

(CNNC), the unit is China's fourth overseas nuclear power unit. Chashma unit 4 was connected to the grid on 29 June, 2017. The Chinese-supplied pressurised water reactor (PWR) is the second of two CNP-300 units to enter service at the site, following unit 3 which entered commercial operation in December 2016. The Chashma site - also referred to as Chasnupp - is home to two Chinese-supplied 300 MWe PWRs as well: unit 1, in commercial operation since 2000, and unit 2, since 2011.

For the final acceptance ceremony, held at Chashma on 23 September, CNNC set up video connections at construction subsidiary China Zhongyuan Engineering Company's headquarters in Beijing and at the Pakistan Atomic Energy Commission (PAEC) headquarters in Islamabad. Participants in the ceremony included PAEC Chairman Muhammad Naeem and CNNC President Gu Jun. CNNC said China and Pakistan have maintained a strong partnership in the nuclear power sector since the two countries signed an agreement in 1986 to facilitate the transfer of civil nuclear technology.

<https://www.world-nuclear-news.org/Articles/Pakistans-Chashma-4-officially-accepted>

## USA

### **U.S. plans to enforce U.N. sanctions on Iran with its own action**

Arshad Mohammed, Michelle Nichols

Reuters, September 16, 2020

The United States said on Wednesday it plans to impose sanctions on those who violate a U.N. arms embargo on Iran, which Washington says will now stay in place instead of expiring in October as agreed under a 2015 nuclear deal. U.S. Special Representative for Venezuela and Iran Elliott Abrams said Washington could deny access to the U.S. market to anyone who trades in weapons with Iran, which President Donald Trump's administration accuses of seeking to develop nuclear weapons.

"It's like pulling a trigger and no bullet comes out," a senior U.N. Security Council diplomat said on condition of anonymity. "There will be no snapback, the sanctions will remain suspended, the JCPOA (nuclear deal) will remain in place." Asked if Washington is "making concrete plans now for secondary sanctions" to enforce the arms embargo, Abrams told reporters: "We are, in many ways, and we will have some announcements over the weekend and more announcements on Monday and then subsequent days next week."

<https://www.reuters.com/article/us-usa-britain-iran/us-plans-to-enforce-un-sanctions-on-iran-with-its-own-action-idUSKBN2672UE>

### **GA delivers HALEU-fuelled reactor concept for Mars mission**

World Nuclear News, September 17, 2020

A design concept for a nuclear thermal propulsion (NTP) reactor to power future astronaut missions to Mars has exceeded key performance parameters and optimised the reactor for manufacturability, General Atomics Electromagnetic Systems (GA-EMS) has announced. The reactor's features include a compact core thanks to the use of high-assay low-enriched uranium (HALEU) fuel.

NTP systems pump a liquid propellant - such as hydrogen gas - through a reactor core. The heat released by uranium fission heats the propellant, converting it into a gas, which is expanded through a nozzle to produce thrust. According to the US Department of Energy NTP rockets are more energy dense than chemical rockets and twice as efficient. They also offer greater flexibility for deep space missions, and could reduce travel times to Mars by up to 25%, although chemical rockets would still be used to launch missions from Earth's surface as NTPs are not designed to have sufficient thrust to do this. GA-EMS President Scott Forney said the company is uniquely positioned to develop and deliver a cost-effective, safe NTP reactor system to progress future space missions. "This is an exciting effort that directly aligns with our 60+ years of nuclear energy research and development, including nuclear reactor design and deployment and our expertise in space systems," he said.

<https://www.world-nuclear-news.org/Articles/GA-delivers-HALEU-fuelled-reactor-concept-for-Mars>

### **Trump plans executive order to punish arms trade with Iran - sources**

Arshad Mohammed and Michelle Nichols

Reuters, September 17, 2020

U.S. President Donald Trump plans to issue an executive order allowing him to impose U.S. sanctions on anyone who violates a conventional arms embargo against Iran, four sources familiar with the matter said on Thursday. The sources, who spoke on condition of anonymity, said the executive order was expected to be issued in the coming days and would allow the president to punish violators with secondary sanctions, depriving them of access to the U.S. market. The White House did not immediately respond to a request for comment.

The proximate cause for the U.S. action is the impending expiry of a U.N. arms embargo on Iran and to warn foreign actors - U.S. entities are already barred from such trade - that if they buy or sell arms to Iran they will face U.S. sanctions. Under the 2015 nuclear deal that Iran struck with six major powers - Britain, China, France, Germany, Russia and the United States - the U.N. conventional arms embargo is to set to expire on Oct. 18, shortly before the Nov. 3 U.S. election.

<https://uk.reuters.com/article/uk-iran-usa-arms-exclusive/exclusive-trump-plans-executive-order-to-punish-arms-trade-with-iran-sources-idUKKBN26830A>

### **In bumpy U.N. dealings, Trump found backing on North Korea, isolation on Iran**

Michelle Nichols

Reuters, September 18, 2020

Though famously skeptical of the United Nations, U.S. President Donald Trump harnessed its collective power to impose crushing sanctions on North Korea in a bid to start talks with Pyongyang, but faces frustration over a similar push on Iran. While the U.N. Security Council was unified on North Korea, there is almost total opposition to the Trump administration's assertion that it has triggered a return of all U.N. sanctions on Iran, using a process agreed under a 2015 nuclear deal with Tehran that Washington quit two years ago.

It will be the fourth U.N. speech by Trump, who is seeking re-election on Nov. 3 and espouses an "America first" approach often at odds with the multilateralism that governs the world body. Diplomats gasped during his debut when he threatened "fire and fury" on North Korea and laughed the second year when he boasted about his accomplishments. Last year he denounced Iran's "bloodlust," but said there was a path to peace.

<https://www.reuters.com/article/us-usa-trump-un/in-bumpy-u-n-dealings-trump-found-backing-on-north-korea-isolation-on-iran-idUSKBN2690GL>

### **US seeks to pressure Russia into nuclear weapons treaty concessions before election**

Kylie Atwood

CNN, September 18, 2020

The Trump administration is threatening Russia that they could increase the cost of extending the one remaining nuclear weapons treaty between the two countries if Moscow does not commit to meeting US demands, including agreeing to stronger verification measures, before the American presidential election in November. The two countries have spent months negotiating over the renewal of the New START nuclear weapons treaty. Moscow has said it is open to renewing it for five years, while the Trump administration is seeking a new framework and will only renew the treaty if Russia makes additional commitments.

"What we have suggested to the Russians in terms of the way ahead is -- in our view precisely that the Russians have a choice to make," Marshall Billingslea, the top Trump administration nuclear negotiator, told CNN. "But they may find the price of admission goes up after November." The

Trump administration assesses that Russia is "desperate" to uphold New START, and that they will be willing to make concessions in order to keep it in place. While the US has already made significant asks of Moscow, Billingslea said "there is a lot more we could demand." He added that the US could begin "including a lot of the other bad behavior that the Russians are engaged in around the world" into the nuclear negotiations. He didn't say what Russian behavior he was referring to.

<https://edition.cnn.com/2020/09/18/politics/us-russia-nuclear-treaty/index.html>

### **U.S. says U.N. sanctions on Iran to be reimposed Saturday. What does that mean?**

Michelle Nichols

Reuters, September 19, 2020

U.S. President Donald Trump's administration says that (2000 EDT/0000 GMT Sunday) all United Nations sanctions on Iran have to be restored and a conventional arms embargo on the country will no longer expire in mid-October. But 13 of the 15 U.N. Security Council members, including long-time U.S. allies, say Washington's move is void and diplomats say few countries are likely to reimpose the measures, which were lifted under a 2015 deal between world powers and Iran that aimed to stop Tehran developing nuclear weapons.

Three senior Iranian officials have told Reuters that Iran's leadership is determined to remain committed to the nuclear deal, hoping that a victory by Trump's political rival Joe Biden in the Nov. 3 election will salvage the pact. Biden, who was vice president when the Obama administration negotiated the accord, said he would rejoin the deal if Iran first resumed compliance. "If Iran returns to strict compliance with the nuclear deal, the United States would rejoin the agreement and build on it, while working with allies to push back on Iran's destabilizing actions," Biden campaign spokesman Andrew Bates said.

<https://in.reuters.com/article/idINL1N2GF0XQ>

### **U.S. announces new sanctions on Iran defense ministry and others**

Reuters, September 21, 2020

The Trump administration on Monday announced new sanctions against Iran's defense ministry and others involved in Tehran's nuclear and weapons program to support U.S. assertion that all U.N. sanctions against Tehran are now restored, a move key allies such as the Europeans dispute. U.S. Secretary of State Mike Pompeo, flanked by other top members of President Donald Trump's



national security team, also told reporters Washington had imposed new sanctions on Venezuelan President Nicolas Maduro, who has forged closer ties between Caracas and Tehran.

<https://in.reuters.com/article/idINKCN26C2K5>

### **US Space Force Deploys to Vast New Frontier: Arabian Desert**

Voice of America, September 21, 2020

The newly formed U.S. Space Force is deploying troops to a vast new frontier: the Arabian Peninsula. Space Force now has a squadron of 20 airmen stationed at Qatar's Al-Udeid Air Base in its first foreign deployment. The force, pushed by President Donald Trump, represents the sixth branch of the U.S. military and the first new military service since the creation of the Air Force in 1947. It has provoked skepticism in Congress, satire on Netflix, and, with its uncannily similar logo, "Star Trek" jokes about intergalactic battles.

Future wars may be waged in outer space, but the Arabian Desert already saw what military experts dub the world's first "space war" — the 1991 Desert Storm operation to drive Iraqi forces from Kuwait. Today, the U.S. faces new threats in the region from Iran's missile program and efforts to jam, hack and blind satellites. "We're starting to see other nations that are extremely aggressive in preparing to extend conflict into space," Col. Todd Benson, director of Space Force troops at Al-Udeid, told The Associated Press. "We have to be able to compete and defend and protect all of our national interests." In a swearing-in ceremony earlier this month at Al-Udeid, 20 Air Force troops, flanked by American flags and massive satellites, entered Space Force. Soon several more will join the unit of "core space operators" who will run satellites, track enemy maneuvers and try to avert conflicts in space.

<https://www.voanews.com/usa/us-space-force-deploys-vast-new-frontier-arabian-desert>

### **Bill would create new federal research program for nuclear waste disposal**

Teri Sforza

The OCR, September 21, 2020

In Europe and Asia, spent nuclear fuel is routinely recycled so it can be used again — which cuts down on how much high-level waste must eventually be stored. In the U.S., spent fuel is discarded with more than 90 percent of its usable material still intact, filling up “beachfront nuclear waste dumps” like the one at San Onofre.

A federal bill that would pump a half-billion dollars into America's long-stalled effort to find a permanent home for such waste would nudge reprocessing of spent fuel back on the table and prod officials toward big-picture solutions. The Spent Nuclear Fuel Solutions Research and Development Act, by Rep. Mike Levin, D-San Juan Capistrano, would create, among many other things, "an advanced fuel cycle research, development, demonstration, and commercial application program" at the U.S. Department of Energy. The program would be charged with investigating improvements to the fuel cycle, advanced reactor concepts "while minimizing environmental and public health and safety impacts," and much-needed storage options, from dry casks to deep geological boreholes. Boreholes have long been considered the single best method to isolate nuclear waste for the long haul, but efforts have been plagued by opposition from communities unwilling to be home to the nation's nuclear waste.

<https://www.ocregister.com/2020/09/21/bill-would-create-new-federal-research-program-for-nuclear-waste-disposal/>

### **U.S. imposes Iran sanctions, says U.N. penalties resume despite skepticism**

Arshad Mohammed and Humeyra Pamuk

Reuters, September 21, 2020

The United States on Monday slapped new sanctions on Iran's defense ministry and others involved in its nuclear and weapons program to support the U.S. assertion that all U.N. sanctions against Tehran are now restored, which key European allies as well as Russia and China reject. Iran said the new U.S. sanctions, which targeted 27 Iranian entities and people in the nuclear, missile and conventional arms sectors, would have no effect and accused the United States of seeking publicity.

The latest sanctions on the oil-exporting nation include a new executive order signed by President Donald Trump targeting those who buy or sell Iran conventional arms that was previously reported by Reuters. U.S. Secretary of State Mike Pompeo told reporters Washington had put new sanctions on Venezuelan President Nicolas Maduro under the order, accusing Iran and Venezuela of having worked "to flout the U.N. arms embargo" for nearly two years.

<https://www.reuters.com/article/us-usa-iran-idUSKCN26C26E>

### **U.S. set to announce new sanctions tied to Iran arms.**

Reuters, September 21, 2020

The Trump administration is set to announce on Monday new sanctions on people and entities involved in Iran's nuclear, missile and conventional arms programs, to support its assertion that all U.N. sanctions against Tehran are now resumed, a move key allies such as the Europeans dispute.

Secretary of State Mike Pompeo is scheduled to hold a news conference at 11 a.m. EDT at the State Department along with National Security Advisor Robert O'Brien and several top cabinet members. Treasury Secretary Steven Mnuchin, Defense Secretary Mark Esper, Secretary of Commerce Wilbur Ross as well as U.S. Ambassador to United Nations Kelly Craft will be joining Pompeo at the news conference which the agency said will be about 'on Iran Snapback Sanctions.'

<https://in.reuters.com/article/idINL5N2GI46T>

### **PSE&G's \$1 billion New Jersey energy efficiency plan approved**

Scott DiSavino

Reuters, September 23, 2020

New Jersey regulators on Wednesday approved Public Service Electric and Gas Co's (PSE&G) plan to invest \$1 billion on energy efficiency programs over the next three years. Parent company Public Service Enterprise Group Inc (PSEG) PEG.N Chief Executive Ralph Izzo told Reuters the investments would cut customer bills by about \$1 billion and stimulate economic growth by creating up to 4,300 jobs that will help the state recover from the impact of the COVID-19 pandemic.

Izzo said the investment will also drive "significant progress" toward achieving New Jersey Governor Phil Murphy's clean energy agenda by avoiding 8 million metric tons of carbon dioxide (CO<sub>2</sub>) through 2050. New Jersey wants all of its electricity to come from non carbon emitting sources, like renewables and nuclear, by 2050.

<https://in.reuters.com/article/idINKCN26E2WS>

### **Trump administration scrambles to complete nuclear deal with Russia before election**

Paul Sonne and John Hudson

Independent, September 23, 2020

Frustration is mounting inside the Trump administration as Russia gives little indication of whether it will agree to an arms control deal before Donald Trump faces reelection, according to senior US administration officials, who are trying to secure the deal. US officials presented a proposal to the

Russians two weeks ago in Vienna as part of negotiations that began in June. Under the deal, the United States and Russia would extend the soon-to-expire New START pact for a limited time while negotiating a replacement treaty. Mr Trump and Vladimir Putin would sign a political agreement outlining a framework for the replacement treaty and what it would cover.

The administration's scramble to cut a deal with Russia before the election comes as the president's top diplomats have been rushing to secure diplomatic achievements as US voters begin going to the polls. Mr Trump has long sought to negotiate an arms control deal with Moscow, but so far his administration has only pulled out of pacts with the former Cold War foe, citing violations by Russia. In comments on 4 September, Mr Trump said arms control talks with Russia were a "very important thing" - more important than addressing global warming. Mr Trump and Mr Putin have been discussing a deal for months.

<https://www.independent.co.uk/news/world/americas/us-politics/trump-us-2020-election-nuclear-deal-arms-control-russia-putin-b550818.html>

### **US test reactor programme moves ahead**

World Nuclear News, September 24, 2020

The US Department of Energy (DOE) has approved Critical Decision 1 for the Versatile Test Reactor (VTR), meaning the project can now move to the engineering design phase. DOE has requested USD295 million for FY 2021 for the one-of-a-kind facility that would support research and development of innovative nuclear energy and other technologies. The VTR addresses a long-standing gap in research infrastructure in the USA, Energy Secretary Dan Brouillette said.

"We have not had a fast neutron spectrum test facility for decades. Many of the new reactor designs under development in the United States require this sort of long-term testing capability. Not only will VTR support the research and development of much-needed clean energy technologies, but it is key to revitalising our nuclear industry, which has long been the model for safe operations and security for the world." Critical Decision 1, known as 'Approve Alternative Selection and Cost Range', is the second step in DOE's process to review and manage research infrastructure projects. As part of Critical Decision 1, federal committees have reviewed the conceptual design, schedule and cost range, and analysed potential alternatives. DOE's issuance of a Notice of Intent to prepare the environmental impact statement (EIS) for the reactor, published last month, is also part of Critical Decision 1 activities. The VTR project will now move to the engineering design phase "as soon as Congress appropriates funding", DOE said.

<https://www.world-nuclear-news.org/Articles/US-test-reactor-programme-moves-ahead>

## **U.S. renews waiver for Iraq to import Iranian energy for 60 days**

Humeyra Pamuk

Reuters, September 24, 2020

The United States said on Thursday it had renewed a waiver for Iraq to import Iranian electricity, this time for 60 days to enable Baghdad to take “meaningful actions” to reduce its energy dependence on neighbouring Tehran. The waiver will continue to exempt Iraq from U.S. sanctions reimposed on Iran, hobbling its oil-dependent economy, after President Donald Trump withdrew Washington from world powers’ 2015 nuclear deal with the Islamic Republic.

Washington has repeatedly extended the waiver for Baghdad to use crucial Iranian energy supplies for its struggling power grid, usually for periods of 90 or 120 days. Renewals for shorter periods, analysts said, could be one reflection of relations between the two countries that have been strained over repeated militant attacks on U.S. forces stationed in Iraq that Washington has blamed on Iran, which denies this.

<https://in.reuters.com/article/idINKCN26F2IW>

## **U.S. base commander calls Chinese Guam attack video 'propaganda'**

Reuters, September 25, 2020

The commander of Andersen Air Force Base on the U.S. Pacific island of Guam on Friday said a Chinese air force video that seemed to show a simulated attack on his facility was “propaganda” designed to coerce and antagonise. The video showed nuclear-capable H-6 bombers striking what appears to be Anderson, though it did not directly mention the base name, as regional tensions rise and the U.S. carries out a major biennial drill near Guam.

“I’m always concerned about our ability to protect our service members and their families,” Brig. Gen. Jeremy T. Sloane, Andersen’s commander, told reporters on a conference call about the ongoing Valiant Shield exercises. “The video itself - they know the timing of the exercise,” he added. “It’s a propaganda video ... although we’re always concerned about the protection of the island and the protection of our people, the video itself is just purely propaganda designed to coerce and antagonise us.”

<https://in.reuters.com/article/idINKCN26G0CM>

## **Energy secretary slams ‘radical environmentalists,’ touts gas and nuclear as California’s energy future**

Eric Wesoff

PV Magazine, September 28, 2020

DOE Chief Dan Brouillette, writing in an op-ed, has a plan for solving California’s energy problem: For more than a month, Californians have lived with government energy reduction mandates and rolling blackouts during an intense heat wave. Recently, Los Angeles Mayor Eric Garcetti cheerfully tweeted, “It’s almost 3 p.m. Time to turn off major appliances, set the thermostat to 78 degrees...” Already paying some of the highest electricity rates in the country and now undergoing energy reduction mandates and rolling blackouts, California residents are rightly asking: Is this what our state leaders had in mind when they touted their 100 percent renewable energy plan? Unsurprisingly, the environmental activists and politicians who pushed the plan through in Sacramento left the disclaimer “may cause blackouts during heat waves” out of the plan’s promotional materials. Of course, this all could have been avoided had the state chosen to prioritize energy security and reliability over appeasing progressive special interest groups. Diablo Canyon nuclear power plant, which provides 9 percent of the state’s electricity, is slated for premature closure, taking a huge amount of reliable power off the grid. The plant still has years of useful life, and the state must find a way to keep it online if California leaders want to retain this source of clean, reliable electricity.

<https://pv-magazine-usa.com/2020/09/28/morning-brief-energy-secretary-slams-renewables-touts-gas-and-nuclear-as-key-to-californias-energy-future/>

## **Trump administration orders assessment on bolstering nuclear warheads as talks with Russia stall**

Daniel Lippman, Bryan Bender and Lara Seligman

Politico, September 28, 2020

The Trump administration has asked the military to assess how quickly it could pull nuclear weapons out of storage and load them onto bombers and submarines if an arms control treaty with Russia is allowed to expire in February, according to three people familiar with the discussions. The request to U.S. Strategic Command in Nebraska is part of a strategy to pressure Moscow into renegotiating the New Strategic Arms Reduction Treaty before the U.S. presidential election, the people said.

In making the request, the Trump administration wants to underscore that it is serious about letting the treaty lapse if Russia fails to meet U.S. demands. The negotiating team is leery that Russia is dragging out the talks in the hope that Joe Biden — who has pledged to extend New START under what Moscow believes will be more favorable terms than what this White House is offering — wins the election. “It’s a clear signal that the costs for not negotiating before the election are going to go

up,” said one of the people, who requested anonymity to relay sensitive discussions. The Trump administration is “trying to create an incentive, and it’s a real incentive, for the Russians to sit down and actually negotiate.”

<https://www.politico.com/news/2020/09/28/trump-russia-nuclear-deal-talks-422736>

### **United States Nuclear Reactor Construction Market Market Sales and Forecast Analyzed in a New Research Study**

The Daily Chronicle, September 28, 2020

The global United States Nuclear Reactor Construction Market Report offers valuable data on this report with the aid of fragmenting the market into different segments. Various vital elements are covered in the global United States Nuclear Reactor Construction Market research report, including regional industry perspectives, geographic developments, country-level assessment, competitive environment, market share analysis of companies, and top company proreports.

This report presents the worldwide United States Nuclear Reactor Construction market size (value, production and consumption), splits the breakdown (data status 2019 and forecast to 2025), by manufacturers, region, type and application. This study also analyzes the United States Nuclear Reactor Construction market status, market share, growth rate, future trends, market drivers, opportunities and challenges, risks and entry barriers, sales channels, distributors and Porter’s Five Forces Analysis. The report presents the market competitive landscape and a corresponding detailed analysis of the major vendor/key players in the United States Nuclear Reactor Construction market.

<https://thedailychronicle.in/news/2008653/united-states-nuclear-reactor-construction-market-market-sales-and-forecast-analyzed-in-a-new-research-study/>

### **Can a 20-person startup with \$25 million get Oklo’s fast-fission micro-reactor to market?**

Eric Wesoff

PV Magazine, September 28, 2020

New generation of entrepreneurs aim to commercialize an advanced fission micro-reactor to compete against diesel gensets in remote and island communities. Technological and regulatory challenges abound. Oklo is attempting to bring an advanced nuclear reactor design to market despite an ill-fitting regulatory system and 40 years of stasis in the U.S. nuclear industry.

Founded in 2013 with an MIT-dominated founder set, Oklo has managed to submit a combined license application for the design and operation of a “compact fast micro-reactor,” which is currently under review by the Nuclear Regulatory Commission (NRC). Last year, Oklo received a first-of-its-kind site permit to build its initial plant on a quarter-acre site at Idaho National Labs. Oklo is trying to commercialize nuclear power with a different fuel, different coolant and radically different scale than the shrinking number of massive light water reactors that comprise the commercial U.S. nuclear fleet. It’s a deep technological challenge with immense regulatory risk.

<https://pv-magazine-usa.com/2020/09/28/can-20-people-with-25-million-get-oklos-fast-fission-micro-reactor-to-market/>

### **US regulator issues first-ever SMR design approval**

World Nuclear News, September 30, 2020

The US Nuclear Regulatory Commission (NRC) has issued a standard design approval (SDA) to NuScale Power, LLC for the NuScale small modular reactor. This allows the design to be referenced in applications for construction, operating and manufacturing licences and permits in the USA. According to a notice in yesterday's Federal Register, the NRC issued the SDA on 11 September, having already issued the final safety evaluation report (FSER) for the reactor. "Issuance of this SDA signifies completion of the NRC staff's technical review of the NuScale SMR design," NRC said.

"This is a significant milestone not only for NuScale, but also for the entire US nuclear sector and the other advanced nuclear technologies that will follow," said NuScale Chairman and CEO John Hopkins. NuScale submitted its application for certification of its design for use in the USA on 31 December 2016. The FSER, which was issued by NRC in late-August, marked the completion of the technical review and approval of the design which uses passive processes such as convection and gravity in its operating systems and safety features to produce about 600 MW of electricity. Twelve modules, each producing 50 MW, are submerged in a safety-related pool built below ground level.

<https://www.world-nuclear-news.org/Articles/US-regulator-issues-first-ever-SMR-design-approval>

### **Gryphon to help develop HALEU-fuelled cislunar rocket**

World Nuclear News, September 30, 2020

Gryphon Technologies has been awarded a USD14 million task order by the US Defense Advanced Research Projects Agency (DARPA) to support its Demonstration Rocket for Agile Cislunar Operations (DRACO) programme. Specifically, Gryphon will support the development and demonstration of a high-assay, low-enriched uranium (HALEU) nuclear thermal propulsion (NTP)



system. The new rocket will enable the US military to operate spacecraft in cislunar space, which is the region outside Earth's atmosphere and extending out to just beyond the Moon's orbit.

"A successfully demonstrated NTP system will provide a leap-ahead in space propulsion capability, allowing agile and rapid transit over vast distances as compared to present propulsion approaches," said Gryphon Chief Engineer Tabitha Dodson. The objective of the DRACO programme is to demonstrate a NTP system in orbit. NTP uses a nuclear reactor to heat propellant to extreme temperatures before expelling it through a nozzle to produce thrust. Compared to conventional space propulsion technologies, NTP offers a high thrust-to-weight ratio around 10,000 times greater than electric propulsion and a two-to-five times greater specific impulse than chemical propulsion.

<https://www.world-nuclear-news.org/Articles/Gryphon-to-help-develop-HALEU-fuelled-cislunar-roc>

### **Terrestrial Energy, L3Harris to develop simulator for IMSR**

World Nuclear News, September 30, 2020

L3Harris Technologies is to develop an engineering and operator training simulator for Terrestrial Energy's Integral Molten Salt Reactor (IMSR) under a newly announced contract. The simulator will support engineering activities and, subsequently, operator training as development of IMSR moves to licensing and construction prior to plant commissioning, Terrestrial said. The simulator is being built by L3Harris in Montreal, Quebec and will be delivered to Terrestrial Energy's Oakville, Ontario facility in 2021. It will provide a high-fidelity platform to simulate and visualise all major IMSR reactor and power plant functions.

Terrestrial Energy CEO Simon Irish said L3Harris' simulator provides an "extraordinary real-world experience" of IMSR power plant operation and performance. "This digital technology illustrates how high-performance computing enables Generation IV innovation capable of providing cost-competitive, reliable, resilient and clean electric power and industrial heat," he said. L3Harris will also provide its Orchid simulation environment and training to Terrestrial Energy for further simulator development, under L3Harris' Industrial and Technological Benefits (ITB) commitments to Canada through its participation in the National Shipbuilding Strategy (NSS). The ITB commitment requires that new opportunities that benefit Canadian industry must be identified when any work is performed outside of Canada on the NSS. This ensures that the entire value of significant Canadian defence contracts is spent in the country.

<https://www.world-nuclear-news.org/Articles/Terrestrial-Energy,-L3Harris-to-develop-simulator>

Europe

### **Hitachi scraps plans for British nuclear plant**

Makiko Yamazaki, Susanna Twidale

Reuters, September 16, 2020

Japan's Hitachi Ltd is scrapping plans to build a nuclear power plant in Wales, it said on Wednesday, dealing a blow to UK hopes to replace its ageing plants. The move leaves only France's EDF and China's CGN with building plans in Britain where nearly half the nuclear plants are set to shut down in the next four years.

Hitachi's UK unit Horizon Nuclear Power failed to find private investors or secure sufficient government support for the stalled Wylfa project in Anglesey, Wales. It was expected to provide about 6% of Britain's electricity. "Hitachi made this decision given that 20 months have passed since the suspension, and the investment environment has become increasingly severe due to the impact of COVID-19," the company said in a statement.

<https://in.reuters.com/article/idINKBN267195>

### **British government looking at options for EDF's Sizewell nuclear plant**

Reuters, September 17, 2020

Britain's government is looking at options for EDF's Sizewell C nuclear plant, a spokesman for Prime Minister Boris Johnson said. "The government is looking at options to invest in Sizewell, nuclear energy has a key role in meeting our net zero commitments," he said. "We regularly engage with all developers on their projects and are considering a range of financing solutions."

<https://in.reuters.com/article/idINS8N2DM081>

### **A carbon neutral Nordic region would need 75% more electricity: study**

Reuters, September 17, 2020

Nordic countries would have to generate another 290 terawatt hours (TWh) of electricity, an increase of 75% from current levels, to meet the additional demand for power if they become carbon neutral, a study published showed. Denmark, Finland, Iceland, Norway and Sweden are all aiming to become carbon neutral by 2050 at the latest, which would mean replacing fossil fuels used in homes, transport and industry with carbon-free alternatives, most of them electricity based. To match the rise in electricity demand, the region would need to maintain its existing hydro and nuclear power

generation capacities and install another 83 gigawatts (GW) of renewable energy sources, the study said.

The study, commissioned by Finnish state-owned utility Fortum FORTUM.HE, said it expected 70% of the new capacity to come from onshore wind farms, 20% from offshore wind and 10% from solar power. “The study sees emissions reductions happening both directly through electrification and indirectly via production of e-fuels from electrically produced hydrogen derivatives,” Fortum said. Finland aims to become carbon neutral by 2035, Iceland by 2040, Sweden by 2045, and Norway and Denmark by 2050.

<https://in.reuters.com/article/idINL8N2GE2G9>

### **UK looking at funding options for EDF's Sizewell C nuclear plant**

Reuters, September 17, 2020

Britain is looking at funding options for the 17-18 billion pound (\$22-\$23 billion) Sizewell C nuclear plant that France's EDF EDF.PA is scheduled to build in eastern England, a spokesman for Prime Minister Boris Johnson said. Britain is phasing out coal plants and investing in renewables to help meet its climate targets. But many of its nuclear plants - another source of low-carbon electricity - also need replacing, and progress so far has been mixed.

Japan's Hitachi on Wednesday dropped its plans to build a new nuclear plant in Britain, while Japan's Toshiba Corp 6502.T, scrapped its British NuGen project in 2018 after its U.S. reactor unit Westinghouse went bankrupt. “The government is looking at options to invest in Sizewell, nuclear energy has a key role in meeting our net zero commitments,” Johnson’s spokesman told journalists.

<https://in.reuters.com/article/idINKBN26824E>

### **In bumpy U.N. dealings, Trump found backing on North Korea, isolation on Iran**

Michelle Nichols

Reuters, September 18, 2020

Though famously skeptical of the United Nations, U.S. President Donald Trump harnessed its collective power to impose crushing sanctions on North Korea in a bid to start talks with Pyongyang, but faces frustration over a similar push on Iran. While the U.N. Security Council was unified on North Korea, there is almost total opposition to the Trump administration’s assertion that it has

triggered a return of all U.N. sanctions on Iran, using a process agreed under a 2015 nuclear deal with Tehran that Washington quit two years ago.

Diplomats expect Iran to be a focus when Trump addresses the annual U.N. meeting of world leaders on Tuesday from the White House just days after a deadline passes that Washington says requires all countries to extend here an arms embargo and reimpose other sanctions on Tehran. It will be the fourth U.N. speech by Trump, who is seeking re-election on Nov. 3 and espouses an “America first” approach often at odds with the multilateralism that governs the world body. Diplomats gasped during his debut when he threatened “fire and fury” on North Korea and laughed the second year when he boasted about his accomplishments. Last year he denounced Iran’s “bloodlust,” but said there was a path to peace.

<https://in.reuters.com/article/idINKBN2690HO>

### **Uncertainty over French power needs requires vigilance: grid firm RTE**

Reuters, September 18, 2020

The ability of France to meet electricity needs this winter does not appear at risk for now but the uncertain demand outlook calls for vigilance, power grid operator RTE said. The coronavirus crisis is making forecasts difficult and they will be updated in mid-November, it said. Consumption returned to closer to normal levels from June onward due to the end of the confinement measures and the partial restart of company activity, but still remained about 3 to 4 percentage points lower compared with last year, RTE said. “The drop in demand was in line with the framework used for the RTE forecast in June and supports the prospect of a similar decrease in the winter,” it said.

RTE did not modify its initial analysis of a 2 percent demand reduction over the winter months. The evolution of consumption over the coming months will essentially depend on the evolution of the health and economic situation, RTE said. “This is particularly the case for industrial and tertiary sectors, which can exceed 40 GW of power demand at their peak in the winter. Therefore a great deal of uncertainty remains,” the operator said. On the supply side, reactor maintenance led to a slight upward reassessment of expected nuclear availability, especially in October through early 2021, the grid operator said.

<https://in.reuters.com/article/idINKBN26913H>

### **Britain, France, Germany say U.N. sanctions relief for Iran to continue beyond September 20**

Michelle Nichols

Reuters, September 18, 2020

Britain, France and Germany told the U.N. Security Council on Friday that U.N. sanctions relief for Iran - agreed under a 2015 nuclear deal - would continue beyond September 20, when the United States asserts that all the measures should be reimposed. In a letter to the 15-member body, seen by Reuters, the three European parties to the nuclear deal and long-time U.S. allies said any decision or action taken to reimpose U.N. sanctions “would be incapable of legal effect.” The United States quit the nuclear deal in 2018.

“We have worked tirelessly to preserve the nuclear agreement and remain committed to do so,” said the U.N. envoys for Britain, France and Germany, adding that they remain committed to “fully implementing” a 2015 Security Council resolution that enshrines the pact, which also included Russia and China. U.S. Secretary of State Mike Pompeo said last month that he triggered a 30-day process at the Security Council leading to a return of U.N. sanctions on Iran on Saturday (2000 EDT/0000 GMT Sunday) that would also prevent a conventional arms embargo on Tehran from expiring on Oct. 18.

<https://in.reuters.com/article/idINKBN26A0AF>

### **EU top court rejects Austrian appeal against UK Hinkley nuclear plant**

Reuters, September 22, 2020

Europe’s top court rejected Austria’s appeal against a British subsidised nuclear plant, agreeing with EU competition regulators that government aid offered to Hinkley Point C nuclear power station was in line with EU state aid rules. The European Commission gave the green light to the project in 2014, triggering a court challenge from Austria which has opposed nuclear power for decades, and Luxembourg. “The Court of Justice confirms the Commission decision approving United Kingdom aid for Hinkley Point C nuclear power station,” the Luxembourg-based Court said.

<https://in.reuters.com/article/idINKCN26D0QI>

### **World’s operating nuclear fleet at 30 year low as new plants stall: report**

Susanna Twidale

Reuters, September 24, 2020

The number of nuclear reactor units operating globally is at a 30 year low, while new plants struggle for investment, an industry report said. Proponents of nuclear say as a low-carbon power source it could be vital in helping countries meet climate targets, but several plants around the world are coming to the end of their life expectancies and many new ones have faced delays. Some 408 nuclear reactors were in operation in 31 countries as of July 2020, a decline of 9 units from mid-2019 and 30 fewer than the 2002 peak of 438, the annual World Nuclear Industry Status Report (WNISR) showed.

The slow pace of new projects coming on stream also increased the overall age of the global fleet to around 31 years old. Of the 52 new plants being built globally at least 33 are behind schedule, while not a single new project came online in the first half of 2020, the report said.

<https://in.reuters.com/article/idINKCN26F0DQ>

### **Hungary's Orban says EU should reverse Russia sanctions, not push Cyprus on Belarus**

Gabriela Baczynska, John Chalmers

Reuters, September 24, 2020

The European Union should reverse its sanctions on Russia, Hungarian Prime Minister Viktor Orban told Reuters on Friday, as he pushed for a resumption of trade with Moscow and a European army that would restrain the Kremlin's might. Asked if the EU should impose new penalties on Russia over the poisoning of leading Kremlin critic Alexei Navalny, the nationalist Hungarian leader said: "From the Hungarian point of view, we don't see why we should do that. But if the European Union would like to initiate that, we are ready to consider."

The European Union introduced sanctions on Russia over the 2014 annexation of Crimea from Ukraine. It stepped them up over Russia's subsequent backing for rebels facing off against government troops in east Ukraine, a conflict that has killed more than 13,000 people to date. Those penalties hit Russia's energy, financial and arms sectors. The bloc also has a ban on doing business with Moscow-annexed Crimea and a blacklist of people and firms seen responsible for spreading havoc in ex-Soviet Ukraine. "What we are doing on sanctions to Russia is not a reasonable policy," said Orban, whose country is building a new nuclear power plant with Russian state support.

<https://in.reuters.com/article/idINKCN26G28Q>

### **Germany publishes nuclear storage list, Gorleben dropped**

Reuters, September 28, 2020

Germany on Monday published a list of potential storage sites for radioactive waste as part of its plans to exit nuclear power, dropping the Gorleben salt dome in Lower Saxony from the running. The 444-page list of sites, to be assessed by 2031 for use from 2050 to hold waste currently in interim storage at nuclear plants, was published by Germany's Federal Agency for Final Storage (BGE). Some 90 locations, including parts of Lower Saxony, Bavaria, Baden Wuerttemberg and eastern German states, have been found to be potentially suitable after BGE undertook preliminary mapping that revealed 54% of German territory could be satisfactory.

It eliminated Gorleben, confirming a Reuters report. Taking three years, the process identified salt, clay and crystalline, above all granite formations, stressing the criteria were science-based, without political influence.

<https://in.reuters.com/article/idINKBN26J0SX>

## Russia

### **Roscosmos to sign contract on nuclear-powered space tug project by year-end**

TASS News Agency, September 16, 2020

By the end of 2020, Russia's state space corporation Roscosmos will sign a contract to design the Nuklon space complex, which includes a space tug fitted with a nuclear reactor, said Alexander Bloshenko, the director of advanced programs and science at Roscosmos. "The contract for preliminary design of the Nuklon space complex will be signed by the end of the year. It will include a space tug fitted with a nuclear reactor, to be used for missions to remote planets of the solar system. Its first mission is scheduled for 2030," Bloshenko told TASS.

The prospective space tug would have the capacity to generate energy in the autonomous mode, with the help of a megawatt-class nuclear reactor, he said. Speaking about Nuklon's first flight, the official said that instead of a test launch, Nuklon's first journey would be a "full-fledged scientific mission."

<https://tass.com/science/1201289>

### **Work on Avangard complex comparable to USSR nuclear project – Putin**

TASS News Agency, September 19, 2020

Russian President Vladimir Putin compared the work of Russian gunsmiths on the development of the Avangard hypersonic missiles with the scale of the USSR's nuclear project, Putin said on

Saturday during a video conference on the Gunsmith Day with an engineer - designer of rocket and space technology Gerbert Efremov.

"The results of your work can hardly be overestimated. You not only stood at the origins of this technological idea, but you are its author. In modern conditions, the embodiment of your idea for our country is undoubtedly comparable to the implementation of the Soviet Union's nuclear and missile projects, which were carried out by outstanding Soviet scientists Kurchatov and Korolev," Putin said.

<https://tass.com/defense/1202701>

### **Russia won't take part in any US-led coalition against China, wants France and UK included in new nuclear talks – ambassador**

Russian Times, September 19, 2020

Russia won't join any coalitions against China, or other countries, and it regards American demands to force Beijing into nuclear talks as inappropriate if London and Paris aren't involved too, Moscow's envoy to the US has said. The US "promotes anti-Chinese sentiments" and its relations with Asia-Pacific countries are based on their support for such an approach, Russian Ambassador to the US Anatoly Antonov outlined in an interview with the Japanese publication Nikkei Asia Review.

"We believe that the US attempts to create anti-Chinese alliances around the world are counterproductive" and "present a threat to international security and stability," Antonov said, adding that Russia "will never participate in coalitions against third countries, including China." While Washington talks about "the free and open Indo-Pacific" with Japan, Australia and India, the initiative is neither transparent nor inclusive, Antonov noted. Instead of established norms of international law and existing multilateral organizations, the US insists on a "rules based order."

<https://www.rt.com/news/501111-russia-china-india-nuclear-envoy/>

### **Deployment of US missiles in Asia to put Russia's nuclear deterrent at risk — ambassador**

TASS News Agency, September 19, 2020

Possible deployment of US ground-based intermediate-range missiles in Asia will affect Russia's national security interests and will put its nuclear deterrence potential at risk, Russian Ambassador to the United States Anatoly Antonov said in an interview with Japan's Nikkei Asian Review. The text was posted on the Russian embassy's Facebook about on Friday. "The possible deployment of US intermediate-range ground-based missiles in Asia will not only upset the military-political balance in



the region and global strategic stability, but will also directly affect Russia's national security interests. The fact is that this region is located near the Russian borders, naval facilities and the bases of the Pacific Fleet where submarine strategic forces are based. The deployment of new US systems there will put our nuclear deterrent at risk," he said.

"The American partners, perhaps, should carefully weigh all the destabilizing consequences of such a step fraught with further escalation of tension and an arms race," he noted. "We are interested neither in escalating tension either in the Asia-Pacific region or anywhere else in the world, nor in the beginning of an economically destructive arms race. I hope the United States and its regional allies share this approach. We are ready to work together - our proposals remain on the table."

<https://tass.com/politics/1202609>

### **Rosatom, Syria to develop radiation technologies in medicine and agriculture**

TASS News Agency, September 20, 2020

Director General of Rosatom State Nuclear Energy Corporation Alexey Likhachev and Director General of Atomic Energy Commission of Syria Ibrahim Othman on the sidelines of the 64th IAEA General Conference signed a memorandum of understanding on cooperation in the field of non-energy application of nuclear technologies for peaceful purposes, Rosatom said in a statement.

The memorandum includes organizing interaction in such areas as the use of radiation technologies in medicine, agriculture, and industry, ensuring nuclear and radiation safety, advancing training of administrative, scientific and technical personnel and more, the report said. Earlier on Monday, Permanent Representative of Russia to International Organizations in Vienna Mikhail Ulyanov announced signing of the document on Twitter.

<https://tass.com/economy/1203623>

### **Russian nuclear giant Rosatom eyes 10% of lithium market by 2030**

Russian Times, September 20, 2020

Uranium One, a unit of Russia's state-owned nuclear energy firm Rosatom, plans to begin producing lithium by 2023, targeting between 9% and 10% of the global market by 2030. "We are considering the acquisition of raw material assets overseas to integrate into global supply chains for final products

such as batteries with localized production in Russia,” Sergey Polgorodnik, general director of Joint Stock Co. TENEX, told a weekly in-house news publication.

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<https://www.rt.com/business/501048-russia-enters-lithium-market/>

### **Russia to continue efforts for preserving Iran nuclear deal - Foreign Ministry**

TASS News Agency, September 20, 2020

Russia will continue efforts to ensure that the terms of the Joint Comprehensive Plan of Action on the Iranian nuclear program remain in place and are implemented, the Russian Foreign Ministry said in a statement on Sunday. "The efforts on preserving and ensuring sustainable implementation of JCPOA will continue," the ministry emphasized. "The UN Security Council Resolution 2231 remains unchanged and the commitments arising from it must be fulfilled in the initially agreed mode and volume on the basis of the reciprocity principle by all states," it said.

Moscow highlights that in August the UN Security Council’s members dismissed the US attempts to restore the UN’s anti-Iranian sanctions as void. In September, this stance was confirmed and Russia fully agrees with it, the Russian diplomats said. "To claim now that sanctions resolutions against Iran have been restored is wishful thinking. We hope that US colleagues will be brave enough to finally face the truth and stop speaking on behalf of the UN Security Council," according to the statement. "Illegitimate US initiatives and actions definitely cannot have international and legal consequences for other countries and create their obligations to limit legitimate cooperation with Iran."

<https://tass.com/politics/1202789>

### **Russia rejects U.S. terms, sees 'minimal' chance to extend New START nuclear pact**

Gabrielle Tétrault-Farber

Reuters, September 21, 2020

Russia sees minimal chances of extending the New START treaty with the United States - their last major nuclear arms pact - as it does not accept conditions set out by Washington, Deputy Foreign Minister Sergei Ryabkov was quoted as saying on Monday. He spoke came after Marshall

Billingslea, the U.S. Special Presidential Envoy for Arms Control, told a Russian newspaper that Moscow must accept a joint agreement with Washington on extending the treaty before the U.S. presidential election in November.

“I suspect that after President Trump wins re-election, if Russia has not taken up our offer, that the price of admission, as we would say in the U.S., goes up,” Billingslea told Kommersant newspaper in an interview. “We cannot talk in this manner,” TASS news agency quoted Ryabkov as saying. Another news agency, RIA, quoted him as saying the chances of a treaty extension were “minimal”. The New START accord, signed in 2010, limits the number of strategic nuclear warheads that Russia and the United States can deploy.

<https://in.reuters.com/article/russia-usa-nuclear/russia-rejects-u-s-terms-sees-minimal-chance-to-extend-new-start-nuclear-pact-idINKCN26C132>

### **US ultimatums on New START show its unwillingness to reach deal, says Russian legislator**

TASS News Agency, September 21, 2020

The United States’ plans to advance more conditions for the extension of the New START Treaty indicate Washington’s unwillingness to regulate the issue of arms reduction, a senior Russian lawmaker said on Sunday. "What is alarming is the categoricalness of certain approaches - ‘either as we say or nothing.’ It can hardly be called the shortest way to the desired result, if the Americans really want to reach any sustainable and mutually acceptable agreements," Konstantin Kosachev, chairman of the international committee of Russia’s Federation Council upper parliament house, told journalists.

He said that this was a very serious matter that was to be tackled by experts taking part in corresponding consultations. "But it is alarming that some of the problems in question are being conveyed via the press, which may indicate an attempt to exert extra pressure on the other side," he noted. US Special Presidential Envoy for Arms Control Marshall Billingslea said in an interview with the Kommersant daily that Washington may put forth more conditions for the extension of the New START Treaty if Russia doesn’t accept its proposals before the presidential polls in the United States.

<https://tass.com/world/1202895>

### **Russia not ready to extend New START treaty under Washington's conditions – TASS**

Reuters, September 21, 2020

Russia is not ready to extend the New START treaty with the United States - the last major nuclear arms pact between the two countries - under the conditions set out by Washington, TASS news agency quoted Deputy Foreign Minister Sergei Ryabkov as saying on Monday.

His comments came after Marshall Billingslea, the U.S. Special Presidential Envoy for Arms Control, said in an interview with a Russian newspaper that Moscow must agree to a joint memo with the United States on extending the treaty before the U.S. presidential election in November.

<https://in.reuters.com/article/idINR4N2G500V>

### **Russia has no fear of potential US sanctions over arms deals with Iran — senior diplomat**

TASS News Agency, September 21, 2020

Moscow has no fear of potential US sanctions over arms deals with Iran, Russian Deputy Foreign Minister Sergei Ryabkov told reporters on Monday. "We are not afraid of US sanctions, we are used to them," he pointed out in response to a TASS question. "It will not affect our policy in any way. Our cooperation with Iran is multifaceted, defense cooperation will progress depending on the two countries' needs and mutual willingness," Ryabkov added.

"That said, another executive order will not change our approach," the senior Russian diplomat emphasized. Reuters reported earlier, citing a senior US official, that "the United States on September 21 will sanction more than two dozen people and entities involved in Iran's nuclear, missile, and conventional weapons programs." "An important part of the new US sanctions is an executive order targeting those who buy or sell Iran conventional arms that will also be unveiled by the Trump administration on September 21, the official said," according to Reuters.

<https://tass.com/politics/1203037>

### **Russia says chances of extending New START nuclear treaty are minimal -RIA**

Reuters, September 21, 2020

Russia sees the chances of the United States and Russia agreeing to extend the New START nuclear arms control treaty as "minimal", the RIA news agency cited Deputy Foreign Minister Sergei Ryabkov as saying on Monday.

The treaty, the last major nuclear arms pact between the two countries, expires in February next year. (Reporting by Maria Kiselyova; writing by Tom Balmforth; Editing by Catherine Evans)

<https://in.reuters.com/article/idINR4N2G500Y>

### **Russia says U.S. sanctions on Iran will not affect Moscow-Tehran cooperation -Ifax**

Reuters, September 22, 2020

Russia said on Tuesday new U.S. sanctions against Iran would have no political or practical consequences for Moscow's cooperation with Tehran, the Interfax news agency reported, citing Deputy Foreign Minister Sergei Ryabkov.

The United States on Monday slapped new sanctions on Iran's defence ministry and others involved in its nuclear and weapons programme to support the U.S. assertion that all U.N. sanctions against Tehran are now restored, a stance which key European allies as well as Russia and China reject. Ryabkov also said that Russia had not given the United States any new deadlines in negotiations over the New START treaty, their last major nuclear arms pact, but said time was running out. (Reporting by Maria Kiselyova; Writing by Alexander Marrow Editing by Gareth Jones)

<https://in.reuters.com/article/idINR4N2G5019>

### **Russia's newest Kazan nuclear submarine enters White Sea for trials**

TASS News Agency, September 22, 2020

The Kazan, the first submarine of the upgraded Project 885M (Yasen-M class), entered the White Sea for sea trials, Russian Navy's Northern Fleet press service announced Tuesday. "Ships and assistance vessels of the Northern Fleet's White Sea naval base initiated another stage of sea trials of the newest Kazan multipurpose nuclear submarine of the upgraded Yasen class. The submarine crew [...] tests systems and mechanisms in the underwater position," the press service said.

The TK-208 Dmitry Donskoy heavy nuclear ballistic missile submarine is involved in the Kazan's trials, among other ships, the press service said. After the trials are complete, all ships and vessels will return to their permanent base in Severodvinsk.

<https://tass.com/defense/1203643>

### **Russia says world's largest nuclear icebreaker embarks on Arctic voyage**

Reuters, September 22, 2020

A nuclear-powered ice breaker Russia says is the world's largest and most powerful set off on Tuesday on a two-week journey to the Arctic as part of Moscow's efforts to tap the region's commercial potential. Known as "Arktika," the nuclear icebreaker left St. Petersburg and headed for the Arctic port of Murmansk, a journey that marks its entry into Russia's icebreaker fleet.

Russian state firm Rosatomflot has called the vessel the world's largest and most powerful icebreaker. It is more than 173 metres long, designed for a crew of 53, and can break ice almost three-metres thick.

<https://in.reuters.com/article/idINKCN26D1RA>

### **Senior Russian diplomat notes progress in discussions on US-made Trident II missiles**

TASS News Agency, September 22, 2020

A certain progress has been achieved in Russian-US discussions on US-made Trident II missiles submarine-launched ballistic missiles fitted with nuclear warheads, Russian Deputy Foreign Minister Sergei Ryabkov said in an interview with the Kommersant daily. "As far as the problem of refitting launchers of Trident II submarine-launched ballistic missiles is concerned, I can confirm that some progress has been made," he said. "But I'd rather <...> not go into details right now."

The Russian diplomat added that "the issue is still in the process of discussion, some matters have not yet been clarified." "Yes, a certain progress has been achieved, but it is yet unclear when the next meeting of a bilateral consultative commission on the New START will be held. The pandemic affects our plans. We are searching for a date," Ryabkov said.

<https://tass.com/defense/1203333>

### **Russian deputy foreign minister says extending New START for less than five years possible**

TASS News Agency, September 22, 2020

Moscow does not rule out the possibility of extending the Russian-US New START treaty on the reduction of strategic nuclear weapons for a period of less than five years, Russian Deputy Foreign Minister Sergei Ryabkov said in an interview with the Kommersant daily, published on Monday. "We would of course prefer the five-year period. But if the United States is, regrettably, not ready, an extension for a shorter period is possible," the Russian diplomat said.

He added that if the extension period is not long enough "to reach some serious agreements for the future," it will be a bad decision. "However, this is still better than nothing," the Russian deputy foreign minister said. "But we are not going to pay the price named by the Americans even for a five-year extension, let alone for a shorter period," Ryabkov said.

<https://tass.com/politics/1203329>

### **Russian nuclear medicine producers to be supported subject to WTO rules, says Putin**

TASS News Agency, September 23, 2020

Russian authorities should provide support to national producers of high technology products, including in the nuclear medicine sphere, without breaching WTO principles, Russian President Vladimir Putin said on Wednesday at the meeting with nuclear industry specialists.

Russian authorities have already taken decisions creating advantages for national manufacturers and intend "to advance this idea," Putin said. "You are certainly aware of the approach of the liberal part of our economists; it involves competition that must be observed on the domestic market. Nevertheless, I agree we will never achieve such competition because hidden support is provided continuously overseas for manufacturers. We should provide support to our manufacturers without violation of WTO principles and we do so," the head of state said.

<https://tass.com/science/1204343>

### **Nuclear is environmentally friendly energy, says Russian minister**

World Nuclear News, September 23, 2020

Russian Minister of Energy Alexander Novak yesterday highlighted the contribution of the country's nuclear power sector, which this year celebrates its 75th anniversary, to the transition to low-carbon energy. During his address to the 11th Clean Energy Ministerial (CEM11), Novak said the climate agenda was becoming an increasingly significant factor in changes to the wider energy industry. Russia has 36 nuclear power units in operation and three new ones under construction. In March,

Russia's Ministry for Economic Development published a draft strategy for low-carbon development to 2050. The strategy's basic scenario would see nuclear output grow from 203 TWh in 2017 to 225 TWh in 2030 and 260 TWh in 2050. State nuclear corporation Rosatom's foreign orders include 36 units, which are at various stages of implementation.

"Despite the shock to the global economy in early 2020 associated with the COVID-19 pandemic, many governments and major energy companies have increased investment in green technologies, as well as tightened emission requirements," Novak said yesterday. "The growth of investments in renewable energy in the first-half of 2020 amounted to 5%, while investments by companies in production and exploration decreased by 20-30%. And we see statements from individual countries that it is planned to achieve carbon neutrality by 2050." The minister said that large Russian energy companies "keep track of their carbon footprint" and are implementing environmental improvement programmes aimed at raising energy efficiency, increasing the share of natural gas and renewable energy sources, and optimising the use of associated petroleum gas.

<https://www.world-nuclear-news.org/Articles/Nuclear-is-environmentally-friendly-energy-says-Ru>

### **Russia seeks to determine additional steps to preserve Iran nuclear deal**

TASS News Agency, September 24, 2020

Russian Foreign Minister Sergey Lavrov expects that his Thursday meeting with Iranian top diplomat Mohammad Javad Zarif will allow the parties to determine additional steps to preserve the Joint Comprehensive Plan of Action (JCPOA) for Iran's nuclear program, as he himself said. "We are actively working with all JCPOA participants who remain committed to this most important document," Lavrov pointed out. "I hope that today's meeting will help determine additional steps in this direction," he added.

According to him, Moscow and Tehran have a clear understanding of joint actions on the international stage and further steps in terms of bilateral cooperation. "To our great regret, tensions are being raised around the JCPOA," Lavrov noted. "Our American colleagues are trying to promote illegal and unacceptable unilateral ideas that the UN Security Council does not support," he added.

<https://tass.com/politics/1204693>

### **Russia's imposing Arktika icebreaker heads north**

Dave Makichuk

Asia Times, September 24, 2020



It's large and imposing, nuclear powered and it tears through seven-foot thick Arctic ice like a knife — but it has issues, technical issues. We're talking, of course, about the Arktika, the first of Russia's new nuclear-powered Project 22220 icebreakers. The largest and most powerful such ship in the world at present, it has set sail for its future homeport in Murmansk with plans to plow through ice in the Arctic before it arrives there.

However, only two of the ship's three engines are presently working, raising questions about just how close it really is to fully entering operational service. The icebreaker, which is set to be delivered soon to the state-run company FSUE Atomflot, part of Russia's central nuclear corporation Rosatom, left the Baltic Shipyard in St. Petersburg on Sept. 22, 2020. This follows the completion of initial sea trials in the Baltic Sea and the Gulf of Finland earlier this month.

<https://asiatimes.com/2020/09/russias-troubled-arktika-icebreaker-heads-north/>

### **Russian, Iranian top diplomats to meet in Moscow for discussions on nuclear deal**

TASS News Agency, September 24, 2020

Russian Foreign Minister Sergey Lavrov will meet with his Iranian counterpart Mohammad Javad Zarif in Moscow on Thursday to discuss the Joint Comprehensive Plan of Action (JCPOA) on the Iranian nuclear program and the situation in Syria. "It was scheduled to discuss a range of pressing international issues, including the state of affairs regarding the Joint Comprehensive Plan of Action on Iran's nuclear program, as well as the situation in Syria, Afghanistan and the Persian Gulf zone," Russian Foreign Ministry spokeswoman Maria Zakharova told reporters on Wednesday.

In late August, the United States once again accused Iran of violating the nuclear deal and the US Secretary of State requested the UN Security Council re-impose the sanction on Iran. Under the Iran nuclear deal, any signatory to it can trigger the snapback of the sanctions if Teheran violates its commitments under the deal. However, the United States quitted the deal in 2018 and hence, its request cannot be satisfied, as was said by UNSC President (Indonesia's Permanent Representative to the United Nations Dian Triansyah Djani) on August 25.

<https://tass.com/politics/1204423>

### **Russian Su-27 fighters scramble to intercept US B-52N bombers over Black Sea**

TASS News Agency, September 24, 2020

Two Russian Su-27 fighter jets scrambled to intercept two B-52N strategic bombers of the US Air Force over the Black Sea, Russia's National Defense Control Center told reporters on Wednesday. According to the center, on Wednesday Russian radars detected two air targets over the neutral waters of the Black Sea. The aircraft were approaching Russia's sovereign airspace.

"Two Su-27 fighter jets of the Southern Military District's air defense units on duty were scrambled to identify the air targets and to prevent their unauthorized incursion into the Russian airspace. The crews of the Russian fighter aircraft identified the air targets as B-52N strategic bombers of the US Air Force and escorted them over the Black Sea," the center said. —mil/ The National Defense Control Center pointed out that after the US aircraft had turned away from the Russian border, the Su-27 fighter jets returned to their home airbases.

<https://tass.com/defense/1204361>

### **Russia's Nuclear Imports Likely Larger Than Declared – Greenpeace**

The Moscow Times, September 25, 2020

A series of nuclear byproduct shipments to Russia from Germany is likely importing more than officially declared, Greenpeace Russia said Tuesday. European enrichment firm Urenco resumed exports of uranium hexafluoride, a byproduct known as "tails," last year after a 10-year pause initiated by Russia's state nuclear agency Rosatom. The shipments have sparked outcry from environmental activists, who say importing nuclear waste is illegal and threatens human and environmental safety.

The latest batch of "tails" to arrive at Russia's northern port of Ust-Luga could contain up to 900 metric tons of uranium enrichment byproducts instead of the declared 600 tons, Greenpeace energy campaigner Rashid Alimov told the Sever.Realii news website, citing documents shared by German activists. From 2019-2022, Urenco plans to ship a total of 12,000 metric tons of uranium tails from the German city of Gronau to Russia, though this number is likely higher in reality, Greenpeace Russia said.

<https://www.themoscowtimes.com/2020/09/23/russias-nuclear-imports-likely-larger-than-declared-greenpeace-a71520>

### **Nuclear submarine Irkutsk may return to Pacific Fleet in 2023 — source**

TASS News Agency, September 25, 2020

The Project 949A Antey-class multipurpose nuclear-powered submarine Irkutsk, which has been awaiting repair and modernization for more than 20 years, may return to tactical composition of the Pacific Fleet in 2023, a source in the shipbuilding industry told TASS. "Given the opportunity, the expected return date for Irkutsk is 2023," the source said. Earlier it was expected that Irkutsk submarine will return to the Pacific Fleet in 2017. Then the dates were shifted to 2019, then to 2022.

<https://tass.com/defense/1204851>

### **Supporting development of nuclear industry is Russia's priority – PM**

TASS News Agency, September 27, 2020

Russian Prime Minister Mikhail Mishustin congratulated the nuclear industry workers on their professional holiday and assured that support for the industry is an absolute priority for the state. "The nuclear industry is one of the key sectors in the Russian economy. Supporting and developing it is an absolute priority for the state," he said in an address written to mark the 75th anniversary of the nuclear industry.

Mishustin noted that the industry fulfills strategic tasks related to the country's energy security and its defense capabilities, makes Russia a leader in the world market, makes it possible to apply innovative technologies and developments in all spheres of human life - from nuclear medicine to nuclear icebreakers, and floating nuclear power plants. He thanked the veterans of the nuclear industry, who laid down the industry's traditions and pass them on to the new generations of Russian nuclear workers.

<https://tass.com/economy/1205585>

### **Rosatom explains the 'multiplier effect' of new nuclear**

World Nuclear News, September 28, 2020

The development of a national nuclear industry facilitates a country's economic growth while at the same time keeping in harmony with low-carbon and sustainable development, Yaroslav Mozdakov, director for communications and international affairs at Rosatom Energy International (REIN), said last week during a webinar hosted by the Expert Group on Resource Management of the United Nations Economic Commission for Europe. REIN is a subsidiary of Russian state nuclear corporation Rosatom. "It's quite obvious that Sustainable Development Goal 7, for affordable and clean energy, is our priority," Mozdakov said, "but a nuclear power plant project contributes to at least six of the SDGs and also generates multiple economic effects."

A 2400-megawatt twin-VVER plant provides a clean and stable supply of electricity for at least 60 years, he said, which is enough to power 1.8 million homes on average. It also creates about 3000 direct jobs at the construction site and more than 10,000 others in related sectors. Rosatom's 10-year portfolio of overseas orders has a value of about USD140 billion and includes, among others, 36 new units at various stages of implementation in 12 countries. Thanks to its serial approach to construction, as many as 15 of its reactor units have been connected to the grid in the last 14 years, eight in Russia and seven abroad - in China, India and Iran.

<https://www.world-nuclear-news.org/Articles/Rosatom-explains-the-multiplier-effect-of-new-nucl>

### **Russia, China develop unique method for determining radiation resistance of materials**

TASS News Agency, September 28, 2020

Researchers at Tomsk Polytechnic University (TPU) and Chinese scientists created a method for quickly determining the radiation resistance of materials used in the design of a nuclear reactor. The method has no analogues in the world, the press service of the university told reporters on Monday. The development solves the problem of a quick test for radiation resistance of materials of a nuclear reactor structure, due to the deformation of which a nuclear reaction can lose control, which can lead to an explosion of the reactor. The existing methods of testing the radiation resistance of materials take several years, which slows down the development of technologies.

"Scientists from Tomsk Polytechnic University have proposed a new method for determining the radiation resistance of materials using beams of accelerated atoms. Simulation irradiation with such beams repeats the effect of neutron radiation from a nuclear reactor on a material in a minimum time, which makes it possible to predict more reliably how resistant the material is to radiation. The developed tool has no analogues in the world ", the statement reads. The method developed by Tomsk scientists allows, due to the irradiation of materials with beams of accelerated atoms, to reduce the verification time from several years to several hours. "In addition, the mechanisms of the formation of radiation defects in metals under irradiation with accelerated atoms and neutrons are very close. This makes it possible to increase the research's reliability," said Alexander Pushkarev, one of the researchers, professor of the TPU Department of Materials Science.

<https://tass.com/science/1206867>

West Asia

Iran

**Iran warns against 'sabotage acts' on its nuclear facilities**

Tehran Times, September 18, 2020

The Iranian ambassador to the Vienna-based international organizations has warned against any act of sabotage against Iran's nuclear facilities, saying such acts should be condemned by the International Atomic Energy Agency (IAEA). "We warn against any such reckless and dangerous adventurism," Kazem Gharibabadi said on Thursday. "Such malicious acts should be condemned strongly by the Agency and its Member States." Gharibabadi made the remarks in his report to the seasonal session of the Board of Directors of the IAEA. In addition to protecting its nuclear facilities in any way it deems necessary, Iran reserves its right to take appropriate actions against such threats, he said.

He was referring to a July 2 incident that took place at the Natanz nuclear facility. At the time, Iran didn't disclose the cause of the incident. Late last month, the spokesman for the Atomic Energy Agency Organization of Iran (AEOI) announced that the explosion was an act of "sabotage". "Such malicious acts should be condemned strongly by the Agency and its Member States," Ambassador Gharibabadi says "Security investigations confirm the sabotage [nature] of this action and what is certain is that the explosion took place in Natanz, but the security officials will announce the details of the explosion and how it took place and what materials were used in the explosion," Behrouz Kamalvandi told the al-Alam news network on August 23.

<https://www.tehrantimes.com/news/452587/Iran-warns-against-sabotage-acts-on-its-nuclear-facilities>

### **Iran's rial hits record low as tension spikes with the U.S.**

Reuters, September 19, 2020

The Iranian rial fell to a record low against the U.S. dollar on the unofficial market on Sunday, a day after the U.S. President Donald Trump's administration declared all United Nations sanctions on Tehran had been restored. The dollar was offered for as much as 273,000 rials, up from 267,800 rials on Saturday, according to foreign exchange site Bonbast.com, which tracks the unofficial market. Iran has dismissed the U.S. move as "void and illegal" and U.N. Secretary-General Antonio Guterres told the Security Council on Saturday he cannot take any action on the U.S. declaration because "there would appear to be uncertainty" on the issue.

The three European parties to the nuclear deal - France, Britain and Germany - said in a statement on Sunday that any decision or action taken to reimpose U.N. sanctions "would be incapable of legal effect" because Washington used a mechanism agreed under a 2015 nuclear deal between Iran and world powers, which the United States quit in 2018.

<https://in.reuters.com/article/idINKCN26B0EM>

### **Iran says U.S. seeks to ‘completely ruin’ JCPOA**

Tehran Times, September 20, 2020

In a letter to the UN Security Council and to the UN secretary-general on Saturday, Iran’s ambassador and permanent representative to the UN said the U.S. seeks to “completely ruin” a 2015 nuclear deal between Iran and world powers. “Given that the stated objective of the United States is to completely ruin the Joint Comprehensive Plan of Action and to that end, its strategy is to create legal complication through presenting unilateral arbitrary interpretations and pseudo-legal arguments, the Islamic Republic of Iran trusts that the members of the Security Council will, once again, reject the United States’ continued attempt to abuse the Security Council’s process, thus undermining the authority and credibility of the Council and the United Nations,” Majid Takht Ravanchi said in the letter, according to CNN.

On September 19, U.S. Secretary of State Mike Pompeo announced the return of “all previously terminated UN sanctions” on Iran, a move that drew criticism from all parties to the JCPOA including Washington’s European allies. “Today, the United States welcomes the return of virtually all previously terminated UN sanctions on the Islamic Republic of Iran....Sanctions are being re-imposed on Iran pursuant to the snapback process under UN Security Council resolution (UNSCR) 2231,” Pompeo said in a statement on Saturday. According to Pompeo’s announcement all UN member states should fully comply with the UN restrictions, otherwise, they would face U.S. sanctions.

<https://www.tehrantimes.com/news/452697/Iran-says-U-S-seeks-to-completely-ruin-JCPOA>

### **Iran's Rouhani says U.S. faces defeat in bid to reimpose U.N. sanctions**

Reuters, September 20, 2020

The United States faces defeat in its move to reimpose U.N. sanctions on Tehran, Iranian President Hassan Rouhani said on Sunday, as Washington declared all U.N. sanctions on Iran had been restored. “America is approaching a certain defeat in its sanctions move ... It faced defeat and negative response from the international community,” Rouhani said in a televised speech. “We will never yield to U.S. pressure and Iran will give a crushing response to America’s bullying,” he said.

The Iranian rial fell to a record low against the U.S. dollar on Sunday following the Trump administration's declaration. The U.S. currency was offered for as much as 273,000 rials, up from 267,800 rials on Saturday, according to foreign exchange site Bonbast.com, which tracks the unofficial market. Iran has dismissed the U.S. sanctions move as "void and illegal" and U.N. Secretary-General Antonio Guterres told the Security Council on Saturday he cannot take any action on the U.S. declaration because "there would appear to be uncertainty" on the issue.

<https://in.reuters.com/article/idINKCN26B0HF>

### **U.S. concerned about Iran-North Korea cooperation, seeks to prevent it: envoy**

Reuters, September 21, 2020

The United States is concerned about Iran's cooperation with North Korea and will do whatever it can to prevent it, Elliott Abrams, Washington's envoy on Iran, said. Abrams was responding to a reporter's question on whether the United States had seen evidence that Tehran and Pyongyang had resumed cooperation on long-range missile development. He spoke shortly after the Trump administration slapped new sanctions on Iran over its nuclear and weapons programs.

<https://in.reuters.com/article/idINKCN26C2PJ>

### **Grossi verifies non-diversion of nuclear material declared by Iran**

Tehran Times, September 21, 2020

Director General of the International Atomic Energy Agency (IAEA) Rafael Mariano Grossi has verified the non-diversion of nuclear material declared by Iran. "I report regularly to the Board of Governors on Iran's implementation of its nuclear-related commitments under the Joint Comprehensive Plan of Action (JCPOA)," Grossi said in a statement on Monday. "The Agency continues to verify the non-diversion of nuclear material declared by Iran under its Safeguards Agreement. Evaluations regarding the absence of undeclared nuclear material and activities for Iran continue," he added.

"Last month, I went to Tehran for discussions with President Rouhani and other senior officials. We reached agreement on the resolution of some safeguards implementation issues raised by the Agency. The Agency subsequently conducted a complementary access, under the Additional Protocol, at one of two locations specified by us. Our inspectors took environmental samples which will be analyzed. A complementary access at the second specified location will take place later this month." Grossi also welcomed the agreement between the Agency and Iran which he said "I hope will reinforce cooperation and enhance mutual trust."

Grossi visited Tehran on August 24 and 25 and held talks with senior Iranian officials. On August 26, at the end of his visit, Iran and the IAEA issued a joint statement on agreements and the results of high-level talks between the two sides. According to the statement, the IAEA and Iran “agreed to further reinforce their cooperation and enhance mutual trust” to facilitate the full implementation of Iran’s Comprehensive Safeguards Agreement (CSA) and the Additional Protocol (AP) thereto, which is provisionally applied by Iran since January 16, 2016. Last week, Grossi said that Iran is an important partner of the Agency, saying he hopes the agreement between Iran and the IAEA “will reinforce cooperation and enhance mutual trust”.

<https://www.tehrantimes.com/news/452740/Grossi-verifies-non-diversion-of-nuclear-material-declared-by>

### **Iran says it is ready to swap all prisoners with U.S.**

Reuters, September 21, 2020

Iran is ready for a full prisoner exchange with the United States, Foreign Minister Mohammad Javad Zarif said in a virtual address to the Council on Foreign Relations in New York on Monday, amid heightened tension between the longtime foes. Washington has long demanded that Iran release U.S. citizens including Iranian-American father and son Baquer and Siamak Namazi, who it says are political prisoners. Tehran denies it holds people for political reasons and has accused many of the foreigners in its jails of espionage. It says Iranians detained in the U.S., mostly for breaking sanctions, are being unjustly held.

<https://in.reuters.com/article/idINKCN26C2K9>

### **Rouhani says U.S. can impose neither negotiations nor war on Iran**

Parisa Hafezi

Reuters, September 22, 2020

Iran’s president told the U.N. General Assembly that the United States could impose “neither negotiations nor war” on the Islamic Republic amid heightened tension between the longtime foes over Tehran’s 2015 nuclear deal with major powers. “Iran is not a bargaining chip in U.S. elections and domestic policy ... Any U.S. administration after the upcoming (U.S.) elections will have no choice but to surrender to the resilience of the Iranian nation,” Hassan Rouhani told the annual U.N. gathering in a video message.



The U.S.-Iranian confrontation has intensified since 2018 when President Donald Trump withdrew the United States from Iran's nuclear deal with world powers and unilaterally reimposed sanctions that have hobbled the Islamic Republic's economy. Trump wants a broader agreement with Tehran's clerical rulers that would further restrict Iran's nuclear programme, halt its ballistic missile development work and end its support for proxy forces around the Middle East. Iran has refused to hold talks with the United States unless Washington lifts sanctions on Tehran and returns to the original agreement. In retaliation for U.S. pressure, Tehran has scaled back compliance with nuclear capacity limits set by the deal.

<https://in.reuters.com/article/idINKCN26D201>

### **U.S. sanctions on Iran amount to 'crimes against humanity': envoy**

Tehran Times, September 23, 2020

Iran's ambassador and permanent representative to the UN office in Geneva says U.S. sanctions on Iran amount to "crimes against humanity" The imposition of unilateral sanctions is an international offence, Esmail Baghaei Hamaneh said in a statement to the regular session of the UN Human Rights Council. Baghaei Hamaneh said those who imposed such sanctions and those who enforced them will both be held responsible in the international arena, IRNA reported. He called for shared efforts and tough stance of the international community against the injustice.

The Iranian ambassador pointed to the U.S. disregard for numerous requests by the UN secretary general, UN human rights commissioner and different human rights mechanisms, saying the U.S. approach is a "serious alarm" to the world. He pointed out that Washington's efforts to reimpose the old international sanctions against Iran is another example of its bullying and its disregard for international law and the UN Charter, the U.S. asserted that all UN sanctions eased or lifted by the 2015 nuclear deal, officially called the Joint Comprehensive Plan of Action (JCPOA), are reimposed and must be enforced by UN member states.

<https://www.tehrantimes.com/news/452812/U-S-sanctions-on-Iran-amount-to-crimes-against-humanity-envoy>

### **Iran's oil exports jump in September defying sanctions: TankerTrackers**

Bozorgmehr Sharafedin, Alex Lawler

Reuters, September 24, 2020

Iranian oil exports have risen sharply in September in defiance of U.S. sanctions, three assessments based on tanker tracking showed, throwing a lifeline to the Islamic Republic and its collapsing economy. Exports have shrunk from over 2.5 million barrels per day (bpd) since the United States

withdrew from a nuclear deal with Iran and reimposed sanctions in 2018. Still, Iran has been working to get around the measures and keep exports flowing.

Data from TankerTrackers and two other firms, who asked not to be named, indicated exports are rising in September, although the figures fall into a wide range of between 400,000 bpd and 1.5 million bpd, reflecting the difficulty in tracking the shipments. “Exports are way up right now. We are seeing close to 1.5 million bpd in both crude and condensate so far this month,” Samir Madani, co-founder of TankerTrackers, told Reuters. “These are levels we haven’t seen in a year and a half.” The amount was twice that of August, TankerTrackers data showed, and around 11% of it was ultra light crude, known as condensate. Reuters could not independently verify the data. The range for August’s exports is 300,000 bpd to 750,000 bpd. Data from TankerTrackers, which tracks shipments and oil storage, showed almost half of Iranian exports were picked up by foreign vessels via ship-to-ship transfers, making it difficult to determine final destinations.

<https://in.reuters.com/article/idINKCN26G1VA>

### **Iranian president accuses U.S. of savagery after new sanctions**

Reuters, September 26, 2020

Iranian President Hassan Rouhani accused the United States on Saturday of “savagery” for inflicting \$150 billion of damage on Iran due to sanctions, and said Iranians should direct their anger at the White House. “With their illegal and inhuman sanctions, and terrorist actions, the Americans have inflicted 150 billion dollars of damage on the people of Iran,” Rouhani said in televised remarks, his voice shaking with anger. “We haven’t seen such an extent of savagery ... The address for Iranian people’s curses and hatred is the White House.”

<https://in.reuters.com/article/idINKBN26H0BR>

### **U.N. nuclear watchdog inspects second Iranian site as agreed with Tehran**

Reuters, September 30, 2020

The U.N. nuclear watchdog has inspected the second of two suspected former secret atomic sites in Iran, as agreed with Tehran last month in a deal that ended a standoff over access, the agency said. The International Atomic Energy Agency has not named either of the two undeclared sites but it has described activities it suspects took place there in 2003, the year when it and U.S. intelligence services believe Iran halted a secret and coordinated nuclear weapons programme. Although the IAEA says it has the power to carry out snap inspections anywhere in Iran it deems necessary,

Tehran had denied it access to the two sites for seven months until the deal was struck for access on specific dates this month.

<https://in.reuters.com/article/idINKBN26L1IO>

## Israel

### **Israel concerned Saudi Arabia building nuclear weapons with Chinese assistance**

I24, September 22, 2020

Fears growing that a nuclear race in the region with Beijing's help could potentially spiral out of control. While the recent normalization deals between Israel, UAE and Bahrain are cause for optimism, the prospect of cementing an alliance with Saudi Arabia as part of a bulwark of Sunni states against Shia Iran, may come at a high cost.

Israel's former ambassador to the United Nations and current Director of the Jerusalem Center for Public Affairs told *JNS* that the relationship between the Saudi and the Chinese dates back to the 1980s and started through Chinese missile technology.

<https://www.i24news.tv/en/news/international/middle-east/1600763760-israel-concerned-saudi-arabia-building-nuclear-weapons-with-chinese-assistance>

## UAE

### **In break with past, UAE and Bahrain forge ties with Israel at White House**

Steve Holland, Matt Spetalnick

Reuters, September 15, 2020

The United Arab Emirates and Bahrain signed agreements on Tuesday to establish formal ties with Israel, becoming the first Arab states in a quarter century to break a longstanding taboo, in a strategic realignment of Middle East countries against Iran. U.S. President Donald Trump hosted the White House ceremony, capping a dramatic month when first the UAE and then Bahrain agreed to reverse decades of ill will without a resolution of Israel's dispute with the Palestinians.

In front of a crowd of several hundred people on the White House lawn, Prime Minister Benjamin Netanyahu signed accords with Emirati Foreign Minister Sheikh Abdullah bin Zayed al-Nahyan and

Bahrain's Foreign Minister Abdullatif Al Zayani. The deals, denounced by the Palestinians, make them the third and fourth Arab states to take such steps toward normalizing relations since Israel signed peace treaties with Egypt in 1979 and Jordan in 1994.

<https://in.reuters.com/article/idINKBN2660L1>

## Saudi Arabia

### **Saudi King Salman assails Iran in United Nations debut**

Michelle Nichols, Ghaida Ghantous

Reuters, September 23, 2020

Saudi Arabia's King Salman bin Abdulaziz took aim at Iran during his debut on Wednesday at the annual United Nations meeting of world leaders, calling for a united front to contain Riyadh's rival and stop it from getting weapons of mass destruction. He said Iran exploited a 2015 nuclear deal with world powers "to intensify its expansionist activities, create its terrorist networks, and use terrorism," adding that this had produced nothing but "chaos, extremism, and sectarianism."

"A comprehensive solution and a firm international position are required," the Saudi king, 84, told the 193-member General Assembly in a video statement that was pre-recorded due to the coronavirus pandemic. The United States, a strong ally of Saudi Arabia, quit the Iran nuclear pact in 2018, with President Donald Trump calling it the "worst deal ever." Washington has since imposed unilateral sanctions on Tehran and asserts that all countries also should reinstate U.N. sanctions to try to push the Islamic Republic to negotiate a new deal. French President Emmanuel Macron told the world body on Tuesday that Washington's sanctions campaign against Iran had failed.

<https://in.reuters.com/article/idINKCN26E2XD>

### **Saudi Arabia says any nuclear deal with Iran must preserve non-proliferation**

Reuters, September 23, 2020

Saudi Arabia said that any nuclear deal with Iran has to preserve non-proliferation and continue efforts aimed at making the Middle East a zone free of mass destruction weapons, state news agency SPA reported on Tuesday. The agreement "has to address Iran's destabilising behaviours and its sponsorship of terrorism in the region to prevent it from any provocative actions in the future" it said in a statement issued after weekly cabinet meeting.

In 2015 Iran signed a fragile nuclear deal with world powers but the fate of the 2015 pact has been in doubt since U.S. President Donald Trump pulled the United States out of it and reimposed sanctions. Washington has threatened to use a provision in the agreement to trigger a return of all U.N. sanctions on Iran if the Security Council does not extend an arms embargo on Iran indefinitely.

<https://www.reuters.com/article/us-saudi-iran-nuclear-idUSKCN26D314>

### **UPDATE 1-In U.N. debut, Saudi king calls for comprehensive solution on Iran**

Reuters, September 23, 2020

Saudi Arabia's King Salman bin Abdulaziz on Wednesday called for a comprehensive solution on Iran and disarming its affiliate Hezbollah in Lebanon, and expressed support for U.S. efforts to start talks between Israel and the Palestinians during his first address to the United Nations General Assembly. He said Iran has exploited a 2015 nuclear deal with world powers "to intensify its expansionist activities, create its terrorist networks, and use terrorism," adding that this had produced nothing but "chaos, extremism, and sectarianism."

"A comprehensive solution and a firm international position are required," he told the 193-member General Assembly in a video statement, prerecorded due to the coronavirus pandemic. The United States quit the Iran nuclear pact in 2018 with President Donald Trump dubbing it the "worst deal ever." Washington has since imposed unilateral sanctions and asserts that all countries also have to reinstate U.N. sanctions in an attempt to push the Islamic Republic to negotiate a new deal.

<https://in.reuters.com/article/idINL2N2GK0XO>

### **Saudi Arabia donates \$10 million for combatting nuclear terrorism**

Samir Salama,

Gulf News, September 24, 2020

Saudi Arabia has contributed \$10 million (Dh36.7 million) to the International Atomic Energy Agency (IAEA) for setting up of a specialised centre to combat nuclear terrorism, said Prince Abdullah Bin Khalid Bin Sultan, Saudi Arabia's ambassador to Austria, on Tuesday. Prince Abdullah said Saudi Arabia has transferred the funds to begin the work on the Seibersdorf centre in Austria.

Saudi Arabia has also donated 500,000 euros (Dh2.1 million) for the project to modernise the IAEA laboratories in Seibersdorf. Prince Abdullah affirmed that the kingdom's government is seeking to benefit from the expertise of the IAEA in introducing nuclear energy to contribute to the national energy mix, and what this requires of human capacity development in order to build an integrated and sustainable national system for the energy sector, following the agency's standards.

<https://gulfnews.com/world/gulf/saudi/saudi-arabia-donates-10-million-for-combatting-nuclear-terrorism-1.74083402>

### **Saudi Arabia elected to preside over IAEA committee**

Hibshi Alshammari

Arab News, September 25, 2020

Saudi Arabia has been elected instead of Iran to head the main committee of the International Atomic Energy Agency (IAEA) General Conference during its 64th session held currently in Vienna. Seventy out of 112 countries voted for Saudi Arabia, while 37 abstained. The differences with Iran over its controversial nuclear program have deprived it of heading the committee, which is responsible for studying the decisions put before the week-long IAEA General Conference that started on Monday.

Iran is also competing with the UAE to get a seat on the Council of IAEA Governors, which is in charge of designing the IAEA general policy for South Asia and the Middle East regions. In his video address to the 75th Session of the UN General Assembly in New York King Salman said the Kingdom's hands were extended to Iran in peace with a positive and open attitude over the past decades, but to no avail.

<https://www.arabnews.com/node/1739686/saudi-arabia>

### **Saudi Cabinet: International community must deal firmly with Iran's nuclear violations**

Reuters, September 30, 2020

Saudi Arabia's Cabinet reiterated the Kingdom's position that the international community must take a firm stand towards Iran, and deal seriously against its violations related to its nuclear program, the state news agency reported in a statement early on Wednesday. (Reporting by Hesham Abdul Khalek; Editing by Sandra Maler).

<https://in.reuters.com/article/idINL8N2GQ6YV>

## Turkey

### **Erdogan urges diplomacy to resolve Iran's nuclear programme**

Reuters, September 22, 2020

Turkish President Tayyip Erdogan told the U.N. General Assembly on Tuesday that dialogue and diplomacy should resolve issues related to Iran's nuclear programme under international law, with all parties abiding a 2015 international agreement. The United States on Monday announced new sanctions against Iran's defense ministry and others involved in its nuclear and weapons programme. They were meant to support Washington's assertion - disputed by Europeans and others - that all United Nations sanctions against Tehran are now restored.

"We support solving issues regarding Iran's nuclear programme by taking international law into consideration and through dialogue and diplomacy," Erdogan told the United Nations General Assembly in a video message. "I repeat our call for all parties to abide by their responsibilities under the Joint Comprehensive Plan of Action, which provides serious contributions to regional and global security," he said.

<https://in.reuters.com/article/idINKCN26D2HE>

### **Foundation slabs completed at Akkuyu 2 reactor and turbine buildings**

World Nuclear News, September 23, 2020

JSC Akkuyu Nuklear has announced the completion of concrete pouring of the reactor and turbine buildings' foundation slabs at unit 2 of the Akkuyu nuclear power plant under construction in Mersin province, in southern Turkey. The 4800 MWe plant will comprise four VVER1200 reactors and is expected to meet about 10% of Turkey's electricity needs. Rosatom's first build-own-operate venture, the USD20 billion project is based on an inter-governmental agreement signed between Russia and Turkey in May 2010. More than 17,000 cubic meters of concrete have been poured into the reactor building's foundation. The area of the concrete slab is 6864 square meters, while its height and depth are 2.6 m and over 8 m, respectively.

"To ensure the maximum strength of the slab, the foundation contains 2451 tonnes of rebars, which is equivalent to a third of the weight of all the metal structures of the Eiffel Tower," JSC Akkuyu Nuklear said, adding, "A metal rigid frame is used to keep the rebars in their specified position." The weight of the fully operational reactor building is about 470,000 tonnes, which means the foundation

will "reliably bear a weight that is twice as much as the largest cruise liner in the world", the company said. The reactor building foundation slab is also "highly earthquake-resistant", it added.

<https://www.world-nuclear-news.org/Articles/Foundation-slabs-completed-at-Akkuyu-reactor-and-t>

## East Asia

### Japan

#### **Hitachi pulling out of troubled British nuclear plant project**

Taiki Koide

The Asahi Shimbun, September 16, 2020

Hitachi Ltd. will make official what had long been suspected: It is pulling the plug on a planned nuclear plant construction project in the island of Anglesey in northwest Wales. The company announced in January 2019 that it was freezing the project, but media speculation began simmering this summer that Hitachi might be having a change of heart. That led Hitachi to conclude it could not allow such an ambiguous situation to continue, sources said. A company board meeting on Sept. 16 was expected to formally decide that the company will pull out of the project that carried an estimated price tag of 3 trillion yen (\$28 billion).

Exports of nuclear plant technology and other infrastructure were a key pillar in economic growth policies promoted by the outgoing Abe administration. Hitachi's decision means that no Japanese company will now be involved in the construction of a nuclear plant outside Japan. Hitachi sought to mitigate its own risk in the event of delays in the construction schedule or any accident at the plant by seeking out investments from related companies. However, Hitachi struggled to find new investors. In addition, stricter safety standards in place globally due in large part to the triple meltdown at the Fukushima No. 1 nuclear power plant in 2011 led to a ballooning of projected construction costs. The British government also did not provide the support that Hitachi had relied on. Hitachi's decision is the latest in a string of moves by Japanese companies to end their involvement in overseas nuclear plant projects.

<http://www.asahi.com/ajw/articles/13732505>

#### **Energy authority clears TEPCO to restart Niigata nuclear plant**

The Asahi Shimbun, September 23, 2020



Tokyo Electric Power Co. cleared a major regulatory hurdle toward restarting a nuclear power plant in Niigata Prefecture, but the utility's bid to resume its operations still hangs in the balance of a series of political approvals. The government's nuclear watchdog concluded Sept. 23 that the utility is fit to operate the plant, based on new legally binding safety rules TEPCO drafted and pledged to follow. If TEPCO is found to be in breach of those regulations, it could be ordered to halt the plant's operations.

The Nuclear Regulation Authority's green light now shifts the focus over to whether local governments will agree in the coming months to restart the Kashiwazaki-Kariwa plant. TEPCO is keen to get the plant back up and running. It has been financially reeling from the closure of its nuclear plants in Fukushima Prefecture following the triple meltdown at the Fukushima No. 1 nuclear plant in 2011 triggered by the earthquake and tsunami disaster. The company plans to bring the No. 6 and No. 7 reactors back online at the Kashiwazaki-Kariwa nuclear complex, which is among the world's largest nuclear plants.

<http://www.asahi.com/ajw/articles/13753076>

### **Anti-nuclear crusader Mikiso Iwasa dies at the age of 91**

The Asahi Shimbun, September 25, 2020

Mikiso Iwasa, a survivor of the atomic bombing of Hiroshima and a giant in the hibakusha movement to rid the world of nuclear weapons, died at his home in Funabashi, Chiba Prefecture, of pancreatic cancer on Sept. 7. He was 91. Iwasa served as an adviser to the Japan Confederation of A- and H-Bomb Sufferers Organizations (Nihon Hidankyo) and was professor emeritus of Kanazawa University. Born in Fukuoka Prefecture, Iwasa was only 1.2 kilometers from Ground Zero when the world's first atomic bomb detonated over Hiroshima on Aug. 6, 1945.

<http://www.asahi.com/ajw/articles/13717777>

### **Japanese court opens government and TEPCO to further Fukushima claims**

Reuters, September 30, 2020

A Japanese appeal court on Wednesday ruled that the state and Tokyo Electric Power Company Holdings (TEPCO) could have taken steps to prevent the 2011 Fukushima nuclear disaster and are therefore liable for compensation claims. The ruling by the Sendai High Court, which upholds a lower court decision, means the government and TEPCO must pay 1.01 billion yen (\$9.6 million) to 3,550 plaintiffs forced to flee their homes after a magnitude 9 earthquake triggered a tsunami that

devastated the country's northeast and crippled the Fukushima nuclear plant, public broadcaster NHK reported.

The ruling could open up the government to further damage claims because thousands of other residents evacuated as reactors at the coastal power station overheated and released a radioactive cloud. While some people have returned home, areas close to the plant are still off limits.

<https://in.reuters.com/article/idINKBN26L2M6>

## North Korea

### **N. Korea seen enriching uranium at nuclear facility: IAEA chief**

Choi Si-young

Korea Herald, September 15, 2020

North Korea's nuclear activity is still a serious concern and its pursuit of nuclear weapons is a clear violation of the UN Security Council resolutions, Rafael Mariano Grossi, director general of the International Atomic Energy Agency, told the IAEA board members. Noting monitoring is limited because UN nuclear inspectors are not allowed in North Korea, the IAEA chief said Pyongyang appeared to have continued to operate nuclear facilities. UN inspectors were expelled from the North in April 2009.

"There were indications consistent with the production of enriched uranium at the reported centrifuge enrichment facility at Yongbyon," he said. It was likely that the North has continued activity at the experimental light-water reactor, though the 5-megawatt reactor and the Radiochemical Laboratory showed no signs of operation, he added.

[http://www.koreaherald.com/view.php?ud=20200915000810&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200915000810&ACE_SEARCH=1)

### **Missile launch or storm repairs? Flurry of activity fuels speculation of North Korea test**

Josh Smith

Reuters, September 18, 2020

Analysts and security officials say they are watching for signs that North Korea may use an upcoming holiday to unveil new weapons or test fire a submarine-launched ballistic missile (SLBM), after a flurry of activity was detected at a key base. Formations of troops have been seen practicing for what is expected to be a major military parade on Oct. 10, the 75th anniversary of the ruling Workers' Party of Korea. Some observers say North Korea may showcase its largest missiles for the first time since 2018.

Imagery analysts and security officials caution that so far there is no conclusive evidence of an impending launch. But after several typhoons lashed North Korea in early September, satellite photos have shown a flurry of activity at the Sinpo South Shipyard, including in a secure basin where a barge used in previous underwater missile launches is docked. "We're monitoring developments, as there is a possibility that a submarine-launched ballistic missile test will be conducted there using ejection equipment shortly after the repair is done," Won In-choul, the nominee for chairman of South Korea's Joint Chiefs of Staff, told lawmakers.

<https://in.reuters.com/article/idINKBN2690FZ>

### **N. Korea has 'small number' of nuclear weapons: US general**

Yonhap

Korea Herald, September 18, 2020

North Korea has a "small number" of nuclear weapons, the vice chairman of the US Joint Chiefs of Staff said Thursday, although that number was not defined. Air Force Gen. John Hyten told a virtual forum that the specific numbers were "classified" and in many ways hard to understand. "But a small number is a confident characterization of nuclear capabilities that can threaten their neighbors or the United States," he said in a symposium hosted by the National Defense University's Center for the Study of Weapons of Mass Destruction. Hyten offered no further explanation of what he meant by "a small number."

The US has never officially discussed its assessment of North Korea's nuclear capabilities, but the communist state is widely estimated to possess more than 70 nuclear warheads. In its latest annual report, "North Korean Tactics," published in July, the US Army said the North is "estimated" to possess 2,500 to 5,000 tons of chemical weapons. With regard to its nuclear arsenal, however, the report simply states "estimates for North Korean nuclear weapons range from 20 to 60 bombs, with the capability to produce six new devices each year." North Korea has conducted six nuclear tests, between October 2006 and September 2017. Hyten's remark follows a recently renewed controversy, at least in Seoul, over Pyongyang's nuclear capabilities.

[http://www.koreaherald.com/view.php?ud=20200918000129&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200918000129&ACE_SEARCH=1)

### **Russia has no intel suggesting impending N. Korean SLBM test: Moscow official**

Yonhap

Korea Herald, September 20, 2020

Russia does not have any intelligence suggesting that North Korea is preparing to test-fire a submarine-launched ballistic missile (SLBM), a Moscow foreign ministry official has said amid speculation that Pyongyang could conduct a test next month.

Petr Ilichev, director of the department of international organizations at the Russian foreign ministry, said in an interview with the country's RIA Novosti news agency on Saturday that his country does not have any information of a possible North Korean SLBM test launch next month.

There has been speculation that the North could test-fire an SLBM or undertake other weapons provocations on the occasion of the founding anniversary of the Workers' Party on Oct. 10, which could be a new strategic weapon that leader Kim Jong-un pledged to show off in his New Year's Day message. Ilichev stated that analysis on such a sensitive matter should be made cautiously, arguing that similar speculations in the past have often been made with political motives.

[http://www.koreaherald.com/view.php?ud=20200920000246&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200920000246&ACE_SEARCH=1)

### **NK resumes long-range missile cooperation with Iran: report**

Choi Si-young

Korea Herald, September 21, 2020

North Korea and Iran have resumed long-range missile cooperation, which includes the transfer of critical parts, Reuters reported Monday, citing a senior US official who did not provide detailed evidence. The official, who was speaking of a broader US plan to sanction people and entities linked to Iran's weapons programs, did not elaborate on when Pyongyang and Tehran first started working together, or when they stopped and began again, according to the report. North Korea and Iran have forged close ties against the United States and have long been suspected of cooperating to build ballistic missiles and nuclear weapons.

[http://www.koreaherald.com/view.php?ud=20200921000859&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200921000859&ACE_SEARCH=1)

### **Possible missile carrier spotted at North Korea parade practice, U.S. think-tank says**

Josh Smith

Reuters, September 22, 2020

A vehicle that may be carrying a ballistic missile has been spotted at a parade training ground in North Korea amid signs it is preparing a big military display for an Oct. 10 holiday, a U.S. think-tank said. Commercial satellite imagery taken on Tuesday showed a "probable missile-related vehicle" at the Mirim Parade Training Ground outside the capital, Pyongyang, according to a report by the group 38 North, which monitors North Korea. "While imagery resolution is insufficient to determine exactly what the vehicle is, relative size and shape suggests that it may be a transporter-erector-launcher (TEL) for a large missile," the group said.

The vehicle appeared to be large enough to carry one of North Korea's intercontinental ballistic missiles (ICBM), which are believed to be capable of delivering a nuclear warhead to targets as far as anywhere in the United States. The authors acknowledged there was a chance the vehicle could be

something else but said that seemed “unlikely in this particular location and circumstance”. Satellite imagery had also shown large formations of troops and vehicles practicing at the parade training ground, 38 North reported. “The recent training strongly suggests a large military parade is planned for the 75th anniversary of the Workers’ Party of Korea on October 10,” the think-tank said.

<https://in.reuters.com/article/idINKCN26E0IR>

### **North Korea tells U.N. that now it has 'effective war deterrent' it will focus on economy**

Michelle Nichols, David Brunnstrom

Reuters, September 30, 2020

North Korea has a “reliable and effective war deterrent for self-defense” and will now focus on developing its economy, North Korea’s U.N. Ambassador Kim Song said on Tuesday, though he acknowledged that international sanctions were a hindrance. Addressing the U.N. General Assembly, Kim also said the “anti-epidemic situation in our country is now under safe and stable control” as a result of measures taken to contain the spread of the novel coronavirus. North Korea has said it has no confirmed cases, though some U.S. officials have cast doubt on that claim. Already weighed down by tough international sanctions over its nuclear and ballistic missile programs, Pyongyang is also facing significant economic damage from strict border closures and other measures aimed at preventing a coronavirus outbreak and struggling to cope with damage from recent storms and flooding.

“Based on its reliable guarantee for safeguarding the security of the state and people, the DPRK is now directing all its efforts to economic construction,” said Kim, using his country’s formal name - Democratic People’s Republic of Korea. “It is a matter of fact that we badly need an external environment favourable for economic construction,” he said. “But, we cannot sell off our dignity just in a hope for brilliant transformation – the dignity which we have defended as valuable as our own life. This is our steadfast position.” He said North Korea was still being threatened by military hardware like stealth fighters being used on the Korean Peninsula and “nuclear strike means of all kinds are directly aimed at the DPRK.”

<https://in.reuters.com/article/idINKBN26K3I8>

## South Korea

### **South Korea says no use of nuclear weapons in joint operational plans with U.S.**

Hyonhee Shin

Reuters, September 15, 2020

South Korea said on Tuesday none of its joint military action plans with the United States include any use of nuclear weapons, after a book by a U.S. journalist sparked debate over whether scenarios of a full-blown war with North Korea would entail a nuclear attack from either side. In his new book, titled “Rage,” Washington Post associate editor Bob Woodward wrote that the United States had devised plans for a possible armed clash with North Korea, such as “the U.S. response to an attack that could include the use of 80 nuclear weapons.” The book was based on multiple interviews with U.S. President Donald Trump. The passage fuelled debate in South Korea over whether it meant Washington or Pyongyang would detonate 80 bombs against each other.

Seoul’s defence ministry said on Tuesday its joint operational plans (OPLAN) with the United States did not include any use of nuclear weapons, reiterating the view of the presidential office. A presidential official said on Monday there must not be another war on the peninsula and any use of force cannot be implemented without South Korea’s consent.

<https://in.reuters.com/article/idINKBN2661PS>

### **NK silent as Moon speaks of peace deal**

Choi Si-young

Korea Herald, September 2020

South Korean President Moon Jae-in said Saturday that the Pyongyang Joint Declaration should be fulfilled, in a message commemorating the second anniversary of the inter-Korean peace deal signed by him and North Korean leader Kim Jong-un on Sept. 19, 2018, at their third summit that year. “The reason the deal has yet to be realized was that there were hurdles, both domestic and foreign. Nevertheless, we have an unwavering commitment to peace,” Moon wrote on Facebook, adding that the “seeds” of peace sown two years ago were destined for fruition.

Moon said he and Kim shook hands on bringing about a nuclear-free Korean Peninsula and on upholding an inter-Korean military arrangement. Not a single skirmish has occurred at the border since that time, and that was valuable progress, Moon added. Unification Minister Lee In-young voiced similar sentiments, saying the two Koreas should go back to that year when they marked a “new milestone” for peace. “We should try dialogue and find an answer,” Lee told a forum. On the other hand, North Korea remained silent on the topic, with its state newspaper, broadcaster and propaganda outlets staying quiet. The two Koreas have not addressed each other since Pyongyang suspended a plan to stage military action against Seoul in June after blowing up an inter-Korean liaison office over the launch of anti-North leaflets over the inter-Korean border.

[http://www.koreaherald.com/view.php?ud=20200920000188&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200920000188&ACE_SEARCH=1)

### **S. Korea, US hold nuclear security working group session**

Yonhap

Korea Herald, September 23, 2020

South Korea and the United States held a video-linked session of their Nuclear Security Working Group on Wednesday to discuss cooperation on the minimization of the use of highly enriched uranium and other issues, the foreign ministry said. The group is among the four working groups under the High-Level Bilateral Commission, which was launched in 2016 following the 2015 revision of the two countries' nuclear energy cooperation agreement. Park Il, the ministry's director-general for nonproliferation and nuclear affairs, and Leah Cochran, director for nuclear threat reduction at the US National Security Council, jointly led the session that also involved officials from nuclear energy-related agencies in both countries.

"The two sides checked pending issues of nuclear security cooperation between the two countries, and their future course of cooperation," the ministry said in a press release. The session's agenda included joint efforts to minimize the use of highly enriched uranium for research purposes by transitioning to facilities employing technologies for high-density yet low-enrichment uranium, a ministry official said. The two sides also discussed ways to enhance the protection of nuclear facilities from potential physical incursions, such as drone-based attacks. The other working groups attached to the High-Level Bilateral Commission are the Spent Fuel Management Working Group, the Assured Fuel Supply Working Group, the Promotion of Nuclear Export and Export Control Cooperation Working Group.

[http://www.koreaherald.com/view.php?ud=20200923000629&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200923000629&ACE_SEARCH=1)

### **Top nuclear envoy heads to US for talks amid tensions over NK killing of S. Korean citizen**

Yonhap

Korea Herald, September 27, 2020

South Korea's chief nuclear envoy, Lee Do-hoon, left for Washington on Sunday for talks with his counterpart expected to include North Korea's recent killing of a South Korean citizen drifting in its waters. During his four-day visit to Washington, Lee will hold talks with US Deputy Secretary of State Stephen Biegun, who doubles as the point man for North Korea. "We are currently at a critical point in advancing the peace process on the Korean Peninsula," he told reporters before departing. "I will meet with Special Representative Biegun to closely discuss how to stably manage the current



situation and resume dialogue so as to tackle our challenges of realizing the complete denuclearization and lasting peace on the Korean Peninsula," he added.

When asked by a reporter whether he will discuss the North's recent deadly shooting, Lee said he will discuss "all issues related to the Korean Peninsula." Nuclear negotiations between Washington and Pyongyang remain stalled since the collapse of the Hanoi summit between US President Donald Trump and North Korean leader Kim Jong-un in February 2019. Inter-Korean relations have also been strained after the North severed all communication channels with the South and blew up the joint liaison office in June.

[http://www.koreaherald.com/view.php?ud=20200927000116&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200927000116&ACE_SEARCH=1)

### **Discussions on US intermediate missile deployment in S. Korea premature: US envoy**

Yonhap

Korea Herald, September 28, 2020

The United States is not ready yet to talk with allies about deployment of its specific military capabilities, a senior US official said Monday, as Washington is considering deploying intermediate-range missiles in East Asia to counterbalance China's growing capabilities. Marshall Billingslea, special US presidential envoy for arms control, also said in an interview with Yonhap News Agency and other local media outlets in Seoul that North Korea's recent apology for the killing of a South Korean fisheries official is a good first step toward resolving the issue. Billingslea arrived in Seoul on Sunday for a two-day visit.

The trip came as the US has been considering deploying intermediate-range missiles in Asia to counter China after withdrawing from the 1988 Intermediate-Range Nuclear Forces Treaty (INF) last year amid speculation that South Korea could be one of the candidate sites. Claiming that China test-fired missiles 225 times last year alone, which is more than the number of launches by all the other countries in the world combined, Billingslea called on China to come forward and discuss the matter with the US, which is not a request but its legal obligation. South Korea is already home to a US missile defense system called Terminal High Altitude Area Defense (THAAD), which was installed in Seongju, North Gyeongsang Province, some 300 kilometers southeast of Seoul, in 2017 despite strong protests from China. "We have had no discussions with the US on the possible hosting of US intermediate-range missiles," a defense ministry official said. "No official request from the US side for discussions regarding the issue has been made."

"The two sides agreed to hold a South Korea-US senior-level meeting on arms control and nonproliferation and also agreed to continue to strengthen communication on key related issues at each level," the ministry said in a press release. During the talks, they also exchanged views on key



international regimes on arms reduction and nonproliferation, including the Non-Proliferation Treaty (NPT) and discussed ways for further cooperation in that field, it added.

[http://www.koreaherald.com/view.php?ud=20200928001038&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200928001038&ACE_SEARCH=1)

## Misc

### **Policymakers should act now on nuclear, urges new report**

World Nuclear News, September 16, 2020

Nuclear energy provides nearly one-third of the world's non-emitting electricity and complementing and enabling other clean energy sources, including renewables. Recognising this current and future potential for nuclear energy, the NICE Future initiative was launched in 2018 at the 9th CEM, which was held in Copenhagen, Denmark. The new report - The Flexible Nuclear Energy for Clean Energy Systems - has been published ahead of the 11th CEM, which takes place on 22 September and is being hosted this year by Saudi Arabia. It provides a collection of technical analyses that, in the aggregate, demonstrate the current and potential future roles for nuclear energy in providing flexibility in meeting energy demands. For the purposes of the report, flexibility is defined as: the ability of nuclear energy generation to economically provide energy services at the time and location they are needed by end-users. These energy services can include both electric and non-electric applications utilising both traditional and advanced nuclear power plants and integrated systems.

<https://world-nuclear-news.org/Articles/Policymakers-should-act-now-on-nuclear,-says-new-r>

### **IAEA forecasts doubling of nuclear capacity by 2050 in 'high case'**

World Nuclear News, September 17, 2020

The International Atomic Energy Agency (IAEA) has released its latest projections for energy, electricity and nuclear power trends through 2050. Compared with the previous year, the 2020 projections are largely unchanged. Under the high case scenario, IAEA analysts expect an increase of global nuclear electrical generating capacity by 82% to 715 GWe. Under the low case scenario, it will fall by 7% to 363 GWe. The 40th edition of Energy, Electricity and Nuclear Power Estimates for the Period up to 2050 provides detailed global trends in nuclear power by region. The report presents its projections for nuclear electrical generating capacity as low and high estimates. They reflect different scenarios for the worldwide deployment of this low carbon energy source.

"The latest IAEA annual projections show that nuclear power will continue to play a key role in the world's low-carbon energy mix, with global nuclear electrical capacity seen nearly doubling by 2050

in our high case scenario. Climate change mitigation remains a key potential driver for maintaining and expanding the use of nuclear power," IAEA Director General Rafael Mariano Grossi said. From 2019 to 2050, global electricity generation is expected to more than double, exceeding nuclear generation capacity growth also in the high case scenario. Therefore, IAEA experts expect the share of nuclear power amongst all sources of electricity to remain either stable or decline. In 2019 nuclear power generated 10.4% of global electricity.

<https://www.world-nuclear-news.org/Articles/IAEA-forecasts-doubling-of-nuclear-capacity-by-205>

### **Nuclear's flexibility is the 'magic' to create a clean energy future**

World Nuclear News, September 17, 2020

The panellists all agreed that, in tandem with renewable energy, the flexibility of nuclear - from existing large-scale plants to advanced designs for small and medium-sized reactors of the future - will enable the transition to a cleaner world and a stronger global economy. Chairing the panel discussion, IEA Executive Director Fatih Birol said: "Flexibility is the magic word if we want to have a secure but at the same time clean energy future. Nuclear power can both provide clean electricity and also help to have the flexibility that we need in our energy systems, regardless of whether the wind is blowing or we have sunshine."

As a resident of Paris, where the IEA is based, Birol pointed to the value of reliable electricity supply in France, where nuclear power plants account for more than 70% of generation. The lockdown during the coronavirus pandemic had reminded the whole world of the importance of electricity, he said, and the uninterrupted supply of low-carbon power from nuclear plants had been a reminder of the value of nuclear energy. "In order to make the markets work, governments need to value, remunerate, this service that nuclear or any clean technology can bring," he said. The premature closure or the decision not to extend the operating lives of nuclear plants in some countries "may well be a major mistake when we look at the scale of the climate challenge we are facing today", he added.

<https://world-nuclear-news.org/Articles/Nuclears-flexibility-is-the-magic-to-create-a-clea>

### **U.N. chief says no action on U.N. Iran sanctions due to 'uncertainty'**

Michelle Nichols

Reuters, September 20, 2020

United Nations Secretary-General Antonio Guterres told the Security Council on Saturday he cannot take any action on a U.S. declaration that all U.N. sanctions on Iran had been reimposed because “there would appear to be uncertainty” on the issue. U.S. Secretary of State Mike Pompeo said last month that he triggered a 30-day process at the council leading to the return of U.N. sanctions on Iran on Saturday evening that would also stop a conventional arms embargo on Tehran from expiring on Oct. 18.

But 13 of the 15 Security Council members say Washington’s move is void because Pompeo used a mechanism agreed under a 2015 nuclear deal between Iran and world powers, which the United States quit in 2018. “There would appear to be uncertainty whether or not the process ... was indeed initiated and concomitantly whether or not the (sanctions) terminations ... continue in effect,” Guterres wrote in a letter to the council, seen by Reuters.

<https://in.reuters.com/article/iran-usa-un/un-chief-says-no-action-on-un-iran-sanctions-due-to-uncertainty-idINKCN26B03P>

### **Nuclear plants in Arabian Sea face tsunami risk**

Ranjit Devraj

Prevention Web, September 20, 2020

A major tsunami in the northern Arabian Sea could severely impact the coastlines of India and Pakistan, which are studded with sensitive installations including several nuclear plants, says the author of a new study. “A magnitude 9 earthquake is a possibility in the Makran subduction zone and consequent high tsunami waves,” says C.P. Rajendran, lead author of the study, which was published this September in Pure and Applied Geophysics.

“Our study is a step towards understanding the tsunami hazards of the northern Arabian Sea,” says Rajendran. “The entire northern Arabian Sea region, with its critical facilities, including nuclear power stations, needs to take this danger into consideration in hazard perceptions.” Atomic power stations functioning along the Arabian Sea include Tarapur (1,400 megawatts) in India’s Maharashtra state, Kaiga (being expanded to 2,200 megawatts) in Karnataka state and Karachi in Pakistan (also being expanded to 2,200 megawatts). A mega nuclear power plant coming up at Jaitapur, Maharashtra will generate 9,900 megawatts, while another project at Mithi Viridi in Gujarat may be shelved because of public opposition.

<https://www.preventionweb.net/news/view/73714#:~:text=%5BNEW%20DELHI%5D%20A%20major%20tsunami,author%20of%20a%20new%20study>.

## **Twitter grossed out by India-Pakistan Peace Pizza, prefers 'nuclear war' instead**

Anwasha Mitra

The Free Press Journal, September 21, 2020

With Monday being commemorated as the International Day of Peace 2020, Pizza 4P's has come out with a unique concept. The well known company has created three fusion pizzas that are available for a limited time at their Hai Ba Trung outlet in Vietnam. The 'peace pizzas' that are, as their Instagram profile puts it, "comprised of a harmony of flavors of countries in conflict" have drawn a mixed bag of reactions on social media.

The idea here is that if ingredients from two countries can go perfectly together on a pizza, it just goes on to show that 'so can we on the planet'. To this end, people can now try out the India-Pakistan Pizza (Delhi Palak Paneer and Karachi Chapli Kebab), China-USA Pizza (Shanghai Chilli Shrimp and New York Buffalo Chicken) and the Israel-Palestine Pizza (Tel Aviv Za'atar Hummus and Ramallah Musakhan). As they mention in their social media posts introducing these new offerings, "100% of all proceeds from the sale of our Peace Pizzas will go to the United Nations Peacebuilding Fund".

<https://www.freepressjournal.in/viral/twitter-grossed-out-by-india-pakistan-peace-pizza-prefers-nuclear-war-instead>

## **Triangularity of Nuclear Arms Control**

Alexander Savelyev

Modern Diplomacy, September 22, 2020

In December 2019, the United States officially invited China to enter into a strategic security dialogue. The White House said it hoped Beijing's consent to this proposal might become the first step towards an international agreement encompassing all nuclear weapons of the United States, Russia, and China. As expected, this proposal was rejected. China said its nuclear arsenal was much smaller than those of the United States and Russia, and it would be able to participate in such talks only when their nuclear potentials were brought to parity with its own.

In March 2020, U.S. President Donald Trump once again declared his intention to ask Russia and China to hold such talks with the aim of avoiding a costly arms race (Reuters.com, 2020). The Chinese Foreign Ministry's response followed virtually in no time. Its spokesperson Zhao Lijian said that China had no intention of taking part in the so-called China-U.S.-Russia trilateral arms control negotiations, and that its position on this issue was very clear (ECNC.cn., 2020). He called upon the United States to extend the New START and to go ahead with the policy of U.S-Russian nuclear

arms reduction, thus creating prerequisites for other countries to join the nuclear disarmament process. There is nothing new about China's stance. A year earlier Chinese Foreign Ministry spokesperson Geng Shuang, while speaking at a news conference in May 2019, made a similar statement. China refused to participate in a trilateral arms control agreement

<https://moderndiplomacy.eu/2020/09/22/triangularity-of-nuclear-arms-control/>

### **Uzbekistan on track for IAEA mission this year, says energy minister**

World Nuclear News, September 22, 2020

Uzbekistan is "making great strides" in developing its nuclear and regulatory infrastructure in strong partnership with the International Atomic Energy Agency (IAEA), Uzbek Minister of Energy Alisher Sultanov told participants in the 64th IAEA General Conference yesterday. Speaking via video-link to the annual event in Vienna, Sultanov provided an update on the Central Asian country's new nuclear power programme. Uzbekistan and Russia signed an intergovernmental agreement on cooperation in the use of nuclear energy for peaceful purposes in December 2017, and in September 2018 a further agreement was signed for the construction by Russian state nuclear corporation Rosatom of two VVER-1200 reactors. These are to be commissioned in 2028 and 2030, respectively. Uzbekistan later announced it wanted to build four units and not just two as previously stated.

Sultanov thanked the IAEA for its significant role in mobilising joint efforts to combat the COVID-19 virus, by providing countries with diagnostic kits and detection equipment. He noted these were based on technologies first developed in the nuclear sector. In particular, he thanked the IAEA for diagnostic test systems supplied to three medical centres in Uzbekistan. "Uzbekistan stands shoulder-to-shoulder with the IAEA and fully supports their aims of promoting the use of nuclear science and technology to ensure peace, stability, cooperation and development. I would also like to thank the IAEA for its continued support of our initiatives and the training of Uzbek citizens through the ongoing Technical Cooperation Programme," Sultanov said.

<https://www.world-nuclear-news.org/Articles/Uzbekistan-on-track-for-IAEA-mission-this-year,-sa>

### **Project to downblend Kazakh HEU fuel completed**

World Nuclear News, September 24, 2020

A project to remove the last remaining batch of unirradiated highly enriched uranium (HEU) fuel from Kazakhstan has been completed in a joint effort by Kazakhstan and the USA, the US Department of Energy's National Nuclear Security Administration (NNSA) has announced. The two nations have also signed a new joint statement reaffirming their intention to continue to work

together to support the common goal of minimising nuclear proliferation, ensuring nuclear security and strengthening the nuclear non-proliferation regime.

The NNSA and Kazakhstan's Ministry of Energy together removed 2.9 kilograms of unirradiated HEU fuel from the IGR research reactor in Kurchatov. It was then shipped by truck in 25 special transportation casks more than 200 miles to the Ulba Metallurgical Plant in Ust-Kamenogorsk, where it was downblended. This process included crushing and grinding the graphite/uranium blocks, oxidising the graphite material, dry mixing with low-enriched uranium (LEU) powder, dissolving the uranium, and adjusting to get the uranium oxide to 19.8% enrichment. The entire process was conducted following IAEA safeguards, and the uranium can now be used as fuel for LEU research reactors, NNSA said. "The world is a little bit safer now that this material has been downblended into a less dangerous form," NNSA Administrator and Under Secretary for Nuclear Security of DOE Lisa Gordon-Hagerty said. "Thank you, Kazakhstan, for your steadfast resolve in accomplishing this important task."

<https://www.world-nuclear-news.org/Articles/Project-to-downblend-Kazakh-HEU-fuel-completed>

### **Nuclear delivers a stronger tomorrow**

Nuclear Engineering, September 24, 2020

To say that the spring and summer of 2020 has been unlike many others seems hardly a revolutionary statement. The global coronavirus pandemic has had profound impacts on societies around the world, both socially and economically. It has also offered an opportunity to pause and reflect on what we value the most. Over the past few months, many communities around the world have been enjoying the benefits of significantly cleaner air, with some cities seeing blue skies for the first time in decades. In many countries it has prompted reviews by governments of how best to build stronger, cleaner and more resilient societies. Whilst the pandemic has done great damage, with appropriate policy responses it may provide a unique opportunity to build a genuinely sustainable world.

We need electricity that is clean, reliable and affordable, as no one should have to choose between essentials like heating or eating. We need a power source that can not only help us mitigate the effects of climate change and environmental degradation, but that can also help bring the enormous socio-economic benefits of a reliable electricity supply to the corners of the world that do not have access to it. Nuclear power has a proven track record of delivering such a transformation and is the best option to continue this journey towards true sustainability.

<https://www.neimagazine.com/features/featurenuclear-delivers-a-stronger-tomorrow-8148207/>

**Nuclear Reactor Coolant Pumps Market Have High Growth But May Foresee Even Higher Value 2020-2026 | Areva, General Electric, Alstom Power, KSB Pumps, Bharat Heavy Electricals Limited, Flowserve Corporation, Westinghouse Electric Company, Mitsubishi Heavy Industries, Hitachi Plant Technologies, Sulzer Pumps etc.**

Alex

The Daily Chronicles, September 24, 2020

The Nuclear Reactor Coolant Pumps Market report includes overview, which interprets value chain structure, industrial environment, regional analysis, applications, market size, and forecast. This is a latest report, covering the current COVID-19 impact on the market. The pandemic of Coronavirus (COVID-19) has affected every aspect of life globally. This has brought along several changes in market conditions. The rapidly changing market scenario and initial and future assessment of the impact is covered in the report. The report provides an overall analysis of the market based on types, applications, regions, and for the forecast period from 2020 to 2026. It also offers investment opportunities and probable threats in the market based on an intelligent analysis.

<https://thedailychronicle.in/news/1845400/nuclear-reactor-coolant-pumps-market-have-high-growth-but-may-foresee-even-higher-value-2020-2026-areva-general-electric-alstom-power-ksb-pumps-bharat-heavy-electricals-limited-flowserve-corpor/>

**World's operating nuclear fleet at 30 year low as new plants stall: report**

Susanna Twidale

Reuters, September 24, 2020

The number of nuclear reactor units operating globally is at a 30 year low, while new plants struggle for investment, an industry report said on Thursday. Proponents of nuclear say as a low-carbon power source it could be vital in helping countries meet climate targets, but several plants around the world are coming to the end of their life expectancies and many new ones have faced delays.

Some 408 nuclear reactors were in operation in 31 countries as of July 2020, a decline of 9 units from mid-2019 and 30 fewer than the 2002 peak of 438, the annual World Nuclear Industry Status Report (WNISR) showed. The slow pace of new projects coming on stream also increased the overall age of the global fleet to around 31 years old. Of the 52 new plants being built globally at least 33 are behind schedule, while not a single new project came online in the first half of 2020, the report said.

<https://www.reuters.com/article/global-nuclearpower/worlds-operating-nuclear-fleet-at-30-year-low-as-new-plants-stall-report-idUKL5N2GK2SP>



## **‘Nuclear power is now the most expensive form of generation, except for gas peaking plants’**

Emiliano Bellini

PV-Magazine, September 24, 2020

The levelized cost of energy (LCOE) from nuclear power rose from around \$117/MWh in 2015 to \$155 at the end of last year, according to the latest edition of the World Nuclear Industry Status Report, published annually by French nuclear consultant Mycle Schneider. By contrast, the LCOE from solar power decreased from \$65/MWh to approximately \$49 and that of wind from \$55 to \$41.

“What is remarkable about these trends, is that the costs of renewables continue to fall due to incremental manufacturing and installation improvements while nuclear, despite over half a century of industrial experience, continues to see costs rising,” stated the report, citing a recent study from financial advisory and asset management firm Lazard. “Nuclear power is now the most expensive form of generation, except for gas peaking plants,” added the study, which did not provide an LCOE for gas peaker generation. The cost difference is having a huge impact in new generation capacity deployment, with just 2.4 GW of new nuclear plants installed last year, compared to 98 GW of solar and 59.2 GW of wind, according to the report. The world’s operational nuclear capacity fell 2.1% to 362 GW by the end of June. “The number of operating reactors in the world has dropped ... to 408 as of mid-2020, that is below the level already reached in 1988 and 30 units below the historic peak of 438 in 2002,” the study reported.

<https://www.pv-magazine.com/2020/09/24/nuclear-power-is-now-the-most-expensive-form-of-generation-except-for-gas-peaking-plants/>

## **Panellists address SMR supply chain challenges**

World Nuclear News. September 25, 2020

The commercial deployment of small modular reactors (SMRs) will bring new supply chain opportunities as well as challenges, panellists at an event to launch a World Nuclear Association report said this week. The World Nuclear Supply Chain: Outlook 2040 analyses the economic value of the nuclear power industry and provides a market-oriented review of the opportunities and challenges for nuclear power plants and their supply chain over the next two decades. There is "significant potential" for both light-water and next-generation SMRs over the coming decade, Elina Teplinsky, partner at Pillsbury Winthrop Shaw Pittman, said. Rosatom's floating nuclear power plant Akademik Lomonosov - which was commissioned earlier this year - and the recent US design certification approval for the NuScale SMR illustrate recent progress towards the deployment of light-water SMRs, but non-light water models are also catching up, she said, and a "whole fleet" of SMRs could potentially become a reality in the next decade.



This presents significant possibilities for nuclear new-build in markets that are different from the traditional ones, Teplinsky said. "SMRs can address a whole new set of markets, both geographically because they can be used and deployed in countries that have smaller grids or require distributed energy, or don't have the financial capacity to support a large nuclear power plant," she said. In addition, these designs open up a new market non-electricity generation uses such as desalination, process heat, district heat and, in the longer term, the production of alternative fuels like hydrogen, she said. The impact that will have on the supply chain will be "interesting", she said. "By their nature, SMRs are more modular, and they're going to have more manufactured content and potentially less civil construction [than large-scale nuclear power plants] - here, we're moving more towards a product rather than a project." This will lead to an expansion in the supply chain as new companies join it, she said.

<https://www.world-nuclear-news.org/Articles/Panellists-address-SMR-supply-chain-challenges>

### **Vietnam govt says needs \$133.3 bln for power projects by 2030**

Khanh Vu

Reuters, September 28, 2020

Vietnam will need to invest up to \$133.3 billion in new power plants and transmission networks over the next decade to meet the country's rising demand, the government said on Monday. Of the total, \$96 billion is needed to build new power plants and \$37.3 billion to expand its power grid, the government said in a statement on its website. The Southeast Asian country's demand for electricity is forecast to annually rise 8.6% during the 2021-2025 period, and 7.2% in the 2026-2030 period, the government added.

<https://in.reuters.com/article/idINL4N2GP2OW>

### **Westinghouse signs expanded Ukraine nuclear fuel deal**

Reuters, September 30, 2020

Westinghouse Electric Co has signed an expanded nuclear fuel deal to supply Ukraine's reactors, the company said on Wednesday. It currently supplies six of 15 Ukraine's VVER-1000 reactors with a seventh due to switch to it next year. The new contract, signed with the National Nuclear Energy Generating Company Energoatom, adds two VVER-440 reactors at the Rivne nuclear power plant.

The parties also signed a letter of intent regarding exploring localising fuel assembly component production.

“With this major agreement, we extend further our commitment to Ukraine’s energy security and focus on further improving the operational excellence of its nuclear fleet,” Westinghouse CEO Patrick Fragman said. Kyiv wants to wean Ukraine off its traditional dependence on Russian energy supplies, including nuclear fuel.

<https://www.reuters.com/article/us-ukraine-energy-westinghouse-idUSKBN26L25B>

## Op-Ed

### India

#### **Initiation of a nuclearised South Asia**

Dr Rajkumar Singh

Pakistan Today, September 30 2020

India went for a test after the Chinese test made it panic

Since the early 1960s the environment stands nuclearised. Both China and Pakistan possess nuclear weapons and delivery systems to pose a nuclear threat across the length and breadth of India. A substantive amount of nuclear technology moved from US to Pakistan. Such a In situation the basic controversy of nuclear asymmetry was not likely to be resolved through disarmament in the predictable future and the only option left for India was to “exercise” the option of a nuclear deterrent.

In addition, the humiliating defeat at the hands of China in 1962 awakened India to the new realities of military power as a major factor in international politics and inter-state relations. Even at that moment Nehru, who inherited the traditions of Gandhian non-violence, relied on the principle of a minimum of military power to maintain internal law and order and safeguard the country’s security against any external threat.

<https://www.pakistantoday.com.pk/2020/09/30/initiation-of-a-nuclearised-south-asia/>

### Pakistan

## **Evolution of Indian Nuclear Doctrine: From NFU to Preemption**

Sher Bano

Modern Diplomacy, September 29, 2020

India's obscure nuclear doctrine of 'No First Use' (NFU) had evolved over the years since it was first declared in 1999 by NSAB's (Nuclear Security Advisory Board) in the 'Draft Nuclear Doctrine'(DND) that forms the very basis of the official Indian nuclear doctrine. Subsequently, in 2003 after a review by the Cabinet Committee on Security (CCS) the DND had emerged as India's official nuclear doctrine. However, the later developments are quite evident that India has shifted its nuclear posture from NFU to preemption. In August 2019, a statement made by Mr. Rajnath Singh (Indian Defence Minister) made headlines amid rising tensions between India and Pakistan, the two arch-rivals in South Asia. This was an assertion of India's likely shift from its long doubted NFU policy. This has further exposed the pretense of India's NFU policy, to which Pakistan has never given any credence. This shift in Indian nuclear doctrine seems to be purely Pakistan centric. Such an Indian shift is further evidence of India's focus towards nuclear war-fighting rather than maintaining deterrence. In the wake of the evolved tensions in the region, India's offensive nuclear posture of preemption would have dire implications for the strategic stability of South Asia.

Over the period, various statements by the Indian government officials and prominent academicians have raised serious concerns over India's adherence to the NFU policy. In 2010 Shivshankar Menon, the then National Security Advisor of India stated that according to Indian nuclear doctrine NFU policy is meant only for non-nuclear-weapon states. Hence, it implies that using a nuclear weapon could be a resort against nuclear-weapon states, particularly against Pakistan. Later on, in 2016 Manohar Prakar the then Indian Defence Minister questioned "Why do lots of people say that India is for no first use? Why should I blind myself?" Moreover, in 2017 a prominent Indian scholar, Vipin Narang while speaking at the conference at Carnegie stated that India would not let Pakistan go first. These assertions are quite evident that in a crisis, India might take a nuclear first strike against Pakistan. Such drifts in Indian policy have further enhanced Pakistan's threat perception vis-à-vis India. Similarly, Pakistan would be further compelled to maintain a credible nuclear deterrence posture to overcome India's offensive nuclear posturing.

<https://moderndiplomacy.eu/2020/09/29/evolution-of-indian-nuclear-doctrine-from-nfu-to-preemption/>

## **USA**

### **Trump Needs a Tutorial on How International Agreements Work**

New York Times, September 20, 2020

Two years ago, the Trump administration withdrew from an international agreement that had lifted most sanctions on Iran in exchange for strict limits on Iran's nuclear program. President Trump called the accord, which had been painstakingly negotiated by the Obama administration and America's closest European allies, the "worst deal ever." He has been trying to kill it ever since. He reimposed economic sanctions and threatened secondary sanctions on European allies that do any business with Iran. The repudiation was so head-spinning that other countries now wonder if American international commitments can be trusted to last beyond the next election.

Preventing the sale of sophisticated weaponry to Iran is a laudable goal, given the military support that Iran provides to various violent nonstate actors in its region. But for nearly two decades, world powers have agreed to focus on the bigger prize: preventing Iran from obtaining a nuclear weapon. Snapback sanctions could put the final nail in the coffin of an agreement that does just that, at least until 2030. Moreover, the United States left the agreement in 2018. No amount of legalistic contortions can change that simple fact. The United States has no standing to invoke a cherry-picked provision that serves its own agenda while it makes a mockery of the rest of the agreement. That's not how international agreements work. The Trump administration's behavior erodes the integrity of every international accord going forward.

<https://www.nytimes.com/2020/09/20/opinion/trump-sanctions-iran-deal.html>

### **US and Middle East: strongmen contemplate post-Trump era**

Andrew England and Katrina Manson

Financial Times, September 20, 2020

It took Donald Trump less than 48 hours to lay the foundations of a radical shift in US Middle East policy and ingratiate himself with some of the region's most powerful leaders. On visits to Saudi Arabia and Israel — his first overseas as US president in May 2017 — he set the tone for the transactional and personality-based relationship that has characterised his dealings with the region's strongmen. He made it clear that Iran was in his crosshairs, arms sales would be a priority and human rights concerns would be consigned to a proverbial dustbin, telling a summit of Muslim leaders in Riyadh: "We are not here to lecture." It was welcomed by the US's traditional Middle East allies, Saudi Arabia, the United Arab Emirates, Egypt and Israel. All were desperate to see new US policies after years of rising anger with the administration of Barack Obama — not least for signing the 2015 nuclear deal with Tehran.

Mr Trump could yet win re-election: few analysts in Washington have written him off. But with the president trailing badly in the polls, the region's leaders are being forced to contemplate the prospect of Democratic nominee Joe Biden entering the White House, upending the president's policies and setting a new course for relations with the Gulf. For those who invested heavily in their personal relationship with Mr Trump, notably Saudi Crown Prince Mohammed bin Salman and de facto UAE

leader Sheikh Mohammed bin Zayed, a Biden victory in November would usher in a fresh period of uncertainty and unease. Some even ask whether a new president could cold shoulder states as a punishment because of their closeness to the Trump administration.

<https://www.ft.com/content/132ad76d-0ad4-4cf8-9dc7-acd1797c9e6d>

### **Appeasing Vladimir Putin’s Russia Will Only Embolden It**

Ariana Gic, Hanna Hopko and Roman Sohn

Politico, September 25, 2020

Last month, Politico Magazine published an open letter calling for a rethinking of U.S. foreign policy toward Russia, and the letter inspired multiple responses. The relationship between the United States and Russia has direct consequences for countries dealing daily with Moscow’s threat to their national interests, including Ukraine—the one country that currently has to defend itself against Moscow’s armed aggression, and stands on the front lines of international efforts to halt the Russian menace.

This is why our group of political leaders, experts and intellectuals from Ukraine and the diaspora feels compelled to contribute to the revived debate over U.S. policy toward Moscow. Our position is that the world simply cannot afford another American “reset” with Russia. On the contrary, the United States needs a more robust policy to address Moscow’s hostile actions to undermine the global security order.

<https://www.politico.com/news/magazine/2020/09/25/open-letter-russia-ukraine-421519>

### **If We Can’t Ban Nukes, Let’s Stigmatize Them**

Andreas Kluth

Bloomberg, September 26, 2020

There are potential catastrophes so dire, only an approach that blurs the realist and the utopian seems appropriate. Take for example the Treaty on the Prohibition of Nuclear Weapons. Adopted by the United Nations in 2017, it seeks to completely get rid of the most satanic arms ever created. The treaty’s already been signed by 84 states and ratified by 45. To take effect — that is, to be binding on its signatories — it needs only another handful of ratifications. And this week a group of 56 international bigwigs signed an open letter to nudge that along. They include former presidents and prime, foreign and defense ministers from 20 NATO member states plus Japan and South Korea, as well as one former secretary-general of the UN and two of NATO.

One of their stated objectives is to get the current leaders of their countries to sign the treaty. That's cheeky, since all of the nations in question are presently under the U.S. "nuclear umbrella," which they'd have to leave or disavow. Unlikely. Several, like Germany, even have American nukes stationed on their own territory.

<https://www.bloomberg.com/opinion/articles/2020-09-26/un-nuclear-treaty-if-we-can-t-ban-nukes-let-s-stigmatize-them>

## **Washington's Arms Control Delusions and Bluffs**

Steven Pifer

Defence One, September 28, 2020

The clock for the New Strategic Arms Reduction Treaty runs out on February 5. The Trump administration has not taken up Russia's offer to extend the treaty, believing it has leverage to get something more from the Kremlin, and it has even threatened an arms race. This is delusion and bluff. If the administration does not change course, New START will lapse and, for the first time in decades, U.S. and Russian nuclear forces will be under no constraints.

The terms of New START permit its extension for up to five years. Keeping Russian strategic forces limited and maintaining the current flow of information about those forces are very much in the U.S. interest. The Kremlin is ready to extend. Yet the Trump administration has laid down conditions, apparently believing that Moscow is desperate to continue the agreement. The first condition is expanding the scope of the agreement. President Trump's arms control envoy, Marshall Billingslea, has said that Russia must agree to new negotiations that cover all U.S. and Russian nuclear arms. This is not an unreasonable goal; it was proposed by the Obama administration in 2010. But Moscow has already responded by saying that any new negotiations would have to address questions of interest to Russia, starting with missile defense — and Mr. Billingslea has made clear that limits on missile defense are not on offer.

<https://www.defenseone.com/ideas/2020/09/washingtons-arms-control-delusions-and-bluffs/168817/>

## **Russia**

### **Why Russia Wants Stability in the Arctic**

Maritime Executive, September 27, 2020

Russian polar strategy specialist Elizabeth Buchanan has urged lawmakers in the United States to reconsider key assumptions about the impact of the China–Russia relationship on strategic issues in the Arctic. The following is an edited summary of Dr Buchanan’s evidence to the US House Committee on Foreign Affairs and the Congressional Energy and National Security Caucus in which she argued that three widely held assumptions about Russia, China and the Arctic were wrong. Strengthened commercial engagement between Russia and China on Arctic energy ventures is driving a notion that there’s a Sino-Russian alliance in the region. The reality is that mutual mistrust, centuries-old territorial tensions over the Russian Far East and hangovers from the Sino-Soviet split in the Cold War are all permanent features of the China–Russia relationship. They’ll continue to shape the strategic outlook, to an extent curtailing the two states’ ‘axis’ potential.

Moscow and Beijing have both learned that nations don’t have allies, or partners. Secure, successful states seek merely mutually beneficial relationships. That sentiment frames Sino-Russian engagement in the Russian Arctic. Of the eight voting members of the Arctic Council, Russia took the most convincing to grant China its observer status in 2013. Moscow approved membership, and with it legitimacy, on the basis that Beijing explicitly acknowledged the sovereignty of Arctic-rim states and reaffirmed its commitment to the legal architecture of the Arctic region—the United Nations Convention on the Law of the Sea.

<https://www.maritime-executive.com/editorials/op-ed-why-russia-wants-stability-in-the-arctic>

## West Asia

### Iran

#### **Tehran, Washington to fight at ICJ over sanctions**

Tehran Times, September 15, 2020

Tehran and Washington are slated to face off the latest round of their battle over the U.S. sanctions, which were imposed by the administration of Donald Trump, at the United Nations’ top court on Monday. Back in 2018, Tehran dragged Washington to the International Court of Justice (ICJ) after Trump unilaterally pulled the U.S. out of the historic 2015 nuclear deal that was signed under his predecessor Barack Obama. Following the withdrawal, Washington imposed what it called “the harshest ever sanctions” on Tehran under the banner of a “maximum pressure” policy intended to pressure Iran into negotiating a new deal. Iran argues that the sanctions brought back by the Trump administration breach the 1955 “Treaty of Amity” between the two countries, signed before the 1979 Islamic Revolution. In October 2018, Iran won an early victory when the ICJ ordered sanctions on humanitarian goods to be eased until the overall lawsuit is dealt with.

At the time, President Hassan Rouhani termed the ICJ's ruling as "unique". "Our nation has the upper hand politically and legally. The public opinion considers Iran a country which abides by its commitments and the U.S. a country which is not loyal to its promises and violates the international regulations," Rouhani said. According to the Associated Press, the U.S. is scheduled to first address the court on Monday about whether judges have jurisdiction in the case, while Iran will speak on Wednesday. The two sides are also clashing over a separate case over the Islamic Republic's bid to unfreeze \$2 billion in assets frozen in the U.S.

<https://www.tehrantimes.com/news/452440/Tehran-Washington-to-fight-at-ICJ-over-sanctions>

### **UN secretary-general calls on international community to protect JCPOA**

Tehran Times, September 16, 2020

United Nations Secretary-General Antonio Guterres has called on the global community to do all they can to protect a 2015 nuclear deal between Iran and world powers, Fars news agency reported. The secretary-general has described the deal as a triumph of "multilateral diplomacy," calling on countries to do all they can to protect it. Guterres made the remarks in a Tuesday interview with the Russian RIA Novosti news agency. The nuclear deal, officially known as the Joint Comprehensive Plan of Action (JCPOA), reached a critical juncture on August 20, as the U.S. took the controversial step of triggering the snapback process, a mechanism built into the 2015 nuclear deal to allow the deal's parties to reinstate all UN sanctions on Iran in case it didn't uphold its commitments under the deal. The U.S. complaint faced firm opposition from almost all members of the UN Security Council and all remaining parties to the JCPOA. The opponents say the U.S. lost its legal authority to trigger the snapback process after it unilaterally withdrew from the JCPOA on May 8, 2018.

As the 30-day U.S. process of restoring the UN sanctions on Iran is nearing its end, the global community faces a stark test over the JCPOA future. On September 20, the U.S. process will end, and that the U.S. is very likely to announce the return of all UN sanctions on Iran, a move that could create a diplomatic mess at the UN. Guterres also said that the UN secretariat will coordinate with the Security Council on JCPOA-related issues.

<https://www.tehrantimes.com/news/452524/UN-secretary-general-calls-on-international-community-to-protect>

### **'Iran to return to pre-JCPOA era if UN bans imposed'**

September 19, 2020

The chairman of the Majlis National Security and Foreign Policy Committee says Iran will return to the pre-JCPOA era if the UN sanctions are reimposed. In an interview with Fars published on



Saturday, Mojtaba Zonnour said Iran will comply with its obligations under the Joint Comprehensive Plan of Action (JCPOA) as much as the other parties to the deal comply with it. “If the sanctions are reimposed, we will stop all of our JCPOA-related cooperation with the [International Atomic Energy] Agency,” Zonnour said. The remarks came after U.S. President Donald Trump’s administration announced that on Saturday (2000 EDT Sunday) all UN sanctions on Iran have to be restored and a conventional arms embargo on the country will no longer expire in mid-October.

But 13 of the 15 UN Security Council members have said Washington’s move is void. Diplomats say few countries are likely to reimpose the measures, which were lifted under the JCPOA. A return of UN sanctions, under the so-called snapback mechanism, would require Iran to suspend all nuclear enrichment-related and reprocessing activities, including research and development, and ban imports of anything that could contribute to those activities or to development of nuclear weapon delivery systems. All other parties to the deal – including Iran, China, Russia, France, Britain and Germany – have argued that the U.S. cannot trigger the snapback mechanism since it abandoned the nuclear pact in May 2018. “The first step to initiate the snapback mechanism is that the initiator must be a member of the JCPOA,” Zonnour said. “This is while the U.S. has exited the JCPOA and is not a member of the JCPOA anymore,” he added. The top MP said if the United States bullies other countries into following its lead, “the Islamic Republic will naturally produce responses.”

<https://www.tehrantimes.com/news/452640/Iran-to-return-to-pre-JCPOA-era-if-UN-bans-imposed>

### **E3's greatest test: Will they defy U.S.?**

Tehran Times, September 20, 2020

In a statement on Saturday night, U.S. Secretary of State Mike Pompeo announced the return of “all previously terminated UN sanctions” on Iran, a move that was met with strong opposition from the international community. “Thus today, the United States welcomes the return of virtually all previously terminated UN sanctions on the Islamic Republic of Iran.... Sanctions are being reimposed on Iran pursuant to the snapback process under UN Security Council resolution (UNSCR) 2231,” the statement said.

On August 20, Pompeo traveled to New York to submit a letter to the president of the UN Security Council calling for the reimposition of UN sanctions on Iran within 30 days. The letter sparked a diplomatic controversy after 13 of the 15-member UN Security Council questioned the legality of the U.S. measure. All opposing members sent letters to the Council’s president telling him that the U.S. measure was void and invalid because the White House withdrew from the 2015 Iran nuclear deal – officially known as the Joint Comprehensive Plan of Action (JCPOA) - on May 8, 2018.

However, the U.S announced the reimposition of UN sanctions, ignoring fierce opposition from all JCPOA participants and almost all members of the UN Security Council. In a joint statement on August 20, European signatories to the nuclear deal –Germany, France, and the UK (E3) - rejected the U.S. notification to the president of the Security Council, saying the U.S. was no longer a participant to the JCPOA. “France, Germany, and the United Kingdom (‘the E3’) note that the U.S. ceased to be a participant to the JCPOA following their withdrawal from the deal on 8 May, 2018. Our position regarding the effectiveness of the US notification pursuant to resolution 2231 has consequently been very clearly expressed to the Presidency and all UNSC members. We cannot therefore support this action which is incompatible with our current efforts to support the JCPOA,” the E3 foreign ministers said in the August statement.

<https://www.tehrantimes.com/news/452675/E3-s-greatest-test-Will-they-defy-U-S>

### **Nuclear armed Israel remains biggest threat to peace in West Asia: Tehran**

Tehran Times, September 26, 2020

Iran has called on the international community to stand for a nuclear-free world, and condemned the U.S. and the Zionist regime for their destabilizing policies and activities which threaten world peace. “The International Day for the Total Elimination of #NuclearWeapons, provides an opportunity for the int'l community to re-emphasize on its commitment to nuke disarmament as a priority. We believe in a peaceful & secure world, with no state possessing weapon of mass destruction,” the Foreign Ministry wrote in a series of tweets on Saturday.

The UN General Assembly commemorates September 26 as the International Day for the Total Elimination of Nuclear Weapons. The occasion provides an opportunity for the world to reaffirm its commitment to global nuclear disarmament as a priority. “The Int'l Day for the total elimination of #NuclearWeapons is an opportunity to re-express our total rejection of all kinds of WMDs,” the Foreign Ministry said. Unfortunately, the ministry added, the U.S. regime’s disregard for international treaties and its plans to produce new nukes has brought the world closer to a new arms race. “Also in our region, the Israeli Regime with its 10s of nukes remains the biggest threat to peace & security & - supported by the U.S. – prevents the ME to become a NWFZ,” it said.

The Foreign Ministry added that responsible nations should stand for a nuclear-free world. Israel is not a signatory to the Non-Proliferation Treaty (NPT), and has refused to either confirm or deny the possession of nuclear weapons in its arsenal. The regime is believed to possess 200 nuclear warheads, making it the only country in West Asia that has nuclear weapons. Iran has signed the NPT and its nuclear program is inspected regularly by the International Atomic Energy Agency (IAEA). The IAEA has in numerous occasions certified the peaceful nature of Iran’s nuclear program.

<https://www.tehrantimes.com/news/452909/Nuclear-armed-Israel-remains-biggest-threat-to-peace-in-West>

### **Will Trump be forced to follow Obama Iran policy?**

Tehran Times, September 29, 2020

As Donald Trump's presidential campaign reaches a critical juncture amid unprecedented internal crises, the White House intensifies diplomatic efforts to achieve breakthroughs in foreign policy, especially in U.S. relations with countries in the Western Asia region. Trump's thirst for election "breakthroughs" was on full display in U.S.-brokered normalization deals between some Arab countries and Israel. The normalization wave started in mid-August when Trump, out of the blue, announced that he brokered a normalization deal between the United Arab Emirates and Israel. A little bit more than a month later, on September 11, Trump once again announced another normalization deal, this time between Bahrain and Israel.

Trump sought to portray these deals as historic breakthroughs that was unimaginable just a few weeks ago. "So things are happening in the Middle East [West Asia] that nobody thought was even possible to think about, and that's what's going on right now." Trump said on September 11 as he announced the Bahrain-Israel normalization deal, adding, "The significance of the signing will be elevated from an already historic breakthrough to one representing a previously unthinkable regional transformation. And that's exactly what it is. It's unthinkable that this could happen, and so fast."

Citing the normalization deals, analysts and commentators believe that Trump has resorted to foreign policy to save his troubled campaign ahead of the November election. But the same deals indicated the limits of the impact the foreign policy "breakthroughs" can have on the public. Despite Trump's hype about the deals, they did little to improve his plummeting popularity. So Trump could resort to making breakthroughs with U.S. adversaries such as China, Russia, North Korea, and Iran because the U.S. tensions with these countries are so deep that any deals with them will probably catch ordinary Americans by surprise.

<https://www.tehrantimes.com/news/453054/Will-Trump-be-forced-to-follow-Obama-Iran-policy>

## Israel

### **Why Israel Should Worry About the Saudi and Emirati Nuclear Programs**

Azriel Bermant

Foreign Policy, September 17, 2020

The embattled Israeli Prime Minister Benjamin Netanyahu recently found an escape route from his escalating domestic crisis, with the announcement in August of Israel's peace deal with the United Arab Emirates and in recent days with Bahrain. For decades, the United States has pledged to uphold Israel's qualitative military edge over neighboring Arab states, and in recent years it has refused the sale of cutting-edge weapons to the UAE, fearing this could compromise Israel's military advantage. Now that Israel has signed a peace deal with the UAE and Bahrain, however, it will become harder for Israel to oppose the sale of military hardware to its Arab neighbors.

Israel has historically expressed fierce opposition to strengthening the offensive capacity of any Arab state. The United States is pushing to sell Abu Dhabi a package of sophisticated weapons including F-35 fighter jets, widely believed to be the most capable strike aircraft in the world, as well as Reaper drones and electronic warfare planes which jam enemy defenses. Once the UAE receives these arms, other Arab states will expect the same treatment.

<https://foreignpolicy.com/2020/09/17/why-israel-should-worry-about-saudi-emirati-nuclear-programs/>

## East Asia

### Japan

#### **Suga should seize opportunity to reinvent nation's energy policy**

The Asahi Shimbun, September 18, 2020

The Abe administration set a nuclear power target but failed to provide leadership for achieving it. It left decisions on whether specific reactors are safe to run to the Nuclear Regulation Authority (NRA) and decisions to restart these reactors up to the electric utilities operating them and the host communities. As a result, the actual situation has been quite different from the scenario scripted by the Abe administration. The administration's initiative to promote exports of Japanese nuclear power technology as part of its growth strategy has also gone nowhere. Japan's program to recycle spent nuclear fuel, which has been kept alive despite being untenable, is provoking international concerns and criticism. The program, which involves recovering plutonium from spent nuclear fuel for recycling back into new fuel, is building a growing stockpile of plutonium that cannot be used as fuel because most reactors in Japan remain offline. This is a concern because plutonium is a material that is also used to make nuclear weapons. How does Abe's successor, new Prime Minister Yoshihide Suga, intend to deal with this sticky situation?

In a news conference immediately after taking office, Suga stressed that his administration is firmly committed to ensuring a stable energy supply for the nation. But the new administration has yet to unveil any specifics about its energy policy. In addition to the ruined reactors at the Fukushima plant, some aging reactors have also been designated for decommissioning, lowering the total capacity of

nuclear power generation by some 30 percent from before the Fukushima accident. It is now next to impossible to achieve the government's target for the share of nuclear power. The next triennial review of the government's basic energy policy will start in the summer of 2021. The reality calls for reducing the nation's dependence on nuclear energy. A decision to go down this path would point the way toward a future without nuclear power. The government should ask itself whether its adherence to the nuclear power policy is causing it to underestimate the potential of renewable energy. Suga has pledged to remove the influence of vested interests on policymaking and break with the bad tradition of simply following precedents. He should spearhead an initiative to reinvent the energy policy.

<http://www.asahi.com/ajw/articles/13739098>

### **Letter calls on Japan, 21 other nations to ratify nuke ban treaty**

Toshiya Obu

The Asahi Shimbun, September 22, 2020

In an open letter, 56 former world leaders and top officials representing 22 U.S. allies urged their states Sept. 21 to sign a U.N. treaty banning nuclear weapons. They represent 20 NATO countries as well as Japan and South Korea. Ban Ki-moon, a former South Korean foreign minister who served as U.N. secretary-general from 2007 to 2016, and Javier Solana, a former NATO secretary-general who also served as Spain's foreign minister, were among those who signed. Former Japanese prime minister Yukio Hatoyama, along with Makiko Tanaka, a former foreign minister, and her husband Naoki Tanaka, a former defense minister, also affixed their names to the document, urging the Japanese government to ratify the Treaty on the Prohibition of Nuclear Weapons.

The open letter was coordinated by the International Campaign to Abolish Nuclear Weapons (ICAN), an international nongovernmental organization that was awarded the Nobel Peace Prize in 2017. The treaty that bans development, manufacturing, possession and use of nuclear weapons was adopted at the United Nations in 2017. The Japanese government has stated that "it is necessary to maintain the U.S. nuclear deterrent capability under the Japan-U.S. alliance." "The risk of a nuclear weapon detonation today--whether by accident, miscalculation or design--appears to be increasing, with the recent deployment of new types of nuclear weapons, the abandonment of longstanding arms control agreements, and the very real danger of cyber-attacks on nuclear infrastructure," the open letter states.

It points out that the 22 countries "claim protection" from U.S. nuclear weapons and urges the current leaders of these nations "to advance disarmament before it is too late." These countries "should reject any role for nuclear weapons in our defense," the letter adds. It goes on to say: "With close to 14,000 nuclear weapons located at dozens of sites across the globe and on submarines patrolling the oceans at all times, the capacity for destruction is beyond our imagination. All responsible leaders must act now to ensure that the horrors of 1945 are never repeated."

<http://www.asahi.com/ajw/articles/13750051>

### **TEPCO's fitness to operate nuke reactors still open to question**

The Asahi Shimbun, September 24, 2020

The Nuclear Regulation Authority has effectively endorsed Tokyo Electric Power Co.'s fitness to operate nuclear reactors in its safety screening of the utility's plans to restart the No. 6 and No. 7 reactors at the Kashiwazaki-Kariwa nuclear power plant in Niigata Prefecture. The nuclear watchdog's endorsement, based on new legally binding safety rules the utility drafted and pledged to follow, has opened the door for the operator of the crippled Fukushima No. 1 nuclear power plant to start running reactors again. But TEPCO's actions concerning safety, the decommissioning of the destroyed Fukushima reactors and compensation for victims of the catastrophic accident have created a deep sense of distrust that is hard to brush off. The NRA's decision is open to question.

Three years ago, when it cleared the No. 6 and No. 7 reactors under the tougher new reactor safety standards established in response to the Fukushima disaster, the NRA placed great importance on TEPCO's "fitness" to run reactors. This has led the utility to incorporate seven new principles into its safety code. They include the company's commitment to carry through the decommissioning of the Fukushima No. 1 nuclear plant and hold its president responsible for reactor safety as well as its pledge not to put economic efficiency before safety. The safety code is legally binding, with a violation potentially provoking an order to suspend operations. This time, the NRA has examined TEPCO's seven commitments and acknowledged that they are specific enough to allow the watchdog to identify and punish any violations. But the seven principles still contain vague elements. It is difficult not to wonder whether they will effectively enable the NRA to monitor and check TEPCO's operations for violations.

<http://www.asahi.com/ajw/articles/13755624>

## **North Korea**

### **NK propaganda outlet slams S. Korea over nuclear deterrence discussion with US**

Yonhap

Korea Herald, September 21, 2020

A North Korean propaganda outlet on Monday slammed South Korea over recent defense talks between Seoul and Washington about deterring nuclear and missile threats from the communist nation, criticizing Seoul for being hypocritical by talking peace while preparing for war. Seoul and

Washington held their biannual Korea-US Integrated Defense Dialogue (KIDD) via videoconference earlier this month and discussed ways to boost their alliance to deter North Korea's nuclear and missile threats and agreed to continue close cooperation, according to Seoul's defense ministry. "Their tailored deterrence strategy ... is an extremely dangerous strategy of nuclear war with and invasion of North Korea by preemptively striking our republic with nuclear weapons and all military means, using nonexistent threats as an excuse," Meari, one of the North's propaganda websites, said.

"The danger of such a reckless act can be more serious given that it came at a time when situations have gotten worse due to (their) persistent pursuit of invading the North and beefing up war equipment," it added. The website criticized South Korea for being hypocritical in talking about peace while preparing for war, saying that Seoul has spent an "astronomical amount of money" on the military and actively participated in US-led military exercises. "Seeing words and acts of the current South Korean government, it has been more vocal about peace than any other previous governments," it said. "But as the reality indicates, its peace talk so far has been nothing but a deceit."

[http://www.koreaherald.com/view.php?ud=20200921000323&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200921000323&ACE_SEARCH=1)

## South Korea

### **Realistic viewpoint**

Korea Herald, September 22, 2020

South Korea's new defense chief vowed to fully implement the 2018 military accord with North Korea in line with Seoul's efforts to build lasting peace on the peninsula. Signed on the occasion of President Moon Jae-in's second summit with North Korean leader Kim Jong-un in Pyongyang, the agreement calls for a series of trust-building and arms control measures as part of a broader understanding to halt all hostile acts against each other. Among the measures is the joint excavation of remains in the Demilitarized Zone. During his visit to Arrowhead Hill in the DMZ in time for the second anniversary of the signing of the accord, Suh said he hoped the two Koreas would jointly excavate the area as soon as possible. Suh's appraisal of and commitment to the inter-Korean military pact seems out of tune with critical views held by many experts here about its actual consequences for the security of the South.

Critics note that the South has stuck to the agreement word for word, reducing surveillance and reconnaissance activities along the front line as well as naval and air operations, while the North remains deceitful and insincere. Over the past two years, the recalcitrant regime has continued to refine its nuclear and missile capabilities. In June, the North strained ties with the South by blowing up a joint liaison office on its border town of Kaesong in anger over the sending of anti-Pyongyang leaflets by North Korean defectors and other activists here. With the two sides showing asymmetric attitudes toward the military agreement, the readiness posture and discipline of South Korea's armed



forces appears to be slackening. The new defense minister, who served as the Army chief of staff until being appointed to his current post, has repeatedly vowed to maintain a staunch readiness posture while fully implementing the inter-Korean military accord.

With US-North Korea talks on denuclearizing the North stalled and inter-Korean ties strained, there seems to be little need now to be overly enthusiastic about fulfilling the transfer. The necessary conditions for the transfer, as agreed earlier by Seoul and Washington, include South Korea having the capabilities to lead the allies' combined defense mechanism and respond promptly to the North's nuclear and missile threats. There must also be a stable security environment on the peninsula and in the region. Security threats from Pyongyang are getting more serious and harder to cope with. There has been growing speculation that the North could test-fire a submarine-launched ballistic missile or show off a new kind of strategic weapon around Oct. 10, the 75th anniversary of the founding of its ruling Workers' Party.

[http://www.koreaherald.com/view.php?ud=20200921000708&ACE\\_SEARCH=1](http://www.koreaherald.com/view.php?ud=20200921000708&ACE_SEARCH=1)

## Think Tanks

### **Spinning good news on arms control**

Steven Pifer

Brookings, September 16, 2020

For months, President Trump has put the brightest possible spin on COVID-19. He insists the virus is under control. He praises his administration's "incredible" job. He suggests a vaccine will be available by November. Unfortunately, the real world looks very different. Trump and his administration likewise are spinning an image of progress on nuclear arms control. As with their assertions on COVID-19, the image does not reflect reality.

U.S. and Russian officials held a series of consultations on nuclear arms control matters this summer, in the fourth year of the Trump administration. Though tardy, one can only welcome these meetings, particularly as the last remaining U.S.-Russian nuclear arms treaty – the 2010 New Strategic Arms Reduction Treaty (New START) – expires in just five months.

<https://www.brookings.edu/blog/order-from-chaos/2020/09/16/spinning-good-news-on-arms-control/>

### **NPT@50: How India Framed its Decision to Reject the Treaty**

A Vinod Kumar



Manohar Parrikar-Institute for Defence Studies and Analyses, September 25, 2020

The dominant Indian narrative has been to project the ‘discriminatory’ nature of the Non-Proliferation Treaty (NPT) as the reason for India’s perennial opposition and that the treaty, as drafted by the then superpowers, cannot facilitate disarmament and, instead, could only sustain a world of nuclear ‘haves’ and ‘have-nots’. However, as some recent literature and analyses illustrate, there were many other dominant factors including the domestic clamour in favour of developing nuclear weapons as a response to the repeated nuclear tests by China since 1964 that had seemingly shaped India’s decision to reject the treaty at the United Nations General Assembly (UNGA) in 1968.

Notwithstanding the passionate advocacy of disarmament and the crusade for third world rights, three documents prepared soon after the joint draft was presented at ENDC provide not just deeper insights on the discussions leading to the formal announcement of India’s NPT decision at the UNGA but also the thought process and strategic considerations that went into it. Two key features of India’s NPT decision are evident from these documents: (a) the decision to reject the NPT was made before the joint US-Soviet draft was tabled in ENDC (March 1968) and UNGA (April 1968), and (b) beyond the call of a third world crusader, the NPT decision was seemingly based on national interest, including keeping the nuclearisation option open, even while depicting a larger ‘idealist’ cause at work. The three documents are: (a) M.A. Husain’s detailed note on ‘NPT and Security Assurances’, (b) top-secret note titled ‘Non-Proliferation Treaty and Brief Answers’, and (c) Prime Minister’s Secretariat note with ‘Instructions to India’s Representative to U.N. on Non-Proliferation Treaty’.

<https://idsa.in/issuebrief/npt-at-50-avkumar-250920>

### **Toward an honest Middle East nonproliferation policy**

Victor Gilinsky and Henry Sokolski

Bulletin of Atomic Scientists, September 25, 2020

With the recent outing of Riyadh’s covert nuclear collaboration with Beijing, the dominos of Middle East proliferation are set to tumble. Iran continues to build up a stockpile of enriched uranium, purportedly for nuclear reactor fuel but possibly for bombs, and the Saudis, Turks, and Egyptians seem poised to follow. This can be blocked, but only if the United States sidelines these countries’ plans to enrich uranium or reprocess spent fuel—steps that will give them the capability to produce fissile material for nuclear weapons—and encourages them to invest in more economical non-nuclear alternatives to proliferation-risky reactors. The issue will soon bubble up. Agreements for US nuclear cooperation with Egypt and Turkey are due to be renewed in the next couple of years. Would-be nuclear exporters see the Middle East as the mother lode of nuclear sales. Unfortunately, it also is a nuclear weapons breeding ground.

Turkish President Erdogan has said, “Some countries have missiles with nuclear warheads.... But [they tell us] we can’t have them. This, I cannot accept.” Meanwhile, US officials are still negotiating over nonproliferation rules with the Saudis, whose effective ruler, Crown Prince Mohammed bin Salman, promised to get a bomb as soon as Iran did. Knowing what the crown prince is capable of, he could also mean before Iran does. The United States should be tightening its nonproliferation standards, promoting a nuclear enrichment and reprocessing free zone stretching from Algeria to Iran, and encouraging these states to stop building more reactors.

<https://thebulletin.org/2020/09/toward-an-honest-middle-east-nonproliferation-policy/>

### **Four powerful players want a nuclear waste solution. What’s stopping them?**

David Klaus

Bulletin of Atomic Scientists, September 29, 2020

The 92-page platform adopted at the Democratic National Convention does not include a single sentence on the issue of how to manage the more than 80,000 tons of spent nuclear fuel sitting at 70 sites in communities across the country. The Republicans adjourned without adopting any new platform for 2020, leaving their 2016 platform in place—but it also did not address the nuclear waste issue. Ironically, political interest in addressing the spent fuel issue is decreasing at a time when the number of closed nuclear plants in the United States is increasing—and it is common practice to level the plant and leave the spent fuel behind. If the issue had been as significant a political priority today as it was in the past, it would have been included in one or both of the platforms. In its 2004 and 2008 platforms, the Democratic Party committed to “protect Nevada and its communities from the high-level nuclear waste dump at Yucca Mountain, which has not been proven to be safe by sound science.” Republicans, in their 2012 platform, focused on how “[t]he federal government’s failure to address the storage and disposal of spent nuclear fuel has left huge bills for States and taxpayers.”

There was a glimmer of hope when President Trump came to office in 2016, and the Republicans controlled both the House and Senate, that progress would be made on the issue of nuclear waste. At that time, then-Senate Majority Leader Harry Reid of Nevada no longer had the equivalent of a veto over any legislation on the issue. But with the 2020 elections around the corner and Congress winding down, it is clear that is nothing is going to happen anytime soon. Why? Because none of the organizations claiming they want a permanent waste disposal facility is actually serious about a solution.

<https://thebulletin.org/2020/09/four-powerful-players-want-a-nuclear-waste-solution-whats-stopping-them/>

## Contribute Articles

Indian Pugwash Society welcomes research articles from students, researchers and faculties on Space, Missile, nuclear technology, WMD proliferation, arms control, disarmament, export controls and other related issues. Articles should be crisply written and should address contemporary debates in the policy arena. Manuscripts submitted for the consideration of the Indian Pugwash Society should be original contributions and should not have been submitted for consideration anywhere else. For further assistance, please contact us at: [indianpugwashsociety@gmail.com](mailto:indianpugwashsociety@gmail.com)

The Indian Pugwash Society aims to promote the study, discussion, and knowledge of and to stimulate general interest in, and to diffuse knowledge in regards to problems relating on WMD proliferation, arms control, disarmament, space security, export controls, nuclear technology and other related issues. This newsletter is part of the project "Emerging Nuclear Order in Asia: Implications for India" sanctioned to us by Department of Atomic Energy-Board of Research in Nuclear Sciences (DAE-BRNS).

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