

TURKEY AND THE NUCLEAR POWER

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Turkish President Tayyip Erdogan said on September 4, 2019, it was unacceptable for nuclear-armed states to forbid Ankara from obtaining its own nuclear weapons, but did not say whether Turkey had plans to obtain them.¹

Erdogan spoke at a ceremony marking the hundredth anniversary of Turkish independence in Sivas, the birthplace of Turkish resistance against foreign occupation.

Turkish President Erdogan said: "Several countries have missiles with nuclear warheads, not one or two. But we can't have them. This I cannot accept....there is no developed nation in the world that doesn't have them," he added, "though just nine countries currently possess nuclear arms capabilities: the United States, Russia, United Kingdom, France, China, India, Pakistan and, though technically unconfirmed, Israel and North Korea".²

A Turkish aspiration to acquire nuclear capability is not new but Turkish military nuclear capabilities has never been addressed in such a straightforward manner as Erdoğan did.³

Given Erdogan's dream of reviving "Ottomans time" and his vision of Turkey as a regional power in the Middle East, Turkey has to join the regional nuclear race. Otherwise Turkey will remain second class—a position that Erdogan cannot and will not accept.

Turkey's nuclear energy program

Turkey's push to advance its own policies of energy security has been a long-time strategic goal, especially since the country is highly dependent on foreign energy imports. Nuclear energy has always embodied modernization and development, and Turkey's eagerness to join the ranks of the world's most powerful nations.

Turkey plans to build three nuclear power plants to reduce its dependence on importing energy. The project is part of President Recep Tayyip Erdoğan's '2023 Vision' marking 100 years since the foundation of modern Turkey and make Turkey one of the world's top ten economies.⁴

In 2007, the Turkish government began its first push in the 21st century to construct a nuclear power plant, in passing "The Law on Construction and Operation of Nuclear Power Plants and Energy Sale."

This kick started the negotiations that awarded Russia's state-owned nuclear energy corporation, Rosatom, a contract to build Turkey's first nuclear power plant in Akkuyu and a similar agreement was concluded with a Japanese-French consortium to build Turkey's second nuclear power plant in Sinop.

Turkish President Recep Tayyip Erdoğan in a directive in August 2019, requested from relevant public institutions to immediately complete the works needed for the ongoing nuclear power plant projects in Turkey.⁵ The directive said public institutions should speed up nuclear power plant projects so as to make sure that the increase in demand could be met and dependency on imports could be lowered.⁶

The Akkuyu nuclear power plant (NPP)

The Turkish government is currently building its first nuclear power plant. The nuclear power station, located in Akkuyu in southern Mersin province on the shores of the Mediterranean. The nuclear power station will boast four reactors, each with a capacity of 1,200 megawatts, and will be built by the Russian state nuclear energy agency Rosatom. The Akkuyu nuclear plant will meet 10 percent of Turkey's energy needs.

President Recep Tayyip Erdoğan and his Russian counterpart Vladimir Putin launched the construction of the Akkuyu plant at a ceremony in Ankara on April 3, 2018.⁷

Erdogan noted that "Currently, 31 countries produce a significant amount of electricity from 450 nuclear power plants. Also, in 16 countries, 55 nuclear power plants are under construction. And today we can say that the Akkuyu power station, the foundation of which we are laying today, is the 56th".⁸

"In 2023, we will put into operation the first unit and Turkey will thereby join those countries that use nuclear energy ... On the anniversary of our republic, we will crown this work with success."⁹

Putin said: "We have an ambitious task - to launch the first power unit in 2023, timed to coincide with the 100th anniversary of the founding of the Republic of Turkey. Together with my dear friend Recep Tayyip Erdogan, we have agreed that we will do everything in order to fulfill this task."¹⁰

The launch of the power plant came two weeks after Turkey suffered its most serious nationwide power cut in 16 years which exposed the shortcomings of its energy system.¹¹

Rosatom Director General Alexey Likhachov said on July 1, 2018, that "Rosatom is building in Turkey a cutting edge, tried and tested (Generation III+) nuclear power plant featuring four power units based on the Russian VVER-1200 design which meets the world's highest safety standards".¹²

He added that "The model we are building at Akkuyu is already being built in a series. Unit 6 of Novovoronezh Nuclear Power Plant (NPP) and unit 1 of Leningrad NPP II, based on the same design, are already up and running, with the former in a commercial operation and the latter launched in February 2018. The safe and efficient operation of these units underscores the reliability of our technologies."¹³

Environmentalists have raised alarm about safety issues but the Turkish authorities have swatted away concerns that the Akkuyu facility lies in a

seismic zone, saying it can resist quakes registering up to nine on the Richter scale.¹⁴

Mile stones of the project

- The Akkuyu project is based on an inter-governmental agreement signed between Russia and Turkey in May 2010.
- In October 2011, JSC Akkuyu Nuclear received a site license.
- In November 2013 its site report received approval.¹⁵
- Turkish Energy Minister, Taner Yildiz and the head of Rosatom, Sergei Kiriyenko, on April 14, 2015, laid the foundation stone for the construction of the power station.
- Rosatom has nominated in June 2017, Mr. Yuriy Galanchuk, the General Manager of Akkuyu Nuclear Joint Stock Company. Mr. Galanchuk, has 30 years of experience in the sector and has been in Russia.¹⁶

Russia is using a build-own-operate model for the project, whereby it provides the financing, operation and management of the plant.¹⁷ The first unit is scheduled to start operations in 2023, with the other three units following by 2025.¹⁸

The plant's fuel cycle will be managed by Rosatom and spent nuclear materials will be sent to Russia, preventing the possibility of indigenous proliferation for weapons purposes.¹⁹

The Sinop nuclear power plant (NPP)

The second nuclear plant is due to be built by a French-Japanese consortium in the Black Sea city of Sinop. The negotiations for the Sinop power plant's contract concluded in May 2013 when a Japanese-French consortium won the bidding process.

On October 29, 2013, the Turkish government signed an agreement with a consortium led by Mitsubishi Heavy Industries Ltd. to build four

nuclear power reactors in the Black Sea city of Sinop at an estimated cost of 18 – 22 US\$ billion.

This power plant will consist of four separate units, each with the capacity to produce 1,120 megawatts. The first part of the power plant was planned to be operational in 2017 and the power plant was planned to be completed in 2023.²⁰

As stipulated by the agreement, the Turkey Electricity Generation Company (EÜAŞ) will hold a 49 percent stake in the plant, while a Japanese and French company will have 30 and 21 percent stakes, respectively.

Turkey's president, Recep Tayyip Erdoğan, said, 10 percent or more of Turkey's energy needs would be met by the second nuclear power plant, which will be located in Sinop.²¹

But meanwhile the cost of the construction jumped from 18 – 22 billion US dollars to 40 - 44 billion and President Erdogan said that Turkey's second nuclear power plant project was set to be terminated, in an interview with Japanese newspaper Nikkei. "We met a picture which is not compatible with our initial agreement in terms of both cost and time," the President said. "We are not at the desired point on the Sinop nuclear power plant project," Recep Tayyip Erdoğan told daily Nikkei.²²

The İğneada nuclear power plant (NPP)

Turkey's president, Recep Tayyip Erdoğan, said on June 18, 2018, that the country will build a third nuclear power plant.²³ The third plant will be built near the town of İğneada near the Bulgarian border.

The Turkish government hasn't announced any definitive plans for the capacity of this third power plant, but it likely will be similar to the other two plants.²⁴

The nuclear power plant in İğneada, whose contract the Turkish government has yet to award, faces a somewhat contentious bidding process. Several companies have expressed interest in the project,

including the Japanese firm Westinghouse and the American firm General Electric.

Despite no official announcement being made, it was reported that Turkey is negotiating the third nuclear power plant project with China. During his visit to China in May 2017, President Recep Tayyip Erdoğan was reported to have discussed the third nuclear power plant with his Chinese counterpart President Xi Jinping. According to presidential sources, President Erdoğan and Xi Jinping agreed to accelerate construction of the third nuclear power plant. Energy Minister Albayrak paid a visit to China in May 2018 to discuss the nuclear power plant project with Chinese officials.²⁵

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Turkey and the nuclear weapons

Several hurdles stand in the way of Turkish President Recep Tayyip Erdoğan achieving his vision of acquiring nuclear weapons:²⁷

1. Turkey is a signatory to several treaties and if Turkey is determined to acquire nuclear warheads, it would first have to withdraw from all these international treaties:²⁸
 - The nuclear Non-Proliferation Treaty, which Turkey signed in 1980.
 - Turkey has also signed the 1996 Comprehensive Nuclear-Test-Ban Treaty, which bans all nuclear detonations for any purpose.
 - The Missile Technology Control Regime (MTCR), that restricts the export of missiles with a range of more than 300 km.
 - The Hague Code of Conduct against ballistic missile proliferation of 2002.

Turkey's violation or withdrawal from these international treaties would lead to international sanctions.

2. Recent years have seen progress in Turkey's missile building capabilities, but even though, Turkey has no missile capable of delivering a nuclear payload, so it would either have to develop its own or find a country willing to cooperate and to supply the technology or the hardware.²⁹

Summary

The threat of a nuclear-armed Iran could drive Saudi Arabia, Egypt, and Turkey to pursue the bomb, and Turkey has the most developed industrial base, educated population, and engineering potential.

Erdoğan's speech caused wide-ranging speculation over his intentions and it is not clear yet if Erdoğan's hints of nuclear arms acquisitions signaled a shift in the country's strategy.

Erdoğan was believed to be highlighting unfairness in the global security regime, in which he has long stated Turkey should play a more prominent role. The change in the rhetoric from criticism of global security regime to the threat to develop military nuclear capabilities cannot be ignored.

Given Erdoğan's dream of reviving "Ottomans time" and his vision of Turkey as a regional power in the Middle East, Turkey has to join the regional nuclear race. Otherwise Turkey will remain second class—a position that Erdogan cannot and will not accept.

Turkey already has a civilian nuclear program, with plans to build 3 NPPs and the first plant in Akkuyu is currently under construction and will be operational in 2023. The civilian nuclear program should be the platform for a military nuclear program in the future.³⁰

In negotiations with Japan and other countries, about constructing further NPPs, Turkey insisted that the deal would neither include the provision of uranium nor the return of the spent fuel rods. This insistence has aroused the suspicion that Turkey wants to maintain the

option to enrich uranium and to reprocess the spent fuel rods. Turkey never provided an explanation for this demand.³¹

In last year, Turkey has adopted a foreign policy that is more non-aligned in orientation and in rhetoric than at any time in Turkey's past and it develops stronger defense relations with non-NATO countries such as Russia and China. While the country would likely remain in NATO, last statements are in line with Erdogan's new nonaligned strategy.

Erdogan's speech should be analyzed on the background of the crisis in US-Turkish relations. Turkey has purchased Russian S – 400 air defense systems. Though US sanctions have yet to be applied for the missiles, their purchase led to the removal of Turkey from the NATO F – 35 program and raised questions over Turkey's changing role in the alliance. Turkey also has been quite aggressive in pushing against Greece and Greek Cypriots in the Eastern Mediterranean, as part of Erdogan's policy.

Erdogan's speech should be considered seriously as a warning sign to the countries of the region and the international community and feed the already tense situation in the Middle East.

Notes:

¹ Erdogan says it's unacceptable that Turkey can't have nuclear weapons, Hurriyet daily news, September 5, 2019.

² [Diego Cupolo ,Erdogan hints at nuclear ambitions ,Al Monitor, September 5, 2019. https://www.al-monitor.com/pulse/originals/2019/09/erdogan-turkey-wants-nuclear-weapons.html#ixzz5zIWx6mA](https://www.al-monitor.com/pulse/originals/2019/09/erdogan-turkey-wants-nuclear-weapons.html#ixzz5zIWx6mA)

³ Many obstacles in Turkey's path to nuclear weapons – Yakış, Ahval news, September 16, 2019.

⁴ Turkey launches construction of first nuclear power plant, Al Arabiya, April 14, 2015.

⁵ Cumhuriyet newspaper reported on August 17, 2019.

⁶ Turkish president orders speeding up nuclear power plant projects, Ahval news, August 17, 2019.

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- ⁷ Turkey to build third nuclear power plant, SightlineU3O8, July 1,2018.
- ⁸ Russia starts building Turkey's first nuclear power plant, World Nuclear News, April 3, 2018.
- ⁹ Ibid.
- ¹⁰ Ibid.
- ¹¹ Turkey to build third nuclear power plant, SightlineU3O8, July 1,2018.
- ¹² Ibid.
- ¹³ Ibid.
- ¹⁴ Ibid.
- ¹⁵ Russia starts building Turkey's first nuclear power plant, World Nuclear News, April 3, 2018.
- ¹⁶ A New Boss for Akkuyu Nuclear, NBN, June 14, 2017.
- ¹⁷ Russia starts building Turkey's first nuclear power plant, World Nuclear News, April 3, 2018.
- ¹⁸ Russia starts building Turkey's first nuclear power plant, World Nuclear News, April 3, 2018.
- ¹⁹ Diego Cupolo ,Erdogan hints at nuclear ambitions ,Al Monitor, September 5, 2019. <https://www.al-monitor.com/pulse/originals/2019/09/erdogan-turkey-wants-nuclear-weapons.html#ixzz5zIWx6mAl>
- ²⁰ Erdoğan: Sinop Nuclear Plant Project Halted, bianet.org, June 27, 2019.
- ²¹ Turkey to build third nuclear power plant, SightlineU3O8, July 1,2018.
- ²² Erdoğan: Sinop Nuclear Plant Project Halted, bianet.org, June 27, 2019.
- ²³ Turkey to build third nuclear power plant, SightlineU3O8, July 1,2018.
- ²⁴ Daniel Metz, Turkey Invests in Nuclear Energy, diplomaticourier.com, December 28, 2017.
- ²⁵ Turkey's third nuclear power plant likely to be built in Thrace, anews.com, June 15, 2018.
- ²⁶ Daniel Metz,Turkey Invests in Nuclear Energy, diplomaticourier.com, December 28, 2017.
- ²⁷ Yaşar Yakış, former Foreign Minister and a former parliamentarian for the ruling Justice and Development Party (AKP),wrote an article for the Arab News website.
- ²⁸ Many obstacles in Turkey's path to nuclear weapons – Yakış, Ahval news, September 16, 2019.
- ²⁹ Ibid.

³⁰ Hans Rühle, Is Turkey Secretly Working on Nuclear Weapons? The National Interest, September 22, 2015.

³¹ Hans Rühle, Is Turkey Secretly Working on Nuclear Weapons? The National Interest, September 22, 2015.