

Russian Nuclear Power in Turkey: Energy Cooperation in a Strategic and Trade Environment

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I. TIMELINESS OF THE STUDY

In September 2021, President Recep Tayyip Erdoğan met for three hours with President Vladimir Putin in the Black Sea resort town of Sochi.¹ Agenda items included arms deals, bilateral trade, energy partnerships, and regional security issues. The single-most lucrative deal between the two countries touches all the aforementioned issues: the \$22 billion Russian built, owned, and operated (abbreviated as the BOO model) nuclear facility under construction in Akkuyu, Turkey. Although Russia has attempted to shop the BOO model around the world, for example in Jordan, Nigeria, and South Africa, Akkuyu is the first site to be under construction. The plant demands a significant amount of state-backed financing and deployment of human capital from Russia.

At present, the Akkuyu nuclear power plant consists of four Russian VVER-1200 generation 3+ reactors. The first reactor is set to produce electricity for the Turkish grid beginning in 2023, a symbolic date representing the Turkish Republic's centennial. In January 2019, construction began on the second power unit. The third and fourth power units have received licenses and construction is underway. There is not yet a set date for when the power plant will be fully operational and connected to the electric grid.

As Dimitar Bechev assesses in Russia Rising: Putin's Foreign Policy in the Middle East and North Africa, that economic links, a normative convergence, Turkey's geopolitical posture, and domestic political evolutions are driving overall relations between Turkey and Russia in the past two decades.² Bechev outlines the main drivers of the Turkish-Russian relationship as: economic interdependence, converging attitudes of state power, Turkey's geopolitical posture, crisis in relations with 'the West,' and Russia's expanded footprint in the Middle East.

At first glance, the Akkuyu nuclear facility may ring alarm bells among those concerned about a proliferation risk or even a proliferation cascade across the region. In fact, Turkey's membership in the NATO alliance and international arms control treaties have arguably acted as a bulwark against institutional development of a bomb. Instead, the Akkuyu project largely follows trends in Turkish-Russian energy cooperation, and to a larger extent the trade relationship, since the respective states' imperial predecessors. While Russia is extracting critical political leverage in the Eastern Mediterranean region and Turkey is boosting its indigenous baseload energy supply.

II. TURKEY'S QUEST FOR NUCLEAR POWER

Prior to reviewing the current status of the Akkuyu site, it is necessary to evaluate the previous proposals and negotiations that led to the current Russian deal. For decades before the groundbreaking ceremony in Akkuyu, reoccurring themes plagued Turkey in its efforts to establish nuclear power in the country, such as lack of adequate financing offerings acceptable to both the creditor and debtor parties as well as an intolerable level of geological and political risk. After reviewing Turkey's decades-long quest for nuclear power, readers can appreciate how significant

¹ Andrew E. Kramer and Carlotta Gall, "Amid Tensions With U.S., Erdogan Praises Ties With Russia," *New York Times*, September 29, 2021, <https://www.nytimes.com/2021/09/29/world/europe/erdogan-putin-turkey-russia.html>.

² Dimitar Bechev, "Russia and Turkey: The Promise and the Limits of Partnership" in *Russia Rising: Putin's Foreign Policy in the Middle East and North Africa*, eds. Dimitar Bechev, Nicu Popescu, Stanislav Secieru (London: I.B. Tauris, 2021), 86 - 89.

the Russian offer at Akkuyu is. In subsequent sections, this study aims to elucidate the drivers of the Russian state-backed financial offer and geostrategic value.

Domestic Motivations and Infrastructure Maturity

Efforts to establish nuclear energy in Turkey stem from NATO membership in 1952 and President Eisenhower's Atoms for Peace program in 1955. That trajectory will be greater developed in subsequent sections. Still, the Eisenhower-era program jumpstarted an institutional infrastructure to support research, feasibility studies, site selection, and the solicitation of bids. A few critical moments in the early decades are below.

In 1956, the Prime Ministry established Turkey's Atomic Energy Commission (TAEK). The Ministry of Energy and Natural Resources was established in 1963, and the Electric Works Study Administration, a division within the ministry, began feasibility studies for the construction of a nuclear power plant: a 300–400 MWe (megawatts of electrical output) pressurized heavy water reactor (PHWR) was planned to go online in 1977.³ The studies lasted until 1970, but the project was later canceled due to issues related to site selection. Meanwhile, in 1972 a Nuclear Power Plants Division was set up under the auspices of the Turkish Electricity Authority (TEK), which conducted feasibility, bid specification, and site selection studies for a 600 MW power plant was planned to come online in 1983.⁴ At the time, the three sites ranked highest on the cost-benefit scale were: Akkuyu in Mersin Province, Inceburun in Sinop Province, and İğneada in Kırklareli Province.⁵ These three sites still are the main locations for nuclear power plant (NPP) development proposals today.

The 1980s were characterized by capacity building at the institutional level as well as by the ratification of various international agreements. In 1980, Ankara ratified the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which it had signed in 1969. In an agreement signed with the International Atomic Energy Agency (IAEA) a year later, Ankara accepted IAEA safeguards on all existing and future nuclear facilities. In 1982, Turkey's Atomic Energy Commission was reorganized as the Turkish Atomic Energy Authority (TAEK) and placed once again under the auspices of the prime ministry. In 1983, another organization under the name Nuclear Power Plants Institution was founded and put in charge of managing various aspects of nuclear power generation, such as constructing and managing plants, building necessary infrastructure, conducting feasibility studies, and so on. It would later turn out that the organization existed only on paper and was shut down in 1991. In 1984, Turkey became a member of the Nuclear Energy Agency of the Organization for Economic Cooperation and Development (OECD). The Chernobyl disaster in 1986 compelled the Turkish government to suspend its nuclear energy ambitions.⁶ In 1988, the Nuclear Power Plants Division was disbanded during the reorganization of TEK.⁷

³ Gürkan Kumbaroğlu, "Turkey and Nuclear Energy," in *Turkey's Nuclear Future*, eds. George Perkovich and Sinan Ülgen (Washington, D.C.: Carnegie Endowment for International Peace, 2015): 9.

⁴ Ibid.

⁵ Ibid, 10.

⁶ Gürkan Kumbaroğlu, "Turkey and Nuclear Energy," in *Turkey's Nuclear Future*, eds. George Perkovich and Sinan Ülgen (Washington, D.C.: Carnegie Endowment for International Peace, 2015): 11.

⁷ Ibid.

The consideration of nuclear power was partly motivated by a desire to diversify Turkey's energy mix and boost indigenous energy sources. In 1992, the Ministry of Energy and Natural Resources submitted a report to the government in which it stated that unless new energy sources were installed before 2010, the country would face an energy crisis.⁸ The report strongly suggested that nuclear energy should be taken into consideration. In the same year, TEK sent letters to prominent nuclear companies asking for technical and financial information on a 1,000 MW nuclear power plant consisting of one or two units that would come online in 2002 and be built with the Build-Operate-Transfer (BOT) model.⁹ Under the BOT, the contractor company pays for the construction and operating costs of a given facility and operates the facility for a predetermined period (fifteen years in this case), thus recovering its expenses plus profit, after which it transfers control of the facility to the host government.¹⁰ The following year, nuclear power plants were included once again in Ankara's investment program; electricity generation through nuclear reactors was listed as the third-highest priority of the country by the Science and Technology Upper Council of the Scientific and Technological Research Council of Turkey (TÜBİTAK).¹¹

İğneada in Kırklareli Province

The project site in İğneada is the least progressed in the country. In November 2014, Turkey's state-owned Electricity Generation Company (EÜAŞ) announced a multi-party agreement alongside China's State Nuclear Power Technology Corporation Limited (SNPTC) and Westinghouse to enter exclusive negotiations to develop and construct nuclear power plants based on the AP1000 and CAP1400 reactors.¹² The launch of the station was scheduled for 2023. After many years of suspense, in June 2018, President Erdoğan announced that Turkey will likely build its third nuclear power plant with China.¹³ In September 2021, on the heels of a Putin-Erdoğan summit, Erdoğan publicly called for Russia to continue development of Turkey's nuclear energy infrastructure in the Sinop and Kırklareli provinces.¹⁴ It is surmised that the Chinese partnership has disintegrated. This project is likely to remain largely stalled with very limited information in the public domain.

Inceburun in Sinop Province

The Sinop province site is the second most developed site in the country. Site selection studies for a second nuclear power plant began in 1980. After a cost-benefit study in 1983, the Nuclear Power Plants Division identified the Sinop site as an attractive location for facility development. Initially, a consortium led by Mitsubishi and Framatome would construct four 4.6 GW units under the BOO (build-own-operate) model. However, the parties did not agree on the price. Another to Atomic Energy of Canada Limited (AECL) for a 655 MWe CANDU reactor, and the last one to General Electric (GE) for the construction of one or two boiling water reactors in Inceburun with a total

⁸ Ibid, 12.

⁹ Ibid.

¹⁰ Ibid, 10.

¹¹ Ibid, 12.

¹² Hüseyin Erdoğan, "Turkey to build 3rd nuclear plant with China: Erdogan," *Anadolu Agency*, June 19, 2018, <https://www.aa.com.tr/en/energy/nuclear/turkey-to-build-3rd-nuclear-plant-with-china-erdogan/20544>.

¹³ Ibid.

¹⁴ Polina Guseva, "Turkey Offered Russia to Build Two More Nuclear Power Plants in the Country," *Известия*, October 4, 2021, <https://iz.ru/export/google/amp/1230370>.

installed capacity of 1,185 MWe.¹⁵ However, after preliminary site studies revealed that the likelihood of earthquakes in the area increased the cost of constructing a facility,¹⁶ GE determined that it would not be feasible to build a nuclear power plant there until further comprehensive seismic studies and halted the negotiations.

It took many years for steam to build up on this site again. In 2010, EÜAŞ signed an agreement with the Korea Electric Power Corp. (KEPCO) to prepare a bid for the construction of four APR-1400 reactors scheduled to come online in 2019. Yet this proposal proved to be short-lived, reportedly because KEPCO insisted that Ankara provide treasury loans and guarantee electricity sales proceeds directly from the government instead of through TETAŞ. The sides also could not agree on the electricity prices.

Ankara then turned to Japanese companies for the deal and signed an agreement at the end of 2010 for the preparation of a bid. Toshiba and Tokyo Electric Power Company were involved in talks to construct four 1,350 MWe advanced water boiling reactor units,¹⁷ but the talks were suspended at the request of the Japanese side due to the Fukushima incident in 2011. Talks continued throughout 2011–2013, during which Turkey considered offers from Canadian, Chinese, Japanese, and South Korean bidders. In May 2013, Ankara chose a consortium led by Japan's Mitsubishi Heavy Industries and France's GDF Suez. The project remains stalled.

Akkuyu in Mersin Province

The furthest developed nuclear site in Turkey is the subject of this study. The trajectory of the site mirrors challenges faced by the other two sites. The current Russian proposal is a rather novel approach to NPP construction and has emerged after decades of proposals by foreign and Russian companies alike.

Akkuyu was picked as the site of Turkey's first nuclear power plant and received its site license in 1976. A Swedish consortium consisting of ASEATOM and STAL-LAVAL was chosen in 1977 for construction of the 600 MW plant.¹⁸ However, the negotiations were stopped in 1979 after the Swedish government refused to provide financial guarantees and the political instability resulting in the 1980 Turkish military coup posed unsavory political risk.¹⁹

After Prime Minister Özal stabilized the political situation (see later sections), in 1983, Ankara sent a letter went to Siemens-Kraftwerk Union for the construction of a 990 MWe pressurized water reactor (PWR) in Akkuyu. Reportedly, Siemens-Kraftwerk Union left negotiations due to disagreements on the financing and partnership arrangements.²⁰ Negotiations with the other companies that began in 1984 were not fruitful either. Ankara's preferred financing under the BOT model was one reason for this.

¹⁵ Gürkan Kumbaroğlu, "Turkey and Nuclear Energy," in *Turkey's Nuclear Future*, eds. George Perkovich and Sinan Ülgen (Washington, D.C.: Carnegie Endowment for International Peace, 2015): 10.

¹⁶ Ibid.

¹⁷ Ibid, 14.

¹⁸ Ibid, 10.

¹⁹ Ibid.

²⁰ Mustafa Kibaroglu, "Turkey's Quest For Peaceful Nuclear Power," *Nonproliferation Review* (Spring - Summer 1997): 33- 44.

Negotiations with AECL continued, and the Turkish parliament ratified a nuclear cooperation agreement in 1985. AECL and the Turkish authorities reportedly signed a preliminary agreement, in which they agreed that TEK would have 40 percent of the shares and that AECL and its partners would have the remaining 60 percent.²¹ The talks eventually dissolved due to disagreements about financial guarantees, as neither the Turkish government nor the Canadian government wished to provide the necessary guarantees. A further stipulation was that during the time AECL operates the facility, Turkish electricity purchases should be in dollars and should be sufficient for AECL to recoup its expenses.²² Moreover, AECL requested that “risk coverage” should be specified in the contract. By 1987, the talks with the Canadian side had collapsed.

In 1988, Turkey and Argentina signed a fifteen-year nuclear cooperation agreement, which was ratified by the Turkish parliament in 1992.²³ Ankara was interested in two nuclear reactors of Argentinean design: the 380 MWe Argos PWR and the 25 MWe CAREM-25. The two countries agreed to establish a joint architecture-engineering firm in 1990 and committed to building two CAREM-25 units, one in each country, in a deal in which Turkey would take the lead in financing the plants and Argentina would take the lead in providing the technology.²⁴ It was expected that if the cooperation in CAREM-25 bore fruit, the 380 MWe Argos PWR might follow it. However, the Argentinean project was also canceled, reportedly because the United States, the Soviet Union, and other countries had proliferation concerns. Executives at TAEK concluded that going ahead with the Argentinean project might hamper Turkey’s chances of cooperating with other countries on nuclear technology in the future.²⁵

A major structural change came into effect the same year, namely the split of TEK into the Turkish Electricity Distribution Co. and Turkish Electricity Generation Transmission Co. (TEAŞ), which retained authority over nuclear matters and later reestablished a Nuclear Power Plants Division.²⁶ Revised tender specifications for the plant in Akkuyu were released at the end of 1996, and bids from three companies were taken the following year: for two 669.5 MW or four 665.5 MW CANDU type PHWRs from AECL; for one or two 1,482 MW PWRs from Nuclear Power International, which consisted of Siemens and Framatome; and for a 1,218 MW PWR from the consortium of Westinghouse and Mitsubishi.²⁷ The government, however, delayed its decision “no less than eight times” between 1998 and 2000 and finally abandoned the plans in July 2000 due to financial disagreements.²⁸ Furthermore, the Nuclear Power Plants Division was shut down again.

In 2008, Ankara became more resolute in its aspirations for a nuclear energy program. The site of Akkuyu opened for bidding once again. A consortium of 14 parties, including two Russian

²¹ Gürkan Kumbaroğlu, “Turkey and Nuclear Energy,” in *Turkey’s Nuclear Future*, eds. George Perkovich and Sinan Ülgen (Washington, D.C.: Carnegie Endowment for International Peace, 2015): 11.

²² Ibid.

²³ Mustafa Kibaroglu, “Turkey’s Quest For Peaceful Nuclear Power,” *Nonproliferation Review* (Spring - Summer 1997): 33- 44.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Gürkan Kumbaroğlu, “Turkey and Nuclear Energy,” in *Turkey’s Nuclear Future*, eds. George Perkovich and Sinan Ülgen (Washington, D.C.: Carnegie Endowment for International Peace, 2015): 12.

²⁷ Ibid.

²⁸ Gürkan Kumbaroğlu, “Turkey and Nuclear Energy,” in *Turkey’s Nuclear Future*, eds. George Perkovich and Sinan Ülgen (Washington, D.C.: Carnegie Endowment for International Peace, 2015): 12.

companies, submitted only one bid and the deal collapsed a year later, mostly due to high prices for proposed electricity sales.²⁹ In May 2010, the Turkish government took a new approach- direct talks between the Russian Federation and the Republic of Turkey that led to an intergovernmental agreement on cooperation a few months later.³⁰ The Turkish parliament ratified the agreement on July 15 and the Russian parliament in November the same year. Under the agreement, Rosatom agreed to build four VVER-1200 generation 3+ reactors (producing 1.2 GW each) of Russian design under an unprecedented model, the BOO investment model, by 2026. Russia is also offering to transfer used nuclear fuel from the Akkuyu site to Russia for re-processing,³¹ a highly desirable service for those with proliferation and environmental concerns. The first reactor received a license in 2018, the second in 2019, the third in 2020, and the fourth in 2021. At present, the first reactor is on track to be completed by 2023, the 100th anniversary of the founding of the Republic of Turkey, with the other three units to follow by 2026.

Under the terms of the agreement, the Russian side established a project company in Turkey, the Akkuyu Nuclear Joint-Stock Company, with stakeholders consisting of Russian companies: Atomstroyexport CJSC (2,267%), Inter RAO UES JSC (0,820%), Rosenergoatom JSC (21,948%), Atomtechenergo JSC (0,025%), Atomenergoremont JSC (0,025%), Rosatom Energy International JSC (74,915%). The Russian government approves all stakeholders.

Overall, the project is estimated to represent a \$22 billion investment and produce approximately 10 per cent of Turkey's electricity needs.³² The Turkish Electricity Trading and Contracting Company (TETAŞ) was assigned to purchase 70 percent of the electricity generated by the first two reactors and 30 percent of the electricity generated by the next two at a weighted average price of 12.35 cents per kilowatt-hour (kWh), not including value added tax (VAT), for fifteen years starting from the date of commercial operation for each power unit.³³ After the first fifteen years, the project company is to sell the electricity on the open market and transfer 20 percent of its profits to the Turkish government.

Critical Gaps at the Akkuyu Site

The exact contract has not been released between the two parties. Thus, scholars must depend largely on press releases and expert interviews to piece together on the ground dynamics as well as future prospects for the site. A few key operational questions deserve greater attention and analysis in order to best understand the development and future pain points at the Akkuyu site.

Since Akkuyu is the first nuclear power facility in Turkey, Turkey does not benefit from a strong domestic workforce specialized in nuclear engineering and facility management. However, Turkey does have a strong talent base in a variety of engineering fields, electric grid, and manufacturing industries. In several expert interviews, both scholars and policymakers were confident that Turkey

²⁹ Ibid, 13.

³⁰ Sebnem Arsu, "Turkey's Pact With Russia Will Give It Nuclear Plant," *New York Times*, May 12, 2010, <https://www.nytimes.com/2010/05/13/world/europe/13turkey.html>.

³¹ Huseyin Erdogan, "Turkey's nuclear waste to be re-processed in Russia," *Anadolu Agency*, April 15, 2015, <https://www.aa.com.tr/en/economy/turkeys-nuclear-waste-to-be-re-processed-in-russia/57202#>.

³² Ebru Şengül, "Akkuyu nuke plant to meet 10% of Turkey's power demand," *Anadolu Agency*, March 10, 2021, <https://www.aa.com.tr/en/energy/nuclear/akkuyu-uke-plant-to-meet-10-of-turkeys-power-demand/32105>.

³³ Gürkan Kumbaroğlu, "Turkey and Nuclear Energy," in *Turkey's Nuclear Future*, eds. George Perkovich and Sinan Ülgen (Washington, D.C.: Carnegie Endowment for International Peace, 2015): 13.

has a competitive capacity to train the necessary personnel for future site operation. Contributing to shrinking the talent gap, Russian universities are training Turkish students under the nuclear power generation industry specialist curriculum. Turkish students are studying at National Research Nuclear University's Moscow Engineering Physics Institute and St. Petersburg Polytechnic University.³⁴ Turkish experts will join the operational staff of Akkuyu NPP after they have completed the training course at the educational and technical centers of Rosatom. Still, the talent gap in the coming years will certainly influence the transfer of operation and ownership of the facility in years to come. Expert interviews revealed a sentiment that Russia may increase its leverage on site by stalling the necessary training of Turkish nationals.

Another critical question raised within expert interviews is the Turkish state's competency and authority on site. Typically, it is the state's responsibility to regulate and enforce coordination across governmental bodies. Reportedly, the Akkuyu Nuclear Joint-Stock Company, essentially Rosatom, is closely cooperating with the Turkish side in developing efficient institutional relationships. For example, parties convene meetings on design solutions and licensing issues with the Ministry of Energy and Natural Resources of Turkey, Ministry of Environment and Urban Planning, Ministry of Water and Forestry, Treasury, and government organizations: EÜAŞ (Electricity Generation Company), TEİAŞ (State-owned Electricity Grid Company), Nuclear Regulatory Agency, TAEK (Turkish Atomic Energy Authority), and other agencies.³⁵ Nonetheless, the relative power dynamics between bodies is obscure and remains an open question. The competencies and influence of each body will determine various outcomes of the Akkuyu facility as construction and operation continues. Expert interviews also revealed a concern that Turkish institutions³⁶ are not mature and nimble enough to, for example, manage day-to-day regulatory standards or address emergency response.

III. INSTITUTIONAL CONSTRAINTS TO PROLIFERATION

At the Munich Security Conference in February 2008, Prime Minister Erdoğan responded to a journalist's question as to "why Turkey did not seem to be worried" about Iran's nuclear program: "Our Iranian colleagues tell us that they want nuclear energy for peaceful purposes to satisfy their energy needs, not for weapons." Erdoğan shared that work in the nuclear field would soon start in Turkey: "I'm afraid some people may accuse us of having ambitions for producing weapons of mass destruction, too."³⁷

And, in fact, such concerns are not entirely misplaced, especially when President Erdoğan himself in 2019 stated that, in a room full of AK Party members in the eastern city of Sivas, "Some countries have missiles with nuclear warheads, not one or two. But [they tell us that] we can't have

³⁴ "Turkey to send 80 students to Russia for nuclear education," *Hürriyet Daily News*, May 26, 2015, <https://www.hurriyetdailynews.com/turkey-to-send-80-students-to-russia-for-nuclear-education--82977>.

³⁵ Mustafa Kibaroglu, Personal Interview, December 10, 2021.

³⁶ For an overview of Turkey's legislation and regulatory bodies in the field of nuclear energy, please see the following report: Nuclear Energy Agency at the OECD, "Nuclear Legislation in OECD and NEA Countries: Regulatory and Institutional Framework for Nuclear Activities, Turkey," 2008, <https://www.oecd-neo.org/law/legislation/turkey.pdf>.

³⁷ Prime Minister Erdoğan made these remarks during a press conference after he participated in the annual Munich Security Conference on February 9, 2008. The press conference was broadcast live on Turkish television channels, such as NTV and CNN Turk.

them. This, I cannot accept.”³⁸ President Erdoğan’s 2019 statements, while perhaps the most prominent recent example, are not unique among other AK Party politicians. Some scholars emphasize the need to place such statements within a domestic political context.

As Mustafa Kibaroglu and Baris Caglar assess in their 2008 article, “Even though there is much talk in Turkey about why the state should develop nuclear weapons among those who approach the issue from the perspective of national pride and prestige as well as security, most decision makers are quite aware that the possible consequences of going nuclear would mean violation of Turkey’s international obligations. Outside powers point to the difficulties Turkey may have to endure, but it also is state practice in institutions such as the Ministry of Foreign Affairs and the military.”³⁹ The article continues to emphasize that apolitical, establishment decision-makers within Turkey’s foreign policy and security arenas remain in line with Turkey’s decades-long commitment to international arms control and non-proliferation institutions. Such statements by Erdoğan should instead be understood as desperate pleas to rally a domestic base that see nuclear weapons as powerful markers of a prestigious and respected state.

Turkey Accedes to the NATO Alliance

Arguably, the most critical constraint on nuclear weapons development emerges from Turkey’s membership in the NATO alliance. Turkey’s deployment of troops to the Korean War paved the way for NATO membership in 1952. As Philip Remler, a scholar at the Carnegie Endowment for International Peace, assesses, chief among Ankara’s decision to join NATO was the threat from the Soviet Union, and more acutely, Stalin’s desire to close the Bosphorus and Dardanelle straits to Turkish commerce during World War II.⁴⁰ Ankara came to see itself as the anchor of United States-led containment in the Middle East and beyond.⁴¹ The repercussions for Moscow were drastic: the United States began construction of the Incirlik air base in 1951 and the Soviet Union now shared a direct border with a ‘Western’ ally.

As a member of NATO, Turkey is theoretically given ‘positive security guarantees’ by the other members of the alliance, according to Article 5 of the 1949 Washington treaty. Under the treaty, Turkish territory would be covered by a ‘nuclear umbrella’ against attacks from other countries. Turkey has accepted deployment of U.S.-origin nuclear weapons at Incirlik in accordance with the nuclear strategies of the alliance since the decision taken at the 1959 NATO summit in Rome. As Mustafa Kibaroglu and Baris Caglar assert, “the presence of U.S. nuclear weapons in Turkey may be considered by outside observers and by experts inside Turkey to be an insurance policy that would be sufficient to deter possible future attacks.”⁴² Thus, under the assumption that Turkey’s security decision-makers remain confident in the NATO umbrella, NATO acts as a bulwark against Turkey developing its own nuclear weapons capability.

³⁸ “Erdogan says it's unacceptable that Turkey can't have nuclear weapons,” *Reuters*, September 4, 2019, <https://www.reuters.com/article/us-turkey-nuclear-erdogan-idUSKCN1VP2QN>.

³⁹ Mustafa Kibaroglu and Baris Caglar, “Implications of a Nuclear Iran for Turkey,” *Middle East Policy Council* 15, no. 4 (Winter 2008): 59 – 80.

⁴⁰ Philip Remler, Personal Interview, June 20, 2021.

⁴¹ For more on this topic, please see: A. L. MacFie, “The Turkish Straits in the Second World War, 1939-45,” *Middle Eastern Studies* 25, no. 2 (1989): 238–48. <http://www.jstor.org/stable/4283302>.

⁴² Mustafa Kibaroglu and Baris Caglar, “Implications of a Nuclear Iran for Turkey,” *Middle East Policy Council* 15, no. 4 (Winter 2008): 67.

Membership in Non-Proliferation Regimes

In a broader context from NATO, Mustafa Kibaroglu and Baris Caglar also argue that the fundamental thrust of Turkish foreign and security policy has derived from membership in international arms control agreements.⁴³ Accordingly, Turkey became a state party to the Nuclear Non-Proliferation Treaty (NPT) with signature in January 1969, and ratified in April 1980. As a country that had never sought to acquire weapons of mass destruction, Turkey also contributed to international efforts to strengthen the NPT regime and participated actively in the process of enhancing the IAEA's verification system with a view to making safeguard inspections more intrusive.⁴⁴ As for the Additional Protocol that was released by the IAEA as a result of "Programme 93+2," Turkey became a state party to it by signing and ratifying the document in July 2000.⁴⁵

In April 1997, Turkey also became a member of the Missile Technology Control Regime (MTCR), which aims to demonstrate to the actual and potential proliferants that there is a solid bloc of likeminded nations determined to fight against proliferation. Moreover, Turkey took steps in the late 1990s to become a member of the Nuclear Suppliers Group (NSG), and was successful in June 2000. Turkey has sped up the process of adjusting its national export control regime (laws and regulations) to that of the NSG countries.

Furthermore, Turkey signed the Comprehensive Test Ban Treaty (CTBT) in 1996 and ratified it in 2000 as one of 44 states whose ratification was necessary for the treaty to become effective. Turkey also hosts a CTBT seismic station at Keskin. The complete ban on nuclear testing, the core function of the treaty, is thought by Turkish officials to be an effective measure to control nuclear weapons technology and a step toward the eventual elimination of nuclear weapons.⁴⁶

Russia has a strong history of engagement and support of the NPT and multilateral nuclear institutions. More specifically, in relation to the Akkuyu site, it must be stated that Rosatom has not demonstrated a consistent record of aiding countries in proliferation and Russia remains active in upholding non-proliferation agreements. As Nicolas L. Miller provides evidence in his article "Why Nuclear Energy Programs Rarely Lead to Proliferation," even with Rosatom assuming a dominant role in the nuclear energy marketplace, Moscow has a strong and historic nonproliferation track record.⁴⁷ For example, Russia has a long-standing policy, dating from the Soviet era, of providing enriched uranium fuel and taking back the spent fuel from the reactors it supplies, which reduces the ability of countries to enrich or reprocess.⁴⁸ Russia supported the conclusion of the JCPOA and has no recent history of exporting enrichment or reprocessing technology, in contrast to China.⁴⁹

IV. TURKEY-RUSSIA TRADE RELATIONS

⁴³ Ibid, 66.

⁴⁴ Ibid.

⁴⁵ Ibid, 66 - 67.

⁴⁶ Ibid, 66.

⁴⁷ Nicholas L. Miller, "Why Nuclear Energy Programs Rarely Lead to Proliferation," *International Security* 42, no. 2 (2017): 40-77.

⁴⁸ Viet Phuong Nguyen and Man-Sung Yim, "Post-Cold War Civilian Nuclear Cooperation and Implications for Nuclear Nonproliferation," *Progress in Nuclear Energy* 93 (November 2016): 255-256.

⁴⁹ For more on this topic, please see: Matthew Kroenig, *Exporting the Bomb: Technology Transfer and the Spread of Nuclear Weapons* (Ithaca, N.Y.: Cornell University Press, 2010).

If scholars, at least temporarily, suspend a fatalistic and extreme threat perception that Russia is scheming to aid Turkey's illicit proliferation attempt, then how can the Russian investment be assessed? Upon a deep historic review, scholars can uncover deep trends in the Russia-Turkey energy trade relationship, even extending to the respective states' imperial ancestors, that contribute to the decision-making of both parties.

Imperial Origins

In the fifteenth century, the Ottoman Empire conquered and replaced the Byzantine Empire. The Ottomans expanded in all directions: north to Crimea, east to Baghdad and Basra, south to the coasts of the Arabian Peninsula, west to Egypt and North Africa, and into the Balkans. They enriched themselves by capturing wealth and slaves; invading new territories was the only path they knew to economic growth.⁵⁰ In this early period of bilateral relations with the Russian Empire, the fifteenth and sixteenth centuries, the Ottoman Empire was the dominant power in the major trade and cultural centers across the Black Sea, Mediterranean Sea, Persian Gulf, and Red Sea.

Over the next several centuries, the Russian Empire expanded into a competing empire, including extending its reign into the Black Sea and the Caucasus as well as enabling passage between the Bosphorus and Dardanelles Straits. In the late sixteenth and seventeenth centuries, the conquests turned into defeats and retreats; the Ottomans had mastered the art of war, but not that of government and revenue distribution.⁵¹ Territorial and maritime competition was the predominant feature of Russo-Turkish relations in this period and such dynamics persisted for centuries to come.

The two empires fought each other 12 times in the Balkans, Caucasus, and the Black Sea regions between the seventeenth and twentieth centuries.⁵² The Ottoman-Russian war of 1768-1774 remains of particular significance since the Ottoman loss, and the treaty that ended it (Treaty of Küçük Kaynarca), was responsible for the elimination of Ottoman hegemony in the Black Sea and an indicator of Ottoman decline.⁵³ Following the signing of the Treaty of Küçük Kaynarca, one of the fundamental principles of Turkish foreign policy was established: that of trying to find power balances among European states in order to survive.⁵⁴

After the Battle of Navarino in 1827, the Russians, alongside the British and the French, led the Ottoman state in upgrading its naval fleet into steam-powered ships. This then led to the need for finding coal to power them. Russia also contributed to the growing sea transportation in Ottoman territories. Starting in the 1830s, the Russian Odessa Company sent the first commercial steamship to Istanbul via the Black Sea. Sultan Mahmud II's decree of July 29, 1843 (*Sadaret Tezkeresi*) enabled domestic coal production, called for it to be marketed in Istanbul, and noted that this could make a valuable contribution to the Ottoman coffers. However, domestic coal was not sufficient.

⁵⁰ David Fromkin, *A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East* (New York: Holt Paperbacks, 2009), 34.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Volkan Ş. Ediger and Itir Bağdadi, "Turkey–Russia Energy Relations: Same Old Story, New Actors," *Insight Turkey* 12, no. 3 (2010): 223.

⁵⁴ Volkan Ş. Ediger and Itir Bağdadi, "Turkey–Russia Energy Relations: Same Old Story, New Actors," *Insight Turkey* 12, no. 3 (2010): 223.

Russia emerged as an important alternative supplier to the dominant coal producer Great Britain, whose coal prices had risen due to growing their own demand for steamships.⁵⁵

Close to three decades later, the 1877-1878 Ottoman-Russian War brought to light another critical energy source- petroleum. During this period, Russia became a major competitor in the oil market, especially in the Black Sea region, because of the disruption in the transportation of American oil. Russia was soon among the top of the list of states, from which the Ottoman Empire imported oil.⁵⁶

This brief recount of a few maritime and natural resource encounters between the Ottoman and Russian Empires lays the groundwork of competition and convenient cooperation due to geographic necessity. Such themes expand and become more complex in the following century.

Statehood and the Impacts of the First World War

In the beginning of 1917, Russia held the edge in the war against the Ottoman Empire. The Minister of War Enver Pasha's catastrophic defeat in early 1915 on the Caucasus front was followed by a successful Russian invasion of eastern Anatolia in 1916. The Russians had strengthened their strategic position by winning mastery of the Black Sea and by constructing railroad lines from the Caucasus toward their new front line in eastern Anatolia.⁵⁷ This territorial zone would become a tenuous reoccurring theme in the relationship in later periods, especially under Stalin's leadership. However, during this time, oil prices frequently trumped other issues for the Ottoman leadership. Russia carried out the biggest oil production in the Ottoman empire. When the British Ministry of War prohibited oil deliveries to Istanbul for a few days, the price of oil increased significantly. Russian oil began to compete with American oil in the Turkish market.⁵⁸

The collapse of the Russian (1917) and Ottoman (1922) Empires and their replacement by a communist regime in Moscow and a nationalist one in Ankara dealt a blow to the bilateral relationship. The two new states initially got along well: The Bolsheviks provided critical assistance to Mustafa Kemal in the 1919-1922 Turkish War of Independence.⁵⁹ The priorities of the regimes motivated collaboration between the two nascent nations: both were working on gaining international recognition, maintaining territorial integrity, and ensuring stability in economic and political arenas.⁶⁰ During this period, the countries even signed treaties to secure their common borders and to affirm their political cooperation, including the Treaty of Moscow (1921), Treaty of Kars (1921), and the Soviet-Turkish Treaty of Friendship and Neutrality (1925). The treaties underscored the fleeting nature of strategic-level cooperation, which was rooted in the two countries' perceptions that larger threats loomed, such as France or the United Kingdom.⁶¹ The

⁵⁵ Ibid, 224.

⁵⁶ Ibid, 225.

⁵⁷ David Fromkin, *A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East* (New York: Holt Paperbacks, 2009), 239.

⁵⁸ Volkan Ş. Ediger and İtir Bağdadi, "Turkey–Russia Energy Relations: Same Old Story, New Actors," *Insight Turkey* 12, no. 3 (2010): 225.

⁵⁹ Dimitar Bechev, *Rival Power: Russia's Influence in Southeast Europe* (New Haven, CT: Yale University Press, 2017), 143.

⁶⁰ Ibid, 139 - 177.

⁶¹ Ibid.

notable exception that began was in the sphere of economic cooperation,⁶² focused on the energy and transportation sectors.

Meanwhile, Turkey could still point to the 1921 Anglo-Soviet trade agreement as evidence that the need for ‘Western’ finance had forced Moscow itself to compromise less than two years earlier. The ‘West’ held the keys to acceptance into the postwar international order, and Ankara accepted demilitarization of the Straits and foreign ships’ rights of passage. Maritime traffic across the Black Sea had increased after the Anglo-Russian trade agreement broke the embargo against Soviet Russia. Soviet exports were shipped on to western Europe and revenue was used to purchase non-Turkish goods.⁶³ Without state intervention, the pull of Western markets circumscribed the possibilities for Soviet-Turkish exchange. As early as 1922, Soviet representatives in Turkey advocated that trade be forced through other Black Sea ports to reach the Anatolian hinterland.⁶⁴ To that end, Moscow exempted Turkish merchants from the Soviet state monopoly on foreign trade and allowed them to trade in ports like Odessa.⁶⁵ The Soviet Union accounted for between two and seven percent of Turkey’s foreign trade in the interwar period—Moscow had its own worries and could only absorb so many Turkish agricultural imports—but purchases were calculated to help Turkey avoid total dependence on the West.⁶⁶ Even under a period of extreme distress, the Soviets found it critical to foster economic relationships with Turkey, albeit at its own expense.

The relationship that Bolsheviks and Kemalists forged in the aftermath of the First World War was both more and less than a formal alliance. A sense of shared insecurity carried through into the 1930s, when Soviet and Turkish diplomats discussed the possibility of a Soviet naval base in İzmir to help protect the Straits.⁶⁷ The project never materialized, and neither side was ever prepared to sign a military agreement—because of both residual distrust and fear that a strong partnership would inhibit relations with ‘Western’ governments that controlled access to the international markets that both Moscow and Ankara needed to rebuild their countries after the war. Nonetheless, between Moscow and Ankara, a shared conviction persisted that state action was necessary to foster the development that would allow them to move up in the hierarchy of the international order.

With the trade agreement of 1927, the two sides pledged that the value of Soviet imports from Turkey would be equal in value to Soviet exports to Turkey. When the Soviet ambassador asked the Turkish foreign minister where the latter’s proposal for a “net balance” had come from, the Turkish minister replied that it was a natural product of the two sides’ pursuit of shared economic goals.⁶⁸ A new treaty in 1937 reworked the net balance into a now internationally standard formal clearing agreement and this barter arrangement became the basis for economic negotiations into

⁶² Samuel J. Hirst and Onur Isci, “Smokestacks and Pipelines: Russian-Turkish Relations and the Persistence of Economic Development,” *Diplomatic History* 44, no. 5 (November 2020): 834-859.

⁶³ *Ibid.*, 839.

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*, 839 - 840.

⁶⁷ *Ibid.*, 838.

⁶⁸ Samuel J. Hirst and Onur Isci, “Smokestacks and Pipelines: Russian-Turkish Relations and the Persistence of Economic Development,” *Diplomatic History* 44, no. 5 (November 2020): 840.

the Cold War. Very early, Moscow and Ankara had worked out a model of exchange that did not involve the hard currency that both needed for their purchases in the West.

İsmet Pasha used Soviet-Turkish interactions to support his statist arguments at home and traveled to Moscow in 1932 to obtain eight million dollars in credit to support Turkey's first five-year plan.⁶⁹ Dollars were used only in the sake of determining value, and the Soviet Union sent machinery for the construction of textile plants in Kayseri and Nazilli.⁷⁰ Turkey, in turn, paid the Soviet investment with exports. İsmet confided to the Soviet ambassador that Turkey had turned to Moscow for aid because European offers came with strings that would keep Turkey 'an agricultural colony' and only the Soviets' terms allowed for Turkey's industrial transformation.⁷¹

In 1932, İsmet had asked the Soviet Union to help counter Turkish dependence on the West; in 1936, the Turkish ambassador in Moscow begged his hosts to help curb Turkey's dependence on Germany. Just months after the disagreement at Montreux, Turkey again requested a loan from the Soviet Union—this time in the amount of \$100 million worth of goods, again to be paid off with agricultural produce and to be used for industrial projects.⁷² Moscow's options were limited given preparations for war, but the new trade agreement signed in 1937 was an attempt to address Turkey's concerns. Soviet-Turkish trade nearly doubled that year within the net balance framework.⁷³

From 1920 until 1939, Moscow and Ankara demonstrated a remarkable commitment to bilateral relations despite geopolitical differences on the question of the Straits. The two aligned on the foundational conviction that state action is necessary to boost domestic development in the energy and manufacturing sectors, support for trade facilitated by a barter system, and a compartmentalization of trade and security efforts.

The Aftermath of the Second World War

The Second World War changed the character of the Soviet-Turkish relationship and brought back mutual hostilities, which had plagued Russian-Ottoman relations. The announcement of the Nazi-Soviet Pact in 1939 put an end to the interwar convergence. Ankara quickly learned that the Soviets were eyeing the Straits. For the next two decades, Turkey sought supporters who might check Soviet aggression, such as the United States. This period of open tension between Moscow and Ankara was an anomaly in the twentieth century and came to an end in the mid-1950s, especially with the passing of Stalin.⁷⁴

⁶⁹ Ibid, 841.

⁷⁰ Ibid, 840 - 841.

⁷¹ Ibid, 841.

⁷² Ibid, 842.

⁷³ Ibid.

⁷⁴ A. L. MacFie, "The Turkish Straits in the Second World War, 1939-45," *Middle Eastern Studies* 25, no. 2 (1989): 238-48. <http://www.jstor.org/stable/4283302>.

Without the restraining influence of the interwar partnership, Stalin's unbridled pursuit of Soviet interests pushed Turkey towards the United States. In 1941, Ankara had learned from Hitler of the Soviet Union's Minister of Foreign Affairs Vyacheslav Molotov's secret proposal to establish Soviet naval bases on the Bosphorus.⁷⁵ In March 1945, the Soviets delivered a note to the Turkish ambassador in Moscow, Selim Sarper, in which it was made clear that the Soviet-Turkish Treaty of Friendship and Neutrality (1925) would not be renewed in November of the same year. In June 1945, amidst preparations for the Potsdam Conference, the Turkish ambassador in Moscow met with Molotov. Ankara was not surprised to hear again of Moscow's disdain for the rules governing passage through the Straits, but was stunned to be presented with a Soviet claim to much of eastern Anatolia.⁷⁶ Soviet and Turkish territorial interests clashed, and the Soviets had reason to oppose even the revised terms of the Montreux Convention because Turkey—claiming neutrality—had allowed warships from both belligerent blocs to pass into the Black Sea. Moscow's message suggested that previous acceptance of differences over the Straits and acquiescence to Turkish claims to eastern Anatolia in 1921 had been part of an alliance that the war had broken. When Molotov repeated Soviet conditions more assertively, Turkey begged Washington to accept that Moscow was a menace to the neighborhood and, overall, the postwar order.⁷⁷



"Turkey-Soviet Union" Designed by Jean Leffell for Swiss Nebelspalter magazine, December 1945, showing the Soviet Union facing off against Turkey.

The cartoon was published amid rising tensions between the two, namely a border dispute in Turkey's northeast (the Soviets had begun claiming territory bordering the Armenian and Georgian republics) as well as the persistent conflict over the status of the Straits. Peaking in the summer of 1946, with Soviet naval exercises near the Straits and the dispatch of a US naval task force, these disputes diminished in the early 1950s, especially after Turkey's accession to NATO and Stalin's death.

The United States was an attractive partner since its military had demonstrated the ability to cross the Straits undeterred by Soviet interests. The tale of the *USS Missouri* stands as a larger metaphor to the kind of dynamics at play during this time. In 1944, the Ambassador of Turkey to the United States Mehmet Münir Ertegün unexpectedly passed away and rested temporarily in Arlington cemetery. In 1946, the United States exhumed his body and delivered his remains on the *USS Missouri* to his widow in Istanbul.⁷⁸ As anticipated, when the *USS Missouri* docked in Istanbul in April 1946, it was greeted with public ceremonies and the press covered every detail of the visit. In his Army Day speech on 6 April 1946, President Truman stated that coercion should not threaten the sovereignty of the countries in the Middle East and that the United States had a responsibility to preserve peace in the region. Thus, a typical practice of 'diplomatic courtesy' became a strategic

⁷⁵ Samuel J. Hirst and Onur Isci, "Smokestacks and Pipelines: Russian-Turkish Relations and the Persistence of Economic Development," *Diplomatic History* 44, no. 5 (November 2020): 843.

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Jonathan Knight, "American Statecraft and the 1946 Black Sea Straits Controversy," *Political Science Quarterly* 90, no. 3 (1975): 451–75.

instance of 'gunboat diplomacy,' whereby American leadership was demonstrating their interest in and long-term commitment to a tougher stance on aggressive Soviet expansionism.⁷⁹

After the conclusion to the Second World War, Turkey and the Soviet Union experienced profound security disputes pertaining to territorial and maritime integrity. Any prior trade relationship was greatly impacted and largely stalled. The two nations were unable to compartmentalize their relationship, as in periods prior and forthcoming. The issue of militarization of the Straits, depending on perspective, either remains in the background or central to the bilateral relationship. Nonetheless, passage from the Black Sea to the Eastern Mediterranean remains a critical thread of the strategic picture governing both parties' actions at this time and in the decades to come.

The Cold War Period

Turkish statism during the Cold War, unlike its interwar predecessor, was not overtly affiliated with the Soviet Union. By the late-1950s and 1960s, the Turkish political elite accepted the need for statism, but were divided on the form it should take. The military-bureaucratic establishment figures favored state ownership and management of industry, in part for social and political reasons; their opponents sought to limit the state's role to the encouragement of private enterprise.⁸⁰ The two sides did intersect on the topic of import substitution industrialization.

Ankara's tension with the United States encouraged renewed contacts between Moscow and Ankara. Soviet-Turkish trade amounted to a grand total of zero between 1940 and 1954 but began to pick up in the post-Second World War recovery of international trade and even before significant political rapprochement.⁸¹ With currency short, Prime Minister Menderes' government was forced to reinstitute controls on foreign trade and Turkey signed a new set of clearing agreements with a handful of countries. Turkey's limited return to a barter system made the Soviet Union a natural partner and allowed Moscow to work towards the normalization of relations with Ankara.⁸²

In 1957, even before the Turkish government openly embraced a return to statism, Turkey and the Soviet Union began to explore ways to push economic exchange. With the conditions on Western aid tightening, Prime Minister Menderes sent a delegation to Moscow to negotiate Soviet investment.⁸³ In 1959, the arrival of the U.S.' intermediate-range Jupiter ballistic missiles did not end Soviet-Turkish normalization; that same year, the Turkish minister of health visited Moscow and agreed on a personal meeting between Menderes and Khrushchev. Turkish frustrations with the lack of development despite NATO membership led to Soviet-Turkish economic cooperation that trumped the political conflict of the Cold War.

The largest Soviet-Turkish initiatives of the 1960s and 1970s—a steelworks, an aluminum plant, and an oil refinery—were state-run icons of Turkey's progress towards industrial modernity. The

⁷⁹ Gül İnanc and Şuhnaz Yilmaz, "Gunboat Diplomacy: Turkey, USA and the Advent of the Cold War," *Middle Eastern Studies* 48, no. 3 (2012): 401-11. <http://www.jstor.org/stable/23217363>.

⁸⁰ Sevket Pamuk, *Uneven Centuries: Economic Development of Turkey since 1820* (Princeton, New Jersey, Princeton University Press: 2018): 215.

⁸¹ Oscar Sanchez-Sibony, *Red Globalization: The Political Economy of the Soviet Cold War from Stalin to Khrushchev* (Cambridge, UK: Cambridge University Press, 2014), 141.

⁸² V.N. Koptevskii, *Россия-Турция: этапы торгово-экономического сотрудничества* (Moscow, 2003), 112.

⁸³ Cahit Kayra, *Cumhuriyet Ekonomisinin Öyküsü 2* (Istanbul: 2013): 91-92.

factory completed in Seydişehir in 1972 remains Turkey's only large-scale site of aluminum production. The steelworks opened in İskenderun in 1975 is still the biggest in the country. The oil refinery built by the Soviet Union in Aliğa was the country's third and today supplies 25% of Turkey's petroleum.⁸⁴

Moscow's willingness to engage in interstate development and to accept payment in Turkish agricultural goods gave Ankara a way to capitalize on the social and political symbolism of development that complemented Turkey's Western-supported initiatives. The Soviet Union did not offer aid in the form of grants, but, once again, did not ask for payment in hard currency.⁷⁴ The agreement adopted the interwar model and took as its formal basis from the 1937 clearing agreement. Turkish payments were to be deposited in a Soviet account in the Turkish central bank, and Moscow agreed to spend all proceeds on Turkish exports, including set amounts of hazelnuts, citrus fruits, raisins, and olives.⁷⁵

Until the September 1980 military coup, this strategy of balancing Washington and Moscow allowed Turkey to complement consumer-focused Western investment with industry-heavy Soviet assistance.⁸⁵ However, the overall economic stagnation persisted. A new economic plan was unveiled in January 1980, supported by the IMF and the employers' organization TÜSİAD (Organization of Turkish Industrialists and Businessman). It aimed to achieve structural changes in the economy: a shift from import substitution industrialization to export-oriented industrialization and a free-market economy.⁸⁶ However, these measures could not be put into practice before the military coup due to political ambivalences and trade union opposition.

The return of civilian rule in Ankara in 1983 saw a rebound in the economic condition of Turkey. The 1980 plan was back on the table. Halil Turgut Özal, who had played a principal role in developing the 1980 plan, assumed the role of Prime Minister and was now in a position to implement such policies. With political dexterity and the support of key stakeholders in Turkey's body politic, Özal guided the country into a period of economic strength and diversification.⁸⁷

The Soviet Union's transition from an industry- to a hydrocarbon-exporting economy inspired Moscow to think firmly about benefits to be extracted Turkey. When, for example, Prime Minister Bülent Ecevit asked Moscow to increase oil exports to Turkey in 1978, the Soviets agreed in principle but indicated that Ankara would need to pay with goods other than figs and raisins. The Soviets were not yet asking for hard currency, but wanted more useful shipments of wool and grain.⁸⁸ Ultimately, Ankara and Moscow agreed in 1982 that exchange would henceforth be in freely traded currencies.⁸⁹ And, yet, two years later when Moscow and Ankara negotiated the

⁸⁴ Samuel J. Hirst and Onur Isci, "Smokestacks and Pipelines: Russian-Turkish Relations and the Persistence of Economic Development," *Diplomatic History* 44, no. 5 (November 2020): 850.

⁸⁵ Elifcan Karacan, *Remembering the 1980 Turkish Military Coup D'état: Memory, Violence, and Trauma* (Wiesbaden, Germany: Springer VS, 2016), 19.

⁸⁶ For more information on this topic, please see: Nesecan Balkan and Sungur Savran, eds., *The Ravages of Neo-Liberalism: Economy, Society and Gender in Turkey*, (Hauptpage, New York: Nova Science Publishers, 2002).

⁸⁷ Elifcan Karacan, *Remembering the 1980 Turkish Military Coup D'état: Memory, Violence, and Trauma* (Wiesbaden, Germany: Springer VS, 2016), 128.

⁸⁸ A.A. Rodionov, *Турция: Перекрёсток судеб, воспоминания посла* (Moscow, 2006): 155.

⁸⁹ Samuel J. Hirst and Onur Isci, "Smokestacks and Pipelines: Russian-Turkish Relations and the Persistence of Economic Development," *Diplomatic History* 44, no. 5 (November 2020): 854.

opening of the first pipeline that would bring natural gas from the Soviet Union to Turkey, Ankara succeeded in persuading Moscow to spend revenue on Turkish exports.⁹⁰ Turkey's increasing imports of Soviet energy threatened to undermine the principle of net balance that had characterized bilateral trade, and the Soviet agreement to accept payment in Turkish goods was a concession to allow Ankara to protect currency reserves.⁹¹

An intergovernmental agreement and a landmark petrochemical contract between these two parties occurred in 1984: the Soviet Gazexport and Turkey's BOTAŞ signed a 25-year trade agreement on February 14, 1986 and Turkey and the Soviet Union signed governmental agreements in the area of natural gas on September 18, 1984. The major project emerging from these agreements was the "Western Line" natural gas pipeline, which crosses Ukraine, Romania, and Bulgaria to deliver natural gas to Turkish territory.⁹² Despite the collapse of the USSR, the spirit of this agreement would persist after significant horse-trading.⁹³ It would also represent a pivot in the energy trade relationship: a focus on natural gas pipelines and Turkey as a transport hub between the South Caucasus into Southern Europe.

From the developments of the Cold War, scholars can observe a reemergence of cooperation between the Soviet Union and Turkey. The two parties still employed the barter system with Moscow focusing its investments on the manufacturing, raw materials, and energy sectors. Towards the end of the Cold War, the Soviet Union began to capitalize on its hydrocarbon exports, a pattern that would carry through into later decades. Additionally, the heightened tension between 'Western' countries and Russia, even with the layer of NATO security assets in Turkey, did not prevent high volumes of a bilateral trade relationship.

The Russian Federation

The dissolution of the Soviet Union bolstered Turkey's strategic location, while Turkey's own domestic economic policies cultivated a diversified economy. Turkey became an attractive investment market and trade partner at the emergence of the Russian Federation. Since the late 1990s, the network of natural gas pipelines circumambulating territory bordering the Black Sea, Caspian Sea, and the Eastern Mediterranean Sea. The network of pipelines and their agreements demonstrates a pivot in the Russian approach, in comparison to its USSR and Russian Empire predecessors, and yet several similar patterns remain.

In the decades to come, Russia maintained its historic energy trade relationship with Turkey, while modifying its investment model away from exclusive contracts and towards participating in investment consortia. It took a full seven years after the collapse of the Soviet Union for Moscow to persuade Turkish companies to finally pay for Russian energy in hard currency. Some of the patterns from centuries past remained, such as government leadership and the strategic context of the Black Sea and Eastern Mediterranean spaces. Even without a full review of the details of each

⁹⁰ V.N. Koptevskii, *Россия-Турция: этапы торгово-экономического сотрудничества* (Moscow, 2003), 161.

⁹¹ Samuel J. Hirst and Onur Isci, "Smokestacks and Pipelines: Russian-Turkish Relations and the Persistence of Economic Development," *Diplomatic History* 44, no. 5 (November 2020): 854.

⁹² Volkan Ş. Ediger and İtir Bağdadi, "Turkey–Russia Energy Relations: Same Old Story, New Actors," *Insight Turkey* 12, no. 3 (2010): 221 - 236.

⁹³ Onur Isci, Personal Interview, July 13, 2021.

pipeline project, the Baku–Tbilisi–Ceyhan (BTC) pipeline and the Southern Gas Corridor (SGC)⁹⁴ enterprise provide outstanding examples of larger patterns within the trade relationship and the governmental agreements underpinning them.

The BTC pipeline project ties into the thread of the often-deployed barter system. In February 1997, a feasibility study began for a Baku–Tbilisi–Ceyhan (BTC) crude petroleum pipeline that would carry oil from the Azeri–Çirak–Güneçli fields located in Azerbaijan’s territorial waters in the Caspian Sea to Turkey’s Ceyhan terminal located in the Eastern Mediterranean Sea. Governmental agreements were signed on November 18, 1999, with later agreements following in October 2000. The groundbreaking ceremony was held on September 2002 and, four years later, in July 2006, the BTC pipeline was officially opened. Developed largely by BP, with diplomatic and financial incentives from the U.S., the BTC pipeline, completed in 2005, ran from Azerbaijan through Georgia and Turkey to the Mediterranean Sea. This represented a major success in supplying crude oil from Central Asia to global markets in ways previously unseen during the Soviet Union. As Philip Remler noted, Gazprom initially attempted to block the project in any fashion possible, but Russian leaders soon realized that they could not completely prevent the initiative, and therefore decided to work with the Turkish industrial group Borusan and take a stake in the project.⁹⁵

The BTC crude oil pipeline was, in many ways, a precursor to the Southern Gas Corridor (SGC). The SGC consists of 2,000 miles of pipelines with a total investment of around \$40 billion: apart from the Shah Deniz 2 development, the Corridor includes three pipelines—the South Caucasus Pipeline (operational September 2006) to Azerbaijan and Georgia; the Trans Anatolian Pipeline (operational June 2018) across Turkey; and the Trans Adriatic Pipeline (operational November 2020) crosses Greece, Albania, and arrives in southern Italy. Despite the SGC providing a non-Russia origin and transit route for Europe’s natural gas needs, Russian companies decided to participate in the project. The consortium of companies are as follows:⁹⁶ BP (operator, 28.8%), Turkey’s TPAO (19%), AzSD (a subsidiary of Azerbaijan’s state oil and gas company SOCAR, with 10%), SGC Upstream (a subsidiary of SOCAR, with 6.7%), Brazil’s Petronas (15.5%), Russia’s Lukoil (10%), and Iran’s NIOC (10%).⁹⁷ By participating in the consortium, Russia would at least be able to keep its fingers on the pulse of the project, rather than exclude itself from developments.

⁹⁴ For more on the pipelines, please see the following report: Luca Franza, “From South Stream to Turk Stream,” *Clingendael International Energy Programme*, 2015, https://www.clingendaelenergy.com/inc/upload/files/CIEP_paper_2015-05_web_1.pdf.

⁹⁵ Philip Remler, Personal Interview, June 20, 2021.

⁹⁶ U.S. Energy Information Administration, “Caspian Sea Region,” August 26, 2013, https://www.eia.gov/international/content/analysis/regions_of_interest/Caspian_Sea/caspian_sea.pdf.

⁹⁷ In August 2018, the Trump administration issued an Executive Order that, in part and in practice, granted a sanctions waiver for Iran’s NIOC and the other parties to participate in the consortium without the threat of penalties from the U.S. sanctions regime. For the text of the Executive Order: <https://trumpwhitehouse.archives.gov/presidential-actions/executive-order-reimposing-certain-sanctions-respect-iran/>.



Trade volume between Russia and Turkey peaked around \$35 billion in 2008. With the background of the pipeline development timeline and the context of the Akkuyu site negotiations, scholars can situate Russia's investment in the Akkuyu site within the state's larger trade patterns and strategic goals. However, trade is not distributed equally between the two states. While Russia is Turkey's main trading partner, Turkey ranks seventh among Russia's trade partners. Turkey's energy dependence on Russian fossil fuel imports reached approximately 50% with 34% of Turkish coal imports, 33% of oil imports, and 62% of natural gas imports coming from Russia in 2008.⁹⁸

Furthermore, the pipelines and the nuclear facility also tied into another growing trend in Turkey-Russia energy relationship: the tendency to bundle several lines of effort. In February 2009, Turkish President Gül signed a joint political declaration with Russian President Medvedev, later declared a strategic partnership by Prime Ministers Erdoğan and Putin in January 2010. Among the energy projects under discussion between the two states at the time, only the nuclear energy deal was signed on May 12, 2010.⁹⁹ This demonstrates the prioritization of the Akkuyu project and the relationship that the Akkuyu site has within the network of natural gas pipelines.

The timeline of the Akkuyu NPP negotiations is best understood with the additional context of the pipelines. On-the-ground development of the industrial sites coincided with high-level negotiations that bundled security, political, and economic issues together. While Russia does not have an exclusive contract on the pipeline projects as, essentially, in the Akkuyu NPP site, Russia is still able to extract political capital and buttress its bilateral relationship with Turkey.

V. A FORWARD OUTLOOK

The Akkuyu site is still under development, and it may be roughly another decade before all four power reactors provide electricity to the Turkish electric grid. It may be many more years when operation of the facility is transferred to the Turkish government. Still, even once one reactor comes online, Turkey will have achieved a nearly eight decades-long goal to procure a nuclear power capability within the country. Undoubtedly, how and to what extent Russia and Turkey will exert that power is worthy of attention.

⁹⁸ Volkan Ş. Ediger and İtir Bağdadi, "Turkey–Russia Energy Relations: Same Old Story, New Actors," *Insight Turkey* 12, no. 3 (2010): 233.

⁹⁹ Ibid, 232.

After a review of the historical trends, a few outcomes are likely: the bilateral energy investment will operate outside of security-arena disputes and Russia will maintain a presence in European energy security. What is less certain is how the boost in baseload power will interact with the current natural gas purchasing contracts and the overall Turkish economy. In the past few months, headlines have lambasted President Erdogan's economic policies, sending the Turkish lira into a rapid devaluation. Coupled with the global economic downturn due to the COVID-19 pandemic, questions arise about whether Turkey even needs the energy. If not, could Turkey use the excess energy to link its electric grid across countries, such as Bulgaria and Georgia? In turn, Turkey would be able to extract its own political and economic leverage from the Russian investment.

On the proliferation front of the Akkuyu NPP, while scholars today are less alarmed by the safety and security aspects of the site, the Middle East is in a period of nuclear expansion. More countries, such as Egypt, Jordan, Qatar, and Saudi Arabia, are exploring nuclear energy programs and with a JCPOA hanging by a thread in Vienna, Iran may trigger a proliferation cascade across the region. In such a case, private consultations have revealed that Turkish security establishment figures may no longer be able to stave off a political desire to 'race to the bomb,' especially if politicians are desperate enough to rally support. Certainly, most level-headed individuals would like to avoid such a scenario. For this reason, it is critical to continue to uphold multilateral institutions, arms control treaties, and Russia's robust engagement on nuclear affairs in the decades to come.

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