

## **Nuclear Development in the Arabian Peninsula: The United Arab Emirates – A Harbinger of Things to Come?**

Yoel Guzansky

The United Arab Emirates has completed construction of the first nuclear reactor on its soil, one of four being built.<sup>1</sup> With the launch of the reactor, probably in 2018, the UAE will become the first Arab country to possess a viable civilian nuclear program. However, this development raises concerns regarding the future use of such a program by the UAE or other Arab states, such as Saudi Arabia, which may seek to use their developing nuclear capabilities for the production of nuclear weapons.

### **Increased Energy Needs**

The United Arab Emirates presents strong arguments about its needs for nuclear power to meet the country's growing energy demands, reduce its dependence on oil, and enable more petroleum exports. To alleviate the concerns regarding the country's intentions, the UAE committed itself to the "123" nuclear cooperation agreement<sup>2</sup> with the United States in 2009, which prohibited uranium enrichment and the reprocessing of plutonium - a threshold set as the "gold standard" of a non-proliferation regime (NPT).<sup>3</sup> This agreement opened the door to international cooperation in the nuclear field. The UAE has signed cooperation agreements with Argentina, Australia, Canada, France, Japan, Russia and the United Kingdom, among others, which included the transfer of technology, experts, nuclear materials, and facilities. Additionally, a South Korean corporation began building reactors in the UAE in 2009.

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<sup>1</sup> Mariam M. Al Serkal, "[UAE's First Nuclear Power Plant Now Completed](#)," *Gulf News*, March 3, 2018.

<sup>2</sup> The agreement is named after the Atomic Energy Act, which was changed in 1978 to the Nuclear Nonproliferation Act, which ties all US nuclear assistance to adherence to strict nuclear nonproliferation criteria.

<sup>3</sup> 191 countries are signatories to the Treaty. For the text of the Treaty, [see the UN website](#).

On the face of it, the UAE's argument for its nuclear program is logical, despite its ample supply of oil and its traditional support of a nuclear-free zone in the Middle East. According to UAE estimates, the new reactors will supply up to a quarter of its energy consumption upon completion. Moreover, there is public support for the development of nuclear technology in the UAE as a means of creating jobs and reducing pollution. In 2017, the country was eighth in the World Bank's carbon dioxide emissions per capita ranking. Public opinion surveys on the subject indicate that 82 percent of UAE residents favor nuclear energy development, and 89 percent support building a civilian nuclear infrastructure. In addition, 89 percent felt that civilian use of nuclear energy was, alternatively, "extremely important," "very important" or "important," to the UAE.<sup>4</sup>

### **Fear of Iran**

The UAE and other Arab countries are not indifferent to the Iranian nuclear threat, particularly in light of the JCPOA (Joint Comprehensive Plan of Action) agreement between Iran and the US, Russia, China, Great Britain, France and Germany, signed in 2015. According to various surveys, UAE citizens are more skeptical of the deal than even the Saudi public: 91 percent state they do not support the agreement, and 71 percent believe the deal only benefits Iran, and is bad for Arab countries.<sup>5</sup>

Although the Gulf States ultimately supported the nuclear deal with Iran,<sup>6</sup> albeit cautiously and with reservation, there have since been indications that under certain circumstances, the UAE could request to reopen the "123 Agreement." For instance, after the Iran deal was signed, the Emirati ambassador to the United States, Yousef Al Otaiba, signaled that his country might reconsider its stance on uranium enrichment and hinted that the UAE will not necessarily continue to consider itself beholden to the deal it signed with the United States. During a telephone conversation with Republican congressman Ed Royce in October 2015, who at the time headed the Foreign Affairs Committee of the House of Representatives, Otaiba is reported to have said that "your worst enemy has been granted this right to enrich (uranium), and this is a right that your friends are also going to want, and we won't be the only country."<sup>7</sup>

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<sup>4</sup> See, for example: "UAE poll shows continued support for peaceful nuclear energy program," *Emirates Nuclear Energy Cooperation*, June 11, 2017.

<sup>5</sup> Zogby Research Service, [\*Middle East 2015: Current and Future Challenge\*](#), November 2015.

<sup>6</sup> Yoel Guzansky and Azriel Bermant, [\*"The Best is the Worst: Why Iran's Enemies Support The Nuclear Deal."\*](#) *Foreign Affairs*, August 13, 2015.

<sup>7</sup> [\*"After Iran Nuke Deal, Another Country Show New Interest in Uranium,"\*](#) *CBS News*, October, 10, 2015.

The nuclear deal with Iran puts the UAE in an uncomfortable position, because UAE officials believe that the deal it signed with Washington provides fewer positive elements than those granted to Iran in the JCPOA. For this reason, the UAE's adherence to the "123" deal was the object of criticism for other Arab governments.<sup>8</sup> Agreements for full nuclear cooperation between Jordan, Saudi Arabia and the US are pending for the time being due to the resistance of both countries to American pressure, and their insistence on maintaining an option to enrich uranium<sup>9</sup>.

However, Iran is not the sole factor leading to increasing nuclearization in the region. Saudi Arabia does not want to lag behind the Emirates, and has also commenced a rather ambitious nuclear program, including the planned construction of sixteen nuclear reactors by 2032.<sup>10</sup> Neither are the Saudis willing to give up their "right" to enrich uranium. The Kingdom has already signed nuclear cooperation deals with China, Russia, and South Korea, as well as other countries, and announced that it will choose construction sites for the Kingdom's first two reactors by May 2018. There is also a possibility that the UAE will share its knowledge with other countries that are not bound to a non-proliferation regime. This scenario was raised by official Emirati sources, who have explained that the country might be interested in sharing its nuclear expertise with friends, such as Turkey<sup>11</sup> and Jordan.<sup>12</sup>

Iran's Arab neighbors believe that the JCPOA does little to curb its regional conduct and long-term nuclear ambitions.<sup>13</sup> It would therefore be impossible to separate the Arab countries' nuclear rationale from the broader regional context. If it remains in place, the agreement with Iran will buy its neighbors about a decade, during which they will be able to continue efforts to develop nuclear programs. However, if Iran joins the U.S. and walks away from the JCPOA, some of Iran's neighbors may accelerate nuclear development. If, in the future, the UAE decides to acquire military nuclear capabilities, its civilian nuclear program, which includes facilities, technologies, materials, human capital, and accumulated experience, can quickly and relatively easily be adjusted

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<sup>8</sup> [Robert Einhorn](#) and [Richard Nephew](#), "[The Iran nuclear deal: Prelude to proliferation in the Middle East?](#)," *Brookings*, May 31, 2016.

<sup>9</sup> Yaroslav Trofimov, "[Saudi Arabia Considers Nuclear Weapons to Offset Iran](#)," *The Wall Street Journal*, May, 5, 2015.

<sup>10</sup> Angelina Rascoet Wael Mhadi, "[Saudi Arabia to Select Nuclear Plant Site 'Very Soon'](#)," *Bloomberg*, October 20, 2016.

<sup>11</sup> Huseyin Erdogan, "[UAE ready to share nuke experience with Turkey](#)," *Anadolu Agency*, October 13, 2016.

<sup>12</sup> Mohammad Ghazal, "[Jordan in negotiations with potential partners in nuclear project](#)," *Jordan Times*, May 23, 2016.

<sup>13</sup> Taken from a [speech of the UAE Foreign Minister at the General Assembly in 2016](#): "H.H. Sheikh Abdullah Bin Zayed Al Nahyan, Minister for Foreign Affairs."

accordingly and thus reduce the costs associated with development of weaponized nuclear technology.<sup>14</sup>

Yet, due to the UAE's dependence on foreign manpower and expertise, for example, only 57 percent of the employees of the Federal Authority for Nuclear Regulation in the UAE are local workers<sup>15</sup> — the international community has the necessary tools to reign in the UAE's potential nuclear ambitions. The government recognizes this dependence on foreigners and tries to encourage "Emiratization" in all areas of activity. Moreover, a practical decision by the UAE to move toward nuclear weapons depends on several factors, foremost of which are the non-fulfillment of the nuclear agreement obligations by Washington and Tehran, and the extent to which the United States considers the security concerns of its allies. In any case, renewed negotiations or a withdrawal from its obligations to prevent uranium enrichment would not serve the interest of the UAE and would endanger the completion of its civilian nuclear program.

*Yoel Guzansky is a Senior Researcher at the Institute for National Security Studies (INSS), Tel Aviv University. Formerly with Israel's National Security Council, The Prime Minister's Office and Stanford University.*

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<sup>14</sup> Yoel Guzansky, "[The UAE's Nuclear Push: And the Potential Fallout for the Middle East](#)," *Foreign Affairs*, February 19, 2017.

<sup>15</sup> Caline Malek, "[More Emiratis needed for UAE nuclear industry, says new chief](#)," *The National*, July 7, 2015.

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