

PolicyWatch 3013

Israeli Gas Is Almost Ashore, But Challenges Remain

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September 7, 2018

Environmental concerns, uncertainty over export routes, and future security risks overshadow the latest progress in bringing the Leviathan field online.

Watched over by a small group of environmental protestors camped on the beach at Dor, engineers are putting the final touches on a pipeline for Israel's Leviathan offshore natural gas reservoir. Located between Tel Aviv and Haifa, the line will connect to a network that already transports gas from the smaller Tamar field to power stations and industrial plants across Israel. And thirty miles to the east, other engineers are working on a line that will cross into Jordan, with Leviathan gas predicted to generate most of the kingdom's electricity from 2020.

Various other alternatives for Israeli gas have been discussed, including a possible undersea line to Cyprus, Greece, and Italy, but the imminent Leviathan routes are the most promising options for the foreseeable future. Smaller fields in Israel's offshore exclusive economic zone may be developed as well, but they are far below Leviathan's scale, while exploration to the north is limited by the lack of a recognized maritime border with Lebanon. Now that full exploitation of Leviathan finally seems like a reality, what export options does it present, and what obstacles may yet arise to thwart them?

LEVIATHAN'S CURRENT STATUS

Although Israel's gas reserves are small in global terms, the numbers associated with Leviathan could be a game changer in the Levant. Noble Energy, the U.S. company that discovered the field in 2010, described it earlier this week as an "amazing reservoir." It is estimated to contain more than 22 trillion cubic feet of gas. To put this figure in perspective, the Tamar field contains only 10 tcf yet still manages to provide around 60 percent of Israel's electricity and will do so for many years.

Thus, when Leviathan comes online, it will enable Israel to become a gas exporter. Pipelines from Leviathan, which lies nearly eighty miles offshore and 6,000 feet deep, have already been laid, awaiting connection to a production platform currently being completed in Texas. The platform's framework is due to be towed across the Atlantic soon, leaving at the end of November and arriving early next year. Once in position around six miles offshore, it will be mounted with processing units to clean and dry the gas before it reaches shore.

CONTROVERSY

Despite its prospects of providing energy security, the development of Israel's gas reserves has been marked by lively political and public debate. Originally, Leviathan was planned to come onstream in 2017. Initial concerns about Noble's dominance in the gas sector were alleviated when the company sold off some of its interests in other fields and reduced its stake in the Tamar field. Its Israeli partners, including Delek, have also raised political controversy, with opponents alleging that the consortium was negotiating too high a price for the gas.

Meanwhile, green campaigners—including the campers at Dor and another couple thousand protestors who reportedly gathered in central Tel Aviv on September 1—claim that placing a gas platform so close to shore is dangerous because condensate extracted in the cleaning process could spill into local waters. Instead, they advocate a floating facility located directly above Leviathan. Yet their arguments are seemingly outweighed by a combination of engineering and security considerations: some believe the condensate risk is exaggerated and will be minimized by safety measures; the planned platform is much more practical than a floating installation and needs to be close to shore before the seabed drops steeply; and a near-shore platform can be better defended from missiles and seaborne threats. For example, Hamas rockets landed near Dor during the 2014 Gaza war, and Hezbollah's huge arsenal of missiles in Lebanon is even closer.

Another concern is that the platform will be visible from shore, particularly for some people living in the upscale coastal hill town of Zichron Yaakov. But residents have lived there for decades with a similarly close view of the coal-fired Hadera power station and its four giant chimneys. That station is expected to shut down in four years; a more representative view of Israel's energy future is the gas-fired Hagit power station, which can also be seen from Zichron Yaakov but nestles unobtrusively in the hills to the east.

REWORKING OLD PIPELINES

Since developing Leviathan only makes economic sense if Israel can export much of its gas, securing routes to Jordan and Egypt is vital. Using existing pipelines avoids the expense of laying new ones or building a liquefied natural gas export plant on the coast, which would prompt environmental concerns of its own. The portion of the line extending to Jordan will be new, but it will use the right of way already established by the old line from Kirkuk to Haifa, which exported Iraqi oil between 1935 and 1948—the reason why a refinery, now Israel’s biggest, was built in Haifa.

Once in Jordan, the flow from Leviathan will connect with the old Arab Gas Pipeline, which carried supplies from Egypt to Jordan, Syria, and Lebanon until 2013, when political chaos in Cairo disrupted exports. The plan now seems to hinge on sending Leviathan gas to Egypt via this circuitous route, down to the Gulf of Aqaba and up through the Sinai Peninsula. Reversing the pumps and rehabilitating the pipe is far cheaper than building a new one.

Another potential twist is the proposal to send Israeli gas from Tamar (and, later, Leviathan) to Egypt along the old East Mediterranean Gas Pipeline, which was used to send supplies from al-Arish to Ashkelon up until 2013. On August 30, Delek chief executive Asaf Bartfeld stated that “negotiations on the purchase of the EMG pipeline continue.” And on September 5, Noble chairman David Stover stated that “work is going on solidifying the access into Egypt,” and that “updates and news” would be available on that effort “shortly.”

FUTURE CHALLENGES

The disruption of Egypt’s gas flows to Israel and Jordan after the Mubarak regime’s ouster is a reminder that emerging energy arrangements in the region are always subject to political risks. Israel has since become one of Jordan’s most reliable suppliers, and according to Noble, Egypt’s recent offshore discoveries have not dented its seemingly inexhaustible domestic demand for gas. Yet public opinion in both countries remains very negative toward Israel, and gas cooperation is a frequent target of this resentment.

Egypt’s current government seems quite willing to buy Israeli gas, but the presumed route for such supplies—northern Sinai—is still a security concern. The Sinai portion of the pipeline was plagued by jihadist attacks five years ago, and while Cairo claims to have renewed counterterrorism efforts there, it needs to show long-term success.

Israel’s ongoing tensions with Hamas and Hezbollah could likewise erupt in a fresh round of hostilities at any time. Israeli missile defenses have been able to stave off major infrastructure damage in previous rounds, but they could be overwhelmed in future conflicts by more (or more-accurate) projectiles.

Nevertheless, the Leviathan project at last seems to be coming together. From the U.S. perspective, an additional cause for celebration is that it combines American business and technology with Washington’s quiet diplomatic efforts to help regional partners work together.

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