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POLICY OUTLOOK

Uncovering Syria's Covert Reactor

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Summary

- In June 2009, one year after the first and only inspector visit in Syria, the IAEA director general reported that the information provided by the country "does not adequately support its assertions about the nature of the site." In August, he reported that the IAEA's investigation was "severely impeded" by Syria's non-cooperation.
- The IAEA must complete its investigation in order to verify the absence of other undeclared activities in Syria, and the country's regime must be dissuaded from renewing such nuclear pursuits.
- This case is as much about North Korean proliferation as it is about Syrian violations. Exposing North Korean cooperation with Syria could help to disclose and disrupt North Korea's global network.
- The IAEA Board of Governors should address the Syrian investigation and North Korean proliferation activities at its next meeting in March 2010, and the issues should also be taken up at the NPT Review Conference in May, and the Six-Party Talks on North Korea.
- Newly-appointed IAEA Director General Yukiya Amano should pursue a special inspection of Syria. The IAEA Board should be ready to back him, including through a report to the UN Security Council if the country's non-cooperation continues.
- The European Union should condition future economic relations with Syria on its cooperation with the IAEA to demonstrate that non-compliance has real consequences.

"Essentially, no progress...." Thus stated bluntly the director general of the International Atomic Energy Agency (IAEA) in its November 2009 report on the agency's investigation of undeclared nuclear activities in Syria.

The absence of progress is no fault of the IAEA's professional cadre of inspectors. Indeed, the IAEA Department of Safeguards has uncovered more than the Syrian government ever wanted to be known about the reactor destroyed by an Israeli air strike in September 2007. The fault for the current stalemate lies with President Bashar Assad's government, which first buried the remains of the reactor and now seeks to bury the IAEA investigation.

This essay reports on the current state of the IAEA investigation, explains why it must be completed, and suggests a way ahead. The importance of the investigation goes well beyond a destroyed facility in Syria's eastern desert; its outcome will advance or retard world efforts to disrupt North Korea's nuclear exports and to shore up a global nonproliferation regime shaken by Iran's nuclear pursuits.

An Investigation "Severely Impeded"

The IAEA launched its investigation after being briefed by the U.S. government in April 2008 that Syria had been secretly building a nuclear reactor until its destruction seven months before. This reactor, which had no obvious civil purpose, was being built in the remote desert with North Korean assistance. It had striking similarities to the gas-cooled graphite-moderated reactor at Yongbyon, which North Korea had used to produce plutonium for its nuclear weapons.

By failing to notify the IAEA before the reactor's construction, Damascus had violated its Safeguards Agreement. Moreover, discovery of the reactor may help explain why Syria had refused to adopt the IAEA's Additional Protocol. This protocol, already signed by nearly 130 countries, would have granted IAEA inspectors expanded information and access related to Syria's nuclear activities and thus would have increased the likelihood of their finding this secret facility.

The IAEA's investigation was severely impeded by Syria, which vehemently denied the existence of the reactor and vigorously removed and covered up what remained. By the time IAEA inspectors arrived in June 2008, much of an adjacent hill had been bulldozed over the reactor remains and a new building had been constructed on top. Syrian authorities presumably thought that their extraordinary efforts at concealment would succeed in defeating the IAEA's inspectors. They were wrong.

The IAEA inspectors did their homework before the June 2008 visit, gathering and assessing information from a variety of sources. Upon arrival in Syria, the inspectors posed tough questions about the destroyed facility and

suspicious procurement activities. The Syrian authorities refused to provide answers. The inspectors asked to visit three other suspect sites. The Syrian authorities again refused. The IAEA later obtained commercial satellite imagery showing apparent cleanup activities at those sites.

The inspectors also took environmental samples at the reactor site. Subsequent analysis by the IAEA's network of laboratories revealed manmade uranium particles of a type that Syria had not declared to the IAEA. Syrian authorities were quick to claim that the particles came from the Israeli air strike. International experts observed that the particles were not from depleted uranium, which is sometimes used in conventional munitions. After a careful assessment, the IAEA Department of Safeguards dismissed Syria's claim as a "low probability"—a very forceful denial by the standards of mildly-worded IAEA reports.

The presence of manmade uranium particles at the reactor site remains a mystery. Was uranium to fuel the reactor already there? Were other clandestine nuclear activities taking place at the site? Did the particles come from clandestine activities elsewhere in Syria, or even from North Korea?

In August 2008, IAEA inspectors discovered more unexplained uranium particles at Syria's Miniature Neutron Source Reactor, a known research reactor in Damascus. As of the November 2009 IAEA report, the Department of Safeguards is still not satisfied with Syrian explanations for the presence of these particles. Their source is another mystery. Were they associated with peaceful research that Syria neglected to declare to the IAEA? Were they associated with the reactor being built in the desert? Or were they associated with a different project entirely?

Despite the mystery, indications of undeclared material at two sites in Syria give the inspectors an indisputable basis for their investigation, in addition to the information provided by member states. Indeed, the existence of undeclared nuclear material in Syria obligates the Agency to investigate its origin.

Syria's cover-up having been less than successful, Damascus changed tactics. Claiming that the reactor site and the other three sites were "military related," Syrian authorities refused to provide any further access or information about those sites or associated activities. IAEA lawyers protested that Syria's Safeguards Agreement did not exclude "military" sites, but to no avail. Syrian cooperation ground to a halt, particularly after reports that a sniper's bullet killed the Syrian general who had escorted the IAEA inspectors on their only visit. Perhaps someone in Damascus or elsewhere did not want Syria's covert activities to be uncovered. Or perhaps someone elsewhere did not want them to be continued.

In June 2009, one year after the first and only inspector visit, the IAEA director general offered a grim report. He informed the IAEA Board of

Governors that the information provided by Syria "does not adequately support its assertions about the nature of the site" and that Syria "needs to be more cooperative and transparent." In August, the director general went even further, reporting that the IAEA's "ability to confirm Syria's explanation regarding the past nature of the destroyed building ... is severely impeded because Syria has not provided sufficient access to information, locations, equipment or materials." In November, as described at the outset, he reported that "no progress has been made since the last report to clarify any of the outstanding issues relevant to the implementation of safeguards."

Why Does This Matter?

Syria's secret reactor is history. Bombed, broken, and buried, it will never be resurrected for purposes peaceful or military. The IAEA investigation has some semblance to an archeological expedition in hostile territory. Yet uncovering Syria's clandestine activities is more—much more—than of historic interest.

First, the IAEA must verify the absence of other undeclared activities in Syria. The Syrian reactor had marked similarities to the North Korean reactor at Yongbyon. The Yongbyon reactor had an associated facility for nuclear fuel rod manufacture and another for plutonium reprocessing, where the plutonium was extracted for North Korea's nuclear weapons. Were comparable facilities contemplated or constructed in Syria? What was Syria doing at its research reactor near Damascus? What was it doing at the various sites that IAEA inspectors were not allowed to visit? IAEA inspectors must ensure that Syria is not hiding any other nuclear activities. Or, if further clandestine facilities are found, the IAEA must, at a minimum, put them under safeguards or, better yet, verify their destruction.

Second, the Syrian regime must be dissuaded from renewing such nuclear pursuits. Syria's motives in building a secret nuclear reactor are unknown. Even experts on Syria remain baffled. Was Syria's leadership seeking prestige and a demonstration of technical prowess? Did they see a nuclear program as leverage to regain the Golan Heights or to protect the regime from Israeli attack? Was the young President Assad trying to demonstrate his manhood after replacing his father? Some or all of these motives could still exist. Moreover, Iran's steady progress toward a nuclear weapons capability could give Damascus renewed impetus to renew its clandestine activities. The temptation will be greater if the Syrian regime believes that it can block an IAEA investigation and suffer no consequence.

Third, this case is as much about North Korean proliferation as it is about Syrian violations. North Korea has a long history of military cooperation with Syria and other countries, including Iran. Traditionally, cooperation has involved missile and conventional military equipment. Assistance in building the covert reactor shows that North Korea has also become a nuclear supplier. Where else might Pyongyang be peddling its nuclear wares? We must not allow North Korea to replace A. Q. Khan as the world's supplier of nuclear weapons technology. Exposing North Korean cooperation with Syria could help to disclose and disrupt North Korea's global network.

Finally, the integrity of the nonproliferation regime is at stake. Syria, North Korea, and other countries must not conclude that refusing cooperation with the IAEA protects against international scrutiny and sanction. President Barack Obama has called for a world with no nuclear weapons, a vision that has global appeal. Yet this vision will become fatally distant if the IAEA cannot investigate—let alone detect and deter—the type of clandestine activities conducted by Syria and North Korea.

What Is To Be Done?

First, the IAEA and its member states must keep a spotlight on Syria's illicit activity and the dangerous role of North Korea.

The IAEA investigation should remain on the agenda of the IAEA Board of Governors, and Syria should be kept off the Board. A spotlight must also stay trained on North Korea's involvement. In one of his final acts as director general, Mohamed ElBaradei removed North Korea from the IAEA Board agenda. The Board should use the Syrian investigation to put North Korea back on the agenda with a new focus on DPRK proliferation activities.

Deliberations at the next meeting of the IAEA Board in March should be used to prepare discussion of both Syria's non-cooperation and North Korean proliferation at the Nuclear Non-Proliferation Treaty (NPT) Review Conference in May. Review Conference participants should use the illicit cooperation between the two countries to show the importance of strengthening the IAEA's verification capabilities, including the need for the Additional Protocol. They could also use the Syrian investigation to show how sustained non-cooperation should be treated as non-compliance so that safeguards violators are not rewarded for stonewalling IAEA investigations. Some experts may argue that, to avoid controversy, the Review Conference should not address specific cases of non-compliance. But as one leading nonproliferation expert recently remarked, it is irresponsible for firemen to hold a convention while ignoring a fire blazing outside. The presence of two arsonists in the convention should not keep the rest from their duty.

North Korea's role in building the Syrian reactor should also be a subject for the Six-Party Talks on the DPRK. To date, North Korea has merely declined to deny its involvement. This is not enough, particularly if one goal of the talks is to obtain verifiable assurances of nonproliferation. By raising this case with North Korea and pressing Syria at the same time, we may even generate some helpful mistrust between the two illicit nuclear conspirators. Finally, the Syrian investigation should remain on the agenda of the many visitors to Damascus and the smaller number to Pyongyang. This issue may not be at the top of our diplomatic agenda with the two countries, but it must not fall off the bottom. Moreover, pressing for IAEA cooperation should not be a talking point only of the United States. Convincing Arab states to raise this in Damascus, and China in Pyongyang, would provide a new and useful diplomatic nudge.

Second, the IAEA should move forward with a special inspection.

Syria's Safeguards Agreement allows special inspections "if the Agency considers that information made available by Syria, including explanations from Syria and information obtained from routine inspections, is not adequate for the Agency to fulfill its responsibilities." The ongoing investigation, "severely impaired" by Syria's non-cooperation, easily meets this test. Indeed, James Acton, Mark Fitzpatrick, and Pierre Goldschmidt have argued persuasively that Syria is a "textbook definition of a case in which a special inspection is merited."¹

A special inspection need not be restricted to locations that Syria has declared to the IAEA. Special inspections can also encompass any other sites that the inspectors seek to visit or any information that the inspectors need to fulfill their verification task. The IAEA has already laid a strong basis for a special inspection through its written request on October 23, described in the November report, seeking "access to locations where the debris from the destroyed building, the remains of munitions, the debris from equipment and any salvaged equipment had been and/or are located." If Syria refuses to grant this request on a voluntary basis, the director general can invoke a special inspection.

If Syria disputes a special inspection, the IAEA Board can decide that action is "essential and urgent" and "call upon Syria to take the required action without delay." If Syria still refuses, the Board may conclude that Syria's noncooperation constitutes non-compliance and report this to the UN Security Council. Indeed, the Security Council, in the very first operative paragraph of its Resolution 1887 of September 24, "emphasizes that a situation of noncompliance with non-proliferation obligations shall be brought to the attention of the Security Council." Syria's sustained non-cooperation is a "textbook case" for both a special inspection and a report to the Security Council.

If Syria persists in non-cooperation, the IAEA Board would need to make a succession of decisions to declare a special inspection "essential and urgent," find Syria in non-compliance, and report it to the Security Council. This would provide both leverage and space—perhaps through next autumn—to convince Damascus to change its course. However, the decisions would also likely require a series of contentious votes, since spoilers like Cuba and Venezuela are among the Board's 35 members. Positive Board decisions should be achievable with sizeable majorities, just as the Board adopted its

recent resolution on Iran with 25 members voting in favor and only three voting against. However, the United States and other like-minded countries should start through quiet diplomacy laying the basis for these Board decisions.

While the IAEA Board must be ready to provide its support, special inspections must be initiated by the director general. Special inspections have not been used since North Korea, and a special inspection of Syria could be one of the first decisions for Ambassador Yukiya Amano, the new director general. This will be a difficult decision for Amano, who wants to rebuild consensus in the Board but also understands the critical importance of the IAEA's verification role. The United States and other like-minded countries should signal to Amano their readiness to back him in initiating a special inspection and to solicit support from a majority of Board members if Syria refuses. This is critical since a failure by the Board to back a request for a special inspection would damage the new director general personally and the nonproliferation regime more broadly.

Some experts may argue that a special inspection that is refused would undercut the nonproliferation regime. I disagree. A refused special inspection that generates a report to the UN Security Council would at least show that the system works. On the other hand, shirking from a special inspection for fear of refusal would only encourage further non-cooperation by Syria and future violators of safeguards commitments. It is better to have a watchdog that barks, rather than one kept locked up and quiet in a cage.

In a recent speech on strengthening the nonproliferation regime, Secretary of State Hillary Clinton said that the IAEA "must make full use of existing verification authorities, including special inspections." Syria is the textbook case. If not now, then when?

Third, the European Union should condition future economic relations with Syria on its cooperation with the IAEA investigation and adoption of the IAEA's Additional Protocol.

Syria is accustomed to being under international scrutiny. Moreover, President Assad has been largely successful in diverting international attention from a separate UN investigation into the assassination of former Prime Minister Rafiq Hariri of Lebanon. Thus, international attention and special inspections may not be enough to convince Assad to expose past misconduct or to turn on his North Korean partner in proliferation.

In contrast, international trade and investment are vitally important to Assad and his pursuit of economic growth and reform. He and his advisers are eager to increase trade with Europe and attract European investment. Economic opportunity may be the one inducement that could entice Damascus away from Pyongyang. The EU has signed an Association Agreement with Syria that would improve trade relations. The agreement will not enter into force until it goes over further procedural hurdles, including approval by European parliaments. The agreement with Syria, like many other EU agreements, includes a nonproliferation clause, and EU policy provides for the suspension of ratification in cases of nonproliferation concern. Catherine Ashton, the EU's new high representative, could inform Assad that the Association Agreement will be put "on hold" until the IAEA investigation is closed and Syria takes steps to rebuild international confidence, including by adopting the Additional Protocol.

The European Union stresses the use of multilateral diplomacy to prevent proliferation and strengthen the nonproliferation regime. Here is a case where Europe can back diplomacy with its economic weight. By taking this step before the NPT Review Conference in May, the EU could demonstrate that it is a serious player and that non-compliance has real consequences.

A Watchdog That Barks

President Assad seeks to bury the IAEA investigation just as his bulldozers buried the reactor remains. He undoubtedly hopes that the world's focus on Iran will help him succeed.

Yet as Iran moves closer to possessing nuclear weapons, other countries in the Middle East and elsewhere may follow suit, with North Korea eager and ready to help. If we are serious about achieving a world without nuclear weapons, we must either dissuade or prevent these countries from joining a new arms race. This means that we must be in a position to detect, disrupt, and penalize further proliferation. The IAEA will need to play an important role. For it to be effective and credible, we must aggressively back its investigation of Syria. The stakes go well beyond reconstructing the history of a reactor in ruins.

Yukiya Amano, as the new director general, faces major challenges. Foremost among these is restoring the IAEA's effectiveness and credibility after its investigations of Iran and Syria became mired in obstruction, politics, and personal ambition. Open the cage, and take off the muzzle. Whether investigating Syria or other proliferators, the IAEA must be a watchdog that barks.

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Note

¹ James M. Acton, Mark Fitzpatrick, and Pierre Goldschmidt, "The IAEA Should Call for a Special Inspection in Syria," Proliferation Analysis, Carnegie Endowment for International Peace, February 26, 2009.

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