Terrorist threat to energy infrastructure increases

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Recent indications point to an increased risk of systematic attacks against the world’s petroleum supply chain, particularly in South Asia and the Middle East. Tamara Makarenko examines the trends in terrorist attacks on the energy sector.

Al-Qaeda’s stated aim of focusing operations on hard economic targets allied to a rise in incidents of energy terrorism in regions where there has been a growth in Islamist groups indicates that the risk of attacks on energy sector infrastructure has increased significantly in recent months.

In February 2003 the internet site arabforum.net - allegedly popular among Al-Qaeda supporters - published a call to the mujahideen of all Arab and Muslim countries in which the West has military bases or are involved in the energy industry, to rise against these interests in the name of the Muslim Ummah.

In light of the recent attacks on the petroleum supply chain, such as the bombing of the French-flagged supertanker Limburg off the coast of Yemen in October 2002, and the rising vulnerability of Saudi Arabia to acts of terrorism - as illustrated by the Riyadh bombings on 12 May - it appears that this call to target the oil industry is more than mere rhetoric.

Given rising global, and particularly Western, dependence on oil and natural gas resources, such a trend could bring significant economic disruption. With European and US dependence on oil imports likely to grow to more than 70% and 60% by 2010 and 2020 respectively, the security of African and Middle Eastern reserves will become increasingly important, but the very knowledge of Western dependence on these reserves makes attacks more likely. Even alternative sources currently under development, such as those in the Caspian Sea, have proven vulnerable to terrorism.

Characteristics of energy terrorism

The oil and gas industry is not a new target for terrorists. On the contrary, terrorist groups have always been aware of the economic and political benefits of attacking these strategic resources. In addition to contributing to economic instability, the energy industry has been targeted as a symbol of resistance to national governments, and as a means of placing pressure on foreign powers and multinational corporations with a strategic interest in oil and gas producing regions. Furthermore, terrorist groups have commonly targeted oil and gas pipelines as a source of financing; or as a way to increase their own influence among communities they seek to control.

Although energy terrorism does not elicit the same level of attention as the spectre of chemical, biological, radiological and nuclear terrorism, the economic implications of this terrorist strategy are potentially enormous. With a plethora of targets, including depots, gas stations, personnel, pipelines, production plants, tankers, terminals and
refineries, the energy infrastructure is intrinsically vulnerable, and the knock-on effects of disruptions in production or distribution can have severe and immediate effects on economies, as was seen in the blockade of petroleum distribution in the UK in 2001, and during the strike in Venezuela at the end of 2002.

Terrorist attacks against the oil and gas industry can be divided into seven categories, each of which represents a different level of threat for a variety of actors.

The most common form of attack, due to the immediate disruption caused, is pipeline bombings. Attacks against pipelines, however, also damage national economies and can cause human fatalities. As a result, guerrilla groups engaged in civil wars, particularly in Latin America and the Middle East, commonly target pipelines. One of the most serious attacks of this type was the October 1998 National Liberation Army (Ejército de Liberación Nacional) bombing of the Ocensa oil pipeline in Colombia. The oil spills created by the bombing caught fire, setting nearby homes and part of the conduit in Manchuca on fire, resulting in the death of more than 70 people.

Associated to pipeline bombings is sabotage - predominantly undertaken to create national economic losses. Although sabotage has historically not been common, there is reason to believe that this tactic is gaining interest among terrorist groups. There are three main motivations for the use of sabotage: as a way to siphon oil or gas for black market sales; to cause disruption without the loss of human life; and to force low-level political or corporate concessions.

Different tactics have in the past been used in attacks against oil/gas corporate offices. Normally located in city centres, office buildings are relatively easy targets but until now bombings of corporate offices have tended to be small-scale, with few casualties. This is primarily because groups responsible for such attacks, including eco-terrorist or anti-globalisation groups, are not interested in mass casualties. As such, this tactic has usually been used as a symbolic attack for propaganda purposes.

Less common than office bombings are violent attacks against oil and gas depots, petroleum stations and refineries. Given overall security at these installations, apart from petrol stations, these remain difficult targets to penetrate. However, considering that separatist groups are most commonly responsible for attempting to perpetrate attacks against these installations, it would be naïve to rule out such an attack as a last resort by groups increasingly frustrated by national militaries. Based on current trends, the most likely region for such an attack in the near future is South Asia. Even less common are attacks on oil platforms and offshore installations; again, because of the logistical difficulties associated with access. However, given evidence that oil platforms can successfully be targeted, as they were in Nigeria in 1999, offshore attacks are especially illustrative of infrastructure vulnerability to motivated and organised terrorists.

A fifth form of attack is the hijacking of energy installations, accompanied with the taking of hostages. As with violent attacks against installation, this is not a common tactic because of relatively effective facility security. However, well-organised groups that have identified vulnerable structures could engage in this tactic with serious consequences. Although local groups with unaddressed grievances are normally associated with this form of attack, left-wing and right-wing terrorist groups as well as criminal organisations - motivated by ransom, the pursuit of government concessions or media attention - have also used it.

Sixth, and the most lethal form of energy terrorism in terms of the potential for civilian casualties, are direct, armed attacks on oil and gas facility personnel. Given that
violence is at the core of these attacks, and casualties are an intrinsic aim, this tactic 
is common among Islamist groups in Algeria and increasingly in the Gulf states.

Finally, and occurring with significant frequency, are kidnappings of oil and gas 
company personnel by terrorist groups. Relatively easy to conduct, kidnap for 
ransom is a tactic chosen for three reasons: first, as a source of revenue; second, to 
protest corporate policies of energy companies; and, third, to disrupt the exploration 
and development of oil fields - thus challenging national economic strategies. 
Historical experience dictates that kidnappings most commonly occur in regions 
plagued by active guerrilla organisations, such as Latin America. However, ethnic-
separatist groups in South Asia also conduct similar operations.

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List of Terrorist attacks on energy infrastructure in 2002/2003 (with map)

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