Issue Brief



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Pakistan's Nuclear Arsenal: Debating Objectives and Safety

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South Asia's security dilemma has been a source of constant deliberation within and outside the region. The apprehension of a conventional conflict triggering a chain reaction that could lead to a potential nuclear crisis haunts the strategic peace and security scenario in the subcontinent. Despite mounting global and regional concerns regarding the safety and security of Pakistan's nuclear warheads, fissile material stocks and nuclear facilities, recent reports indicate that Islamabad has managed to amass a nuclear stockpile of approximately 110 warheads – a steep upward climb from earlier international estimates.

In January 2011, The Washington Post quoted David Albright, President of the Institute for Science and International Security, as stating "They [Pakistan] have been expanding [their nuclear weapons production capability] pretty rapidly." The newspaper also quoted Peter Lavoy, erstwhile US National Intelligence Officer for South Asia, as having told NATO officials in December 2008 that "despite pending economic catastrophe, Pakistan is producing nuclear weapons at a faster rate than any other country in the world." The frenzied activities by Pakistan's nuclear establishment will soon make it the world's fifth largest nuclear power, in terms of the number of warheads stockpiled. In fact, it has now edged ahead of India, which is reported to have 60 to 80 nuclear warheads.

The 'China' Factor

Pakistan could not have accelerated production of plutonium and enriched uranium, which it uses for warheads, without substantial outside support. China has been its principal nuclear and missile technology benefactor. Pakistan's Chasma-I reactor was imported from Beijing during the 1990s, followed by Chasma-II in the early 2000s. Now China is supplying Pakistan with two new 650-MW nuclear reactors, Chasma-III and Chasma-IV. While these reactors are ostensibly for electricity generation, they will produce plutonium as a byproduct. It is not yet clear whether these will be subject to full-scope International Atomic Energy Agency (IAEA) safeguards.

The China-Pakistan deal is in violation of China's Non-Proliferation Treatv (NPT) obligations and transgresses the Nuclear Suppliers Group (NSG, having 46 NPT states as members, including China) guidelines that forbid NPT-signatory states from supplying nuclear technology and fissile material to states not party to the NPT. Pakistan has a poor nonproliferation track record as it is known to have passed on nuclear technology to states like Iran, Libya and North Korea through the AQ Khan network. As Pakistan Air Force aircraft have ferried nuclear goods in the past and the army continues to tightly control the nuclear programme, it is facetious for the Pakistan

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government to continue to claim that proliferation occurred without its knowledge.

Confirmation regarding the deal to supply new reactors has come in from the China National Nuclear Corporation, which announced that China Zhongyuan Engineering Corporation (CZEC) would be the general contractor for the project. Beijing has sanctioned a low-interest loan to Pakistan for 82 percent of the \$1.9 billion cost of the reactors. The leading Chinese political daily and mouthpiece of the Chinese Communist Party (CCP), *Renmin Ribao*, lashed out against the US for "being soft on India and deriding the NPT." Commenting on the spillover effect of the Indo-US civilian nuclear deal and choosing to ignore India's spotless nuclear non-proliferation record, *Renmin Ribao* stated that if the US made a "nuclear exception for India," other powers could "do the same with their friends".

However, going by the experience in setting up Chasma-I and Chasma-II, it will be quite some time before the Chasma-III and Chasma-IV reactors begin producing power – and plutonium – to add to Pakistan's fissile material stockpile. Meanwhile, the Kahuta facility has been producing highly enriched uranium for a quarter century now. Additionally, two un-safeguarded plutonium and tritium producing reactors are operational at the Khushab facility for advanced compact warheads, and the intensified construction of a third facility has been reported.

Pakistan has been testing ballistic and nuclearcapable cruise missiles at an average rate of one every two months. It is apparently engaged in improving the accuracy of its North Korean-origin No Dong and Taepo Dong missiles and of the Chinese-origin missiles M-9 and M-11. Its indigenous arsenal includes the

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Pakistan does not have any tactical or battlefield nuclear weapons. However, low-yield fission bombs can be employed against tactical targets by means of aerial delivery or missiles. Pakistan is reportedly working towards miniaturising its nuclear warheads for use on the Babur cruise missile. As and when this capability is acquired, Pakistan will also be able to develop tactical nuclear warheads for its short-range missiles.

On the other hand, while Indian missiles are indigenous, they have not been tested as often as Pakistan's. Also, there is a question mark over the efficiency of India's fusion warhead. India acquired an edge by establishing a genuine triad, that is, land-, sea- and air-based deterrence that enhances survivability for retaliatory strikes. While this may give the impression of an overall nuclear parity with Pakistan, it is not so. Nuclear deterrence is not a numbers game and if deterrence breaks down, India has the capability to destroy major Pakistani cities several times over. Although Pakistan's arsenal may have inched numerically ahead of India, that does not guarantee the efficacy of its deterrent.

A Growing Arsenal amidst a Spectre of Terrorism and Radicalisation

Pakistan faces a severe economic crunch coupled with an armed extremist insurgency, and by no means will additional nuclear weapons aid Pakistan's government in solving either of these internal problems. Zulfikar Ali Bhutto's statement that "...even if we have to eat grass, we will make nuclear bombs..." still appears to goad Islamabad towards continuing the strategy of nuclear buildup at any cost. Resultantly, resources are being diverted from programmes formulated to address existing internal security and economic threats.

With the spectre of terrorism having taken hold of Pakistan's polity, there are serious doubts whether Pakistan's nuclear warheads are safe from falling into *jihadi* hands. The death of Punjab Governor Salman Taseer at the hands of a specially selected bodyguard



has fuelled apprehensions of guards being subverted and diverting fissile material or even a warhead or two. Western commentators have for long expressed grave reservations about the safety and security of Pakistan's nuclear warheads and have called for contingency plans to "take out" all of them in the eventuality of their imminent loss to the *jihadis*. According to US-based columnist Seymour Hersh, US and Israeli Special Forces have even rehearsed such plans in the Negev Desert. So long as the warheads are in the custody of the Pakistan Army, such reservations are misplaced. However, in case there is ever a successful coup led by radical extremists with the support of disgruntled elements in the Pakistan Army, nuclear warhead storage sites will need to be bombed so as to render the warheads ineffective. For this contingency, India must consider providing military and logistics support to the US and its allies.

As fighting intensifies in the NWFP-Pakhtoonkhwa and other tribal regions in Pakistan's Federally Administered Tribal Areas (FATA), creeping Talibanisation, and continuing radical extremism elsewhere in Pakistan have raised deep concerns regarding the safety and security of Islamabad's nuclear arsenal. In the event of President Zardari's government crumbling due to the Pakistan Army's failure to root out militants and terrorists, a situation could well arise where extremist infiltration within the military and intelligence services could compromise the security of Islamabad's nuclear weapons. This would be catastrophic for the entire region. As Pakistan's immediate neighbour, India will have to face the brunt of such a collapse.

There is serious unease about the possibility of nonstate actors seizing an opportunity to acquire a nuclear warhead or a "dirty" weapon. Admiral Mike Mullen, Chairman of the Joint Chiefs of Staff (US), has expressed doubts regarding the "continuing safety" of Pakistan's nuclear arsenal. Going by assurances provided by Zardari in May 2009, the Obama administration maintains that Pakistan's nuclear weapons are secure, "at least for the moment." However, apprehensions continue to grow, not just in Pakistan's immediate neighborhood, but even across the globe, notwithstanding a categorical rejection of such propositions by General Tariq Majid, With the spectre of terrorism having taken hold of Pakistan's polity, there are serious doubts whether Pakistan's nuclear warheads are safe from falling into *jihadi* hands.

erstwhile Chairman Joint Chiefs of Staff Committee (Pakistan).

It is imperative for Pakistan's nuclear authorities to come clean on the system of checks and balances instituted by them. These organisations include the National Command Authority – responsible for policy formulation and control over all strategic nuclear forces, the Strategic Plans Division – in charge of developing and managing nuclear capability in all dimensions, and the Strategic Forces Command – responsible for planning and control as well as for issuing operational directives for the deployment and use of nuclear weapons.

Contrasting Approaches to Nuclear Weapons Politics

India views nuclear weapons as entirely political in nature, whose sole purpose is to deter the use and threat of use of nuclear weapons against itself. India's nuclear doctrine outlines the strategy of credible minimum deterrence and also establishes that India will not be the first to initiate a nuclear strike. However, should deterrence fail, the country shall respond with punitive retaliation.

Pakistan has not formally declared a nuclear doctrine. Its nuclear weapons are its first line of defence which, in turn, explains its presumed "firstuse" policy aimed at negating India's conventional military superiority by projecting a low nuclear threshold. Its nuclear capability is defined primarily by its own assessment of India's nuclear force inventory, penetrability and targeting requirements and unspecified future contingencies. Pakistan has operational plans and requirements for nuclear use integrated within its military war-fighting plans.



... Objectives and Safety

It prioritises conventional military readiness for deterrence and war-fighting. If this fails, Pakistan plans to be the first to use nuclear weapons, though as a weapon of last resort, to prevent any loss of territory, or the military defeat of its armed forces.

This sentiment is clearly visible even at the Conference on Disarmament (CD), the United Nations' arms control negotiating body, where Islamabad has managed to prevent any initiation on the Fissile Material Cut-off Treaty (FMCT) for more than two years. According to Zamir Akram, Pakistan's ambassador to the CD, opposition to opening negotiations on the FMCT in the CD is based on resistance to the world's key

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nuclear technology suppliers' lifting longstanding restrictions on nuclear trade with India. According to Akram, this action, "...will further accentuate the asymmetry in fissile materials stockpiles in the region, to the detriment of Pakistan's security interests." Islamabad contends that a fissile material ban must cover existing stocks of fissile material instead of simply halting future production. Most nuclear weapons possessors, including India, insist on a production cutoff that does not address current stockpiles.

By co-relating India's eventual admission to the NSG, which, according to Pakistan, "shall further destabilise security in South Asia," it conveniently chooses to overlook India's spotless non-proliferation record and the credibility of an indigenous nuclear and missile programme – much in contrast to its own.Abdul Basit, Pakistan's Foreign Ministry spokesman, stated in February 2011, "Pakistan is mindful of the The argument that as of today, the Pakistan Army is in firm control of Pakistan's nuclear arsenal, can be accepted at face value. However, it needs to be equally reinforced that as a nation, Pakistan is in dire straits.

need to avoid an arms race with India." Nevertheless, the figure that would finally lead to achieving a 'credible minimum deterrent' still remains elusive and ambiguous.

The argument that as of today, the Pakistan Army is in firm control of Pakistan's nuclear arsenal, can be accepted at face value. However, it needs to be equally reinforced that as a nation, Pakistan is in dire straits. An unsafe yet growing nuclear munitions store only amplifies the risk and possibility of these weapons falling into the wrong hands. It has widely been reported that Washington has invested as much as \$100 million in an effort to improve Pakistan's nuclear weapons safeguards. This step in itself is testament to and acceptance of the fact that there are gaping loopholes (which Pakistan is expected to effectively plug) in the system through which sensitive WMD technology could slip into the hands of non-state actors.



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