



A FORTNIGHTLY NEWSLETTER ON NUCLEAR DEFENCE, ENERGY AND PROLIFERATION FROM
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STATEMENT - Shri Salman Khurshid

Plenary Statement by EAM at the Nuclear Security Summit

Nuclear terrorism and clandestine proliferation continue to pose a serious threat to international security. India fully shares the continuing global concern on possible breaches of nuclear security. We welcome the galvanising role that the NSS process has played in raising awareness of this threat and in promoting national actions and international cooperation. We consider the IAEA's role as central in international cooperative efforts to promote nuclear security. While the locus of action on nuclear security is primarily national, national actions must be supplemented by national responsibility. All States must strictly abide by the international commitments that they have undertaken.

India views nuclear energy as an essential source of clean energy for meeting our growing demand for power. We are committed to taking forward our three stage nuclear programme based on a closed fuel cycle and the principle of reprocess to reuse. We envisage a major expansion of nuclear energy in the coming decades from just over 5000 MW currently to 20,000 MW by 2020 and on to 60,000 MW by 2030.

India's nuclear programme is oriented towards maximising the energy potential of available Uranium resources and the utilisation of India's large Thorium reserves. We believe that available global uranium resources cannot sustain the

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projected expansion of nuclear power without adopting the closed fuel cycle approach. Such an approach also offers the prospect of technology-based solutions for nuclear security, nuclear waste management and nuclear proliferation dilemmas.

While this is not specifically the purview of this Summit, we are committed to the objective of a world free from nuclear weapons. India's Action Plan for global nuclear disarmament in a time-bound framework tabled by former PM Mr. Rajiv Gandhi remains a benchmark for us and India remains ready to move in a step by step manner towards the goal of nuclear disarmament.

We have not wavered in our commitment to global efforts to prevent the proliferation of weapons of mass destruction and their means of delivery. India has never been a source of proliferation of sensitive materials and technologies. We are proud of our record on nuclear security and nuclear non-proliferation but we are not complacent. India is committed to upholding and strengthening physical security of nuclear facilities and materials. We are prepared to further strengthen our export control systems in line with the highest international standards. Our adherence to the guidelines and lists of the Nuclear Suppliers Group and the Missile Technology Control Regime is testimony to this commitment. India's membership of the four export control regimes would further strengthen global non-proliferation efforts. We support the early commencement of negotiations on a FMCT in the CD in Geneva.

India is committed to international cooperation to achieve our common goals on nuclear security. Since the last Summit we have taken a number of steps, alone and in partnership with others to implement the commitments we have all agreed at the previous two Summits. To cite one example, PM laid the foundation stone of India's GCNEP in January 2014. While the construction of the five schools at the Centre continues apace, we have already conducted three International Training Courses on Nuclear Security, eleven national courses and two public outreach programmes. This is in addition to our other longstanding human resource and technology development programmes. International cooperation with the IAEA, USA, France and the Russian Federation is in built into the GCNEP. We continue to expand our technical assistance to developing countries interested in the safe and secure use of nuclear energy and radiological sources. We have offered assistance through the IAEA for search and recovery of orphan radioactive sources.

After the tragedy at Fukushima we have comprehensively reviewed nuclear safety measures at all our nuclear facilities; we are strengthening emergency preparedness, monitoring, and response to nuclear accidents. After successfully hosting an IAEA Operational Safety Review Team at two nuclear

power reactors in 2012, 2014 we have invited the IAEA to conduct a regulatory review of India's AERB. We remain engaged with the IAEA's Commission on Nuclear Safety Standards, the IAEA Director General's Advisory Group on Nuclear Security and the Nuclear Security Guidance Committee. Our experts are contributing to the formulation of IAEA's Nuclear Security Plans and we are pleased that the IAEA is utilising our financial contribution to the Nuclear Security Fund for cooperative activities to strengthen nuclear security. We commend the IAEA for organising the July 2013 Ministerial Conference on Nuclear Security. India was one of the countries represented at the level of a Minister.

Despite the progress we have made since President Obama convened the first NSS, terrorism and other malicious acts involving nuclear materials and facilities remain a clear and present danger. Any breach in nuclear security and safety anywhere could undermine public confidence in nuclear energy. We

should together deny terrorists what they seek and eliminate the risks of sensitive materials and technologies falling into their hands. The focus on non-state actors should in no way diminish state accountability in combating terrorism, dismantling its support structures or its linkages with weapons of mass destruction.

We should also strengthen the international nuclear security architecture, in particular by ratifying and implementing the

CPPNM and its 2005 amendment and the ICSANT. UNSCR 1540 is integral part of this bulwark. The role of industry is vital in implementing nuclear security measures. Our common message as governments, industry and academia must be that nuclear energy can and must be harnessed while maintaining the highest levels of nuclear safety and security.

To conclude, Mr. PM, I would like to welcome the offer of the US to host the next NSS in Washington in 2016. We should give thought in our next inter-Summit process to the role IAEA could play in steering the implementation of the NSS commitments beyond Washington while reserving the possibility of occasionally convening future Summits as required.

Source: Excerpted, <http://www.mea.gov.in>, 25 March 2014.

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NSS 2014: NATIONAL PROGRESS REPORT

1) INTERNATIONAL LEGAL INSTRUMENTS

India is party to all the 13 universal instruments accepted as benchmarks for a State's commitment to combat international terrorism. India is party to the Convention on the Physical Protection of Nuclear Material and is amongst the countries which have also ratified the 2005 amendment to the Convention. India looks forward to early entry into force of the 2005 Amendment. India is also Party to the International Convention for the Suppression of Acts of Nuclear Terrorism. India supports efforts for promoting the universality of these two Conventions.

2) INTERNATIONAL ATOMIC ENERGY AGENCY

As a founding member of the IAEA, India supports the Agency's role in promoting the peaceful uses of nuclear energy. India has consistently supported IAEA's central role in facilitating

national efforts and in fostering effective international cooperation to strengthen nuclear security. India has contributed US \$ 1 million to the IAEA's Nuclear Security Fund. India is a member of the IAEA Commission on Nuclear Safety Standards and the Advisory Group on Nuclear Security. India has been actively involved in the preparation of the Nuclear Security Series documents produced by the IAEA. India has contributed actively to IAEA's

Action Plans on Nuclear Security, including third plan for 2010-2013. As a partner in the IAEA-US Regional Radiological Security Partnership (RRSP) India has been organizing international training courses in India under the aegis of the IAEA. India offered assistance through the IAEA for search and recovery of orphan radioactive sources in countries which were unable to effectively deal with them and had sought such assistance. India welcomes the Agency's efforts to develop a Nuclear Security Information Portal and its efforts in developing a comprehensive set of guidance documents under the Nuclear Security Series.

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We support the fifth revision of the recommendations contained in INFCIRC/225. We look forward to sustainable Agency activities in the area of nuclear security training and education and appreciate the assistance provided by the Agency to educational institutions in the area of Nuclear Security. India is a participant in the IAEA's ITDB, which was established in 1995 and disseminates information on confirmed reports about illicit trafficking and other unauthorized activities and events involving nuclear radioactive materials to the States. India has been supportive of the 2003 IAEA Code of Conduct on the Safety and Security of Radioactive Sources and voluntarily adopted its provisions. India has also conducted 3 regional training seminars on nuclear security in cooperation with the IAEA. India participated at the Ministerial level in the International Conference on Nuclear Security organized by the IAEA from 1-5 July 2013. India also participated in the December 2012

Fukushima Ministerial Conference on Nuclear Safety.

3) UN AND OTHER MECHANISMS

Since 2002, India has piloted a resolution at the United Nations General Assembly on measures to prevent terrorists gaining access to WMD. This resolution has been adopted by the General Assembly by consensus; it was co-sponsored by 77 countries in 2013. India fully supports the implementation of United Nations Security Council Resolution 1540, its extension resolution 1977, and the United Nations Global Counter Terrorism

Strategy. India hosted with the UN Office for Disarmament Affairs a 1540 Workshop on Building New Synergies on Nuclear Security in New Delhi from November 30-1 December 2012. India is also a party to Global Initiative to Combat Nuclear Terrorism and has participated in its working groups on nuclear detection, nuclear forensics and response and mitigation. We also cooperate with the Interpol's Radiological and Nuclear Terrorism Prevention Unit and the World Customs Organization. While nuclear security is being addressed at different forums, India believes that there is need to ensure that these efforts are mutually complementary and reinforce the related activities of the IAEA.

4) NATIONAL LEGAL FRAMEWORK

The Indian Atomic Energy Act 1962 provides the legal framework for securing nuclear materials and facilities. Amendments to this Act are under consideration to further strengthen the legal basis for nuclear security measures. In June 2005, India enacted the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005. Updating of the export control lists and related regulations are undertaken as a continuous ongoing process. India has adhered to NSG Guidelines and has expressed interest in full membership of the NSG and other international export control regimes. India is taking a number of measures to strengthen nuclear security. A Nuclear Controls and Planning Wing has been set up in the Department of Atomic Energy to assist in the implementation of India's commitments related to nuclear safeguards, export controls and nuclear safety and security.

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5) REDUCING NUCLEAR MATERIAL

With regard to minimization of use of civilian HEU, the enriched uranium based fuel in the APSARA reactor was placed in a safeguarded facility in December 2010. APSARA will use indigenous fuel which is not HEU. However, there is a growing demand for large-scale production of isotopes for a range of applications healthcare, industry, food and agriculture. India's three stage nuclear programme is based on a closed nuclear fuel cycle, the principle of 'reprocess-to-reuse' and ensuring control over nuclear material at all stages. It is also important that technology is continually upgraded to develop nuclear systems that are intrinsically safe, secure and proliferation resistant. We have recently developed an Advanced Heavy Water Reactor based on LEU and thorium with new safety and proliferation-resistant features.

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6) INTERNATIONAL COOPERATION – GCNEP

India has a long tradition of fostering international cooperation for peaceful uses of nuclear energy, including through training at India facilities and assistance with setting up facilities abroad in areas

such as cancer treatment. At the first NSS, India announced that it would establish a Global Centre for Nuclear Energy Partnership. We visualize this to be a state of the art facility based on international participation from the IAEA and other interested foreign partners. (Cooperation MOUs/Practical Arrangements have been concluded with France, Russia, US and the IAEA). To begin with, the Centre will consist of five Schools dealing with Advanced Nuclear Energy System Studies, Nuclear Security, Radiation Safety, and the application of Radioisotopes and Radiation Technology in the areas of healthcare, agriculture and food. The Centre will conduct research and development of design systems that are intrinsically safe, secure, proliferation resistant and sustainable, as we believe such technological solutions will strengthen nuclear security in the long run. The Centre will carry out research and development in radiation monitoring including development of detectors and nuclear emergency management.

The Centre will also have state of the art training facilities for Indian and international participants and research by Indian and visiting international scientists. Land acquisition for the Centre has been completed and the Centre was inaugurated by the PM on 3 January 2014. India is interested in development and conduct of courses in association with interested countries and the IAEA. Pending the completion of the physical infrastructure at the Centre, "off-campus" training courses are being organized; six courses have been conducted on topics related to physical protection of nuclear material and facilities, prevention and response to radiological threats, nuclear material accounting, computer security controls etc. Additionally, four courses are planned to be conducted during the year 2014.

7) NUCLEAR SECURITY SUMMIT PROCESS

India supports implementation of the Washington Summit Communiqué and Work Plan as well as the Seoul Summit Communiqué. India has contributed to the NSS process, including by hosting a meeting of the Sherpas in New Delhi 16-17 January 2012.

Source: <https://www.nss2014.com/sites/default/files/documents/india.pdf>

OPINION – Manpreet Sethi

Nuclear Security Summit 2014: Shared Risk, Shared Responsibility

An initiative started by President Obama in 2010 in Washington, the Summit travelled to Seoul in 2012 and Obama will host the next one again in 2016. What is the significance of this Summit process and has it been of any specific benefit to India?

The most important gain from these Summits is that they have brought global attention to nuclear terrorism. President Obama initiated the effort after having realized that the risk of nuclear terrorism was real and urgent. However, India's experience with cross-border terrorism well predates the US awakening to the threat. Since the end of 1990s, India has faced terrorism, sponsored and executed from Pakistan. Obviously, the threat of nuclear terrorism has been of utmost concern given that nuclear weapons (and an increasing stockpile of HEU and plutonium) and terrorism co-exist in Pakistan.

Given this threat perception, a Summit process that demands national action and responsibility for securing nuclear and radiological materials has universalised a threat that India was fighting a lonely battle against. Attention to these issues at the highest political level has ensured their inclusion in national priorities and the accordance of necessary resources to turn commitments into reality. Heads of governments at the Summits have individually and collectively committed to taking measures to secure nuclear material on their territory according to accepted international benchmarks.

Amongst the international agreements that are relevant to this subject, two are worthy of mention. The CPPNM was crafted to regulate international transportation of nuclear material. It came into force in 1987. However, through an amendment in 2005, its ambit was expanded to protection of nuclear material in domestic use, storage and transport too. It enhanced mechanisms for cooperation to locate and recover stolen/smuggled nuclear material and to mitigate radiological consequences of sabotage. However, the amendment is not yet operative since it awaits ratification by 2/3d of the member states.

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The other instrument, the ICSANT, meanwhile, came into force in 2007 mandating national laws for imposition of punitive action on those involved in nuclear terrorism. Unfortunately, neither of these instruments is universal and in fact, many of the countries that are known to harbor terrorists have not joined in, including Pakistan. However, the presence of political leaders at the Summit does exert political and moral pressure on outliers. Indeed, the number of countries joining the two Conventions has increased over the last six years, and a few more are expected to bring their decision to join in as a 'house gift' in 2014 too.

Some positive results notwithstanding, the Summit process does suffer from the shortcoming that it cannot impose uniformity in recognition of threat, or the same rigour in implementation of national efforts. Nations do perceive the threat differently. In any case, there is no punishment for non-compliance and many smaller nations have railed against the increase in need for reporting as burdensome and distracting from other national priorities.

In order to maintain the momentum on nuclear security and get nations to recognize the enormity of the risk, and hence the responsibility they share, it is necessary that a sense of stake-hood be felt by all. One way of doing so would be to foster greater sharing in two dimensions. The first would be information on best practices, for instance, on how countries practice enforcement such as training of security guards, crafting of personnel reliability programmes, tools used for data storage and mining, including on tracking of orphaned radiological sources, etc. The second would be the sharing of technologies, for instance, on manufacture of detection equipment such as scanners at ports, decontamination materials, medical countermeasures etc.

Transfer of such technologies to countries where these could be manufactured at relatively lesser cost would not only make the manufacturing hubs a stakeholder in nuclear security but also make the detection equipment available at low prices thereby relieving nations of burdensome expenditure to deploy expensive machinery or systems. Nuclear security is not the requirement or demand of one nation. The fact that a country as

militarily capable as the USA has felt the need for collective effort in this direction proves that it is a shared risk and hence a shared responsibility that must be carried by all if we are to minimize, if not obviate, an unfortunate act of nuclear terrorism. India's participation in the Nuclear Security Summit is indeed an opportunity to seek a collective redressal of a threat it faces, and also a contribution to international security – a win-win proposition either way.

Source: <http://www.ipcs.org>, 17 March 2014.

OPINION – Sitakanta Mishra

NSS 2014: Response to PR Chari's "India's Mixed Record"

Professor Chari's assertion on India's participation and 'results of its engagement' with the NSS as 'mixed' is moot (*Carnegie*, 18 Mar 2014). Prof Chari views the Summit process as having "failed to convince New Delhi to increase transparency regarding its nuclear security practice." He alleges that India is "reluctant to make public information about its on-site and off-site emergency response arrangements for its civilian nuclear facilities." While highlighting India's positive record in terms of its adherence to legal obligations, he points towards the delay in passing the proposed NSRA Bill, and lack of information in the public domain on the GCNEP.

First, the primary objective of the NSS is to foster a climate of cooperation to encourage participants to take domestic measures to strengthen nuclear security, preventing misuse of nuclear technology and material. The first NSS communiqué itself reaffirmed the fundamental responsibility of States to maintain effective security of all nuclear materials. The NGO, NTI, has ranked India low in its Index on the basis of some arbitrary parameters like transparency, corruption, etc. In fact, the truth is that when the NTI approached the DAE for specific information on India's nuclear material inventory and security arrangements for the preparation of its first Index, a conscious decision was taken by the concerned authorities to not share such sensitive information with an NGO. However, India has never been

It is unfortunate that the new regulatory authority proposed in the NSRA Bill is yet to be approved by the Parliament. However, no model of nuclear regulatory mechanism can claim to be perfect in the world. Even if there were an 'independent' regulatory institution with clear-cut division of responsibilities, where will the country get a set of scientists who will exclusively run power plants and another set of scientists who will look into the regulatory matters?

reluctant to share any information with the IAEA. Therefore, while talking transparency, one must consider the issue of 'transparent to whom?'

Second, Prof Chari's assertion that India is reluctant to publicise information about on-site and off-site emergency response arrangements for its civilian facilities is erroneous. Taking into account both design-basis and beyond design-basis threats, a multi-layered protective envelope is in place around every Indian nuclear facility that includes in-built safety security systems, perimeter security, personnel reliability provisions, facility specific material protection and accounting (NUMAC) systems, air defence measures, transportation security (AERB/NRF-TS/SG-10), emergency preparedness and legal provisions to oversee that nothing is mismanaged and gets out of control. Around 22 emergency response centres have been established across the country and the CISF has four groups of first responders to be activated in times of emergency. What is unavailable is the information about the steps India takes to prioritise nuclear weapons safety and security, for obvious reasons.

Third, it is unfortunate that the new regulatory authority proposed in the NSRA Bill is yet to be approved by the Parliament. However, no model of nuclear regulatory mechanism can claim to be perfect in the world. Even if there were an 'independent' regulatory institution with clear-cut division of responsibilities, where will the country get a set of scientists who will exclusively run power plants and another set of scientists who will look into the regulatory matters?

Fourth, the allegation that the information on the charter of duties and mode of functioning of GCNEP is not in the public domain is mistaken. As per the information available on its official website, the Centre will focus on the development of enhanced nuclear safeguards to effectively and efficiently monitor nuclear materials and facilities; advanced, proliferation resistant nuclear power reactors; advanced nuclear energy systems, isotopes and radiation technologies, nuclear forensics; and establishment of accreditation facilities for radiation monitoring. During 2013, a number of off-campus training courses, workshops,

public awareness and outreach programmes have been conducted by the Centre in coordination with the DAE and IAEA. Another nine such programmes are scheduled for the year 2014. As per the answer given in response to a question in Rajya Sabha (Unstarred QuestionNo.2018), "agreements for cooperation concerning GCNEP related programmes and activities have been signed with the USA, Russia, France and IAEA."

Fifth, as far as 'peer review s' of its nuclear security arrangements is concerned, India has committed to host the Integrated Regulatory Review Service (IRRS) Peer Review Mission of IAEA and has already made a request to the IAEA in this regard. It is expected to commence late 2014.

India's participation at the NSS underscores its commitment to ensure national nuclear security.

India's unique three-stage nuclear programme itself, based on the 'closed fuel cycle', ensures the security of nuclear materials. India is also working to develop proliferation-resistant fuel cycles and has developed an AHWR based on LEU and thorium with new safety and proliferation-resistant features. Responding to the global concern with regard to use of HEU in research reactors, India has shut down its only research reactor using HEU fuel, and at present no research reactor is operating on HEU. At all entry and exit points, radiation monitoring devices are installed to monitor movement of radioactive materials. The Mumbai seaport, where India's major chunk of shipping takes place, is CSI compliant. Suffice it to say that India had internalised the nuclear security practice in its nuclear programme much before the NSS started.

Source: <http://www.ipcs.org/>, 20 March 2014.

OPINION – James S. Robbins

Nuclear Lessons in Ukraine

While the lopsided vote on the Crimean referendum on joining the Russian Federation was underway, pro-Putin news anchor Dmitry Kiselyov hosted a

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segment on Rossiya 1 news channel in which he graphically showed how Russia is capable of turning the US into "radioactive dust." This came two weeks after Russia tested a new intercontinental ballistic missile. The explicit message from Moscow was that nuclear diplomacy is alive and well, and that any debate about Western intervention in the crisis will

have to factor in the possibility of Armageddon.

Russia's implicit nuclear threats are particularly grating to Ukrainians. When the Soviet Union collapsed in 1991, Ukraine inherited part of Moscow's nuclear arsenal and overnight became the world's third-ranked nuclear power. America and other countries believed this

was highly destabilizing, and Ukraine was pressed to give up its nuclear weapons in exchange for billions in assistance.

This helped Ukraine stabilize its economy in the wake of the Soviet meltdown; and anyway in those heady, immediate post-Cold War days, strategists questioned the value of large nuclear arsenals. If there were no more enemies, who was there to deter? In 1994, Ukraine became a

signatory to the NPT, and Russia, Britain and the US signed the Budapest Memorandum guaranteeing Ukraine's sovereignty and territorial integrity. The US then set about spending millions to destroy Ukraine's nuclear weapons.

Paltry Promises: The problem with Ukraine trading its most potent weapons for Russia's

promise of good behavior is now evident. Kiev gave up its means of deterring Russian aggression. Now, Ukraine is overmatched in conventional forces and would have difficulty fighting off a Russian incursion. Russia, on the other hand, has both the conventional force edge and escalation dominance. No matter what happens on the battlefield, Russia can always threaten the nuclear option.

Washington is in a weak position to extend the US nuclear deterrence umbrella over Ukraine. The Obama administration has pursued a nuclear "global

zero" strategy, seeking to eliminate nuclear weapons and hoping other countries will follow. This has led to three destabilizing mistakes: drastically reducing US nuclear capabilities to the point where their deterrent value is questionable; abandoning planned missile defense sites in Poland and the Czech Republic, in favor of a program that significantly reduces the US ability to defend NATO allies and partners from missile attacks; and legitimizing the recent Russian nuclear buildup and modernization under the flawed 2010 New START Treaty. The White House is now learning that the Cold War might be long over, but the rules of deterrence have not changed.

Cold War Rules: Kiev might want to turn back the clock. A few days ago, former Ukrainian foreign minister Vladimir Ogrzyzko recommended pulling out of the non-proliferation treaty and re-nuclearizing Ukraine, saying this would be "the only measure which could secure (Ukraine's) security." He might be right, but Kiev is on borrowed time. If Moscow mounts a large scale military intervention to reinstall ousted Ukrainian leader Viktor Yanukovich, re-nuclearizing will be off the table. The issue then will not be nuclear strategy, but whether Ukrainian freedom fighters will mount an insurgency as they did when Ukraine was reoccupied by the Soviet Union after World War II.

The Ukraine crisis carries nuclear lessons for the rest of the world. For states pursuing nuclear capability, such as Iran, the message is to press on. For states with rudimentary nuclear capability, such as North Korea, the lesson is to build up. ... And for America, the message is to give up the quixotic quest for "global zero," build up missile defenses and modernize the US nuclear force. To live in the 21st century, the US will need to relearn the lessons of the 20th.

Source: James S. Robbins, author of Native Americans: Patriotism, Exceptionalism and the New American Identity, is a member of USA TODAY's Board of Contributors. USA Today, <http://www.usatoday.com>, 19 March 2014.

OPINION – Ludwig Watzal

Manufacturing a Nuclear Proliferation Crisis Against Iran

Since the early 1990s, Israel, US, and their submissive European allies, supported by their uncritical and subservient media, have been peddling allegations,

fabrications, accusations, and lies that the government of Iran was pursuing a secret, military adjunct to its regularly inspected civilian nuclear program. The main thrust of Gareth Porter's book, *Manufactured Crisis: The Untold Story of the Iran Nuclear Scare* (Just World Books, 2014), is to demonstrate that this crisis was "manufactured" and the accusations were bogus, i.e., Iran never had a military nuclear program. For over 20 years Israeli politicians have been claiming that Iran's nuclear device was just around the corner.

Despite the political hullabaloo and Netanyahu's call for military actions against Iran's nuclear installations. "Netanyahu never intended to use military force against Iran, and the Obama administration was well aware of that but was hoping to exploit the threat to gain diplomatic leverage on Iran," writes Porter. President Obama, under severe pressure from Israel, its Zionist lobby AIPAC (American Israeli Public Affairs Committee) with a large majority of Congress, has been leading a worldwide effort to impose crippling sanctions on Iran to force it to give up its alleged nuclear-weapons program. Up until now, there exists no evidence that Iran carried out a military nuclear program. Beyond that, Gareth Porter, a historian and investigative journalist specializing in US foreign and military policy, demonstrates that the so-called stolen documents, which apparently "proved" Iran's covert nuclear program, were "fraudulent." These "mysterious documents" were allegedly smuggled out of Iran on a laptop. The author unravels the contradictions between the material in the documents and well-established facts. Did the US rely on Israeli intelligence services for its "evidence"?

Porter shows how Israel, the George W. Bush and later the Obama administration, successfully portrayed the various actions taken by Western nations and the IAEA as responses to a long history of Iranian covert militarization of its nuclear program. Iran started its nuclear program under Reza Shah Pahlavi. At that time, the US and Israel were allied with the Persian dictator and didn't mind a nuclear Iran. After the overthrow of the Shah regime in 1979, however, the US intervened aggressively, as early as 1983, to prevent Iran from pursuing its legitimate right to peaceful nuclear power. It was these aggressive efforts by the US that forced Iran to resort to black market transactions in order to acquire the technology needed for its civilian nuclear program, writes Porter.

So far, the US and Israel have done all they can to sabotage the Iranian nuclear program by, among other things, sending hit men to assassinate Iranian nuclear scientists and infect the computers of the nuclear installations with malware. According to the online newspaper *The Times of Israel* from March 19, 2014, the Israeli Chief of Staff Benny Gantz revealed in a speech delivered before a class of students, "Israel had already conducted dozens of covert operations in foreign and enemy countries," and that "Our Air Force is wherever we wanted it to be." He added confidently that Iran is not beyond the IDF's reach. According to Porter, there exists a tendency and a power structure inside the Beltway that keeps readiness and permanent preparedness for war despite the Vietnam disaster. Does such a mentality also exist within the Israeli security establishment?

The author submits, "US-Israeli strategy was aimed at using the IAEA to build a case that Iran's nuclear program had been merely a cover for a nuclear weapons program. That case would serve as the basis for UNSC actions that would punish Iran, or even for unilateral US military action against Iran. As a result the IAEA, which had previously been a relatively nonpolitical actor performing technical analysis of nuclear programs, was transformed over the 2003–8 period into an adjunct of the anti-Iran strategy."

Porter describes three stages that form the basis for the progress and the escalation of the crisis. Yet, he does not view each step by the US and Israel as part of a master plan. On the contrary, he argues that each stage of the strategy developed in response to political developments and problems, which emerged from further coercing Iran on the nuclear issue. The first stage was triggered by the Iranian terrorist group Mujahedeen-e-Khalq (MEK) which revealed at a August 2002 press conference Iran's Natanz enrichment facility. MEK was removed a few months ago from the US "terror list." In 2008, the second stage was triggered when the US obtained from an unknown party stolen documents about a secret nuclear program. At the end of 2011, the third stage started by imposing new and more severe sanctions, targeting Iran's oil export and banking sectors. This new round of sanctions was triggered by an IAEA report based on Israeli sources.

The author discusses Iran's leadership attitude towards nuclear and chemical weapons. When Iraq,

with massive support by the US and its Western cronies and also the Soviet Union, attacked Iran and used chemical weapons obtained from the US, Ayatollah Ruhollah Khomeini issued a *fatwa* (religious Islamic ruling), forgoing the use of chemical weapons against Iraqis. The West dismissed his ruling as a deception and a lie. With the same arrogance another *fatwa* by Khomeini's successor Ayatollah Ali Khamenei on the prohibition of nuclear weapons was disregarded. Western media promoted this racist attitude uncritically around the globe.

In the early 1990s, the US portrayed Iran's civilian nuclear program as a cover for its alleged ambitions to acquire nuclear weapons. In chapter four, the author shows that this accusation was intended to manufacture a new scapegoat to replace the communist scapegoat imploded at the end of 1991.

The supposed threat of nuclear proliferation from Iran was a useful theory for the Pentagon and the CIA. Under the Clinton presidency, Israel was brought into the picture. The other half of the story is told in chapter five. Due to the demonization of Iran, successive Israeli governments from Yitzhak Rabin to Benjamin Netanyahu attempted to achieve political and strategic aims that had nothing to do with Iran. Israel had also to pay a political price for its aggressive posture. Reciprocally, Iran regarded Israel as a military threat, writes Porter.

In 2003, then Iranian president Mohammed Khatami offered negotiations with the US the George W. Bush administration rejected it off-hand because Iran was a "rogue state" and ranked top on the so-called "axis of evil." WikiLeaks published cables demonstrating how closely the IAEA cooperated with the US government. Under the leadership of Yukiya Amano, the reputation of the IAEA went down the drain.

Until the end of President Mahmoud Ahmadinejad's term in office, the Obama administration together with Israel's Benjamin Netanyahu tried to bully Iran into submission. With the election of the new President Hassan Rohani, the demonization of the Iranian leadership did not work anymore. With the start of the negotiations, Israel and the Congress called for even more sanctions. In his State of the Union Address, President Obama rejected such

So far, the US and Israel have done all they can to sabotage the Iranian nuclear program by, among other things, sending hit men to assassinate Iranian nuclear scientists and infect the computers of the nuclear installations with malware.

sanctions, saying that negotiations are in the national interest of the US Officially, AIPAC and its servants on Capitol Hill pursued their endeavor more discreetly. As an outside observer, it is mind-boggling to observe how US representatives on the Hill work against their own government and the interest of their country.

Manufactured Crisis presents the first alternative narrative to the Iranian nuclear issue. The author shows what disastrous impact the US-Israeli alliance has on the Middle Eastern region. This fateful partnership is rooted in America's domestic politics. The Gordian knot must be untied for the benefit of the American people. At the end of the book, one gets the impression that the "Iranian problem" is a US one, or to put it differently, the US problem is the alliance with Israel and the American political class inside the Beltway. Gareth Porter's well researched book presents readers with a clear view, so that they can see through the web of lies, deceptions and false accusations, to discover the real enemies of peace.

Source: <http://dissidentvoice.org/2014/03/manufacturing-a-nuclear-proliferation-crisis-against-iran/>, 21 March 2014.

OPINION – Sabir Shah

The Myth and Reality of Nuclear Energy Use

The US Department of Commerce has calculated that the international market for nuclear equipment and services will rest between \$500 billion to \$740 billion over the next 10 years, believing strongly that every \$1 billion of exports by the American companies currently support 5,000 to 10,000 domestic jobs. Meanwhile, the Nuclear Energy Institute — which is a nuclear industry lobbying group in the US — has calculated that every dollar spent by the typical nuclear power plant results in the creation of \$1.04 in the local community, \$1.18 in the state economy, and \$1.87 in the American economy.

It is imperative to note that while an overwhelming majority of the billions of humans breathing on this planet thinks nuclear energy can only be devastating for humanity, more than 22,500 American companies today provide \$14.2 billion in components and services to the world super power's nuclear energy industry each year. Quite a contrast! After analyzing 23 nuclear plants representing 41 reactors, this institute states on its official website

that the companies that are operating a nuclear plant normally pay about \$16 million in state and local taxes annually.

Founded in 1994 from the merger of several nuclear energy industry organizations, this prestigious institute views: "These tax dollars benefit schools, roads and other state and local infrastructure. Each company typically pays federal taxes of \$67 million annually. In addition, nuclear energy facilities typically employ up to 3,500 people during construction and 400 to 700 people during operation, at salaries 36 percent higher than average in the local area. It produces approximately \$470 million annually in sales of goods and services in the local community."

Research shows that not fewer than 71 new nuclear energy facilities are under construction across the world today, and an additional 160 are in the licensing and advanced planning stages. The NEI has estimated that a single uranium fuel pellet the size of a pencil eraser contains the same amount of energy as 17,000 cubic feet of natural gas, 1,780 pounds of coal or 149 gallons of oil. The institute has more to add: "Compared to other non-emitting sources, nuclear energy facilities are relatively compact. The amount of electricity produced by a multi-reactor nuclear power plant would require more than 60 square miles of photovoltaic panels or about 180 square miles of wind turbines?" Quoting the results of a recent opinion poll regarding support for use of nuclear energy, it maintains: "Around 68 per cent of Americans favour the use of nuclear energy. Some 55 per cent respondents agree that industry should build more nuclear power plants in future. About two-thirds said that a new reactor would be acceptable at the nearest operating nuclear power plant site."

Regarding safety of nuclear energy facilities, the afore-quoted institute further states: "After more than half a century of commercial nuclear energy production in the US — more than 3,500 reactor years of production — there have been no radiation-related health effects linked to their operations. However, according to a US Bureau of Labour Statistics report, there is a smaller chance that a worker at a nuclear plant would be injured than the employees at a fast food restaurant or a grocery store."

Source: *The News*, 26 March 2014.

NUCLEAR STRATEGY

CHINA

China Will Soon Place Long-Range Nuclear Missiles on Submarines

China for the first time will likely have subs equipped with long-range nuclear missiles later 2014, part of an increasingly potent submarine fleet, a top US officer said on 25 March. The head of US Pacific Command, Admiral Samuel Locklear, said the latest class of Chinese subs would be armed with a new ballistic missile with an estimated range of 4,000 nautical miles (7,500 kilometers). "This will give China its first credible sea-based nuclear deterrent, probably before the end of 2014," Locklear told the Senate Armed Services Committee.

Locklear was referring to the production of China's JIN-class nuclear powered ballistic missile submarine and the new JL-2 missile on board the vessel. "China's advance in submarine capabilities is significant. They possess a large and increasingly capable submarine force," the admiral said. In October, Chinese state media for the first time showed images of the country's nuclear-powered submarines, touting it as a "credible second-strike nuclear capability." Locklear said China's submarine modernization effort was impressive.

"I think they'll have in the next decade or so a fairly well modernized force of probably 60 to 70 submarines which is a lot of submarines for a regional power," he said. China now has five nuclear attack submarines, four nuclear ballistic missile submarines, and 53 diesel attack submarines, according to Jess Karotkin of the Office of Naval Intelligence. China's production of submarines has moved at a quick annual pace. Between 1995 and 2012, Beijing produced 2.9 submarines a year, according to the Congressional Research Service. Locklear, repeating the Pentagon's view of China's military profile, said Beijing is investing in new weapons and naval power in part "to deny US access to the

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China's military profile, said Beijing is investing in new weapons and naval power in part "to deny US access to the Western Pacific during a time of crisis or conflict and to provide the means by which China can bolster its broad maritime claims in the region.

Western Pacific during a time of crisis or conflict and to provide the means by which China can bolster its broad maritime claims in the region." He added that Chinese military operations were "expanding in size, complexity, duration and geographic location."

Source: Business Insider, 25 March 2014.

INDIA

India Tests New Underwater Nuclear Missile

India has test-fired a SLBM with a "longer range" than that of the existing one of 750-km in the quest towards building a credible nuclear weapons triad. The new SLBM with a range over 2,000 km, tentatively dubbed K-4, was tested from a submersible pontoon in the Bay of Bengal on 24 March. ... The new missile, part of the "K" series of underwater missiles being developed by DRDO, will have to be tested several times, first from pontoons and then finally from submarines, before it can become operational.

While India for long has had land-based Agni missiles and fighters jury-rigged to carry nuclear weapons for deterrence, constituting the land and air legs of the triad, the lack of an operational SLBM has been a big operational gap. The 750-km range K-15 SLBM, which has undergone around a dozen tests from pontoons, is yet to be tested from a submarine. That will happen only after the first indigenous nuclear submarine INS Arihant goes for sea trials later in 2014. Though the miniature 83 MW pressurized LWR on board the 6,000-tonne INS Arihant went "critical" on August 10 2013, it is yet to attain the full power needed for the submarine to head for sea trials. During these 18-month-long extensive "sea-acceptance trials", the 10-tonne K-15 missile — which can carry a one-tonne nuclear

payload - will be fired from the four silos on the submarine's hump. Two more nuclear submarines are being built to follow INS Arihant under the secretive ATV project at the ship building centre in the naval dockyard at Vizag.

Source: The Times of India, 26 March 2014.

Indian Navy Headless as Chinese Nuclear Sub Prowls Indian Ocean

A Chinese SSN made its first declared operational patrol for two months in the Indian Ocean. The Foreign Affairs Office of China's Ministry of Defence informed India's military attache in Beijing of the deployment on

December 3 2013 "to demonstrate respect for India." Top secret intelligence assessments prepared by R&AW and Naval Intelligence teams, term the two-month deployment of the Shang class SSN between December 13, 2013 and February 12, 2014, as 'seriously aggravating India's security concerns'. India's security establishment is still assessing the impact of the deployment that comes at a time when the Indian Navy has been headless for over three weeks. Defence Minister AK Antony swiftly accepted Admiral DK Joshi's resignation on February 26...but is yet to appoint his successor.

The assessments circulated among the highest levels of India's security establishment in February, predict the Chinese SSN patrol will be followed by the deployment of a CBG in two or three years. Intelligence reports say the Chinese deployment aims to 'demonstrate its ability to protect its interests in Africa and West Asia as well as Sea Lanes of Communications' and 'to send a message of persuasion to Indian Ocean Rim States.' Naval sources say the Shang class submarine left its bastion on Hainan island in the South China Sea on Dec 3 2013. Ten days later, on December 13, the SSN reached the Gulf of Aden via the Ombai Wetar Straits near Indonesia. It remained on patrol in the area for nearly two months. China has deployed two warships on anti-piracy patrols in the Gulf of Aden region since 2008.

The deployment of the submarine armed with land attack and anti-ship cruise missiles and torpedoes, has ominous consequences for the Indian Navy's ability to project power into the Indian Ocean. The navy considers the region it considers its primary sphere of influence but suffers from a short-legged undersea fleet. Only seven of India's fleet of 13 conventionally powered submarines are

Top secret intelligence assessments prepared by R&AW and Naval Intelligence teams, term the two-month deployment of the Shang class SSN between December 13, 2013 and February 12, 2014, as 'seriously aggravating India's security concerns.'

Britain will be forced to abandon its nuclear weapons if Scotland becomes independent, a senior admiral has warned. Vice-Adml John McAnally said Scottish independence is "the biggest strategic threat faced by our Armed Forces". He warned that Britain would lose its seat on the UN Security Council and England and Scotland would be reduced to "two struggling nations on Europe's periphery."

operational. One Kilo class submarine exploded and sank in Mumbai harbour on August 14, 2013. The navy operates a solitary Akula class SSN, INS Chakra, leased from Russia in 2012.

The Arihant, the first of three indigenously built SSBNs is yet to commence sea trials, five years after it was launched. The government is yet to okay a 2010 proposal by the navy to build a fleet of four indigenous SSNs to escort the Arihant SSBNs and protect Indian aircraft carriers. "China has credibly demonstrated a formidable capability in our backyard," says Vice Admiral KN Sushil, veteran submariner and former Southern Naval Command chief. "We are yet to sail the Arihant, we are nowhere near starting our own SSN programme and we have no strategic capability yet to deter China." Vice Admiral Sushil says the deployment of SSN screens with the Chinese CBGs will give the Chinese "awesome power" and seriously challenge the Indian Navy's sea control strategy.

China's Ministry of Defence informed five other nations - the US, Singapore, Indonesia, Pakistan, and Russia - of the submarine's deployment in December. Naval officials say this was done possibly to prevent adverse reactions in case their SSN encountered

technical problems. Older Chinese 'Han' class SSNs have been plagued by reactor troubles. Analysts say the glitch-free deployment of the submarine seems to indicate the Chinese have overcome the reactor troubles in the Shang class. China has two Shang class second-generation boats and is building four more.

Source: Sandeep Unnithan, India Today, 21 March 2014.

UK

Scottish 'Yes' Vote Will Force Britain to Abandon Nuclear Weapons'

Britain will be forced to abandon its nuclear weapons if Scotland becomes independent, a senior admiral has warned. In an article for *The Telegraph*, Vice-Adml John McAnally said Scottish independence is

“the biggest strategic threat faced by our Armed Forces”. He warned that Britain would lose its seat on the UN Security Council and England and Scotland would be reduced to “two struggling nations on Europe’s periphery”. Vice-Adml McAnally, a former commandant of the Royal College of Defence Studies, said there is “every possibility” Britain could be forced into unilateral nuclear disarmament. The Navy’s fleet of nuclear submarines is based at Faslane in Scotland which Vice-Adml McAnally warned could cost billions to relocate, leading to the loss of the fleet altogether.

He said: “Today, we can still say with pride that the Armed Forces are one of the great UK brands... Dividing the Union would do them immense damage, leaving both Scotland and Britain with huge bills to make up for the gaps in lost infrastructure. “Our relationship with the US, our status as a leading military power and even our permanent membership of the UN Security Council would all probably be lost. “We would be reduced to two struggling nations on Europe’s periphery, without the means to defend their now separate interests. Neither our allies nor posterity will forgive us if we get this wrong.” ...

Source: The Telegraph, 16 March 2014.

BALLISTIC MISSILE DEFENCE

POLAND

Poland Speeds Up Missile Defence Plan Amid Ukraine Crisis

Poland has decided to speed up its tender for a missile defence system, the Defence Ministry said, in a sign of Warsaw’s disquiet over the tension between neighbouring Ukraine and Russia. “By the end of 2014 we want to already have chosen an offer. That is the acceleration by several months, compared to our original plans, that we are talking about,” Czeslaw Mroczek, Deputy Defence Minister, told Reuters. The NATO member had planned to determine the supplier of its missile defence system in 2015, but the crisis in Ukraine and concerns about Russia’s annexation of Crimea have prompted officials to speed up the timetable.

There are four bidders: France’s Thales, in a consortium with European group MBDA and the

Polish state defence group; the Israeli government; Raytheon of the US; and the MEADS consortium led by Lockheed Martin. One of the bidders, MEADS, said the tender was worth about \$5 billion, but experts say the whole missile defence system could be worth as much as 40 billion zlotys, including maintenance costs. It is to be completed by the end of 2022. Mroczek said the decision to accelerate the process was partly caused by Russia’s military intervention in Ukraine’s Crimea Peninsula.

The first phase of the Polish system is to comprise eight sets of mid-range interceptor rockets, which may later be supplemented by short-range ones.

Poland has already passed legislation to secure funding for the shield, a Defence Ministry spokesman said. The planned system is separate from elements of a US missile shield to be deployed in Poland by 2018, as confirmed by US Vice

President Joe Biden on a visit to Warsaw 3rd week of March.

Source: Marcin Goettig and Andrea Shalal, Reuters, 21 March 2014.

USA

US Gains Additional Protection Against Ballistic Missile

The US will soon have another system to defend against ballistic missiles. Raytheon Company delivered its ninth AN/TPY-2 BMD radar to the MDA, six months ahead of schedule. AN/TPY-2 is an integral element of the BMD System. It is a mobile X-band radar that helps protect civilians and infrastructure in the US, deployed warfighters, and allied nations and security partners, from the growing ballistic missile threat. US public intelligence estimates indicate there are more than 6,300 ballistic missiles not controlled by the US, NATO, China or Russia, with that number expected to reach almost 8,000 by 2020. “Delivering this ninth radar is crucial because our nation’s enemies continue to improve and proliferate their ballistic missile technology and tactics,” said Raytheon’s Dave Gulla, vice president of Integrated Defense Systems’ Global Integrated Sensors business area.

“The AN/TPY-2 consistently demonstrates its ability to pace the evolving threat, and test after test has proven it effectively defends against every category

of ballistic missile." The radar will be integrated into the US Army's fourth THAAD missile defense battery, serving as the "eyes and ears" of the system by searching, detecting, tracking and discriminating threats, and guiding the intercepting missile. Raytheon serves as one of MDA's prime contractors for THAAD. Raytheon is currently under contract to provide three additional AN/TPY-2 radars for the MDA, and is in the process of building two radars for a US ally in the Arabian Gulf.

About AN/TPY-2: AN/TPY-2 is a high resolution, mobile, rapidly deployable X-band radar capable of providing long range acquisition, precision track, and discrimination of all classes of ballistic missiles. The AN/TPY-2 may be deployed globally in either terminal or forward-based mode. The AN/TPY-2 radar has two modes. In forward-based mode, the AN/TPY-2 cues the BMDS, by detecting, discriminating and tracking enemy ballistic missiles in the ascent phase of flight. In terminal mode, it serves as the fire control radar for the THAAD system.

Source: Providence Journal, 19 March 2014.

Romney: Obama Stopped Missile Defense Shield 'as a Gift to Russia'

President Barack Obama mocked Mitt Romney during the 2012 campaign for calling Russia "our No. 1 geopolitical foe." Now, as the country's relationship with Russia worsens over Ukraine, Romney is getting the chance to take a few political swipes himself. Romney appeared on CBS' *Face the Nation* on 23 March and said Obama has been naive about Russian President Vladimir Putin's intentions all along. Romney said Putin has blocked Iran from harsher sanctions, stood with dictators in Syria and North Korea, and provided Edward Snowden a safe haven. Romney said he would have handled things differently.

"For instance, you reconsider putting in our missile defense system back into the Czech Republic and Poland, as we once planned," Romney said of steps he'd take if he were in the White House. "And as you recall, we pulled that out as a gift to Russia." Pundit Fact has heard several Republican politicians

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American officials saw the Europe-based plan as improving their ability to deflect long-range missiles launched by Iran (not Russia) to Europe or the U.S while strengthening military partnerships with countries in Eastern Europe.

and pundits bring up the missile defense system in recent weeks, so we wanted to look back into the program and why it was scrapped.

The Missile Defense System: The missile defense issue represented the first significant break from President George W.

Bush administration policy in Obama's first year in office, so it attracted a lot of attention. Bush, taking advice from Defense Secretary Robert Gates, pushed for an initiative to install 10 interceptor missiles on the ground in Poland and an advanced radar system in the Czech Republic to fend long-range missiles from Iran. American officials saw the Europe-based plan as improving their ability to deflect long-range missiles launched by Iran (not Russia) to Europe or the U.S while strengthening military partnerships with countries in Eastern Europe. Some interceptors had already been built on America's West Coast to protect against nuclear attacks from North Korea. The interceptors in Europe would not be ready until at least 2017, Gates later wrote.

The interceptors couldn't do much against Russia's nuclear weapons, experts said, but Russia still saw them as a threat to its arsenal and NATO-Russia cooperation. Russian defense minister Sergei Ivanov told a Belarus newspaper in 2006, "The choice of location for the deployment of those systems is dubious, to put it mildly," according to the New York Times. Enter Obama, who explained he supported the missile shield to Fox News host

Bill O'Reilly during the 2008 campaign. He gave himself wiggle room, however, by saying, "I want to make sure it works, which is actually one of the problems we've got." He ordered a review.

Washington's relationship with Moscow was icy at the time following Russia's war with Georgia. Obama took office in 2009 talking about hitting the "reset" button with Russia. Then, three years after Bush announced his missile defense proposal, Obama changed course. On Sept. 17, 2009, Obama announced that the US would pursue a new missile defense policy focused on knocking out short- and medium-range missiles from sites closer to Iran.

Russian concerns about the previous program were “entirely unfounded,” Obama said. “Our clear and consistent focus has been the threat posed by Iran’s ballistic missile program, and that continues to be our focus and the basis of the program that we’re announcing 23rd March,” Obama said. “In confronting that threat, we welcome Russians’ cooperation to bring its missile defense capabilities into a broader defense of our common strategic interests, even as we continue to — we continue our shared efforts to end Iran’s illicit nuclear program.”

A ‘Gift’ to Russia?: Russians cheered the decision, though Russian officials said they didn’t promise anything in return. Putin called Obama’s move on the missile defense shield “correct and brave.” Bush allies and congressional Republicans thought Obama caved. Sen. John McCain, R-Ariz., Rep. Mike Pence, R-Ind. (who is now governor of Indiana), and Rep. John Boehner, R-Ohio, released statements along the lines of Obama is soft and let down American allies. Pundits like John Bolton, whom Bush appointed as ambassador to the United Nations, said Russia and Iran came away as “big winners” in a “bad day for American national security.” Meanwhile, Israel and most NATO countries in Western Europe approved of the move, news stories show, as they thought the missile system provoked Russia. Initial reactions from Polish and Czech leaders were not thrilled.

Obama delegated explaining the decision to an interesting source: Gates, the same official who recommended the missile defense plan to Bush in 2006 to combat the growing threat of Iranian ballistic missiles. Gates explained why he urged Obama to change course in a 2009 *New York Times* op-ed and in his 2014 book *Duty*, in which he described the new strategy as necessary due to changing times, technology and threats. (And in which he said some not-so-nice things about Obama.)

“It was neither the first nor last time under Obama that I was used to provide political cover, but it was okay in this instance since I sincerely believed the new program was better — more in accord with the political realities in Europe and more effective against the emerging Iranian threat,” he wrote. Gates wrote that Defense Department officials realized the Iranian government was putting more stock into building short- and medium-range missiles over long-range ones. The agency wanted to uproot the old plan to better counteract that threat, and the new tactic Gates and Joint Chiefs of Staff recommended to Obama was not only cheaper, but

the sea-based missiles could be more easily and quickly produced.

“While there certainly were some in the State Department and the White House who believed the third site in Europe was incompatible with the Russian ‘reset,’ we in Defense did not,” Gates wrote in *Duty*. “Making the Russians happy wasn’t exactly on my to-do list.” Lost in the GOP fury, Gates wrote, was that Russians found Obama’s new approach to be an even bigger problem than the Bush-era plan as they worried about future adjustments that could make the short- and medium-range missiles a bigger threat to Russia. “How ironic that US critics of the new approach had portrayed it as a big concession to the Russians,” Gates wrote. “It would have been nice to hear a critic in Washington — just once in my career — say, *Well I got that wrong.*”

Lance Janda, chairman of the Department of History and Government at Cameron University, told us Romney’s comments are partially accurate. Yes, Obama ended the missile shield planned in Poland and Czech Republic, but the US will address the ballistic missile threat with Aegis missiles in Eastern Europe by 2018, he said by email. “While our decision to cancel the sites in 2009 eased tensions with Russia — which DEEPLY opposed the sites — we also had legitimate security reasons for not moving forward and in that sense it’s not like we were really doing Putin a ‘favor,’ ” Janda said. “And we’re certainly not leaving Poland or the Czech Republic exposed. They’re covered by the rest of NATO and will get the Aegis system ... soon.” We reached out to Romney through CBS and a press contact on MittRomney.com but did not hear back.

Our Ruling: Romney said, the US stopped plans to build a missile defense shield in Eastern Europe “as a gift to Russia.” Romney’s impression about Obama’s decision to end the program is certainly shared by GOP politicians and pundits, and Obama took office with a vow to reset relations with Russia. Russia found Bush’s missile defense program in neighboring countries offensive and was pleased to see it go (though Gates asserts they dislike the new policy more). But Romney’s comments do not reflect the whole story. Gates, the Bush official who recommended the plan in 2006, acknowledged he drove the change in policy because of improved American intelligence of what the Iranians were working on — not solely to be nice to the Russians. Plus, new defense systems are still planned. We rate the claim Half True.

Source: Mitt Romney, Pundit Fact, 23 March 2014.

NUCLEAR ENERGY

CHINA

China Moves to Build World's First Thorium Nuclear Reactor within a Decade

China is undertaking an aggressive new initiative to complete the world's first thorium-based nuclear power plant. The nation's government has cut its initial timeline for development of a thorium reactor by over half in an effort to curb its reliance on coal-fired power to reduce polluting emissions. "In the past, the government was interested in nuclear power because of the energy shortage," Professor Li Zhong, a scientist working on the project, told the South China Morning Post. "The problem of coal has become clear. If the average energy consumption per person doubles, this country will be choked to death by polluted air," Li Zhong added. "Nuclear power provides the only solution for massive coal replacement and thorium carries much hope."

Thorium is a naturally occurring radioactive chemical element that is not only more abundant than traditional sources of nuclear power, but also more efficient. One ton of Thorium holds the potential to produce as much energy as nearly 200 tons of uranium, and it produces energy without an output of carbon dioxide. China's plans for thorium are centered on a liquid fluoride thorium reactor, while competing parties in the US and Europe are focused on utilizing light water technology. The liquid fluoride thorium reactor is a type of molten salt reactor.

China is aiming to complete the project within the next 10 years, pushing the plan forward from its initial goal of 25 years. The Telegraph reports the thorium project came into being in 2013, set in motion by Chinese leader Jiang Mianheng, who estimated that China has enough thorium to power itself for "20,000 years." However, a thorium reactor is not the only

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advanced nuclear solution China is actively pursuing according to the South China Morning Post. An experimental fast reactor is currently operating in Beijing and the country has also recently completed construction of the world's largest experimental platform for an accelerator reactor that burns nuclear fuel with a powerful "particle gun". Nuclear power is a core part of China's energy strategy. Currently, China has a total of 20 operating nuclear reactors and another 28 that are being built.

Source: Dorothy Davis Ballard, PennEnergy, 21 March 2014.

Equal Emphasis on Nuclear Energy, Security Development: Xi Jinping

Chinese president Xi Jinping has said that his country places "equal emphasis" on development of nuclear energy and security, giving the same attention to rights and obligations of the member

countries. Elaborating China's nuclear security concept, Xi told the third NSS at The Hague 25 March that the use of nuclear energy gave new impetus to the progress of humanity, yet mankind must be able to respond to various nuclear security challenges by ensuring safety of nuclear materials and facilities. The world should place "equal emphasis" on development and security, and develop nuclear energy on the premise of security, Xi said, in what official media here said was the first time Beijing elaborated its stand on nuclear energy.

Xi also warned that developing nuclear energy at the expense of security can neither be sustainable nor bring real development, official media here

Xi also warned that developing nuclear energy at the expense of security can neither be sustainable nor bring real development. The elaboration was seen as significant by observers in the context that China is building more nuclear reactors in Pakistan including two 1100 MW nuclear plants at Karachi for which Beijing is providing \$6.5 billion.

reported. The elaboration was seen as significant by observers in the context that China is building more nuclear reactors in Pakistan including two 1100 MW nuclear plants at Karachi for which Beijing is providing \$6.5 billion.

India and the US have expressed concern that the new reactors were being built without the approval of the 48 member NSG,

a multinational body concerned with reducing nuclear proliferation by controlling the export and re-transfer of materials. China says that the reactors are being built under the supervision of IAEA and that nuclear power was important for Pakistan for addressing its power shortages. Xi also met Pakistan PM, Nawaz Sharif, on the sidelines of the summit besides US President Barack Obama. Providing details of China's approach to promoting nuclear security, Xi said that rights and obligations should be given the same attention, adding that rights and interests ought to be recognised with the international nuclear security process being pushed forward. Xi urged all nations to fulfil their duties under international legal instruments regarding nuclear security, and implement relevant UNSC resolutions.

Xi also said that China had tightened nuclear security measures, improved technology and emergency response, and conducted comprehensive safeguards and security checks on nuclear facilities across the country. China's total installed capacity for nuclear power stood at 14.61 million kilowatts as of end-2013. According to a government white paper on energy released in October 2012, China has 15 nuclear power-generating units in operation with a total installed capacity of 12.54 GW. China has another 30 units currently under construction, which will add another 32.81 GW to its energy pool. Speaking of China's future commitment to nuclear security, the Chinese president said his country would continue to strengthen its own nuclear security capability, build the international nuclear security system, support global cooperation, and uphold regional and global peace and stability.

Source: The Economic Times, 25 March 2014.

JAPAN

Working Together for High-Temperature Reactors

High-temperature gas-cooled reactor projects have been boosted by a new agreement between CNECC and Tsinghua University, while US and European reactor initiatives are working on a memorandum of understanding. For over a decade, CNECC and Tsinghua University have been working together on

the design, construction and commercialisation of HTGR technology. The new agreement aims to further cooperation between the two partners in both international and domestic marketing of the advanced reactor technology and is described by CNECC as an important milestone in its commercialisation. The agreement was signed in a ceremony at the university, attended by senior figures from the nuclear industry, academia and politics.

Today's designs for high-temperature reactors can trace their ancestry to several reactors developed during the 1960s and 1970s. Capable of delivering high-temperature steam for industrial uses, or for electricity generation, they use silicon carbide-coated 'pebbles' of uranium fuel. Such reactors offer inherent safety characteristics and are small enough to be factory-built, offering the opportunity to build

Offer inherent safety characteristics and are small enough to be factory-built, offering the opportunity to build as many modules as needed. Although various HTGR projects have been under development around the world over the years, China's HTGR project is currently the closest to commercial realisation.

as many modules as needed. Although various HTGR projects have been under development around the world over the years, China's HTGR project is currently the closest to commercial realisation. Construction work began on two demonstration HTGR units at Shidaowan, Shandong province, in late 2012, with Tsinghua University-CNECC joint venture Chinergy the main contractor for

the nuclear island. The plant's twin HTR-PM units will drive a single 210 MWe turbine. Eighteen further units are proposed for the site.

US-European MoU on Table: Meanwhile, the US-based NNGP Alliance and the European Nuclear Cogeneration Industrial Initiative (NC2I) are working on a MoU that would pave the way for collaboration on development, demonstration and deployment of HTGR systems. Both groups aim to enable commercialisation of HTGR technology, and say they are setting targets to build and demonstrate installations in energy-intensive industries over the next ten years. Following a three-day meeting between the two bodies, they have said that they are to work on an MoU covering areas including the development of a joint vision, business plan and roadmap, establishing an international licensing framework, and supporting joint research beneficial to worldwide commercialisation of their units.

Source: World Nuclear News, 21 March 2014.

KAZAKHSTAN

Kazakhstan to Work on Full Nuclear Fuel Cycle: President Nazarbayev

When speaking at the NSS in the Hague, Kazakhstan's President Nursultan Nazarbayev said that Kazakhstan would be working on the full cycle of nuclear fuel production to feed nuclear power plants, according to his website. He stressed that the initiative of holding global summits on nuclear security once voiced by US President Obama has played a crucial role to strengthen peace and safety in the world. He also emphasized that the summits had become a forum to find solutions to major issues on the international nuclear agenda.

President Nazarbayev reiterated Kazakhstan's commitment to global nuclear security and outlined a few vectors to work along. One of the major vectors is universal nuclear disarmament as the only guarantee of nuclear security. Another vector is to counteract nuclear terrorism and eradicate its foundations.

"At the same time, the anti-terror campaign shouldn't impair nations' right for peaceful nuclear programs, exchange of technology and equipment. Kazakhstan plans to work on the entire cycle of nuclear fuel production and construct nuclear power plants", he said.

Head of Kazakhstan emphasized that Kazakhstan speaks in favor of raising IAES's role and in favor of creating new nuclear-free zones, including in the Middle East.

He reminded that Kazakhstan is ranked 15th in the Nuclear Threat Initiative Nuclear Materials Security Index. "The nuclear materials security is propped by the stable political and economic situation, effective legislation, and counter-corruption measures. Following the closure of the Semipalatinsk nuclear testing site and renouncement of the 4th largest nuclear arsenal [in the wake of gaining independence from the USSR], Kazakhstan in partnership with Russia and the USA liquidated the testing site's infrastructure. Works are still under way to ensure safety and security of the former testing site. The nation's nuclear

activities are monitored by the IAEA. We have supported the Agency's initiative to launch an international LEU bank and are completing talks with the Agency to host the bank in our territory", he said.

Head of Kazakhstan stressed that the summit was being held amidst a crisis of the global security. "Kazakhstan believes it important for nuclear powers to stick to their commitments. Two decades

ago Kazakhstan like Belarus and Ukraine contributed to the global nuclear security.

Kazakhstan voluntarily renounced its sizeable nuclear arsenal and joined the NPT. We all should be concerned over irresponsible statements made by some politicians calling to return the nuclear power status to Ukraine, a country that is home to 5 nuclear power plants, 15 atomic reactors, and that has a missile technology potential", President Nazarbayev

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said, adding that "the world can and must get united to meet today's threats just like in the wake of Sep 11, 2001".

Source: Tengri News, 24 March 2014.

NIGERIA

Jonathan: Nigeria is Committed to Pursue Efforts at Harnessing Nuclear Energy

President Goodluck Jonathan 24 March reaffirmed Nigeria's commitment to global fight against the threat of nuclear terrorism. He equally assured that Nigeria, under his leadership, would vigorously pursue efforts to harness nuclear energy and technology for socio-economic development. The president stated this at The Hague, Netherlands, during the third global security summit. According to him, Nigeria would continue to support all efforts against the proliferation of weapons of mass destruction, including nuclear weapons. He said the world must respect the right of countries to the peaceful use of nuclear energy for development purposes. "As a developing country, Nigeria needs to harness nuclear technology for socio-economic development. It is for this reason we subscribe to the view that international and regional cooperation efforts should be based on the principle of maintaining a balance between nuclear non-proliferation obligations and the inalienable right of states to the peaceful uses of nuclear energy for

development purposes.

While addressing the gathering, the president restated Nigeria's commitment to the non-proliferation of nuclear weapons and the peaceful use of nuclear technology. He disclosed that Nigeria's federal government had already submitted an

Nigeria's federal government had already submitted an executive bill to the National Assembly to accommodate the country's obligations under international treaties on nuclear safety and security.

executive bill to the National Assembly to accommodate the country's obligations under international treaties on nuclear safety and security. "To this end, Nigeria has since the last Summit in Seoul, South Korea, strengthened the legal framework for fighting terrorism through the adoption in 2013 of an amendment to its Terrorism (Prevention) Act, thus ensuring the implementation of more robust counter-terrorism measures in the country.

"Nigeria's ratification of some international treaties and conventions in the realm of nuclear safety, security and safeguards has necessitated the review of the Nigerian Nuclear Regulatory Authority Act resulting in the recent decision of the government to submit a new bill to the parliament for consideration and passage into law in order to accommodate our obligations under these instruments. "The instruments

Ever since India signed a civil nuclear deal with the US, Pakistan has been seeking a similar agreement. Sharif called for Pakistan's inclusion in all international export control regimes, especially the NSG. International treaties and forums, he said, should supplement national actions to fortify nuclear security.

include the Convention on the Physical Protection of Nuclear Materials and its amended version of 2005-the International Convention for the Suppression of Acts of Nuclear Terrorism. The intention of the bill is to ensure the fulfillment of Nigeria's international and national nuclear safety, security, safeguards and radiation protection obligations, by domesticating the international treaties. The bill is presently awaiting passage by the National Assembly.

"Furthermore, as part of the outcome of the second Nuclear Security Summit held in South Korea in 2010, states were urged on voluntary basis, to embark on the process of converting their reactors from the use of HEU to LEU. Consequently, Nigeria is working in collaboration with the US and China for the conversion of Nigeria's limited stock of HEU used in its research reactor to LEU," the president averred.

Besides, he noted that one of the main objectives of the nuclear security summit was to reduce the amount of dangerous nuclear materials in the world by preventing materials that can be used to produce nuclear weapons from falling into the hands of terrorists and

unauthorised non-state actors. Nigeria, according to him, was in full support of the immediate commencement and early conclusion of negotiations on a "non-discriminatory, multi-lateral and internationally and effectively verifiable treaty banning the production of fissile materials for nuclear weapons."

President Jonathan gave kudos to United Nations Secretary-General, Mr. Ban Ki Moon, for establishing a group of governmental experts that would commence work in Geneva, Switzerland last week of March on the proposal.

"Nigeria shares the view that fewer nuclear weapons translate into more nuclear security while at the same time reducing the risk of proliferation. "But it is even more important that states as represented at this summit demonstrate the necessary political will to embark on the path towards the ultimate goal of total and complete nuclear disarmament under strict and

effective international control," the president stressed. ...

Source: Jaiyeola Andrews, This Day Live, 25 March 2014.

PAKISTAN

Pakistan Seeks Access to Civilian Nuclear Technology

Pakistan PM Nawaz Sharif has sought access to civilian nuclear technology for his country that is enduring a crippling energy crisis, even as he allayed fears over the safety its atomic assets. "Energy deficit is one of the most serious crises facing Pakistan," Sharif told delegates at the third Nuclear Security Summit at the Hague in the Netherlands. "As we revive our economy, we look forward to international cooperation and assistance for nuclear energy under IAEA safeguards," he said.

Ever since India signed a civil nuclear deal with the US, Pakistan has been seeking a similar agreement.

Sharif called for Pakistan's inclusion in all international export control regimes, especially the NSG. International treaties and forums, he said, should supplement national actions to fortify nuclear security. Trying to allay global concerns over security of Pakistan's nuclear programme, Sharif reiterated "the highest importance" that his country attached to nuclear security as it was directly linked to its national security.

"Pakistan is a responsible nuclear weapons state and pursues a policy of nuclear restraint, as well as credible minimum deterrence," he said last night in his address. "Our region needs peace and stability for economic development that benefits its people. That is why, I strongly advocate nuclear restraint, balance in conventional forces and ways to resolve conflicts," the PM said. The West has feared that Pakistan's nuclear assets were in danger of falling into the hands of terrorists if unrest was not controlled in the country.

Pakistan has been running a safe, secure and safeguarded civil nuclear programme for more than 40 years and the country has the expertise, manpower and infrastructure to produce civil nuclear energy, he said. Sharif said that Pakistan's nuclear security is supported by five pillars – a strong command and control system led by the NCA; an integrated intelligence system; a rigorous regulatory regime; a comprehensive export control regime; and active international cooperation.

"Looking back, we can say with confidence that our decisions and commitments have spurred national action, promoted international cooperation and fostered nuclear security culture," he said, adding that Pakistan has constructively contributed to this process. Sharif said Pakistan's nuclear materials, facilities and assets were safe and secure and the country's nuclear security regime was anchored in the principle of multi-layered defence for the entire spectrum – insider, outsider or cyber threats.

Source: PTI, 25 March 201.

NUCLEAR COOPERATION

UK-RUSSIA

U.K. Reviewing Russian Nuclear Energy Pact

Britain is reviewing an agreement to cooperate with Russian state-run nuclear engineering company Rosatom following the occupation of Crimea, the government said on 25 March, in a fresh sign that Moscow's actions could have damaging economic

and commercial consequences. The U.K.'s DoE and Climate Change signed a memorandum of understanding with the Rosatom, in September 2013 to work together more closely on the development of commercial civil nuclear energy. "No decisions have been made on how this work will be taken forward, which is under consideration in the light of recent developments in Ukraine," a spokesperson for the department said in a statement. Rosatom declined to comment. Nobody was immediately available at the department to provide further details.

Under the MOU, the government would help Rosatom understand Britain's nuclear regulatory and planning regimes and the approval process for its reactor design. The memorandum was designed to facilitate a separate agreement, signed the same day, between British engineering giant Rolls-Royce PLC, Finnish utility Fortum Oyj FUM1V.

HE +0.25% and Rosatom to collaborate on engineering and safety-assessment work on the Russian company's VVER reactor design with a view to potentially submitting the design to U.K. nuclear regulators. This would be the first step in a wider approval process for new nuclear reactors before they can be deployed in

the UK.

Rolls-Royce and Rosatom have been working closely together since 2011, when a memorandum was signed between the two companies. Rolls-Royce spokesman Richard Wray said: "As far as we are concerned the MOU remains in place and we are monitoring the situation." The U.K. government wants a new fleet of atomic power stations to curb carbon emissions and replace aging coal plants and nuclear power stations that are being shuttered. But progress has been slow. A plan by French nuclear giant Électricité de France SA to build the UK's first new power station in 20 years is the most advanced, but is currently stuck in a Brussels probe on whether proposed government funding for the project breaks subsidy rules.

Britain and other members of the so-called Group of Seven leading industrialized countries—the US, Canada, France, Germany, Japan, and Italy—issued another joint statement on 23 March condemning Russia's intervention in Ukraine. After imposing travel bans and asset freezes on a number of Russian officials in response to the incursion, the G-7 leaders

said they were ready to intensify actions including coordinated sectoral sanctions if Russia continued to escalate the situation.

Source: Nicholas Winning and Selina Williams, *The Wall Street Journal*, 25 March 2014.

UNRANIUM PRODUCTION

GENERAL

Uranium May Be Over-Hyped in the Short Term

The spot price of uranium has been in the doldrums since the Fukushima disaster in 2011. In response to the only Level 7 event on the Nuclear Event Scale other than Chernobyl, Japan took a huge step back from its nuclear activities, idling 50 of the country's reactors and issuing statements that called into question the country's use of nuclear energy going forward. But the nuclear taboo was not confined to Japan: Germany vowed to phase out its nuclear energy use, and several other European countries scrapped plans to build nuclear power plants. The same happened in developing countries such as Malaysia and the Philippines, which had previously seemed like fertile ground for the growth of nuclear power.

Predictably, companies involved in mining uranium for nuclear projects saw their share prices plummet. Canadian based Cameco's share price was basically halved between March and October of 2011 and it still trades much closer to its low than its high of that year today.

Recovery in Sight?: I've heard a good deal of chatter lately about the spot price of uranium being poised to rebound. To be sure, the long-term fundamentals of uranium remain compelling: demand growth is far expected to outpace supply growth, as this chart from Cameco's investor presentation shows: Positive catalysts for uranium include the ending of the "Megatons to Megawatts" project that provided a considerable amount of fuel to nuclear reactors from Russian supplies of HEU used in nuclear warheads, and Japan's recent announcement that it would push to restart at least some of its nuclear reactors 2014.

However, before you race to put your money on every uranium investment under the sun, there a few things to keep in mind.

Lingering Issues Abound: First, is that Japan's accumulated quite a stockpile of uranium since it idled its reactors, so restarts won't instantly translate into new demand on the market. Then there's the issue of the many projects that have been suspended because of poor uranium pricing. Uranium Energy Corporation, for example, recorded no revenue from the sale of uranium over the last six months versus \$4.3 million in the year earlier period, choosing to keep its uranium rather than sell it at depressed prices even while expanding its Texas mining activities. The Australian company Paladin Energy has stopped mining operations at its Kayelekera Mine in Malawi altogether. And various other miners have halted new projects or expansions in light of unfavorable pricing. These projects are capable of adding to

global supply very quickly if not immediately in the event of an uptick in uranium demand.

Finally, should the spot price of uranium move up, it's not always easy to figure out how quickly uranium miners will see a benefit. While it's almost certain that higher uranium prices would stoke increased interest in the

sector, which should in turn inflate share prices, the actual financial benefits may well lag behind. This is because most uranium is sold under long-term contracts rather than in the spot market. The chart below, taken from Cameco's investor presentation, shows that long-term rates are currently considerably higher than the spot rate. Should the spot rate move to the \$70 range and stay there (as I have seen some predictions for), long-term agreements will not benefit from the increased pricing until they are renewed. And that benefit is likely to be a much smaller one since the average long-term price is already much closer to the \$70 mark. The companies that will benefit most from higher spot prices are those whose production is not currently under contract.

A Final Caution: Despite the remaining headwinds that I believe will keep a lid on uranium prices in the near term, I think that Cameco could be a good option for a patient investor. The company pays a dividend, it is profitable at current levels, and it is large and diverse in its geography and operations. However, there are a slew of junior uranium miners that are newly garnering attention that would be better spent elsewhere. Companies like Uranium Energy Corp, UR-Energy, and Uranerz Energy Corp.

are far from sure bets. They are expanding their mining operations at a time of industry weakness, generating operating losses, and very likely will need to find more financing before they can be self-sustaining — even if uranium lifts off soon. These are high-risk investments that will need a long time to bear fruit, and the suspicion of a quick turnaround in uranium pricing is certainly not a sufficient reason for gambling on them.

The “How-To” of Investing in 2014: Everyone has their opinion of how to invest successfully in 2014. The difference is, we’ve got a track record too good to ignore. In fact, our top stock pick from 2013 rose 134%. That’s why you won’t want to pass up on our new report “The Motley Fool’s Top Stock for 2014”, which we are providing to you absolutely free. Just click here to access the report and find out the company!

Source: Anthony Jaramillo, *The Motley Fool.com*, 24 March 2014.

CANADA

Uranium Production Begins at Cigar Lake

The first uranium ore from the Cigar Lake mine, operated by Cameco in the Canadian province of Saskatchewan has been delivered to AREVA’s McClean Lake mill located 70 km away. “Cigar Lake is among the most technically challenging mining projects in the world,” said Tim Gitzel, president and CEO of Cameco, the operator and 50.025% owner of Cigar Lake. “The start of ore production is a tremendous achievement and I want to thank the many hundreds of people who helped to bring this exceptional orebody into production.”

AREVA said the ore, which set out on its journey on 13 March, is expected to be processed at the McClean Lake mill by the end of June 2014. “With a production capacity of 10,900 tonnes of uranium per year, the McClean Lake mill is expected to produce 770 to 1100 tonnes of uranium concentrate from Cigar Lake ore in 2014,” AREVA said. The mill’s annual production rate is expected to ramp up to 8100 tonnes as early as 2018. The capital cost of the Cigar Lake project were estimated at \$2.6 billion in December 2013. Construction started on the mine, which relies on a high-pressure water jet boring method, in 2006. In

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Iran and world powers locked horns on 19 March over the future of a planned Iranian nuclear reactor that could yield plutonium for bombs as the US warned “hard work” will be needed to overcome differences when the sides reconvene in April 2014.

addition to Cameco, owners of the Cigar Lake project are AREVA Resources Canada Inc (37.1%), Idemitsu Canada Resources Ltd. (7.9%) and TEPCO Resources Inc. (5.0%).

Source: *Nuclear Engineering International*, 14 March 2014.

NUCLEAR PROLIFERATION

IRAN

Iran, Six Powers Lock Horns over Nuclear Reactor that could Yield Plutonium

Iran and world powers locked horns on 19 March over the future of a planned Iranian nuclear reactor that could yield plutonium for bombs as the US warned “hard work” will be needed to overcome differences when the sides reconvene in April 2014. Tehran’s foreign minister voiced optimism that a July 20 deadline for settling a long-running dispute about the scope of Iran’s nuclear programme was within reach. The meeting in Vienna was the second in a series that the six nations - the US, China, Russia, Germany, France, Britain - hope will produce a verifiable settlement, ensuring Iran’s nuclear programme is oriented to peaceful ends only, and put to rest the risk of a new Middle East war.

The two sides endeavoured to iron out their positions on two of the thorniest issues: the level of uranium enrichment conducted in Iran, and its Arak heavy-water reactor that the West sees as a possible source of plutonium for bombs. They appeared to reach no agreements and said only that they would meet again on April 7-9, also in the Austrian capital.

The broad goal is to transcend ingrained mutual mistrust and give the West confidence that Iran will not be able to produce atomic bombs while Tehran - in return - would win full relief from economic sanctions hamstringing the OPEC state’s economy.

Iran denies that its declared civilian atomic energy programme is a front for developing the means to make nuclear weapons, but its restrictions on UN inspections and Western intelligence about bomb-relevant research have raised concerns. “We had substantive and useful discussions, covering a set of issues, including enrichment, the Arak reactor, civil nuclear cooperation and sanctions,” European Union foreign policy chief Catherine Ashton told

reporters after the two-day session. The US has called on Iran to scrap or radically alter the as yet-uncompleted reactor, but Tehran has so far rejected that idea while hinting it could modify the plant.

"We shared with Iran ideas that we have," a senior US administration official told reporters condition of anonymity. "We have long said that we believe that Arak should not be a heavy water reactor as it is that we did not think that that met the objectives of this negotiation." Enrichment is also a sticking point in the talks. "It's a gap (on enrichment) that's going to take some hard work to get to a place where we can find agreement," the US official said. Enriched uranium can serve as fuel for nuclear power plants or, if refined to a high degree, for the core of an atom bomb.

As in past rounds of negotiations, the US delegation, led by Under Secretary of State for Political Affairs Wendy Sherman, held an 80-minute bilateral meeting with the Iranian delegation. Such high-level, face-to-face contacts between the long estranged countries - virtually unthinkable one year ago - have become almost "routine", according to the US official said.

Iranian Optimism: Western nations want to ensure that the Arak reactor is modified sufficiently to ensure it poses no bomb proliferation threat. Iran insists that the desert complex be free to operate under any accord as it would be designed solely to produce radio-isotopes for medical treatments. "The Arak reactor is part of Iran's nuclear programme and will not be closed down, (like) our research and development activities," Foreign Minister Javad Zarif told reporters. Possible face-saving options that could allow Iran to keep the reactor while satisfying the West that it would not be put to military purposes include reducing its megawatt capacity and changing the way it would be fuelled.

Iran and the powers aim to wrap up a permanent accord by late July, when their trailblazing interim deal from November 24 expires and would need to be extended, complicating diplomacy. Zarif voiced optimism about the talks. "At this stage we are trying to get an idea ... of the issues that are involved and how each side sees various aspects of this problem," he said. A Western diplomat also said the purpose

of the current round of negotiations was not to nail down a final agreement. Asked whether he expected the negotiating deadline to be met, Zarif said: "Yes, I do I am optimistic about July 20."

The sides are conscious that it may be hard to reach gradual deals without having the overall picture in sight and are insisting that "nothing is agreed until everything is agreed". Much of the progress so far has been achieved since 2013's election of Iranian President Hassan Rouhani, a relative moderate who launched a policy of "constructive engagement" to end Iran's international isolation. "Our ultimate goal is to maintain our peaceful nuclear programmes in line with international rules, and at the same time remove all concerns of the international community," the semi-official Fars news agency quoted Rouhani as saying. "So far we are satisfied with the results and hope that the whole dispute will be settled soon with goodwill of the other side."

Since Rouhani's rise, day-to-day relations between Iranian and six-power negotiators have greatly

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improved. Some senior officials now address each other by their first names and use English in talks, rather than going through onerous translation.... But gaps between expectations on both sides, and their own internal divisions, could still scupper diplomacy. Both the US and Iranian delegations - the two pivotal players in the negotiations - face intense pressure from hawkish critics back home. In Washington, a

large majority of US senators urged President Barack Obama to insist that any final agreement state that Iran "has no inherent right to enrichment under the NPT".

That would be a non-starter for Iran, which cites a right under the NPT to produce nuclear energy for civilian purposes. The powers will also want to spread out the sanctions relief over years, or possibly decades, to ensure they maintain their leverage over Tehran and that it honours its end of the deal. Iran has already suspended its most sensitive, higher-grade enrichment - a potential pathway towards bomb fuel - under the November accord and won modest respite from sanctions.

Source: Fredrik Dahl and Parisa Hafezi, Reuters, 20 March 2014.

Iran Seeks Banned Nuclear Items, Uses China Trader for Missile Parts - US

Iran has pursued a longstanding effort to buy banned components for its nuclear and missile programmes in recent months, a US official said, a period when it struck an interim deal with major powers to limit its disputed atomic activity. Vann Van Diepen, principal deputy assistant secretary of state for international security and non-proliferation, added that a Chinese businessman indicted in the US in 2009 over sales of missile parts to Iran continued to supply such items despite US pressure on China to tighten export controls. Reuters was unable to reach the Chinese businessman, identified as Li Fangwei and also known as Karl Lee, for comment, as the mobile phone he previously used appeared to be out of service despite numerous calls made to it.

Contacted by Reuters on Feb 4, 2013, for an earlier story about his business, Li said he continued to get commercial inquiries from Iran but only for legitimate merchandise. Li said his metals company, LIMMT, had stopped selling to Iran once the US began sanctioning the firm several years ago. In Beijing on 17 March, Chinese Foreign Ministry spokesman Hong Lei told a daily news briefing that China was very clear in its stance on non-proliferation and seriously fulfilled its obligations to UN resolutions about export controls. "As for individuals, we will investigate and deal with in accordance with the law those who break the law and rules," Hong added at 17 March briefing, without elaborating.

Such trade would breach a 2006 UN embargo banning the provision by any nation to Iran of materials related to its nuclear and missile development work. Western experts say such low-profile procurement efforts by Iran date back many years, perhaps decades in the case of its nuclear activity. In November 2013 Iran and six world powers struck a breakthrough agreement providing for Tehran to curb its most sensitive atomic activity in exchange for some limited easing of sanctions damaging its economy. The deal took effect on

A Chinese businessman indicted in the US in 2009 over sales of missile parts to Iran continued to supply such items despite US pressure on China to tighten export controls.

China has no extradition treaty with Washington, and so the allegations have never been tested in any subsequent court proceedings. An official at Dalian Carbon, a venture listed as a LIMMT front company by the US Treasury Department in 2009, denied any wrongdoing when questioned by Reuters about Li Fangwei's activities.

January 20 and UN nuclear inspectors have verified that Iran has suspended higher-grade uranium enrichment, with the powers reciprocating by relaxing some sanctions. Asked if he had seen a change in Iranian procurement behaviour in the past six to 12 months, a period that has seen a cautious thaw in US-Iranian relations after decades of hostility, Van Diepen replied: "The short answer is no.

"They still continue very actively trying to procure items for their nuclear programme and missile programme and other programmes," he said in an interview on 16th March. "We continue to see them very actively setting up and operating through front companies, falsifying documentation, engaging in multiple levels of trans-shipment ... to put more apparent distance between where the item originally came from and where it is ultimately going." Asked for reaction to the allegation, a senior Iranian official replied: "No comment". Van Diepen did not say what sort of components Iran had sought to obtain or which part of a government known for having competing hardline and moderate factions was responsible.

In the past, Western officials said Iran's elite Revolutionary Guards and the Defence Ministry - both hotbeds of opposition to any rapprochement with the West - were believed to control clandestine nuclear procurement efforts. Iran denies Western allegations that it has long sought covertly to develop the means to produce nuclear weapons, saying its uranium enrichment programme is solely a peaceful endeavour to yield electricity as well as isotopes for medical treatments.

Deterrent: In 2009, the New York County District Attorney unsealed a fraud indictment against Li and LIMMT on suspicion they had used false names to process payments for sales to Iran through several US banks. In February 2013, Washington imposed fresh sanctions on Li for further alleged supplies to Iran. It is not clear what, if any, steps US officials or their Chinese counterparts have taken to stop or

detain Li based on those allegations. China has no extradition treaty with Washington, and so the allegations have never been tested in any subsequent court proceedings. An official at Dalian Carbon, a venture listed as a LIMMT front company by the US Treasury Department in 2009, denied any wrongdoing when questioned by Reuters about Li Fangwei's activities.

Security officials who monitor compliance with Western and UN sanctions against Tehran said in 2013 that Dalian Carbon continued then to be one of many aliases used by LIMMT, the company the US accuses of defying sanctions. On 16 March, a manager at Dalian Carbon, who would only give his family name as Li, said he did not have Li Fangwei's latest contact details and had not been in touch with him for a while, but he added that any allegation that Dalian Carbon had been supplying Iran with missile parts was not true.

Washington had repeatedly worked with China to get it to act against Li, but thus far without result, he said. China had taken important steps on export control, providing cooperation in certain cases and installing a national export-control system that met a lot of international standards. It was really the implementation of that system that required work, he said. In 2006, the US Treasury barred Li from the US financial system for allegedly selling goods with potential military uses to Iran.

Diplomats have said that Iran is meeting its commitments under the November 2013 deal, under which Iran suspended its refinement of uranium to 20 % fissile purity, a short technical stage away from high, bomb-grade enrichment, and stopped increasing its capacity to produce low-refined uranium, among other steps. Uranium forms the core of a nuclear bomb if enriched to a 90 % fissile concentration. The agreement, which has a six-month duration, was designed to buy time for talks on a final settlement defining the overall scope of Iran's nuclear work to end fears that it could be diverted to military ends.

Iran has one of the biggest missile programmes in the Middle East, regarding such weapons as an important deterrent and retaliatory force against US and other adversaries - primarily Gulf Arabs - in the region in the event of war. ...

Source: William Maclean, Reuters, 17 March 2014.

JAPAN

Japan's Plutonium Plans Stoke China Tensions on A-Bomb Risk

Japan is planning to start a \$21 billion nuclear reprocessing plant, stoking concern in China that the facility's output could be diverted for use in an atomic bomb. The issue will be one of the flashpoints at the NSS starting 24 march in The Hague that Japan PM Shinzo Abe and China's President Xi Jinping are due to attend. It's adding to bitterness marked by territorial disputes and left over issues from WW II between Asia's two largest economies. "Japan has stockpiled large volumes of sensitive nuclear materials, including not only plutonium but also uranium, and that's far exceeding its normal needs," Chinese Foreign Ministry spokesman Qin Gang told reporters on March 11.

The country planned to reiterate its policy of not producing more plutonium than it can use, the official said. Rokkasho is designed to separate as much as 8 tons of plutonium per year for reactor fuel. If diverted, that's enough material to make hundreds of nuclear bombs like the one dropped over Nagasaki in 1945.

The Rokkasho Reprocessing Plant in northern Japan will begin separating plutonium from spent nuclear fuel in the third quarter, Japan Nuclear Fuel Ltd. spokesman Yoshi Sasaki said March 7. The plant has missed previous start up dates because of equipment failures. "The Chinese have said they saw Japan

plutonium as a weapons option and I think that many people in Japan do too," said Frank von Hippel, a former White House national security adviser now at Princeton University, who has consulted with Chinese and Japanese nuclear officials. This reflects the tension between the two countries, he said.

Reprocessing Program: Japan was prepared to discuss its reprocessing program at The Hague summit, a Foreign Ministry official who asked not to be identified citing agency policy said at a March 20 press briefing. The country planned to reiterate its policy of not producing more plutonium than it can use, the official said. Rokkasho is designed to separate as much as 8 tons of plutonium per year for reactor fuel. If diverted, that's enough material to make hundreds of nuclear bombs like the one dropped over Nagasaki in 1945. While the IAEA monitors Rokkasho, the facility's throughput is so large, inspectors cannot guarantee that significant quantities" of material don't go unaccounted for. About eight kilograms of plutonium are needed for a single bomb.

Neighboring Countries: "Nuclear facilities are very complicated things," IAEA Director General Yukiya Amano said March 3. "It happens from time to time there exists material unaccounted for." Keeping nuclear material from slipping outside official control, where it may be sold for weapons or passed on to terrorists, is the focus of The Hague meeting. The IAEA's Amano added that inspectors "have drawn the conclusion that all nuclear material in Japan stays in peaceful purposes" and that there's no "reason to be concerned that this will be diverted for military purposes."

China, in discussion with Areva SA to build a plant similar to Rokkasho since 2008, has raised public concern over Japanese atomic fuel stockpiles, set to grow even as the majority of the country's reactors sit idle following the Fukushima nuclear disaster. Japan agreed to return "hundreds of kilograms" of HEU and plutonium to the US, according to a White House statement 24 March. Abe is due to meet with US President Barack Obama at the security summit.

Japan, South Korea: China's own nuclear weapons program, which began in 1955, is thought to have left the country with as many as 75 nuclear-capable intercontinental ballistic missiles, according to US DoD estimates cited by the Washington-based NTI. The US has sought to dissuade Japan and South Korea from abandoning their nuclear-weapon bans by protecting the countries under its nuclear umbrella. ... The country's decision to reprocess nuclear fuel to extract plutonium may have other knock-on effects. ... "While Japan has no stated plan to use its nuclear fuel for a weapons program, it's ability to do so is causing mistrust among its neighbors," Fetter said. "When you combine those things with disputes over island territories, I think it's easy for people in China to connect that this is another indication that Japan has other motives."

'No Point': Former Foreign Minister Yoriko Kawaguchi, now a professor at the Meiji Institute for Global Affairs in Tokyo says Japan's membership in the NPT, its protection under the US nuclear umbrella and public antipathy to nuclear arms mean making a bomb is out of the question. "What would be the point of Japan breaking the treaty and being subject to sanctions by the international community, just like North Korea?" she said in an interview. "There would be no point." More than 9 tons of separated plutonium are stockpiled in Japan, according to IAEA declarations. Another 35 tons are stored outside the country. Facilities in France and

the U.K., two of the five officially recognized nuclear-weapons states, currently reprocess Japanese spent fuel. ...

Source: Jonathan Tirone and Jacob Adelman, Bloomberg Business Week, 24 March 2014.

NUCLEAR NON-PROLIFERATION

INDIA

Nuclear Proliferation Pose a Serious Challenge, Warns India

India on 25 March warned that nuclear terrorism and clandestine proliferation of weapons of mass destruction, including attempts by "non-state actors", pose a serious threat to global peace and any breach in nuclear security could undermine public confidence in atomic energy. "We should together deny terrorists what they seek and eliminate the risks of sensitive materials and technologies falling into their hands," External Affairs Minister Salman Khurshid said while addressing the NSS here. "The focus on non-state actors should in no way diminish state accountability in combating terrorism, dismantling its support structures or its linkages with weapons of mass destruction," he said apparently referring to fears that Pakistan's nuclear assets could end up into the hands of militants.

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"All States must strictly abide by the international commitments that they have undertaken." Nuclear terrorism and clandestine proliferation poses a serious threat to international security. India fully shares the continuing global concern on possible breaches of nuclear security, Khurshid, heading the Indian delegation to

the two-day summit, said.

"We have not wavered in our commitment to global efforts to prevent the proliferation of weapons of mass destruction and their means of delivery," he said. He said India is committed to a world free from nuclear weapons.

"We are proud of our record on nuclear security and nuclear non-proliferation but we are not complacent," he said. Despite the progress the world community has made since US President Barack Obama convened the first NSS, terrorism and other malicious acts involving nuclear materials and facilities remain a clear and present danger, he said.

"Any breach in nuclear security and safety anywhere could undermine public confidence in nuclear energy," Khurshid said. "India is committed to

upholding and strengthening physical security of nuclear facilities and materials. We are prepared to further strengthen our export control systems in line with the highest international standards," he said.

Highlighting India's commitment to nuclear energy as a safe source of meeting the country's growing demand for power, he said the government envisage a major expansion of atomic energy in the coming decades from just over 5000 MW currently to 20,000 MW by 2020 and on to 60,000 MW by 2030. After the tragedy in Fukushima in 2011, India has comprehensively reviewed safety measures at all its nuclear facilities. "we are strengthening emergency preparedness, monitoring, and response to nuclear accidents," he said.

Source: *The Economic Times*, 25 March 2014.

USA

US Lawmakers Worry Ukraine Crisis Will Impact Nuclear Proliferation

US senators debating aid to Ukraine say Russia's annexation of Crimea decades after Kyiv surrendered its nuclear arsenal could weaken nuclear non-proliferation efforts around the world. The argument is one of many being voiced on Capitol Hill for a strong US response to Russia's actions in Ukraine. In 1994, world powers, including Russia, pledged to uphold Ukraine's territorial integrity in return for Kyiv giving up what was then the world's third-largest nuclear weapons stockpile. Democratic Senator Richard Durbin says Russia has broken its word.

"Russia has not only reneged on that promise, it has invaded Ukraine. [This is] not just a question of the survival of the Ukrainian government, but also a question as to whether or not civilized countries around the world [that are] trying to lessen the threat of nuclear weapons will stand with one voice and condemn the Russians for what they have done," said Durbin. Durbin said nations aspiring to become nuclear powers or expand an existing arsenal are watching events in Ukraine and drawing dangerous conclusions. That point was echoed by Republican Senator Marco Rubio. "Think about if you are one of the countries around the world right now that feels threatened by your neighbours," said Rubio. "And the US and the rest of the world are going to you and saying, 'Do not develop nuclear weapons, South Korea. Do not develop nuclear

weapons, Japan. Do not develop nuclear weapons, Saudi Arabia. We will protect you. We will watch out for you.' What kind of lesson do you think this instance [in Ukraine] sends to them?"

Rubio said Russia's annexation of Crimea and possible further expansion into Ukraine will make nations around the world question security commitments made to them, and could lead them to conclude that they, too, must either build or cling to nuclear weapons to remain safe. Analyst Anthony Cordesman at the Center for Strategic and International Studies doubts Ukraine's experience will factor into decisions made by other governments. "I think they draw their conclusions on the basis of local threats, and not on the basis of Ukraine. Israel, Pakistan, India, North Korea are not going to give up [their weapons], and the countries that can acquire nuclear weapons or are trying to, like Iran, are going to make these choices based on other criteria," said Cordesman.

At the Capitol, however, many senators warn of dangers if vulnerable countries conclude that world powers cannot or will not stand up for them. Some describe the Obama administration's response to Russia's actions as insufficient, and are urging military aid for Ukraine as well as US natural gas exports to Europe to lessen the region's dependency on Russian energy. The Senate bill being debated would provide loan guarantees to Ukraine, codify penalties against Russian officials, and shift America's contributions to the International Monetary Fund in a way that could facilitate additional loans to Kyiv. Expected to pass 3rd week of March, the bill would have to be reconciled with separate legislation in the House of Representatives.

Source: *Michael Bowman, Voice of America*, 25 March 2014.

US senators debating aid to Ukraine say Russia's annexation of Crimea decades after Kyiv surrendered its nuclear arsenal could weaken nuclear non-proliferation efforts around the world.

NUCLEAR TERRORISM

GENERAL

G7 Leaders Take Part in WMD War Games (And the Good News is, They Won!)

- PM, US president Barack Obama and other leaders took part
- Faced with a scenario involving terrorists getting hold of WMD
- Compared with the 1980s' movie WarGames, starring Matthew Broderick

- The summit is aimed at preventing the situation envisaged in the war game

David Cameron and his fellow world leaders at a major international summit 24 March took part in a war game to test how they would react to an outbreak of nuclear terrorism.

At the NSS in The Hague the PM, US president Barack Obama and other leaders were faced with a nightmare scenario involving terrorists potentially getting hold of a weapon of mass destruction. The organisers of the summit said the leaders were faced with a 'fictitious but realistic scenario' about the possibility of nuclear material going missing.

In a series of anonymous tests the leaders were asked to respond to various events, using a touch screen to record their answers.

The NSS organisers said: 'This is the first time that an interactive

approach of this nature has been taken at such an extensive summit.' The event has been compared with the 1980s' movie WarGames, which starred Matthew Broderick as a hacker who accesses a US military supercomputer, which asks him if he would like to play a game of 'global thermonuclear war' and nearly triggers one in real life. The simulation had a happy outcome, with the collective decisions made by the world leaders meaning they were able to stop the terrorist network before it could actually build a dirty bomb.

NSS spokesman Frank Wassenaar said they preferred to call it a 'scenario-based policy discussion' rather than a war game and the leaders were 'enthusiastic' participants. They were shown a video setting out the scenario, which was then followed by a discussion of ideas between the leaders. Following that there were two more video updates, designed to reflect the changing picture in a fast-moving incident. Mr Wassenaar said: 'We had an enthusiastic reaction. It was quite innovative and not the convention in a summit like this. Usually the leaders of delegations just make a statement.' The leaders were given a series of multiple-choice responses to the scenarios, with four potential

options to select from. Their anonymous responses were then shared with the group. Mr Wassenaar said: 'The leaders debated freely. Of course, there is no good solution or bad solution.'

The summit at The Hague is aimed at preventing the kind of situation envisaged in the war game. A No 10 source said: 'The war games-style tabletop session was an innovative way of bringing the summit to life and encouraging leaders to share their own thoughts and experiences of handling such tense situations. 'The PM liked the interactive style and the fact leaders were confronted with different events they had to respond to. 'And it should be reassuring to people that they took the right decisions to ensure a happy ending where the terrorists didn't succeed in making a bomb.' Some 35 of the countries present - including the

UK - agreed to allow teams of international experts to evaluate the effectiveness of their nuclear security measures, and international guidelines on the protection of nuclear materials will be translated into national legislation.

Source: Mail Online, 26 March 2014.

JAPAN AND USA

Joint Statement by the Leaders of Japan and the US on Contributions to Global Minimization of Nuclear Material

Joint Statement by the Leaders of Japan and the US on Contributions to Global Minimization of Nuclear Material. Recalling the history of Japan-US bilateral collaboration on advanced nuclear activities as well as the IAEA conclusion that all nuclear materials in Japan stay in peaceful activities; Recalling Japan-US cooperation including through the GTRI which strengthened nuclear security worldwide by reducing sensitive nuclear material in Japan and other countries and securely transporting the material to the US; and, Recalling President Obama's remarks at Hradcany Square, Prague, Czech Republic on April 5, 2009;

Japan and the US reaffirm our determination to strengthen nuclear security and to further cooperate, through activities such as our bilateral NSWG and the GTRI, toward our mutual goal of preventing nuclear terrorism. On 24 March in The Hague, on the occasion of the third Nuclear Security Summit, PM Abe and President Obama pledged to remove and dispose all HEU and separated plutonium from the Fast Critical Assembly (FCA) at the JAEA in Japan. This effort involves the elimination of hundreds of kilograms of nuclear material, furthering our mutual goal of minimizing stocks of HEU and separated plutonium worldwide, which will help prevent unauthorized actors, criminals, or terrorists from acquiring such materials. This material, once securely transported to the US, will be sent to a secure facility and fully converted into less sensitive forms. The plutonium will be prepared for final disposition. The HEU will be downblended to LEU and utilized for civilian purposes.

Japan and the US reaffirm our determination to strengthen nuclear security and to further cooperate, through activities such as our bilateral NSWG and the GTRI, toward our mutual goal of preventing nuclear terrorism.

Committing to remove and dispose all HEU and separated plutonium from the FCA, Japan and the US reaffirm our belief that the most cutting edge sciences do not necessarily require the use of the most proliferation sensitive materials. In this context, our two countries plan to work together to design new enhancements to the FCA, expanding the facility's scope to include important research on the transmutation and disposition of nuclear waste. Additionally, to ensure that Japan can safely and securely further its important work on nuclear research and medical isotope production, the US will continue to accept research reactor spent fuel from several Japanese facilities that utilize LEU.

Malaysia not being a nuclear power and a country with nuclear capability, it found it important to participate in the 2014 NSS, to be held in The Hague for two days beginning 24 March, as it was a preventive measure to deal with nuclear terrorism.

This pledge complements the significant role that both Japan and the US are playing in finding new ways to continue improving global nuclear security. Many of the remaining gains that the international community can make in this area will require difficult decisions, and Japan has demonstrated its leadership by resolving to remove all special nuclear material from the FCA, consistent with all Summit Communiqués' spirit to minimize stocks of nuclear material. Our two countries encourage others to

consider what they can do to further HEU and plutonium minimization.

Source: <http://www.globalsecurity.org/> , 24 March 2014.

MALAYSIA

Malaysia's Stand on Nuclear Issue Consistent – Envoy

The Malaysian government has adopted a consistent stand with regard to nuclear weapons and nuclear materials issues, said Malaysian Ambassador to the Netherlands Datuk Dr Fauziah Mohd Taib. She said that despite Malaysia not being a nuclear power and a country with nuclear capability, it found it important to participate in the 2014 NSS, to be held in The Hague for two days beginning 24 March, as it was a preventive measure to deal with nuclear terrorism. "Who knows, one day we will need to use nuclear materials, so we can learn from these people how they develop or build the nuclear facilities, factories, their plants in a very secure manner," she told Malaysian journalists 23 March.

She said the countries with the highest nuclear capabilities in the world included the US, France, Japan, Russia, South Korea, Ukraine, China and North Korea. Fauziah said that in terms of nuclear weapons, the five top countries were the US, Russia, the United Kingdom, France and China. "But we are nowhere in terms of nuclear capabilities, and nuclear weapons," she said. She said the aim of the summit, the idea of which was mooted by US President Barack Obama, was to basically prevent nuclear terrorism worldwide. "It is his fear that nuclear materials are being sourced out illegally and maliciously to non-state actors, to terrorists," she said. She said the ultimate objective of the summit should be to eliminate nuclear weapons from the world.

Source: Suriati Sidek Ahmad, National News Agency of Malaysia, 23 March 2014.

NETHERLAND

Leaders Meet to Address Nuclear Terrorism

Many countries have been slow to acknowledge the threat of nuclear terrorism, with experts saying a 'dirty bomb' could kill hundreds of thousands of

people. A summit is being held in The Hague to address the danger. Last April's bomb attack at the Boston marathon, which killed three people and left over 250 more injured, shook the US like no other incident since Sep 11, 2001. But what if such a terrorist attack had involved a nuclear "dirty bomb"? "The consequences would be disastrous," said Giorgio Franceschini of the Peace Research Institute Frankfurt (HFSK). There would be lengthy evacuation and laborious decontamination measures around "ground zero"; the concerned area would be contaminated, the population nearby would feel they were at risk, citizens' rights would be restricted, and governments destabilized.

Preventing such a scenario is the idea behind the meeting of 53 heads of government, and representatives of the United Nations, the IAEA, Interpol, and the EU on 24 March in The Hague in The Netherlands. It's the third edition of the NSS, set up by US President Barack Obama in 2009 with the goal of finding an action plan to stop nuclear terrorism around the globe. The first such summit took place in Washington, while the second happened two years later in the South Korean capital Seoul. International efforts have made progress. To date, there hasn't been an attack with radioactive bombs, but nuclear terrorism is no longer just an abstract idea. "The terrorist group Al Qaeda and the Japanese sect Aum Shinrikyo were close to obtaining the material for a nuclear bomb," said Franceschini. "They had looked into nuclear bomb ignition triggers, but in the end failed with their project." Chechen terrorists are also believed to have tried to use a radioactive weapon in Moscow.

The terrorist group Al Qaeda and the Japanese sect Aum Shinrikyo were close to obtaining the material for a nuclear bomb," said Franceschini. "They had looked into nuclear bomb ignition triggers, but in the end failed with their project." Chechen terrorists are also believed to have tried to use a radioactive weapon in Moscow.

Secure Weapon Grade Material:

Securing weapon grade radioactive material will therefore top the nuclear security summit agenda. According to recent official data, there are 1,390 tons of HEU worldwide as well as 490 tons of plutonium, of which 260 tons are used for civil purposes, such as in hospitals. "Some of this radioactive material is constantly in circulation. That's no longer just a national matter," said Michelle Cann of Washington-based think tank Partnership for Global Security. "We have to

Pakistan's nuclear security was supported by five pillars - a strong command and control system led by the NCA; an integrated intelligence system; a rigorous regulatory regime; a comprehensive export control regime; and active international cooperation. Pakistan's security regime covered physical protection, material control and accounting, border controls and radiological emergencies.

prevent this material from falling into the wrong hands." An incident in December 2013 in Mexico illustrated this threat: a vehicle carrying medical equipment with radioactive cobalt-60 was hijacked and stolen. The material could have served to build a so-called "dirty bomb."

Reduce Stocks: "But terrorists could also obtain weapon grade nuclear material on the nuclear black market or steal HEU from a research reactor," warned Franceschini, adding that in politically unstable nuclear powers, such as Pakistan, in particular, it would be easy for terrorist organizations to get their hands on such material. Western military facilities may also have security deficiencies. According to recent US media reports, three peace activists, among them an 82-year-old nun, managed to break into a military facility in which tons of nuclear material were stored. ...

Source: <http://www.dw.de/leaders-meet-to-address-nuclear-terrorism/a-17515501>, 23 March 2014.

NUCLEAR SAFETY

PAKISTAN

Pak Gives Top Priority to Nuclear Safety: PM

PM Muhammad Nawaz Sharif on 24 March said that Pakistan attached highest importance to nuclear security because it was directly linked to country's national security. "Pakistan is a responsible nuclear weapons state and pursue a policy of nuclear restraint, as well as credible minimum deterrence," the PM said while speaking at the 3rd NSS here "Our region needs peace and stability for economic development that benefits its people. That is why, I strongly advocate nuclear restraint, balance in conventional forces and ways to resolve conflicts," the PM said.

He said Pakistan's nuclear security was supported by five pillars - a strong command and control system led by the NCA; an integrated intelligence system; a rigorous regulatory regime; a comprehensive export control regime; and active international cooperation. The PM said Pakistan's security regime

covered physical protection, material control and accounting, border controls and radiological emergencies. He said that Pakistan's nuclear materials, facilities and assets were safe and secure and the country's nuclear security regime was anchored in the principle of multi-layered defense for the entire spectrum - insider, outsider or cyber threat.

The PM said Pakistan has established a Centre of Excellence that conducts intensive specialized courses in nuclear security, physical protection and personnel reliability, adding that Pakistan was ready to share its best practices and training facilities with other interested states in the region and beyond. ... PM Nawaz Sharif said Pakistan had been running a safe, secure and safeguarded civil nuclear programme for more than forty years and the country had the expertise, manpower and infrastructure to produce civil nuclear energy. The PM called for Pakistan's inclusion in all international export control regimes, especially the Nuclear Suppliers Group. He said international treaties and forums should supplement national actions to fortify nuclear security. He said Pakistan was a party to the CPPNM and worked closely with the IAEA to deal with safety and security of radioactive sources and illicit trafficking of nuclear materials. The PM said Pakistan regularly submitted reports to the UN Security Council 1540 Committee on the measure the country take to exercise control over transfer of sensitive materials and technologies. "Looking back, we can say with confidence that our decisions and commitments have spurred national action, promoted international cooperation and fostered nuclear security culture," the PM said adding that Pakistan has constructively contributed to this process.

Source: Pakistan Observer, 25 March 2014.

UAE

UAE to Present National Report at Global Nuclear Safety Meeting

The UAE is set to present its second national report at the sixth Review Meeting on the Convention on Nuclear Safety that is taking place at the headquarters of the IAEA in Vienna, Austria and from March 24 to April 4, 2014. ... The UAE National Report describes the measures the UAE has taken to fulfil

its obligations as a Contracting Party to the Convention with particular focus on the lessons learnt from the accident at the Fukushima Daiichi nuclear power plant in Japan. The Report includes a summary of the actions taken by the UAE to support the IAEA's Nuclear Safety Action Plan.

The UAE National Report is the result of a collective effort of various national organisations including the national regulatory body, the Federal Authority for Nuclear Regulation (FANR); the operator, the ENEC; and other leading organisations. The UAE's Permanent Representative to the IAEA, Ambassador Hamad Al Kaabi, and other senior officials from FANR and ENEC will present the UAE National Report at the IAEA Headquarters, which will be open for discussion along with the national reports of other countries. "The sixth Review

Meeting is a great opportunity to highlight the contribution the UAE has made to global nuclear safety in particular since the Fukushima accident. As the UAE moves forward with the development of its peaceful nuclear energy programme, the country is keen to participate actively in the CNS review meetings by providing insight on how to strengthen the Convention," Ambassador Hamad Al Kaabi, said. ...

Source: Gulfnews.com, 25 March 2014.

NUCLEAR WASTE MANAGEMENT

AUSTRALIA

Nuclear Waste Dumps Could Power Economy, Says Deloitte

Australia is being urged to have a mature debate about building a waste management hub for the world's nuclear energy industry, according to a Deloitte report that identifies 19 under-recognised "growth pockets" that would boost growth by \$150 billion. Deloitte Access Economics analyst Chris Richardson said nuclear power was among several ideas business should be considering as a way of tackling the end of the resources boom. ...

He said the need for clean air in Asia meant gas demand would rise, while rising wealth would spur more appetite for food and travel, all of which Australia provides. The ageing population and constrained federal and state budgets were also opening opportunities. "Look at diabetes. We're

living longer but not necessarily healthier and that's a big set of business opportunities. If you look at what businesses go bust in Australia, they are rarely related to the health sector. If you have a bad back and toothache, you're going to do something about it. Some of the best businesses are going to be more immune from the business cycle."

According to the Deloitte's Positioning for prosperity? Catching the next wave, many growth drivers are outside traditional strengths of mining, agriculture, international education, tourism and wealth management. New businesses are needed to service residential aged care, retirement living and leisure and preventive health. Other areas include retraining ageing workers, providing new forms of financing for cash-poor but asset-rich retirees, private schooling to service higher birth rates and parcel delivery for online shopping.

These businesses are likely to grow between 5.1 per cent and 3.8 per cent a year for the next 20 years, outpacing economic growth, which has averaged about 3 per cent over the long term. Mr Richardson said other niche -sectors were clean coal technology to offset climate concerns; ocean farming and next-

generation nuclear. Deloitte argues much of the Australian continent is geologically stable, with low rainfall, limited erosion, extremely slow groundwater velocity and low seismic activity. "Australia also has the political and social stability lacking in some alternative sites, such as southern Africa, western China and Argentina." A focus on selling nuclear waste "storage" to global customers would also remove one of the biggest barriers to nuclear power around the world.

Technologies are being developed in Australia that may increase the stability of stored nuclear waste, while research elsewhere suggests spent material may be used as fuel for electricity generation. "By some estimates, nuclear waste could not only be used up over time, but could generate enough electricity to power the planet for 300 years," Deloitte said in the report. "Clearly, the people of Australia have choices to make." We would simply urge a mature debate that weighs safety, cost, environmental impact, community sentiment and other dimensions of the issue, while examining it through the lens of Australian advantage and global opportunity."

Source: Jacob Greber, *Financial Review*, 24 March 2014.

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Centre for Air Power Studies

The Centre for Air Power Studies (CAPS) is an independent, non-profit think tank that undertakes and promotes policy-related research, study and discussion on defence and military issues, trends and developments in air power and space for civil and military purposes, as also related issues of national security. The Centre is headed by Air Marshal Vinod Patney, SYSM PVSM AVSM VrC (Retd).

Centre for Air Power Studies

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