

Nuclear, Missile & Space Digest

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All the articles are available from the mentioned sources in original format.

A. US & Europe

U.S. Missile Shield Plan Seen Stoking China Fears

The U.S. decision to expand its missile-defense shield in the Asia-Pacific region, ostensibly to defend against North Korea could feed Chinese fears about containment by the U.S. and encourage Beijing to accelerate its own missile program, analysts say.

The new effort, which includes the deployment of an early-warning radar system, known as X-Band, in Japan—and possibly another in Southeast Asia—reflects America’s deepening military and security engagement in the region after a decade focused on the Middle East and Afghanistan. China’s official response has been relatively muted so far. Zhu Feng, a leading Chinese security expert at Beijing University, said the U.S. announcement is “more likely to speed up an arms race.”

A senior U.S. official acknowledged that the Pentagon faces a hard sell convincing China’s People’s Liberation Army that the missile-defense architecture isn’t designed to encircle them. “It sure looks like containment,” the official said. U.S. State Department spokeswoman Victoria Nuland said the missile defenses aren’t directed at containing China.

<http://forum.globaltimes.cn/forum/showthread.php?t=30019>

Feds authorize restart of Y-12’s nuclear weapons plant’s operations

By Frank Munger,
knoxnews.com, August 15, 2012

OAK RIDGE — Nearly three weeks after a stunning security breach shut down

the Y-12 nuclear weapons plant, the government on Wednesday authorized the restart of nuclear operations. The Oak Ridge plant will resume work on nuclear warhead parts and the handling and processing of highly enriched uranium, but it won’t be — a federal spokesman emphasized — a return to normal.

“It won’t be normal at all,” said Steven Wyatt of the National Nuclear Security Administration’s Oak Ridge office. There will be greatly enhanced security oversight, with additional federal personnel on site to review the contractor operations and planning activities, he said.

B&W Y-12, the managing contractor, ordered a “security stand-down” on Aug. 1, soon after the unprecedented intrusion July 28 by three Plowshares protesters, who reportedly scaled a ridge on the north side of Y-12 and walked all the way to the plant’s high-security inner core. The protesters — Sister Megan Rice, an 82-year-old Catholic nun; Michael R. Walli, 63; and Greg Boertje-Obed, 57 — used bolt-cutters to pass through a series of sensor-laden security fences and reach the fortress like uranium storehouse, which they defaced with spray-painted protest messages and human blood.

http://www.knoxnews.com/news/2012/aug/15/feds-authorize-restart-y-12s-nuke-operations/?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=1d45d7ef51-RSS_EMAIL_CAMPAIGN&utm_medium=email

Pak nuke stockpile not ‘endangered’ by air base attack: US

Press Trust of India,
August 17, 2012

Washington: The US on Thursday said

Pakistan's nuclear stockpile was not "endangered" following a daring terrorist attack on the key Kamra Air Force base, believed to house atomic weapons. "I do not have any indication that this particular attack (Kamra) has endangered the Pakistani nuclear stockpile," Pentagon Press Secretary George Little told reporters during an off camera news conference.

He was responding to news reports coming from Pakistan that the attack on the military base in Kamra had threatened the safety of Pakistan's nuclear weapons. "As for the safety of the Pakistani nuclear programmes, we obviously work closely and on regular basis with Pakistani counterparts towards the safety of their nuclear programme. It is our sense that the Pakistani government maintains good security around their nuclear arsenal," Little said.

The Pakistani Taliban have claimed the responsibility of the attack that left nine attackers and a soldier dead and parts of the complex ablaze. But Pentagon maintained that it has no information on this. "I can't confirm attribution for this particular attack. Obviously we are concerned and saddened by this attack," Little said.

<http://www.ptinews.com/news/-djalsty#dv2>

Nuclear waste: America's 'biggest security threat' By

Steve Hargreaves, *CNN*, April 1, 2011

NEW YORK (CNNMoney) — In the United States, 63,000 tons of nuclear waste, the sum total of all the waste generated by decades of nuclear power, sits right where it was created — at the power plants themselves. Often, these power plants are very close to major population centers — Washington, Boston, New York City, Philadelphia and Chicago have reactors

within the 50-mile fallout zone.

If the waste catches fire, a situation Japanese officials are racing to prevent at Japan's Fukushima Daiichi plant, critics say it could effectively render an area the size of half of New Jersey permanently uninhabitable. "It's probably the single greatest security vulnerability in the United States," said Kevin Kamps, radioactive waste specialist at Beyond Nuclear, a watchdog group. How close is your home to a nuclear power plant?

Kamps and many other industry critics want lawmakers to mandate that most of the waste, known as spent fuel, be stored away from the main reactors in certified steel and concrete casks, then have those casks placed in fortified buildings or earthen bunkers

http://money.cnn.com/2011/04/01/news/economy/nuclear_waste/index.htm

Handle With Care: Communities, Collaboration, And What Canada Can Teach The U.S. About Managing Used Nuclear Fuel Tom Isaacs, *The*

Algoma News, August 29, 2012

In 2009, the Yucca Mountain Nuclear Waste Repository was cancelled and the U.S. found itself without a long-term strategy for managing its growing stockpiles of used nuclear fuel. In the wake of that failure President Obama asked the Secretary of Energy to convene a Blue Ribbon Commission on America's Nuclear Future. Its mission was twofold: to review existing policies and relevant experiences for managing used nuclear fuel and to recommend a new plan.

My role on the Commission was that of lead advisor, and over the course of two years, from 2010 to 2012, we heard from thousands of individuals and organizations on a wide range of issues. There were numerous public meetings and numerous fact-finding missions, both in the U.S. and abroad.

One of the key lessons to emerge from our work was that the Yucca Mountain Project was halted not because the science was bad—on the contrary, the repository approach is one that many other technologically advanced countries are actively pursuing—but because the process did not adequately involve the public, their elected representatives, and other key parties in decision-making.

<http://www.reuters.com/assets/print?aid=USBRE87TOY220120830>

The US Is Investigating Claims That Power Plants Are Vulnerable To Hackers

Jim Finkle, *Reuters*, August 22, 2012

BOSTON (Reuters) - The U.S. government is looking into claims by a cyber security researcher that flaws in software for specialized networking equipment from Siemens could enable hackers to attack power plants and other critical systems.

Justin W. Clarke, an expert in securing industrial control systems, disclosed at a conference in Los Angeles on Friday that he had figured out a way to spy on traffic moving through networking equipment manufactured by Siemens' RuggedCom division.

The Department of Homeland Security said in an alert released on Tuesday that it had asked RuggedCom to confirm the vulnerability that Clarke, a 30-year-old security expert who has long worked in the electric utility field,

had identified and identify steps to mitigate its impact...

<http://www.businessinsider.com/flaw-in-us-computer-software-may-allow-hackers-to-control-nuclear-power-plants-2012-8#ixzz257G13crf>

What's next for the NRC: A conversation with Allison Macfarlane *Bulletin*

Staff, August 16, 2012

Allison Macfarlane, the recently appointed chairman of the Nuclear Regulatory Commission, talks about her plans for dealing with fellow commissioners, the agency's response to the Fukushima disaster, and the new uranium enrichment technology called SILEX.

Sworn in as chairman of the Nuclear Regulatory Commission a month ago, Allison Macfarlane is an expert on nuclear waste and the first geologist to serve on the commission. Before beginning her one-year term as the NRC's 15th chairman, Macfarlane was an associate professor of environmental science and policy at George Mason University, as well as an affiliate of MIT's Program in Science, Technology, and Society and Harvard University's Belfer Center for Science and International Affairs.

Macfarlane's research has focused on environmental policy and international security issues associated with nuclear energy. From 2010 to 2012 she was a member of the Blue Ribbon Commission on America's Nuclear Future, a panel appointed...

http://thebulletin.org/web-edition/features/whats-next-the-nrc-conversation-allison-macfarlane?utm_source=Paul%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=4657c7b652-RSS_EMAIL_CAMPAIGN&utm_medium=email

U.S. nuclear industry turning weapons into clean power

Lynn Edward Weaver,
Orlando Sentinel, August 19, 2012

Disarmament hasn't gotten much attention from the presidential candidates, but some surprising progress has been made in the effort to reduce the quantity of nuclear-weapons materials so that they don't fall into the hands of irresponsible governments or terrorist groups. Much of the credit for this goes to the U.S. nuclear industry.

Under a pact signed in 2000, the United States and Russia agreed to eliminate 34 metric tons of surplus weapons-grade plutonium in each country. That might not sound like a lot, considering there is an estimated 200 tons worldwide, but it's enough plutonium to arm 17,000 nuclear warheads. So destroying what amounts to 68 tons of weapons plutonium — one-third of the world's supply — is a major step forward.

http://articles.orlandosentinel.com/2012-08-19/opinion/os-ed-nuclear-energy-plutonium-081912-20120817_1_weapons-plutonium-nuclear-plants-conventional-uranium-fuel?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=60236c6af2-RSS_EMAIL_CAMPAIGN&utm_medium=email

Swedish resource world's second largest

World Nuclear News, August 23, 2012

Newly revised figures have expanded resource estimates for Aura Energy's Haggan project to 800 million pounds U3O8 (307,718 tU), making the Swedish project the second largest undeveloped uranium resource in the world.

Haggan, previously known as Storsjon, forms part of a large uranium field in

central Sweden, with uranium occurring with molybdenum, vanadium and zinc in black shales. The newly published JORC-compliant resource estimate shows an increase of nearly 170 million pounds over the 631 million pounds (242,710 tU) reported by Australian company Aura in August 2011 and includes mineralisation in the separate Marby permit area for the first time.

"This significant upgrade to the resource and the inclusion of the Marby permit shows that we were correct in our anticipation of a notable extension to Haggan," Aura managing director Bob Beeson said.

http://www.world-nuclear-news.org/ENF-Swedish_resource_worlds_second_largest-2308128.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=9f54c79b82-RSS_EMAIL_CAMPAIGN&utm_medium=email

IAEA head visits Finnish nuclear cave

UUTISET, August 23, 2012

Yukiya Amano, Director General of the International Atomic Energy Agency, will on Thursday visit the world's first permanent storage facility for nuclear waste on Finland's west coast. Finland's ambitious project to bury nuclear waste in a facility meant to last 100,000 years has recently attracted a great amount of international interest.

The disposal cave is being built near the Okiluoto power plant by Posiva, a company jointly owned by energy utilities Teollisuuden Voima (TVO) and Fortum. On Thursday, the repository will welcome the head of the UN atomic agency, Yukiya Amano.

"This is a great opportunity for TVO to show what significant projects are in progress here," says TVO's

Communications Manager Lauri Inna. "Finland is a world leader in permanent disposal of spent nuclear fuel. Energy solutions are contemplated in many countries, and Olkiluoto offers one solution how to take care of this." Amano is in Finland on a three-day visit that began on Wednesday. He is discussing nuclear security and the situation in Iran with the Finnish political leadership.

http://yle.fi/uutiset/iaea_head_visits_finnish_nuclear_cave/6267030?utm_source=Paulo%27s+Comer+Daily+Nuclear+News+Digest&utm_campaign=9f54c79b82-RSS_EMAIL_CAMPAIGN&utm_medium=email

KGHM, PGE, Tauron, Enea in Talks on Joint Nuclear Power Project *Fox News, August 16, 2012*

PYZDRY, Poland—Four companies controlled by the Polish government are in talks to build a nuclear power plant together, the country's treasury minister said Thursday.

"Talks between the companies are under way on financial engagements into the nuclear project," Mikolaj Budzanowski said. The four companies are Enea SA (ENA.WA), Tauron Polska Energia SA (TPE.WA), PGE SA (PGE.WA) and KGHM SA (KGH.SA).

The Polish government has charged PGE to build a nuclear power plant featuring three reactors and a capacity of about 3,000 megawatts. The power plant is expected to be launched after 2020.

Poland gets 95% of its electricity from coal, but is aiming for 16% of it to come from nuclear power by 2030.

<http://www.foxbusiness.com/news/2012/08/16/kgmh-pge-tauron-enea-in-talks-on-joint-nuclear-power-project/print#ixzz257GcOgl8>

Belgian atomic watchdog says tough to prove Doel 3 safe *Ben Deighton, Reuters,*

August 16, 2012

BRUSSELS, Aug 16 (Reuters) - GDF Suez's Belgian unit, Electrabel, will find it difficult to prove its Doel 3 nuclear reactor is safe enough to operate, Belgian regulator FANC said on Thursday, raising the prospect that the 30-year-old unit could stay shut for good. Belgium has halted the 1,006 megawatt Doel 3 reactor until at least the end of August after the discovery of suspected cracks in the core tank.

Speaking after a meeting of regulators, FANC Director General Willy De Roovere said it was always hard for a company to meet a requirement to prove a nuclear plant is safe. He told a news conference Electrabel would have to show that "in a period of the remaining lifetime there is no single risk, there is no risk at all that cracks can go (on to produce leaks)".

A spokeswoman for Electrabel said: "Is it safe or not to continue the production of Doel 3 ... that's what we will have to prove to the FANC." The component was built by now defunct Dutch company Rotterdamsche Droogdok Maatschappij, which also constructed the core tank for another Belgian unit, Tihange 2, as well as parts for nuclear plants throughout Europe and in the Americas. Beyond Belgium, Rotterdamsche Droogdok was responsible...

http://www.reuters.com/article/2012/08/16/belgium-nuclear-idUSL6E8JGCI020120816?utm_source=Paulo%27s+Comer+Daily+Nuclear+News+Digest&utm_campaign=4657c7b652-RSS_EMAIL_CAMPAIGN&utm_medium=email

Berlin set to back nuclear development abroad

Christina Ruta & Sean Sinico, *DW Germany*, August 14, 2012

The German government is considering backing the construction of nuclear plants in foreign countries through financial guarantees. But campaigners say this goes against Germany's pledge to cut all forms of nuclear power.

The Fukushima nuclear disaster following the earthquake and tsunami in Japan in March 2011, sent shockwaves around the world. In Germany, there was a massive public outcry against nuclear energy, which prompted the government to do a U-turn on its energy policy and pledge to get rid of all nuclear power by 2022.

Now, over a year later, the German government is considering backing the construction of nuclear reactors on foreign soil, with so-called Hermes guarantees. This came to light as a result of an inquiry to the government posed by Greens parliamentarian Ute Koczy.

http://www.dw.de/dw/article/0,,16165340,00.html?utm_source=Paul%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=1d45d7ef51-RSS_EMAIL_CAMPAIGN&utm_medium=email

Czech Ministry Opposes Nuclear Cost Guarantees, Hospodarske Says

Peter Laca, *Bloomberg*, August 22, 2012

The Czech Finance Ministry is against a plan that would make the government guarantee prices of electricity produced by nuclear power stations, *Hospodarske Noviny* reported, citing a ministry document.

The Ministry of Industry and Trade proposed in its long-term energy strategy that the state provide the

guarantees before the construction of new units at the Temelin nuclear power plant, the newspaper said.

http://www.bloomberg.com/news/2012-08-22/czech-ministry-opposes-nuclear-cost-guarantees-hospodarske-says.html?utm_source=Paul%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=93459ec32e-RSS_EMAIL_CAMPAIGN&utm_medium=email

B. Russia & Central Asia

Reports: Russia plans naval missile defense system similar to US

Aegis radars *Associated Press*, August 31, 2012

MOSCOW — A top defense industry official reportedly says Russia plans to develop its own sea-based missile interceptor program similar to the U.S. Aegis system. The Aegis radar systems technology is carried by warships with missile interceptors and can destroy missiles mid-flight. It is part of the U.S.-led NATO plan to deploy missile defense elements in Europe that has long irritated Moscow.

The U.S. says Aegis would stave off threats from rogue nations such as Iran. Moscow contends it would undermine Russia's nuclear forces. Anatoly Shlemov of the United Shipbuilding Company told the RIA Novosti news agency Friday that the Kremlin "has definitely assigned a task" for Russia's defense industry to come up with naval missile interceptors. Shlemov refused to elaborate because the plans are classified.

http://www.washingtonpost.com/world/europe/reports-russia-plans-naval-missile-defense-system-similar-to-us-aegis-radars/2012/08/31/3617d114-f33c-11e1-b74c-84ed55e0300b_story.html

Polish missile defense plan puts Poland first *Warsaw*

Business Journal, August 13, 2012

President Komorowski's call for the creation of Polish missile defense is not about Polish-American relations, writes the German Marshall Fund's Micha³ Baranowski

In an August 6, 2012 interview in the Polish weekly *Wprost*, President Bronis³aw Komorowski stated that Poland is prepared to create its own anti-aircraft and missile defense system as part of a NATO shield. While some saw the statement as a rejection of US President Barack Obama's proposed missile defense system, others viewed it as a sign of Poland's weakening military alliance with the United States. Both arguments are misleading.

The missile and air defense system proposed by the Polish president is qualitatively different than the American Missile Defense System (MD), scheduled for deployment by 2018. The proposed Polish system would target short and medium range missiles from the near abroad, while the American MD shield would be capable of shooting down long range ballistic missiles originating from rouge states such as Iran.

<http://www.wbj.pl/article-60050-polish-missile-defense-plan-puts-poland-first.html?typ=wbj>

Russia and Iran at odds over missile deal *Michael Theodoulou*,

The National, August 19, 2012

A long-simmering but little-publicised dispute is heating up between Iran and Russia over Moscow's refusal to supply Tehran with sophisticated missiles that would complicate any Israeli or US attempt to attack Iran's nuclear facilities.

Iran resents that Russia, a nominal ally, pulled the plug two years ago on an US\$800 million (Dh2.93 billion) deal to deliver five S-300 air defence systems, which can detect and destroy missiles and low-flying aircraft.

Russia is furious that Iran slapped it with a breach-of-contract lawsuit for \$4bn, an amount equivalent to almost a third of the country's annual arms sales. The row escalated last week when a Russian official warned that Moscow would take a tougher stand against Iran's nuclear programme unless Tehran withdraws the lawsuit.

<http://www.thenational.ae/news/world/middle-east/iran-and-russia-at-odds-over-missile-deal>

Russia Calls on U.S. to Ratify Nuclear Test Ban Treaty *ASTANA, RIA Novosti*,

August 29, 2012

U.S. ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT) will speed up the document's entry into force, the speaker of the upper house of the Russian parliament said on Wednesday.

"Naturally, we are worried by the lack of progress in the ratification of the Comprehensive Nuclear Test Ban Treaty. We are convinced that the treaty's ratification by the U.S. would significantly speed up the process of the document coming into force," Federation Council Speaker Valentina Matviyenko said at a nuclear conference in the Kazakh capital Astana.

She said Russia's proposal on a treaty to ban the deployment of weapons in space "is being blocked by certain Western states." Adopted by the U.N.

General Assembly in 1996, the CTBT is yet to come into force. It has been signed by 183 and ratified by 157 countries, but major nuclear powers either refused to sign (India) or failed to ratify (U.S. and China).

http://en.ria.ru/russia/20120829/175496736.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=43c20fe063-RSS_EMAIL_CAMPAIGN&utm_medium=email

C. West Asia

Egypt may resume civilian nuclear program, Morsi

says *Israel Hayom*, August 30, 2012

Egyptian nuclear ambitions were discarded following the 1967 defeat at the hands of Israel. Egypt signed the Nuclear Non-Proliferation Treaty in 1968 but delayed ratifying it, presumably because it had evidence that Israel had embarked on a nuclear weapons program • Ehud Barak: Israel doesn't see Egypt working toward a military nuclear program.

Egypt is considering reopening its nuclear energy program, President Mohammed Morsi told a group of Egyptian expatriates living in China on Wednesday evening.

“Cairo is considering anew the Egyptian nuclear program, which will be purely for civilian purposes, to provide clean energy to the citizens of Egypt,” Morsi said. He was in China on an official visit before traveling to Iran to attend the Non-Aligned Movement summit in Tehran.

Responding to the report, Israeli Defense Minister Ehud Barak told Army Radio on Thursday morning that there were “many nations” that had civilian nuclear energy programs, and that “Israel doesn't see Egypt working toward a military nuclear program.”

http://www.israelhayom.com/site/newsletter_article.php?id=5612&utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=43c20fe063-RSS_EMAIL_CAMPAIGN&utm_medium=email

Abu Dhabi “must be ready” to store spent fuel, says Hans Blix

Florian Neuhof, *The National*, August 31, 2012

Abu Dhabi may have to develop storage capacity for spent fuel from the nuclear power plants that will become operational from 2017, says the former head of the UN's nuclear watchdog. Emirates Nuclear Energy Corporation (Enec), the owner of the four reactors being built in Barakah in Al Gharbia, this month signed a US\$3 billion (Dh11.01bn) deal to receive sufficient uranium to fuel the plant for 15 years.

So far, no arrangements have been made to deal with the nuclear waste arising from the programme. Abu Dhabi is considering several options, including a scheme to effectively lease the fuel - sending it back to the supplying country after it has been spent.

But the emirate should provide for a fall-back option too, said Hans Blix, who was for 16 years the director general of the International Atomic Energy Agency (IAEA) until 1997. “Any country that launches into nuclear power must also be ready to eventually take care of [spent fuel] within its own territory because an arrangement with a foreign country could one day collapse,” he said.

http://www.thenational.ae/business/energy/abu-dhabi-must-be-ready-to-store-spent-fuel-says-hans-blix?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=43c20fe063-RSS_EMAIL_CAMPAIGN&utm_medium=email

Arab states lead call to censure Israel's own nuclear program

George Jahn,
Associated Press, August 28, 2012

VIENNA, Austria — Muslim nations and Israel are heading for a confrontation at a 154-nation nuclear meeting next month over an Arab initiative to criticize Israel's secretive atomic program.

Documents submitted for that gathering show that Arab nations are seeking Israel's censure — a move the Jewish state says is a sideshow that deflects attention from the real danger to Mideast peace — Iran.

In asking September's International Atomic Energy Agency meeting to reprimand Israel, Jordan says Israel is guilty of thwarting "all initiatives to free the region of the Middle East of weapons of mass destruction, and in particular of nuclear weapons."

Israel, in turn, warns that the Arab initiative is "serving Iran's attempt to divert the attention of the international community ... (from) its quest for nuclear weapons."

Israel is widely assumed to be the only Mideast country with such arms. But it refuses to either confirm or deny its status, sticking to an official policy of ambiguity that, combined with the stalemate over Palestinian demands, feeds tensions in the region.

http://news.nationalpost.com/2012/08/28/iran-leading-call-to-censure-israels-own-nuclear-program-at-international-atomic-energy-agency-meeting-in-september/?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=5842a2cd39-RSS_EMAIL_CAMPAIGN&utm_medium=email

Israel angered over IAEA vote on nuclear arsenal

Press TV, August 29, 2012

Israel has become infuriated by a fresh initiative of Arab member states of the

International Atomic Energy Agency (IAEA) which seeks to launch a global campaign to slam Israel's possession of nuclear stockpile.

The motion tabled by 17 Arab IAEA members has been submitted to a preparatory commission to be put to vote at the Agency's September meeting which is to be attended by 154 countries, the Associated Press reported on Tuesday.

The initiative is widely expected to be ratified, as it enjoys the support of Muslim countries as well as other states critical of Israel's stance on Palestine, the report said. Israel's Ambassador to the IAEA Ehud Azoulay, has censured the initiative, saying the Arab nations have no moral right to point fingers. Tel Aviv has also repeated its allegations against Iran's nuclear energy program, claiming that the new motion seeks to distract attention from Iran's nuclear case at the IAEA.

http://www.presstv.com/detail/2012/08/29/258819/israel-angered-over-iaea-vote-on-nukes/?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=43c20f063-RSS_EMAIL_CAMPAIGN&utm_medium=email

Report on Iran Nuclear Work Puts Israel in a Box

JODI RUDOREN and DAVID E. SANGER, *New York Times*, August 31, 2012

JERUSALEM — For Prime Minister Benjamin Netanyahu, the International Atomic Energy Agency on Thursday offered findings validating his longstanding position that while harsh economic sanctions and diplomatic isolation may have hurt Iran, they have failed to slow Tehran's nuclear program. If anything, the program is speeding up.

But the agency's report has also put Israel in a corner, documenting that

Iran is close to crossing what Israel has long said is its red line: the capability to produce nuclear weapons in a location invulnerable to Israeli attack.

With the report that the country has already installed more than 2,100 centrifuges inside a virtually impenetrable underground laboratory and that it has ramped up production of nuclear fuel, officials and experts here say the conclusions may force Israel to strike Iran or concede it is not prepared to act on its own.

http://www.nytimes.com/2012/08/31/world/middleeast/report-on-iran-nuclear-work-puts-israel-in-a-box.html?_r=1&pagewanted=all

Poll: Most Israelis oppose attack on Iran nuclear facilities *Haaretz, August 16, 2012*

A majority of Jewish Israelis oppose an attack on Iran's nuclear facilities without U.S. cooperation, and think it is unlikely Israel will soon launch a unilateral strike against the Islamic Republic, a poll released Thursday has found. Some 61 per cent of those questioned oppose an Israeli strike, compared to 27 per cent in favor, the poll by the Israel Democracy Institute and Tel Aviv University's Evens Program in Mediation and Conflict Resolution found.

In addition, 56 per cent think the chances are low that Israel would launch such a strike unilaterally, compared to 33 per cent who assume Israel will go ahead anyway. The poll, conducted last week, interviewed 516 respondents and had a 4.5 per cent margin of error.

Speculation, fueled by a flurry of reports and analysis in Israeli media, has snowballed in recent days that a unilateral Israeli attack on Iran is only a matter of months, or even weeks.

Israel sees a nuclear-armed Iran as an existential threat, pointing to repeated statements by Iranian leaders that the Jewish state should be wiped off the map. Iran denies Western allegations that it is seeking to build a nuclear weapon and insists that its nuclear program is solely for peaceful purposes.

http://www.haaretz.com/news/diplomacy-defense/poll-most-israelis-oppose-attack-on-iran-nuclear-facilities-1.458743?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=4657c7b652-RSS_EMAIL_CAMPAIGN&utm_medium=email

Iran doubles underground nuclear capacity: U.N. agency *Fredrik Dahl, Reuters,*

August 30 2012

Iran has doubled the number of uranium enrichment centrifuges it has in an underground bunker, a U.N. report said on Thursday, showing Tehran has continued to expand its nuclear program despite Western pressure and the threat of an Israeli attack.

As Israeli politicians increased their talk of air strikes on Iran's nuclear sites in recent months, the Islamic Republic was rapidly increasing the enrichment capacity of its Fordow site, buried deep underground to withstand any such hit. The U.N. International Atomic Energy Agency also said in its quarterly report on Iran that buildings had been demolished and earth removed at a military site the IAEA wants to inspect, in what Western diplomats see as a determined effort by Tehran to clean up any evidence of illicit nuclear-linked tests.

These "extensive activities" at the Parchin complex, the Vienna-based U.N. agency added, would significantly hamper its investigation

there, if and when inspectors are allowed access. The building, which the IAEA believes is housing a steel chamber for explosives tests, has now been “shrouded”, the report said, in a possible attempt to hide it from satellite cameras.

<http://www.reuters.com/article/2012/08/30/us-nuclear-iran-iaea-idUSBRE87T0Y220120830>

UN nuclear watchdog sets up “Iran Task Force” *Reuters*, August 29 2012

VIENNA, Aug 29 (Reuters) - The United Nations’ nuclear watchdog has set up an Iran Task Force to handle inspections and other issues related to the Islamic state’s disputed atomic activities, an internal IAEA document showed on Wednesday.

The brief announcement by the International Atomic Energy Agency, addressed to agency staff, appeared to be an attempt to focus and streamline the IAEA’s handling of the sensitive Iran file by concentrating experts and other resources in one unit.

The Vienna-based U.N. agency, which regularly inspects Iran’s nuclear sites, has voiced growing concern over the last year of possible military dimensions to the country’s nuclear programme. Tehran says its nuclear work is entirely peaceful.

<http://www.reuters.com/assets/print?aid=USL6E8JTCY920120829>

UN tries again to access suspected Iranian nuclear site *Georg Jahn, Associated Press*, August 24, 2012

It is yet another attempt to get around Tehran’s atomic activities. But Iran has a long-standing refusal to cooperate,

so fears are growing that tensions could spill over into armed conflict. Amid low expectations of success, U.N. nuclear agency officials pushed anew on Friday for access to an Iranian site they suspect was used to work on nuclear arms and cooperation by Tehran on a wider probe of alleged experiments meant to develop such weapons.

Going into the meeting with officials of the International Atomic Energy Agency, Iranian envoy Ali Asghar Soltanieh told reporters both sides were trying to bridge disagreements, adding: “I hope for success.” Senior IAEA official Herman Nackaerts was more circumspect, saying only “his team sought agreement on resolving “all the outstanding issues” — terminology the agency uses for suspected nuclear weapons research and development by Iran. Teheran denies any interest

The Islamic Republic vehemently denies any interest in such weapons and says all its atomic activities are peaceful.

http://www.csmonitor.com/World/Latest-News-Wires/2012/0824/UN-tries-again-to-access-suspected-Iranian-nuclear-site?cmpid=addthis_facebook#.UDf0t2ei3ig.facebook

Signs Suggest Iran Is Speeding Up Work on Nuclear Program *DAVID E. SANGER, New York Times*, August 23, 2012

WASHINGTON — International nuclear inspectors will soon report that Iran has installed hundreds of new centrifuges in recent months and may also be speeding up production of nuclear fuel while negotiations with the United States and its allies have ground to a near halt, according to diplomats and experts briefed on the findings.

Almost all of the new equipment is being installed in a deep underground site on a military base near Qum that is considered virtually invulnerable to military attack. It would suggest that a boast by senior Iranian leaders late last month — that the country had added upward of 1,000 new machines to its installation despite Western sabotage — may be true.

The report will also indicate, according to the officials familiar with its contents, that Iran is increasingly focused on enriching uranium to a level of 20 percent — a purity that it says it needs for a specialty nuclear reactor that it insists is used only for medical purposes, but that outside experts say gets it most of the way to the level needed to produce a workable nuclear bomb.

http://www.nytimes.com/2012/08/24/world/middleeast/signs-that-iran-is-speeding-up-nuclear-work.html?_r=1&pagewanted=2&nl=todaysh headlines&emc=edit_th_20120824

Iran starts NAM summit under UN nuclear scrutiny

By Marc Burleigh, *AFP*, August 30, 2012

TEHRAN — Iran on Thursday lifted the curtain on a summit of non-aligned states it presented as a diplomatic triumph, but the event was held under the cloud of intensified UN scrutiny of the Islamic republic's nuclear programme.

UN chief Ban Ki-moon, in Tehran, spent the eve of the summit telling Iran's supreme leader Ayatollah Ali Khamenei and President Mahmoud Ahmadinejad they needed to provide "concrete" steps to ease the showdown over their country's disputed atomic activities.

Meanwhile, the International Atomic Energy Agency has unveiled the creation of a special Iran "task force" to scrutinise Tehran's nuclear

programme and its compliance with UN resolutions — including those demanding a suspension of uranium enrichment.

http://www.google.com/hostednews/afp/article/ALeqM5h_1aZ2iVdc-vno4G1FZMe7FE7S4g?docid=CNG:9a10a516014f5a80f1ca5c2890f78b52.4d1

Iran war could cost Israel economy \$42 billion:

report *Reuters*, August 21 2012

JERUSALEM (Reuters) - Israel's economy would incur damages of as much as 167 billion shekels (\$42 billion) should Israel attack Iran over its nuclear program, business information group BDI-Coface has projected. Direct economic damage would reach 47 billion shekels, BDI-Coface, a respected research group, said on Tuesday. That would be equivalent to 5.4 percent of Israel's gross domestic product last year. Indirect damages would amount to 24 billion shekels a year for three to five years due to the collapse of businesses, it said.

There has been an upsurge in rhetoric from Israeli politicians this month suggesting the country might attack Iran's nuclear facilities ahead of U.S. presidential elections in November. Israel, widely believed to be the only atomic power in the Middle East, views Iran's nuclear program as an existential threat, citing threats made by leaders of Islamist Iran to destroy the Jewish state.

BDI noted that 32 days of war with Lebanon in 2006 led to a 0.5 percent reduction in Israel's economic growth. Direct costs such as civil property and infrastructure damage cost the economy another 1.3 percent.

<http://www.reuters.com/assets/print?aid=USBRE87KOK820120821>

IAEA Tries Again to Access Suspect Iran Nuke Site

GEORGE JAHN, *The Associated Press*,
August 21, 2012

Iran is in the final stages of sanitizing a military site it is suspected of using for secret nuclear weapons-related experiments, two senior diplomats said Tuesday, as the U.N. atomic agency intensified efforts to gain access to the area before the alleged clean-up succeeds in erasing any traces of such work.

Iran, which insists its nuclear program is peaceful contrary to Western fears, has denied experts of the U.N.'s International Atomic Energy Agency permission to visit the Parchin site despite multiple requests from the agency this year. Tehran says a visit is possible only after extensive planning and a detailed outline of procedures — a caveat IAEA officials describe as a stalling tactic.

The agency said a new meeting was planned for Friday “to resolve issues relating to Iran’s nuclear program,” terminology similar to that describing previous such sessions related to Parchin.

http://abcnews.go.com/International/wireStory/iran-agency-discuss-suspect-nuke-work-17052380?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=93459ec32e-RSS_EMAIL_CAMPAIGN&utm_medium=email#UECj_dHagQ

UN chief to visit Natanz nuclear enrichment facility: report

Tehran Times,
August 27, 2012

TEHRAN – United Nations Secretary General Ban Ki-moon will visit the Natanz nuclear enrichment facility, in the central province of Isfahan, on the sidelines of the summit of the Non-Aligned Movement in Tehran, the

Persian service of the Fars News Agency (FNA) reported on Monday.

The XVI Summit of the Non-Aligned Movement began in Tehran on Sunday and closes on Friday. Ban is scheduled to attend the meeting of heads of state and government, which will be held on Thursday and Friday. Iranian Deputy Foreign Minister Mohammad Mehdi Akhoundzadeh, the secretary general of the NAM expert meetings, also said on Monday that the UN chief will visit the city of Isfahan during his stay in Iran.

FNA also reported on Monday that Egyptian President Mohamed Morsi will visit the Bushehr nuclear power plant on the sidelines of the summit.

<http://www.tehrantimes.com/politics/100920-un-chief-to-visit-natanz-nuclear-enrichment-facility-report>

Don't Underestimate US Resolve to Stop a Nuclear Iran

Dr. Emily Landau, *Al-Monitor*,
August 21, 2012

Where does the United States stand these days with respect to the Iranian issue? And what is it discussing with Israel? These important questions have not been given serious enough attention in the public discourse in Israel recently. It seems that the various signs indicating new and significant emphases and nuances in the approach adopted by the Obama Administration cannot penetrate through the wall of Israel's obsessive preoccupation with itself alone.

The parties to the domestic discourse [in Israel] satisfy themselves with the assumption that what the US is interested in most of all is peace and quiet until, and perhaps even after the [upcoming presidential] election. They are reiterating the mantra that the nuclear issue does not interest

the [American] Administration the way it interests Israel, and that the Administration is thus liable to accept the situation of a nuclear Iran and even give up the sanctions [against Tehran].

http://www.al-monitor.com/pulse/politics/2012/08/the-real-player.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=60236c6af2-RSS_EMAIL_CAMPAIGN&utm_medium=email

Russia says new U.S. sanctions on Iran could affect ties Steve Gutterman,

Reuters, August 13, 2012

MOSCOW, Aug 13 (Reuters) - Russia sharply criticised new U.S. sanctions against Iran on Monday, saying the measures to punish banks, insurance companies and shippers that help Iran sell its oil would harm Moscow's ties with Washington if Russian firms are affected.

Russia, which has long opposed sanctions beyond those approved by the U.N. Security Council to pressure Tehran over its nuclear programme, called the measures "overt blackmail" and a "crude contradiction of international law."

The United States ceased most trade with Iran many years ago and has put increasing pressure other countries to reduce their business with the Islamic Republic. The measures approved by Congress on Aug. 1 build on oil trade sanctions signed into law by Obama in December that have prompted Japan, South Korea, India and others to slash purchases of Iranian oil.

http://in.reuters.com/article/2012/08/13/usa-iran-sanctions-russia-idINL6E8JD8W220120813?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=1d45d7ef51-RSS_EMAIL_CAMPAIGN&utm_medium=email

Kazakhstan reveals whether it will supply Iran with uranium *IA Novosti-Kazakhstan, August 15, 2012*

Kazakhstan will not be supplying Iran with uranium, head of Kazakh national atomic company "Kazatomprom" Vladimir Shkolnick said, IA Novosti-Kazakhstan reported.

Speaking at the press conference on Wednesday, Shkolnick also noted that the international uranium export control system monitors every transportation to ensure it is only for peaceful purposes. "We have created an international system that controls exports of uranium. When we supply a country with uranium we receive a document from them that the uranium will only be used for peaceful purposes. This is being monitored by the system," Shkolnick explained.

The new US sanctions build on Iranian crude sanctions, signed into law by US President Barack Obama, penalize other countries for buying or selling Iran's oil. The sanctions took effect on June 28. The US sanctions are meant to pile up pressure on Iran over its nuclear energy program, which Washington, Tel Aviv, and some of their allies claim may include a military aspect. Iran refutes the allegation and holds that, as a signatory to the nuclear Non-Proliferation Treaty and a member of the International Atomic Energy Agency, it is entitled to enrich uranium for peaceful purposes.

http://en.trend.az/news/nuclearp/2056384.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=1d45d7ef51-RSS_EMAIL_CAMPAIGN&utm_medium=email

D. China, East & South East Asia

China test fires new long-range missile *Global Times,*

August 23, 2012

China's military conducted the first flight test of a new long-range intercontinental ballistic missile (ICBM) that U.S. officials say will be Beijing's first strategic missile armed with multiple warheads. The flight test of the DF-41 road-mobile ICBM occurred July 24 and is raising new concerns within the U.S. military and intelligence agencies over China's long-range missile threat, according to officials familiar with reports of the test.

The DF-41 missile is a first-strike nuclear capability, based on its mobility, estimated range, targeting precision, and multiple warheads. In addition to shorter-range ICBMs known as the DF-31 and DF-31A, which are believed to target India and Russia, the new ICBM is said by U.S. officials to be designed to hit U.S. targets with multiple nuclear warheads.

China has claimed it will not be the first to use nuclear weapons and that its nuclear forces are designed for a counterstrike against a nuclear attack on its territory. The DF-41 development has called into question the so-called no-first-use policy, officials said.

<http://forum.globaltimes.cn/forum/showthread.php?p=73129>

New engine passes test and revs up space hopes *By Xin*

Dingding, Xinhua - english.news.cn,
July 30, 2011

A next-generation engine, that will pave the way for lunar exploration, was successfully tested on Sunday. The engine, with a 120-ton-thrust using

liquid oxygen (LOX) and kerosene, will enable the Long March 5 carrier rocket - which is expected to make its maiden voyage in 2014 - to place a 25-ton payload into near-Earth orbit, or place a 14-ton payload into geostationary orbit, experts said.

The tests, which included seeing how the engine would respond to rotational speeds of nearly 20,000 revolutions per minute and temperatures of 3,000 C for 200 seconds, were held in Xi'an, capital of Shaanxi province.

"The successful tests confirm the reliability of China's LOX/kerosene engine," said Lai Daichu, test commander. Tan Yonghua, head of Xi'an Aerospace Propulsion Institute under the China Aerospace Science and Technology Corp, which developed the engine, said that the single engine currently used by Long March carrier rockets only has a 75-ton thrust, much less than the 120-ton thrust of the new engine.

http://news.xinhuanet.com/english/sci/2012-07/30/c_131747665.htm

China: More Advanced Missiles Are Said to Be on the Horizon *KEITH BRADSHER,*

New York Times, August 23, 2012

Chinese state-controlled media acknowledged on Thursday that the country was actively developing mobile Dongfeng-41 intercontinental ballistic missiles, and seemed to hint that they might have multiple warheads. But a Chinese military expert denied to The Global Times, a newspaper controlled by the Communist Party, that the missile had already been tested last month.

Multiple re-entry vehicles on a ballistic missile, each of which can carry a nuclear warhead, make it much harder for missile defense

systems to stop an attack.

<http://www.nytimes.com/2012/08/24/world/asia/china-more-advanced-missiles-are-said-to-be-on-the-horizon.html>

China Is Said to Be Bolstering Missile Capabilities By KEITH BRADSHER, *New York Times*, August 24, 2012

HONG KONG — China is moving ahead with the development of a new and more capable generation of intercontinental ballistic missiles and submarine-launched missiles, increasing its existing ability to deliver nuclear warheads to the United States and to overwhelm missile defense systems, military analysts said this week.

Over all, China's steady strengthening of its military capabilities for conventional and nuclear warfare has long caused concern in Congress and among American allies in East Asia, particularly lately as China has taken a more assertive position regarding territorial claims in the East China and South China Seas.

The Global Times, a newspaper directly controlled by the Chinese Communist Party, reported Wednesday that China was developing the capability to put multiple warheads on intercontinental ballistic missiles, or ICBMs. But the newspaper disputed a report in Jane's Defense Weekly that the latest Chinese ICBM, the Dongfeng-41, had been tested last month.

<http://www.nytimes.com/2012/08/25/world/asia/chinas-missile-advances-aimed-at-thwarting-us-defenses-analysts-say.html>

Signs point to rekindling of Cold War mentality Fu Mengzi, *Xinuha - www.chinaview.cn*, August 21, 2012

BEIJING, Aug. 21 — The United States

announced a plan in January to deploy 10 ballistic missile defense (BMD) batteries in Poland and a tracking radar station in the Czech Republic supposedly to guard Europe against possible missile attacks by Iran.

The planned deployment of U.S. missile defense systems at Russia's front door has become a new focus of U.S.-Russia bickering in the past few months, because in Moscow's view, neither Iran nor the Democratic People's Republic of Korea (DPRK) has the kind of missiles U.S. defense systems are designed to shoot down. The target of U.S. missiles can only be Russia.

U.S.-Russia bickering on this issue has been heating up. The "homely meeting" U.S. President George W. Bush accorded his Russian counterpart Vladimir Putin at his father's private ranch in Maine in early July did little to narrow the difference between the two military superpowers. No matter what alternative plan Russia managed to put forward, such as a joint missile defense system using Russia's early warning radar in Azerbaijan in central Asia, the United States was not interested.

http://news.xinhuanet.com/english/2007-08/21/content_6575468.htm

Tiangong-1/Shenzhou-9 space delegation leaves Macao *Xinuha - english.news.cn*, August 15, 2012

MACAO, Aug. 15 (Xinhua) — The Tiangong-1/Shenzhou-9 space delegation concluded its three-day visit to Macao and departed for Beijing on Wednesday. More than 300 citizens and students came to the airport to bid farewell to the astronauts.

Speaking to the media before departing, head of the delegation Niu Hongguang said the delegation was deeply impressed by Macao's beautiful scenery and its people's friendliness. After a short farewell ceremony at Macao International Airport, the delegation waved goodbye and embarked on the plane, wrapping up their visit in Macao.

During the three-day trip, three astronauts Jing Haipeng, Liu Wang, Liu Yang and other delegation members attended various activities, gave public lectures and communicated with primary and secondary students. The delegation also attended a welcome variety show presented by local art organizations with some 3,000 people to share the joy of the successful space mission with them.

http://news.xinhuanet.com/english/china/2012-08/15/c_131787480.htm

Fengyun-2F satellite transferred to meteorological authority *Xinuha -*

english.news.cn, August 20, 2012

BEIJING — China's forecasts of severe weather conditions are set to be improved after the Fengyun-2F was officially transferred to the meteorological authority on Monday.

The nation's fourth geostationary orbit weather satellite, has been operating smoothly during a test period, since it was launched on Jan. 13, 2012, from the Xichang Satellite Launch Center, in the southwestern province of Sichuan. A transfer ceremony of the satellite to the China Meteorological Administration (CMA) took place on Monday. With a life span of four years, the Fengyun-2F has higher accuracy and more flexible high-frequency measuring capabilities. The satellite is able to forecast a typhoon's position and intensity ten minutes earlier than

current equipment, according to the CMA.

http://news.xinhuanet.com/english/china/2012-08/20/c_131796683.htm

STRATCOM Commander Rejects High Estimates for Chinese Nuclear Arsenal

Hans M. Kristensen, FAS Strategic Security Blog, August 22, 2012

The commander of U.S. Strategic Command (STRATCOM) has rejected claims that China's nuclear arsenal is much larger than commonly believed. "I do not believe that China has hundreds or thousands more nuclear weapons than what the intelligence community has been saying, [...] that the Chinese arsenal is in the range of several hundred" nuclear warheads.

General Kehler's statement was made in an interview with a group of journalists during the Deterrence Symposium held in Omaha in early August (the transcript is not yet public, but was made available to me). General Kehler's statement comes at an important time because much higher estimates recently have created a lot of news media attention and are threatening to become "facts" on the Internet.

A Georgetown University briefing last year hypothesized that the Chinese arsenal might include "as many as 3,000 nuclear warheads," and General Victor Yesin, a former commander of Russia's Strategic Rocket Forces, recently published an article on the Russian web site vpk-news in which he estimates that the Chinese nuclear weapons arsenal includes 1,600-1,800 nuclear warheads.

http://www.fas.org/blog/ssp/2012/08/china-nukes.php?utm_source=Paulo%27s+Core+Daly+Nuclear+News+Digest&utm_campaign=9547982-RSS_EMAIL_CAMPAIGN&utm_medium=email

Utilities say 2 nuke plants can withstand quakes triggered by multiple active faults *Mainichi, August 29, 2012*

Shikoku Electric Power Co. and Hokuriku Electric Power Co. told the government's Nuclear and Industrial Safety Agency (NISA) on Aug. 28 that the Ikata Nuclear Power Plant in Ehime Prefecture and the Shika Nuclear Power Plant in Ishikawa Prefecture can withstand earthquakes triggered by multiple active faults moving closely together.

The two power companies reported to a NISA expert panel that nuclear reactors and other key facilities at the two nuclear power stations would have no safety problems even if they are struck by earthquakes triggered by multiple active faults moving together. There was no objection to their arguments at the meeting, and therefore NISA is expected to endorse the reports.

At the expert panel meeting, Chugoku Electric Power Co. and Hokkaido Electric Power Co. also reported that the Shimane Nuclear Power Plant in Shimane Prefecture and the Tomari Nuclear Power Plant in Hokkaido would have "no problems" if they were struck by earthquakes under similar conditions. NISA is set to discuss whether their reports are credible.

http://mainichi.jp/english/english/newsselect/news/20120829p2a00m0na006000c.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=43c20fe063-RSS_EMAIL_CAMPAIGN&utm_medium=email

Shizuoka governor supports idea for referendum on restart of Hamaoka nuke plant *Mainichi, August 27, 2012*

SHIZUOKA — Shizuoka Gov. Heita

Kawakatsu has expressed his support for the establishment of an ordinance to hold a referendum over whether to restart the Hamaoka Nuclear Power Plant in the prefecture, which has been suspended following the Fukushima nuclear disaster.

The move came after a citizens group called "Genpatsu Kenmin Tohyo Shizuoka" (Referendum over a nuclear plant in Shizuoka) filed a direct petition with the governor on Aug. 27, demanding the introduction of the referendum ordinance and handing him 165,127 signatures the group collected. "Signatures of 160,000 people mean a lot. I will strive to implement the referendum," said Kawakatsu during a regular press conference that day.

The governor is expected to propose the ordinance to the Shizuoka Prefectural Assembly in September. The assembly's largest faction, Jimin Kaikaku Kaigi, and the second largest group, Minshuto Fujinokuni Kengidan, have not decided whether to approve the initiative.

http://mainichi.jp/english/english/newsselect/news/20120828p2a00m0na008000c.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=5842a2cd39-RSS_EMAIL_CAMPAIGN&utm_medium=email

Japan video shows delay in using seawater to cool meltdown reactor Risa

Maeda, *Reuters*, August 14 2012

TOKYO (Reuters) - A Japanese Nuclear Power Company hesitated before using corrosive seawater to cool the No. 2 reactor at the stricken Fukushima plant because it hoped it could be used again, video released by the company shows, contradicting official findings.

The Fukushima Daiichi plant, run by

Tokyo Electric Power (Tepco), was struck by an earthquake and tsunami on March 11 last year, crippling cooling systems and triggering fuel rod meltdowns and radiation leaks that led to mass evacuations and widespread contamination.

The video, one of dozens of fraught vignettes of officials and plant workers grappling with the world's worst nuclear disaster since Chernobyl in 1986, flies in the face of Tepco assertions that executives didn't delay in using seawater.

The grainy video clips, mostly without sound, provide a picture of the chaos that characterized the early phase of the disaster as workers used everything from car batteries to fire hoses to try to bring the reactors under control as radiation levels rose and explosions rocked the site.

<http://in.reuters.com/assets/print?aid=INBRE87D0F720120814>

Japan Strives to Go Nuclear-Free HIROKO TABUCHI, *International Herald Tribune*, August 29, 2012

TOKYO — As Japan moves to cut back on nuclear power after last year's disaster in Fukushima, it is running into a harsh economic reality: the cost of immediately abandoning its nuclear reactors may be too high for some big utilities to shoulder.

If the country's 50 nuclear reactors were permanently closed this year, power companies would be hit with losses totaling 4.4 trillion yen (\$55.9 billion), rendering at least four of them insolvent, according to calculations this summer by the government's Agency for Natural Resources and Energy.

The extraordinary costs of an immediate shutdown have emerged as a major concern for the Japanese

government, which has struggled to balance the desire for improved nuclear safety with the bottom-line realities of the big utilities. Nuclear plants generated about one-third of Japan's electricity before the Fukushima accident, but most remain at least temporarily offline.

<http://www.nytimes.com/2012/08/30/business/energy-environment/japan-faces-costs-of-closing-reactors.html?pagewanted=all>

8 workers wore no dosimeter at Fukushima nuke plant *THE ASAHI SHIMBUN*, August 24, 2012

Eight employees at the stricken Fukushima No. 1 nuclear power plant have worked without wearing personal dosimeters since June 2011, while 20 have lost their dose measurement devices, Tokyo Electric Power Co. said Aug. 23.

TEPCO apologized for the sloppy enforcement of radiation control and its failure to take appropriate measures to prevent a recurrence of such incidents. The plant operator also acknowledged its "slow response" in reporting the oversights to authorities.

The Asahi Shimbun revealed in July that some subcontractor workers were ordered to cover their dosimeters with lead plates at the Fukushima plant in December to keep radiation dose readings low. Those findings were followed by revelations that three employees worked without dosimeters and one dosimeter was lost at the Fukushima No. 1 nuclear plant.

http://ajw.asahi.com/article/0311disaster/life_and_death/AJ201208240051?utm_source=Paulo%27s+Comer+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email

Vietnam examines future nuclear infrastructure

Vietnam News Agency, August 24, 2012,

The Ministry of Science and Technology in conjunction with the International Atomic Energy Agency (IAEA) and the Ministry of Industry and Trade held a workshop on August 23 in Hanoi, to discuss developing the infrastructure for Vietnam's future nuclear power industry. Minister of Science and Technology Nguyen Quan, who is also deputy head of the State Steering Committee for the Ninh Thuan Nuclear Power Project, chaired the workshop.

This was an opportunity for Vietnamese policy makers, nuclear technology specialists and managers to discuss issues concerning the preparation, construction and development of the necessary infrastructure with IAEA representatives and specialists from Russia and Japan.

This will ensure the successful construction and operation of the Ninh Thuan nuclear power plant, the first of its kind in Vietnam, and other Vietnamese development programmes in this sector in the future. Addressing the workshop, Quan stated that Vietnam always attaches a great deal of importance to strengthening and expanding cooperation....

http://www.tuoitrenews.vn/cmmlink/tuoitrenews/society/vietnam-examines-future-nuclear-infrastructure-1.84168?utm_source=Paulo%27s+Comer+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email

U.S. Urges North Korean Leader Kim Jong-un to Return to Six-Party Talks

Arirang Korea, August 23, 2012

The United States is urging North Korea to return to the six-party talks amid concerns that North Korea has

finished constructing the dome of its Yongbyon nuclear facility.

State Department spokeswoman Victoria Nuland said Wednesday that Washington's stance towards North Korea has not changed and the new leadership should show willingness to abide by international rules and obligations on nuclear issues.

Regarding South Korea's plans to resume Iranian oil imports, Nuland stated that some countries, including South Korea and China, have been exempted from the embargo, and the U.S. will continue holding talks with such nations.

http://www.arirang.co.kr/News/News_View.asp?hseq=135690&code=N2&category=2&utm_source=Paulo%27s+Comer+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email

Satellite imagery shows North Korea completes dome atop nuclear reactor under construction

GeoEye and IHS Jane's Defence Weekly/Associated Press, August 21, 2012

SEOUL, South Korea — A new satellite image shows North Korea has completed a key step in the construction of a light-water reactor at its main nuclear complex, though it may take several more years before it is fully operational, an analyst said Tuesday.

North Korea says the reactor being built since 2010 at its Yongbyon complex is for electricity generation. But some experts have questioned the North's intention since the reactor would give the country a reason to enrich uranium that could be used in nuclear bombs at higher levels.

http://www.washingtonpost.com/world/asia_pacific/satellite-imagery-

shows-nkorea-completes-dome-atop-nuclear-reactor-under-construction/2012/08/21/98e6cbbc-eb8d-11e1-866f-60a00f604425_story.html

China unveils ambitious

space projects Quan Xiaoshu, Yu Fei, Li Huizi and Ji Shaoting, *Xinhua - English.news.cn*, August 21, 2012

BEIJING, Aug. 21 (Xinhua) — China will launch several space projects, including a hard X-ray telescope for black hole studies, between 2014 and 2016, according to a senior Chinese astronomer. Su Dingqiang, an academic at the Chinese Academy of Sciences and former president of the Chinese Astronomical Society, revealed some details regarding the hard x-ray modulation telescope (HXMT), China's first space telescope, on Tuesday at the opening ceremony of the International Astronomical Union (IAU)'s 28th General Assembly.

The hard X-ray band is a key waveband for high-energy astrophysics studies. Hard X-rays originate mostly from regions close to black holes and have high penetrative power, making them important tools for studying physical processes in extreme conditions, such as high matter density and high energy density.

http://news.xinhuanet.com/english/china/2012-08/21/c_131799182.htm

Delayed construction of nuke reactors renews power shortage concerns

Yonhap, August 22, 2012

Plans for new nuclear reactors have been delayed amid renewed concerns over the safety of nuclear power plants here, plant operators said Wednesday, voicing concerns over a possible delay in plans to bring the country's power supply to what officials call safe levels.

According to the Korea Hydro & Nuclear Power Co., Ltd., completion of two reactors in Uljin, 330 kilometers southeast of Seoul, has been pushed back by at least 10 months due to a delay in government approval for their construction. The reactors were originally scheduled to begin operation in 2016 and 2017.

Construction of the four other reactors has also been pushed back by at least one year, partly due to a delay in government authorization, while plans for two others have been scrapped altogether, according to company officials.

http://english.yonhapnews.co.kr/business/2012/08/22/99/0501000000AEN20120822002300320FHIML?utm_source=Publ%27s+Comer+Daily+Nuclear+News+Digest&utm_campaign=93459ec32e-RSS_EMAIL_CAMPAIGN&utm_medium=email

Defense spokesman says missile tests targeted at no specific country

Xinhua - English.news.cn, August 31, 2012

BEIJING, Aug. 30 — China's Defense Ministry spokesman confirmed on Thursday that the People's Liberation Army (PLA) had conducted missile tests within national territory and clarified that they were not targeted at any one country.

"We conducted some normal weapons tests within the territory recently," spokesman Geng Yansheng told a regular press conference arranged by the ministry. "These tests have no specific targets and were not targeted at any specific countries," Geng said, reiterating that the weaponry buildup is to answer the need to safeguard national security.

Domestic and foreign media reports said that the PLA's Second Artillery Force had successfully test-launched

several missiles, including DF-41 intercontinental ballistic missile. Others claimed the PLA's tests of JL-2 submarine-launched ballistic missiles had all failed, and that China's development of ballistic missiles was at a comparatively slow pace.

http://news.xinhuanet.com/english/china/2012-08/30/c_131818392.htm

E. India

'All activities at KNPP nuclear power plant focused on loading fuel in Unit 1'

Press Trust of India, August 15, 2012

KUDANKULAM: All activities at Kudankulam Nuclear Power Plant are now focused on Initial Fuel Loading for the first reactor, a top KNPP official said here today. "With the Atomic Regulatory Board giving clearance to the Initial fuel loading and first approach to criticality, we are focussed on loading the fuel" Koodankulam Site Director RS Sundar said, speaking at Independence Day celebrations here.

He expressed confidence that the first unit would generate 1000 MW before January 26 2013. "Efforts to commission Unit 2 is also being taken up in the same spirit and hopefully by next Aug 15, we will achieve significant milestones on this unit also," he said.

Stating that all safety standards would be fully satisfied, he said plant operation engineers are licensed to operate VVER reactors. "We have also signed the inter-governmental agreement for finalising credit terms between India and Russia for the third and fourth units," he said. He also said the Central expert group had made 'sincere' efforts to help allay fears of the local people over safety aspects of KNPP and explained various facts scientifically.

http://articles.economictimes.indiatimes.com/2012-08-15/news/33216673_1_knpp-central-expert-group-first-unit

India's nuclear safety report warns of Fukushima-like disaster

Sabyasachi Dasgupta, NDTV, August 23, 2012

New Delhi: The national auditor's report on India's nuclear safety has raised concerns over a weak regulatory body. In its report on the Atomic Energy Regulatory Board's (AERB) performance audit, the Comptroller and Auditor General has warned a Fukushima or Chernobyl-like disaster if the nuclear safety issue is not addressed by the government.

The AERB, which supervises safety issues at India's 22 running nuclear plants, has no power to make rules, enforce compliance or impose penalty in cases of nuclear safety oversight. It can impose a fine of maximum Rs. 500 as a deterrent in cases. The report says, "The legal status of the AERB continued to be that of an authority subordinate to the Central Government, with powers delegated to it by the latter."

The national auditor said there was an urgent need for the government to bolster the status of AERB if it was to qualify as an independent regulator in a sector which was likely to become increasingly important in meeting the country's energy needs. The auditor also pulled up the nuclear regulator for failing to prepare any safety policy for the country even after three decades of its existence.

http://www.ndtv.com/article/india/india-s-nuclear-safety-report-warns-of-fukushima-like-disaster-258138?utm_source=Paulo%27s+Comer+Daily+Nuclear+News+Digest&utm_campaign=9f54c79b82-RSS_EMAIL_CAMPAIGN&utm_medium=email

India plans 'safer' nuclear plant powered by thorium

Maseeh Rahman, guardian.co.uk,
November 1, 2011

India has announced plans for a prototype nuclear power plant that uses an innovative "safer" fuel. Officials are currently selecting a site for the reactor, which would be the first of its kind, using thorium for the bulk of its fuel instead of uranium – the fuel for conventional reactors. They plan to have the plant up and running by the end of the decade.

The development of workable and large-scale thorium reactors has for decades been a dream for nuclear engineers, while for environmentalists it has become a major hope as an alternative to fossil fuels. Proponents say the fuel has considerable advantages over uranium.

Thorium is more abundant and exploiting it does not involve release of large quantities of carbon dioxide, making it less dangerous for the climate than fossil fuels like coal and oil. In a rare interview, Ratan Kumar Sinha, the director of the Bhabha Atomic Research Centre (BARC) in Mumbai, told the Guardian that his team is finalising the site for construction of the new large-scale experimental reactor, while at the same time conducting "confirmatory tests" on the design.

http://www.guardian.co.uk/environment/2011/nov/01/india-thorium-nuclear-plant?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email

Nuke-capable Prithvi-II missile test scheduled for next week

Hemant Kumar Rout,
Express News Service, August 17, 2012

After successful trials of two Agni

variant missiles, the Indian Army is gearing up for a user associate launch of nuclear capable surface-to-surface Prithvi-II ballistic missile from a defence base off the Odisha coast to make it more battle-savvy. The missile which was earlier planned to be tested on Friday has been scheduled for next week. Prithvi is the first ballistic missile developed under the country's most ambitious integrated guided missile development programme.

Defence sources said the mission is likely to be conducted any time in between August 25 and 26 from the Integrated Test Range (ITR) at Chandipur-on-sea. Preparation for the test is on as per schedule at the launching complex-III of the ITR.

While the test would be carried out by the Strategic Forces Command (SFC) of the armed forces to gauge its effectiveness and performance in a real time situation, DRDO would provide all logistical support for the mission. The missile to be used for the test has been picked up randomly from the assembly line post production.

<http://newindianexpress.com/states/odisha/article590991.ece#>

Thorium Reserve in the Country

Press Information Bureau,
August 22, 2012

Department of Atomic Energy - Exploration activities carried out by Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of the Department of Atomic Energy (DAE), has resulted in establishing 3.74 million tonnes of Monazite in Andhra Pradesh which contains about 3,36,600 tonnes of thorium oxide equivalent to 2,96,000 tonnes of thorium metal. These reserves are explored and established.

Indian three stage nuclear power programme is aimed at long term energy independence including use of thorium resources in the third stage. In order to realize this goal, presently, the first stage of programme is accomplished through the nuclear reactors based on natural uranium fuel. The second stage envisages setting up of Fast Breeder Reactors.

A Prototype Fast Breeder Reactor is planned at Kalpakkam. The utilization of thorium would be technically possible only in the third stage. Since the country is still in the first stage of the nuclear power programme, the requirement of Thorium by 2020 is quite modest.

http://pib.nic.in/newsite/erelease.aspx?relid=86492&utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=93459ec32e-RSS_EMAIL_CAMPAIGN&utm_medium=email

India not to give up nuclear arms till universal disarmament *Press Trust of India,*

August 21, 2012

New Delhi: Making it clear it will not give up nuclear arms until universal disarmament is achieved, India on Tuesday said the weapons had ended attempts by global powers to blackmail it to toe a particular line.

“Nuclear weapons today are integral part of our national security and will remain so, pending non-discriminatory and global nuclear disarmament,” External Affairs Minister SM Krishna said.

India’s “hard-headed” leadership had fought “explicit or implicit threat” by global powers to change its “behaviour, National Security Advisor Shivshankar Menon said addressing a national conference on global nuclear disarmament to commemorate the 24 years of the Rajiv Gandhi Action Plan

for a nuclear weapons free world order.

<http://www.ptinews.com/maintenance.htm?aspxerrorpath=/news/fullnews.aspx>

http://ibnlive.in.com/news/india-to-keep-narms-till-universal-disarmament/284262-3.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=60236c6af2-RSS_EMAIL_CAMPAIGN&utm_medium=email

US hopes India would convey international concerns to Iran on nuclear program *PTI, August*

15, 2012

WASHINGTON: Ahead of Prime Minister Manmohan Singh’s Tehran visit later this month to attend the NAM summit, US hoped that India would convey the international community’s concern to Iranian leadership about its nuclear program.

Singh is slated to visit Iran later this month to attend the summit of Non-Aligned Movement. He is the first Indian Prime Minister to visit Iran in a decade.

“With regard to the visit, we would hope, as we always do when our partners and allies are involved in any kind of intersection with Iran, that the larger points are made about the importance of Iran coming back into compliance with its international obligations, using the opportunity that the P-5+1 has offered for diplomacy to actually make real progress, and also express concerns about the other alarming trends that we’ve seen with regard to Iran, including its support for terror,” the State Department spokesperson, Victoria Nuland, told reporters yesterday.

<http://articles.economictimes.india.com/2012-08-15/news/33216802>

[_1_iran-on-nuclear-program-international-concerns-iranian-leadership?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=1d45d7ef51-RSS_EMAIL_CAMPAIGN&utm_medium=email](#)

F. Pakistan

Real threat of proliferation of nukes because of Pak, Syria: Romney *Agencies*, August 30, 2012

Tampa (Florida) : Mitt Romney, the Republican presidential candidate, has said that there is a real threat of proliferation of nuclear weapons given the instability in Pakistan and violence in Syria. "Instability in Pakistan and horrific violence in Syria, and with North Korea having shared nuclear technology, the threat of proliferation of weapons of mass destruction continues to be very real," Mitt Romney said in his remarks to the American Legion in Indianapolis, Indiana.

"And we are still at war in Afghanistan. We still have uniformed men and women in conflict, risking their lives just as you once did. All of this and more is happening around the world right now," he said.

"And yet, for the past four years, Obama has allowed the American leadership to diminish. In dealings with other nations, he has given trust where it is not earned, insult where it is not deserved, and apology where it is not due," he alleged.

<http://www.indianexpress.com/news/real-threat-of-proliferation-of-nukes-because-of-pak-syria-romney/995265/>

Attack on Pakistan base raises fear about nuclear arsenal *Los Angeles Times*, August 16, 2012

ISLAMABAD, Pakistan — A militant

raid early Thursday on a northern Pakistan air force base with suspected links to the country's nuclear weapons program has renewed questions about Islamabad's ability to safeguard its nuclear arsenal in the face of an insurgency that shows no signs of waning.

A team of eight militants climbed over a perimeter wall at the base in Kamra, about 25 miles northwest of Islamabad, and exchanged gunfire with Pakistani security forces for more than two hours, said air force spokesman Tariq Mahmood. All eight attackers were eventually shot to death, but not before they fatally shot a Pakistani security officer and damaged an aircraft with a rocket-propelled grenade, officials said.

The base at Kamra abuts the Pakistan Aeronautical Complex, which assembles fighter jets and other weapons systems, and is a major research hub for the country's air force.

http://latimesblogs.latimes.com/world_now/2012/08/raid-on-air-force-base-raises-fears-about-pakistans-nuclear-arsenal-security.html

Pakistan's nukes might fall into hands of terrorists: Panetta *Press Trust of India*, August 15, 2012

WASHINGTON: US defence secretary Leon Panetta fears that there is a danger of Pakistan's nuclear weapons falling into the hands of terrorists if terrorism is not controlled in the country.

"The great danger we've always feared is that if terrorism is not controlled in their country, than those nuclear weapons could fall into the wrong hands," Panetta told reporters at a Pentagon news conference here on Tuesday.

Panetta was responding to questions on a recent congressional report which said Pakistan is increasing its nuclear capabilities, which are mainly targeted towards India. "When I talk to the Pakistanis, I've always stressed the fact that we should have common cause with regards to confronting terrorism; that terrorists not only represent a threat to our country, terrorism represents a real threat to their country as well," he said.

http://articles.timesofindia.indiatimes.com/2012-08-15/pakistan/33216067_1_nuclear-weapons-nuclear-power-terrorists

G. Opinions

Harsh V Pant: Time to get over Fukushima Harsh V Pant, *Business Standard*, August 26, 2012

Despite its risks, nuclear power is the only hope for environmentally sustainable growth and energy security

The Kudankulam nuclear power plant in Tamil Nadu is finally moving towards commission, with the Atomic Energy Regulatory Board (AERB) giving its approval for the loading of fuel in the first unit of the nuclear power plant last week. The project has been under scrutiny for a lot of reasons, not least because of the anti-nuclear power mood after the accident to the Fukushima Daiichi nuclear power plant in Japan last year. The AERB has made it clear that the Board has carried out a safety reassessment of the capacity of the Kudankulam plant to withstand extreme external events and the non-availability of power supply for an extended period.

The Fukushima crisis has been called the worst nuclear accident since Chernobyl, a quarter-century ago. The nuclear accident, after an earthquake and a tsunami, led to anxious questions around the world about the

safety of nuclear reactors, and putting world capitals under intense pressure. The Indian government, too, ordered a review of all safety features at its nuclear plants, although the nuclear establishment was quick to underline that all its 20 nuclear plants are earthquake and tsunami-proof. Yet for the first time there were calls from within government circles for a temporary stop to nuclear power plans and production. Dr P Balaram, director of the prestigious Indian Institute of Science in Bangalore and part of the prime minister's scientific advisory council, described the events in Japan as "a wake-up call" for India. Backed by more than 50 prominent figures, he called for a moratorium on all future nuclear projects following the Fukushima crisis.

After decades of being ostracised by policymakers, nuclear energy had been coming back to the mainstream over the last few years. Faced with rising oil prices and growing concerns about climate change, nations had started giving the nuclear-energy option serious consideration. There was a new enthusiasm for nuclear energy at a time when concerns about curbing global warming and energy security have become paramount. In contrast to coal-fired power plants, atomic reactors produce little in the way of carbon dioxide emissions — which is good news for the climate. In addition, the technology is helpful for regions which may not have natural gas reserves, for example. Nuclear energy means a certain degree of independence and a modicum of political autonomy when it comes to determining energy policy. Furthermore, energy produced from nuclear power plants tends to be cheap, making it popular with consumers.

Nuclear power continued to have a public relations problem, however, as its mere mention raises the spectre of another Chernobyl or Three Mile Island, not to mention proliferation and dirty bombs. But things have been rapidly changing with previous staunch opponents such as Patrick Moore, a founder of Greenpeace, joining the bandwagon, convinced by the growing evidence that nuclear power is the most efficient energy source around today. A growing list of environmentalists openly advocates nuclear power. The “father” of the contemporary global environmental movement, James Lovelock, has been claiming that the challenges of global warming can only be tackled by nuclear energy.

The Intergovernmental Panel on Climate Change emphasised in its report in 2007 that countries could use more nuclear power as part of a shift away from fossil fuels in order to blunt global warming. An unforeseen consequence of the anti-nuclear movement of the 1960s and 1970s in the West was that it impeded the growth of the most environment-friendly, if risky, of energy resources — even as it boosted coal and oil-sourced electricity generation which, it now turns out, has damaged the environment probably beyond repair.

Japan’s nuclear crisis was a major setback to this development. But a proper perspective is needed if debate on nuclear energy is to proceed rationally. It was an old reactor with a design from the 1960s that got into trouble in Japan. The technology of this type of plant is outdated. Its safety level is significantly below that of modern nuclear plants; it wouldn’t get construction approval these days. The crisis at Fukushima was triggered by the failure of diesel generators that provided electricity to cool the reactors once they were shut down. It is

significant that despite all provocations, the containment walls seem to have held. In the new Generation III reactors there is a simplified cooling system where the water circulates by natural convection with no pumping required.

The hyper-reaction to the Japanese crisis, though understandable, will not lead to sensible policy outcomes because the costs and risks of nuclear energy need to be rigorously compared against the costs and risks of other energy sources and the long-term costs and risks of global warming. The present situation in Japan is illustrative. As the debate continues to rage in Japan if, in the aftermath of the triple meltdown at Fukushima, Japan should renounce nuclear power, the cost of a nuclear-free Japan are becoming ever more apparent. Japan is facing an acute energy shortage after all but two of the nation’s 50 nuclear reactors were shut under public pressure. Though a majority of the Japanese seem to prefer a non-nuclear policy by 2030, Japanese Prime Minister Yoshihiko Noda has made it clear that Japan needs nuclear power for a stable electricity supply, underlining that without that, Japanese society will not be able to function.

Nuclear power remains an important means of meeting the energy requirements in emerging powers and a valuable tool in heading off global warming. As of today, India imports three-quarters of its oil, natural gas and coal, and receives only three per cent of its power from nuclear energy. While about one-third of India’s new power supplies have come from natural gas and hydro-electricity over the last decade, the cost of natural gas and the environmental concerns over big dams will force India towards an even greater use of coal in its energy mix.

This can be devastating for the global environment; and so India's embrace of nuclear power should be viewed as a realistic answer to this problem.

<http://www.business-standard.com/india/news/harsh-v-pant-time-to-get-over-fukushima/484396/>

India's 'Realist' Iran Policy

By Sumit Ganguly, *The Diplomat*,
August 27, 2012

"India's readiness to work with Iran stems from careful, hard-nosed calculations of what it deems to be in its vital interests."

India is often the subject of criticism in some U.S. political circles for its diplomatic and other ties with Iran. Much of the criticism stems from the Ahmadinejad regime's explicit hostility toward Israel, Iran's likely pursuit of nuclear weapons, and the abysmal quality of its human rights record at home. All of these criticisms are at one level quite legitimate. Few within India's foreign policy establishment are unaware of or oblivious to Iran's obvious shortcomings at home or abroad.

That being said, many of India's critics had long urged it to abandon its moralistic foreign policy and adopt a more pragmatic approach. Ironically, India's policymakers have taken this advice to heart and are acting on it. The U.S. and other great powers during much of the Cold War often overlooked the many dubious features of a host of squalid regimes as long as they were sufficiently anti-Communist. Even today, when core interests are involved, the internal attributes of numerous key allies are of little concern. For example, Saudi Arabia, Iran's Sunni adversary, which has a legion of human rights issues, enjoys excellent relations with the U.S. and much of the Western world.

In a markedly similar vein, India too has adopted an unemotional and practical approach toward Iran. It has supported United Nations resolutions on Iran's attempts to circumvent its commitments under the Nuclear Nonproliferation Treaty (NPT) and it has adhered to United Nations sanctions on the country. However, it has evinced little enthusiasm for any unilateral use of force against Iran and has also refused to kowtow to the United States on the imposition of unilateral sanctions.

India's position, quite frankly, is understandable. It not only has a substantial domestic Shia population but also recognizes that Iran can serve as a bulwark against a Pakistan-Saudi nexus. More to the point, India remains acutely dependent on Iranian oil and gas supplies despite a concerted effort to reduce its dependence on the country for these critical energy resources. Finally, unlike Pakistan which remains committed to installing a neo-Taliban regime in the wake of the withdrawal of the International Security Assistance Force (ISAF) from Afghanistan, both India and Iran remain unalterably opposed to the Taliban retaking Kabul. This convergence of interests in a critical country in the region also leads India to work with Iran.

It is easy to suggest that India's willingness to work with Iran despite some misgivings is a sign of the return of the cussedness that had characterized much of Indian foreign policy during the Cold War. This characterization, however, is sadly out of date and inapt. India's readiness to work with Iran stems from careful, hard-nosed calculations of what it deems to be in its vital interests. These may well diverge with those of the United States,

Israel, and much of the Western world. Nevertheless, they cannot be dismissed as being either chimerical or irrational.

<http://thediplomat.com/indian-decade/2012/08/27/indias-realist-iran-policy/>

A self-defeating policy on Iran William Tobey, *Foreign Policy*, August 28, 2012

According to the New York Times, the International Atomic Energy Agency is ready to report that the Iranian nuclear program continues to expand and to accelerate. Moreover, the Times notes Iran's emphasis on enriching uranium to 20 percent.

The 20 percent level is more than four times what is necessary for power reactor fuel. As I have noted before, according to Professor Graham Allison, also of Harvard, this is like a football team reaching the ten yard line, where nuclear weapons-usable material is in the end zone. Stocks of uranium enriched to 20 percent materially shorten the time it would take Iran to break out or sneak out of its Treaty obligations and produce a nuclear weapon.

Uranium enriched to 20 percent can also be used to fuel the Tehran Research Reactor for medical isotope production, and this Iran claims to be doing. But that explanation is inconsistent with Iran's research reactor fuel requirements. Iran has already enriched more than enough such material to supply its medical isotope production for many years, and its enrichment to the 20 percent level is not only continuing, it is accelerating, again according to the reported IAEA findings.

How did the Obama Administration react to this unsettling if unsurprising news? It insisted that there is still

“time and space” for a diplomatic solution.

This is a self-defeating U.S. response. It effectively tells Tehran, “Go ahead, keep enriching uranium, you are nowhere near provoking anything other than more fruitless meetings.” Of course, Tehran will use the “time and space” granted by the Obama Administration to increase its stocks of enriched uranium further and to expand further its production capacity.

The only rational explanation for such an extraordinary statement by the Administration is that the White House places a higher priority on restraining a possible Israeli strike on Iranian nuclear facilities than it does on constraining Tehran's nuclear production capacity. Reassuring Tehran that it is in no danger fundamentally diminishes incentives on Iran to negotiate seriously, and thereby undermines the most important U.S. policy priority — halting and reversing Tehran's capacity to make material for nuclear weapons.

The Iranian nuclear program presents a serious and hard problem. There is no easy solution, and no option that does not entail significant risk, including both diplomacy and military action. But the difficulties and the stakes make it all the more important to avoid unforced errors. A self-defeating policy will never succeed, and unfortunately in rushing to insist that there is still “time and space” for diplomacy, the administration has chosen one.

http://shadow.foreignpolicy.com/posts/2012/08/28/a_self_defeating_policy_on_iran?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=5842a2cd39-RSS_EMAIL_CAMPAIGN&utm_medium=email

Public must play a role in shaping nuclear futures

Ayhan Evrensel, *The National*, Aug 30, 2012

“We decide when we engage,” said one nuclear communicator, when asked about his organisation’s low level of interaction with the public. Another one ignored a grave, factual error in a publication. “Even if blatantly incorrect like in this case,” this person said, “we don’t want to enter into a cycle of clarifications and corrections.” A third one refused to respond to a reporter who was merely checking facts. The argument? “It would be best to have this guy simply read our press release.”

These so-called communicators from different national and international nuclear authorities - people with whom I have personally interacted in recent years - forgot one basic rule: If you don’t engage, somebody will, on your behalf, and you won’t like it. The result, in all the examples above, was that misinformation and hearsay prevailed, and the record was not set straight. What was published, incorrectly, will loom online eternally.

Twenty six years after Chernobyl, and 18 months after Fukushima, the nuclear industry should not need reminding that transparency is critical to success. And yet, here I am with a reminder. As a communicator who has been on both sides of the camera, I still see a know-it-all attitude prevailing when it comes to talking nuclear. The disaster in Fukushima showed it once more: official communicators speaking too scientifically and opponents using only emotions.

Blueprints for better nuclear communication exist. Six months after Fukushima, the International Atomic Energy Agency adopted a Nuclear Safety Action Plan. And the longest of

its 11 operational paragraphs was on “communication and information dissemination”. In that document, the IAEA Secretariat was tasked with providing “member states, international organisations and the general public with timely, clear, factually correct, objective and easily understandable information during a nuclear emergency”.

For this to work, however, each country must also see this as its duty. And this should start before any key decision regarding nuclear matters is taken. Withholding information for proprietary or national security reasons must be the exception, not the rule. Involving stakeholders, including the public, should not be limited to emergencies.

Transparency enhances safety. Haven’t we learnt this from the intertwined relationships between the nuclear regulator and the utilities in Japan? Thus, here are four ideas to improve nuclear communication globally:

First, public participation in key decision-making must be globalised. This may sound like a major deal but there are already good examples at hand, like the Aarhus Convention. In force since 2009, it forces the ratifying 16 European governments to engage with their publics on decisions that might affect the environment. It is about government accountability, transparency and responsiveness, and is trans-boundary.

The 1990 African Charter for Popular Participation in Development and Transformation, and the 1992 Rio Declaration on Environment and Development, have similar approaches. Some countries also have laws ensuring public access to information.

This concept must be adapted to the nuclear realm. For instance, the Convention on Nuclear Safety (CNS), the world's only legally binding safety framework covering 75 countries, makes no mention of involving stakeholders or informing the public in nuclear decisions. The CNS should be strengthened with these transparency measures. Parties to this key convention, who are gathered this week in Vienna to discuss lessons from Fukushima, must remember that communicating with the public is an integral part of the safety culture.

The UAE is at the forefront of the dozens of nuclear “newcomers”, with its first two reactors now under construction. As a fresh CNS party, the UAE must push for more transparency to avoid the mistakes many nuclear-energy-producing countries made when they launched their programmes.

Second, measurable criteria for assessing public engagement must be embedded in international nuclear safety reviews. The IAEA sends missions to look into countries' regulatory frameworks, how they operate particular power plants, or the preparedness of a country that is considering the nuclear energy option. The World Association of Nuclear Operators, an industrial group linking commercial nuclear power plants, has similar peer missions. But none of these dig deep into stakeholder involvement.

Thirdly, communication courses should be included in the curricula of nuclear studies. Engineers, at the onset of their careers, should be taught that openness is not just a necessity, but a duty. Only then can they push transparency within their workplaces, from day one to when they assume top positions. Khalifa University, with its various education levels for young Emirati nuclear engineers, could lead by example with such a move.

Finally, national and international entities, journalists and academics should foster better communication in scientific issues. Independent science media centres that provide a network of trusted science sources for reporters in several countries are good examples. Also, bureaucrats must encourage, not discourage, journalists to cover their work.

Communication is a two-way process. Just because people in the nuclear industry talk or Tweet does not mean they communicate successfully. It is past time to make transparency a required ingredient for all nuclear programmes, and for administrators to engage openly and honestly with the public.

Ayhan Evrensel, a Vienna-based nuclear communication expert, is a former spokesperson for the IAEA, and FANR in Abu Dhabi

http://www.thenational.ae/thenationalconversation/comment/public-must-play-a-role-in-shaping-nuclear-futures?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=43c20fe063-RSS_EMAIL_CAMPAIGN&utm_medium=email Published on Nuclear Energy Insider (<http://analysis.nuclearenergyinsider.com>)

Japan playing nuclear roulette Kevin Rafferty, *The Japan Times*, August 15, 2012

HONG KONG — J. Robert Oppenheimer, one of the prominent fathers of the atomic bomb, had read the Bhagavad Gita, and when he saw the first test of the weapon, he quoted the terrifying line from the Hindu scripture: “Now I am become Death, destroyer of worlds.” It is hard to imagine the horror of the dropping of the atomic bomb on Hiroshima 67 years ago. It seared the sky and instantaneously wiped much of the city and tens of thousands of people,

and left a trail of misery that continues today, but which should not be forgotten.

Sadly, leading Japanese politicians today seem to have forgotten the lessons of the war and its savage end. Powerful politicians are hard at work trying to scrap Article 9 of the Constitution — which renounces war — and some of them want to go all-out to build a Japanese nuclear weapon. What are they thinking about? It beggars belief that a country that has suffered so much, first from being the only victim of nuclear war, and then from bungling over the use of nuclear energy, should be contemplating building nuclear weapons.

It is almost a game of Chinese roulette. Japan does not know how to cope with the rise and rise of an increasingly assertive and muscular China. It is also obviously concerned about nuclear-armed North Korea that is wont to making bellicose threats in spite of its small size and its impoverished economy. But Chinese roulette is more suicidal than the Russian version: If Japan built nuclear weapons for first-strike capability against an overbearing China, it would be committing national suicide; second-strike, or retaliatory, capacity might be too late if China had done its job properly. Using nuclear weapons against North Korea, whatever the provocation, seems unthinkable.

That is without considering the suicidal economic costs. France and the United Kingdom have discovered that keeping up with the latest nuclear weapons technology is prohibitively expensive. For already heavily indebted Japan, it could be the final straw to economic ruin.

Any decision to build nuclear weapons would be a red rag to China, far more serious than the Tokyo government or

Japan buying the Senkaku Islands. Even so, hawkish Japanese politicians claim that flaunting the bomb option will give Japan greater diplomatic clout.

The nuclear option is very much part of shadow politics, going on outside the public arena, but linked to the obvious reluctance of the government and bureaucrats to give up nuclear energy. Japan has years of expertise in production of nuclear energy, but, even so, it is questionable, especially in the light of the lessons of the Fukushima disaster, whether any part of a country sitting on so many earthquake fault lines is safe to host a nuclear plant.

However, the ability to produce nuclear power gives obvious material and technological advances toward weapons production. Former Defense Minister Shigeru Ishiba, from the opposition Liberal Democratic Party, said, “Having nuclear plants shows to other nations that Japan can make nuclear weapons.”

“Fukushima Project,” a book by anti-nuclear experts, claims that, “A group is starting to take a stand to assert the significance of nuclear plants as military technology, a view that had been submerged below the surface until now.” In June, without fanfare, Japan’s Diet changed the 1955 Atomic Energy Basic Law to add “national security” as a reason for using nuclear technology along with people’s health and wealth.

The debate on Article 9 of Japan’s Constitution has also been going on largely behind closed doors. The LDP sees itself as poised to sweep Prime Minister Yoshihiko Noda’s fractious government from power. It is demanding early elections as the price for supporting Noda’s controversial doubling of the consumption tax.

The party has been busy designing a nationalist campaign that, according to *The Economist*, “looks likely to border on emperor-worship.” In April the LDP published proposals for a constitutional amendment, which would eviscerate Article 9, the key to Japan’s peace Constitution. Article 9 famously renounces war and the threat or use of force as a means of settling international disputes.

Its second paragraph pledges that Japan will not maintain land, sea or air forces or other war potential. Some supporters of the peace clauses agree that the time has come to revise Article 9, especially given that Japan’s Self-Defense Forces are armed forces in all but name and defense spending of \$61 billion makes Japan the world’s fifth or sixth largest in the global league, vying with France. The Self-Defense Forces have also contributed, controversially, to international peacekeeping efforts.

So there is a plausible case that the new realities be recognized and careful limitations and strict rules and conditions be set. Professor Craig Martin set out the arguments for updating Article 9 without destroying it in *The Japan Times* recently. The essential core of the first paragraph of Article 9 should be preserved as Japan’s contribution to humanity.

The danger is that Japan’s rightwing will set the terms of the debate and provide a *fait accompli* of a changed constitution and a new more militaristic agenda. You can see how the approach will be made. China is growing daily more assertive, undoubtedly true. Japan is highly vulnerable, also true. But a bright guy facing a bully needs to use brains, not to slug it out and get mashed up. Japan should be making friends, especially in the Asian region. It should also try to disarm the bully by friendship and

point out — also undoubtedly true — that no one wins in a fight, least of all in the 21st century when the miseries of war would threaten the whole world’s existence.

The bigger danger, ultimately for Japan itself, is that this small island country, highly dependent on the outside world for essential imports and for exports that provide jobs and economic growth, seems unable to see itself as the rest of the world does — largely irrelevant — and lives in its own bubble world. It should be a matter of concern, for example, that South Koreans hate Japan more than they hate the North Korean regime, that there is visceral hatred in China toward Japan.

Small island nations often have an undue pride in their own insular superiority. The U.K. is similar. But the U.K. recognizes that there is an alien world out there and you have to be active in knowing what goes on and sometimes to make concessions and occasionally sacrifice cherished interests for the greater good. The U.K.’s failure to engage Europe wisely, pretending to be aloof and not part of the eurozone problems, is costing its economy dearly.

But Japan, apart from exporters at the sharp economic end, who are increasingly taking their factories abroad, seems to wish the world outside does not exist. You can see this tragically any day on the state broadcaster NHK, which seems totally ignorant of the rest of the world.

As a small example, the main morning news of NHK on Aug. 9 devoted its first 19 minutes to the Olympics, with seven minutes for Japan’s judo golds, a minute about Usain Bolt, before celebrating Japan’s javelin thrower who failed to qualify for the finals, its decathlon competitor in 26th place

and the vital women's field hockey match between Japan and South Africa to decide who comes ninth. Then there was a preview of the Japan-U.S. women's soccer final. There was no mention of the achievements of China or the United States, or of the world outside the Olympics.

The BBC on the same day started with the medal battle between China and the U.S., went to Jamaica to ask about the culture that produced Bolt, celebrated Japan's judo golds and found time to report on mayhem in Syria.

At 20 minutes after the hour, NHK went on to the intense political fight over the consumption tax and, very briefly, after 30 minutes, to the people of Nagasaki waiting to commemorate the dropping of the second atomic bomb on Aug. 9. Lest Japan forget: War in the 21st century would be tantamount to national suicide.

Kevin Rafferty is author of "Inside Japan's Powerhouses", a study of Japan Inc and internationalization.

<http://www.japantimes.co.jp/print/eo20120815a2.html>

The denuclearisation

threat By Talat Masood, *The Express Tribune*, August 15, 2012.

There is a fear, bordering at times on paranoia, in certain sections of our society that the US has plans to denuclearise Pakistan. These apprehensions are repeatedly reflected in seminars, television 'talk shows' and other forums and add to the prevailing distrust between the two countries. Even repeated American assurances have failed to put these fears to rest.

Mutual distrust between the US and Pakistan on nuclear issues has a historical, political and strategic connotation. The United States has been opposed to Pakistan's acquisition

of nuclear weapons from the very beginning and has even pursued coercive policies in this regard. It has imposed sanctions, cut off financial and military aid, and exercised diplomatic pressure and only looked the other way when its immediate strategic interests took priority.

It ignored Pakistan developing nuclear capability during the 1980s, when it was a key partner in supporting the insurgency in Afghanistan against the erstwhile Soviet Union, but as soon as the insurgency was over, the US came down hard by invoking the Pressler and Symington Amendments. Grudgingly, as a quid pro quo to Pakistan acting as a front-line state in the war against terror, the US once again lifted the sanctions and reconciled to the reality of a nuclear Pakistan.

Initially, Washington was as much opposed to India's nuclear build-up, but over the years, its policy dramatically changed as the strategic interests of the two countries converged. The Indo-US nuclear deal and strategic partnership turned out to be another source of mistrust between the US and Pakistan.

Meanwhile, the revelation of the AQ Khan odyssey created new tensions between the US and Pakistan, further aggravating the distrust between them. Pakistan's cooperation, however, in providing access to the IAEA and to the US to investigate AQ Khan's proliferation network and the SPD's (Strategic Plans Division) subsequent serious effort of strengthening the safety and security of Pakistan's nuclear assets largely contributed to restoring, both the US and the international community's confidence. Senior officials of the US have since publicly acknowledged that Pakistan's nuclear weapons and material are safe and secure.

But the with the growing power of the insurgents — the Tehreek-e-Taliban Pakistan, the Lashkar-e-Taiba and other militant groups — and the government's inability to counter them effectively has once again given rise to fears in Washington and Western capitals about the dangers of Pakistan's nuclear weapons or fissile material falling in their hands. From their perspective, prospects of nuclear terrorism, though remote, cannot be ruled out. Pakistan's response has been that these are exaggerated fears, dictated by ulterior motives. The US fears, in turn, give rise to Islamabad (read the SPD) probably taking precautionary measures and further tightening the security of nuclear assets not only against militants but against any potential US move to denuclearise it. If this involves any physical movement within Pakistan, it is most likely captured by US satellites, causing anxiety and feeding each others' insecurities.

More to the point, Pakistan's nuclear capability is essentially to countervail India's nuclear power. It poses no threat to the US or any other country. In any case, with such overwhelming US superiority in nuclear weapons and means of delivery, it would be hubris for Pakistan (or any country) to contemplate such aggressive scenarios. Domestically, Pakistan's nuclear programme has the full support of the military establishment, political and religious parties and scientific community and is perceived as a central pillar of the country's security. There is also a certain romance and emotionalism associated with the nuclear capability and successive governments in Pakistan have made psychological investment in the programme that supposedly serves to cement national unity and pride. For all these reasons, Pakistan's leadership has done everything possible

to keep nuclear assets safe and secure. With all the sacrifices and investment to acquire a nuclear status, Pakistan will not let them fall in the hands of the militants.

At the same time, it serves no US interest to take up Pakistan's nuclear assets. Even if it were to try this, it would be a highly risky and dangerous undertaking with no chance of success. Moreover, we need to remind ourselves that knowledge is indestructible and no one can take it away. The conspiracy theories need to be discarded.

<http://tribune.com.pk/story/422062/the-denuclearisation-threat/?print=true>

Deterrence-palooza By

Michael Krepon, August 12, 2012

For four years now, STRATCOM has hosted an annual deterrence symposium that provides opportunities for younger officers and their seniors to hear old hands, U.S. government officials, foreign perspectives, policy influentials, and the occasional heretic. As a networking and learning experience on all matters relating to deterrence, it doesn't get much better than this.

I was on a panel this year with Frank Miller and George Perkovich addressing the question of whether nuclear weapons are becoming more or less influential in the emerging international security environment. Peter Lavoy, the Pentagon's Principal Assistant Secretary of Defense for Asia and the Pacific, served as moderator. Videos of the panel discussions and speakers will be posted on STRATCOM's event web site. [Update: videos have been posted here.] A common answer to hard questions throughout the two-day event, held on August 8-9, was "it depends." My presentation follows.

Appearances matter. Appearances matter for deterrence. But in all matters other than cosmetic surgery, the force of gravity trumps appearances. Gravity is having its way with the U.S. nuclear stockpile and deployed forces. The effects of gravity are reinforced by budgetary woes and significant trends, including the absence of actual battlefield use and the use of threats to use nuclear weapons. The former is now 67 years old as of this very week. The latter has mostly become the province of outlier states. Responsible states don't threaten nuclear weapons' use; irresponsible states do. Numbers matter, but norms matter more. Numbers become a way to reinforce norms. Numbers as well as norms point to the diminished utility of nuclear weapons for the United States. The question before us is whether to assist or resist gravity.

The concept and practice of deterrence are as important as ever. The constituent elements of deterrence are familiar, but the mix is shifting. The use of economic instruments in deterrence equations is growing among four of the P-5, if not all five. Two other elements – space and cyber – are also gaining prominence. The element of nuclear deterrence has variable salience, depending on individual cases. Every case is unique and hard to categorize. But for purposes of discussion, and to spark rebuttals, I propose the following typology:

1. States with strong conventional forces and significant economic equities, in a global or a regional sense. In these cases, states try to reduce the salience of nuclear weapons in deterrence equations. I place the United States, India, and perhaps Israel in this category.
2. States with multiple weaknesses – military (relative to potential foes), economic, political, and institutional – that have worrisome security challenges. In these cases, the salience of nuclear weapons in deterrence strategies is increasing. Nuclear weapons provide a porcupine defensive strategy, while compensating for worrisome internal and external trends. In this group I would place Pakistan, the DPRK, and Russia.
3. States for whom nuclear weapons are primarily a reflection of Cold War history. In these cases, nuclear weapons have a very limited role in deterrence strategies, even though they cost a great deal. Government leaders have difficulty acknowledging this. In this category I would place Great Britain and France.
4. The wild card category: China, a state with a growing economy, rising status and worrisome internal prospects. China has previously demonstrated relaxed requirements for nuclear deterrence, even when Beijing was on poor terms with two superpowers. China's strategic modernization program continues, but at a modest pace. Beijing's strategy for achieving great power status has been about economics, not nuclear weapons. Will Beijing become increasingly attached to the Bomb as it becomes better off?

All of these cases, with the exception of Great Britain and France, have important qualifiers. Israel's public silence and private reliance on nuclear weapons could be reconfigured in the event that the Iranian nuclear program continues to advance.

India is a status-conscious society with risk-averse leadership that largely views nuclear weapons as political instruments. Consequently, it has a poorly operationalized

deterrent. India has done well for itself by trying to reduce the salience of nuclear weapons in deterrence equations, but how long will this continue to be the case, if Pakistan and China take nuclear weapons more seriously?

Pakistan is increasing the salience of nuclear weapons in its deterrence calculations more than any other state. Pakistan's high-low deterrence mix – nuclear weapons and proxy groups – is deeply problematic. This mix speaks volumes about the severity of the challenges Pakistan faces and how much autonomy Pakistan's military enjoys. North Korea is a black box. Surprises are inside. Some might even be positive.

Russia is increasing the salience of its nuclear deterrent even though its external threats are, by historical standards, very modest. Trend lines that reduce the salience of nuclear weapons in the United States are now a quarter-century old and very well defined. It will take very serious shocks to reverse these trend lines. The shock of 9/11 certainly didn't.

How does all of this net out?

The economic element of deterrence is growing as the nuclear element is declining, with prominent exceptions. Sanctions have come a long way – to the point where they can even hurt a big oil producer like Iran. They may not deter or compel Tehran, but these sanctions could be an object lesson for potential fence-sitters.

One definition of deterrence is what the competition worries about. We in the United States worry more about China's economic clout than its nuclear arsenal. Even the Kremlin, with its reflexive, atavistic tendencies toward nuclear and BMD issues, gets more mileage out of threats to turn off pipelines than to vaporize cities.

Can those who now seek increased salience for nuclear deterrence – the outliers and Russia – tip the scales? Not yet. When outliers seek more nuclear weapons, they gain more notoriety, not power. And nuclear weapons are a very poor substitute for what ails Russia. The top line indicators of reduced salience remain strong. The two biggest nuclear stockpiles and deployed force levels are shrinking, and the absence of nuclear testing further reduces the salience of nuclear weapons. If the DPRK tests another nuclear device, it will not gain power, influence, or foreign aid. No one seems to be lining up behind North Korea.

Will nuclear weapons become more or less influential in the emerging international security environment? Given this mixed picture, it depends. It depends mostly on China and whether the Iranian nuclear program will have cascade effects.

http://krepon.armscontrolwonk.com/archive/3509/deterrence-palooza?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=4657c7b652-RSS_EMAIL_CAMPAIGN&utm_medium=email

Dreams of nuclear peace

Hassan Tahsin, *Saudi Gazette*,
August 23, 2012

Amid the fierce media war going on among the United States, Israel and Iran, Garth Evans, Co-Chair of International Commission on Nuclear Non-Proliferation and Disarmament, said during a press conference held in Cairo under the auspices of the Australian Embassy and the Strategic Studies Center of Al-Ahram Egyptian daily, "The year 2020 will be the year of disarmament. There's a genuine intention on the part of the countries which possess nuclear weapons to reduce the number of their nuclear arsenals." He also said that Israel

should be part of the non-proliferation agreement.

He concluded with these reassuring political words, "I appeal to nuclear countries to stop the race of arming themselves with nuclear and chemical weapons. We should engage in negotiations to stop this race and make our peoples live in peace." Evans spoke highly of the commitment of the Kingdom of Saudi Arabia and Egypt to maintain their self-restraint. He lauded them for not engaging themselves in a nuclear race that would make the region more volatile than it already was. Evans' statements are optimistic about the future of humanity. He dreams to see the day when the whole world is free from nuclear and mass destruction weapons.

After completing the commission's tasks in Egypt, Evans traveled to Israel. A few hours after arriving there, the BBC announced that Israel had plans to build a new nuclear arsenal and that the Israeli infrastructure minister would reveal the new plans later.

The BBC also claimed that the new nuclear reactor would be built in south Israel and that the Israeli minister discussed the plans with the French energy minister and Jordanian authorities. However, Israel neither confirmed nor denied the plans. We must not forget that France was the first to provide Israel with nuclear reactors in the 1950s. France also built Dimona, Israel Nuclear Reactor, and developed Israel's nuclear abilities. Then the United States took over and took on the responsibility.

Many experts on weapons of mass destruction say that Israel can annihilate Europe and Moscow. After all, Israel ranks fourth in the International Nuclear Club after the United States, Russia and China. Israel had not responded to the BBC

news about the new nuclear reactor. It played the same card and kept talking about how the country is surrounded by enemies and that its security requires deterring forces. Haaretz Israeli daily published the following report in line with the Israeli policy.

The report said tens of surface-to-surface missiles would target Israeli air force bases in the next war. These predictions were made by the division in charge of studying air weapons performance and preparedness to respond to potential attacks on air force bases. Israeli intelligence units claimed that Hizbollah and Syria were arming themselves with missiles which could target strategic targets in Israel with high precision.

Israeli predictions claimed that if a war raged in the north, Syria and Hizbollah, perhaps Hamas too, would attempt to hit military targets such as air force bases in addition to populous areas. The study stated that the Israeli air force sector was implementing a plan to prepare thousands of soldiers to take their places in military bases and be ready to continue working even at times of shelling.

Sources indicated another method, called "Iron Dome" to protect Israeli air force bases. The Israeli army obtained 20 giant aircraft which provide fuel to jet fighters while in the air. Moreover, Israel, with unlimited US help, was able to get permission to use several air routes of the countries surrounding Iran.

Israel set up two military airports at the autonomous Kurdish region, north Iraq, in 2004. Some NATO sources said that three countries permitted Israel to use their airspace in cases of war and use their regional waters to get fuel, food and missiles. Moreover, an Israeli submarine

carrying weapons is stationed permanently in the Gulf region.

Some experts said Israel might resort to using its nuclear arsenal in emergency cases. If Iran or Hizbollah decides to use missiles with biological or chemical heads against Israel, the latter will use its arsenal, specifically small nuclear bombs to counter attack.

These bombs are capable of annihilating living things without causing any damage to buildings and organizations. They possess radiological reactions that might reach to hundreds of kilometers. These bombs are used as a new method to cause harm to living things without causing any harm or damage to nearby countries. They have been kept in the US nuclear arsenal since the fall of the Soviet Union.

Therefore, I would like to say to Mr. Evans that he is very optimistic and this optimism will lead him nowhere. Evans as well as all people should know that the world is not going to get rid of mass destruction weapons unless the United States, Russia, China, France and the United Kingdom has gotten rid of their nuclear weapons and forced Israel, India, Pakistan and North Korea to follow suit.

Is this possible? I don't think so, at least for the time being.

http://www.saudigazette.com.sa/index.cfm?method=homeRegion&contentid=20120823133814&utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email

Why the world can't tolerate a pre-emptive Israeli attack on Iran L. Michael Hager, *Gulf*

News, August 22, 2012

Now that negotiations with Iran over its nuclear programme are at an

impasse, we are once again hearing that Israel, with or without US participation, is about to bomb Iran. Last Sunday, Israel's Deputy Foreign Minister Danny Ayalon called for an international declaration that the diplomatic efforts to halt Tehran's enrichment of uranium "have failed." Such a declaration, he went on to say, would make clear that "all options are on the table" for Israel, the United States, and Nato. Other news reports say that Israeli Prime Minister Benjamin Netanyahu has "all but made the decision" to attack Iran this fall.

What is now at stake is not only a threat of a major war in a volatile region, but more importantly for the long run, the future of the international peacemaking process itself. Responding to the horrors of the Second World War, countries sought to build an international order that would ensure and maintain international peace and security. Signed on June 26, 1945, the United Nations Charter stated that all members shall refrain from "the threat or use of force against the territorial integrity or political independence of any state."

At the same time, the Charter recognised as an exception the right of self-defence. Article 51 provides: "Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack [italics added] occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security."

The Charter established peacemaking procedures to prevent international disputes from becoming armed conflicts, mandating that parties to disputes seek a solution by negotiation, mediation, or other

peaceful means.

Under the strict wording of the Charter, neither Israel nor the United States would have a legal right to preemptively launch a military strike on Iran. Moreover, if the US were to participate in such an attack without the approval of Congress, the president would violate US law as well as the UN Charter, which by treaty became part of US law.

'Bush doctrine'

Because international law is mostly defined by international practice, the so-called "Bush Doctrine" of pre-emptive attack has seriously compromised Article 51. Nothing in the UN Charter would justify a pre-emptive strike, yet George W. Bush proceeded with the 2003 "shock and awe" strikes on Iraq, based on faulty intelligence reports that Saddam Hussain had weapons of mass destruction.

Recall Colin Powell's speech to the UN on February 5, 2003 in which he insisted that Iraq was harbouring weapons of mass destruction, and implied that weapons capacity alone was enough to justify a pre-emptive strike. In the wake of 9/11, the Iraq war planners simply disregarded Article 51 as outmoded. No wonder that Israeli planners think they have a legal *carte blanche* to bomb the Iranians, even if their rationale for attack rests only on an assumption that Iran is developing a nuclear bomb capacity and does intend to use it against Israel.

A key question is whether the strict "armed attack" limitation on national self-defence will remain as an effective check on governments. More fundamental is whether the UN Charter will endure as a viable mechanism for the maintenance of international peace. To put these questions in practical terms: Do we

want a world in which leaders are free to launch military attacks on other countries simply on an assumption of hostile intent and military capacity? Are we content with a lexicon that clothes aggression with the mantle of "pre-emptive self-defence?"

It is time for President Obama to say "No" to the Israelis — no more military aid (now amounting to more than \$3 billion (Dh11.02 billion) a year) if they launch a military strike on Iran. He should publicly and definitively rule out the possibility of US participation in a military attack on Iran.

L. Michael Hager is co-founder and former director-general of the International Development Law Organisation in Rome, Italy.

http://gulfnews.com/opinions/columnists/why-the-world-can-t-tolerate-a-pre-emptive-israeli-attack-on-iran-1.1064286?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=60236c6af2-RSS_EMAIL_CAMPAIGN&utm_medium=email

H. Special Reports & Press Releases

Fact Sheet: Nuclear Energy Facilities Well Protected Against Hurricanes *Nuclear Energy*

Institute, August 2011

In every instance of a natural challenge, including hurricanes, U.S. nuclear energy facilities' safety systems and emergency equipment have, without exception, effectively protected public health and safety.

<http://www.nei.org/resourcesandstats/documentlibrary/safetyandsecurity/factsheet/nuclear-energy-facilities-well-protected-against-hurricanes/?page=1>

Debate: Is a nuclear fuel bank a good investment?

Bulletin of Atomic Scientists, August 28, 2012

Among the fundamental challenges facing the nonproliferation project is that highly enriched uranium suitable for nuclear weapons can be produced in the same facilities that make low-enriched uranium for civilian reactors. One approach to this problem is limiting the number of countries where enrichment occurs: Offer nations a guaranteed supply of low-enriched uranium if they renounce the right to enrich on their own.

But in potential customer nations, enthusiasm for a fuel bank has not been universal. Below, Ta Minh Tuan of Vietnam, Khaled Toukan of Jordan, and Ramamurti Rajaraman of India address the question: "From the customer's perspective, what are the advantages and disadvantages of an international nuclear fuel bank for supplying developing countries with low-enriched uranium?"

http://www.thebulletin.org/web-edition/roundtables/nuclear-fuel-bank-good-investment?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=43c20fe063-RSS_EMAIL_CAMPAIGN&utm_medium=email

Institute for Science and International Security (ISIS): North Korea's Estimated Stocks of Plutonium and Weapon-Grade Uranium: By David Albright and Christina Walrond, August 16, 2012

For years, great controversy has surrounded North Korea's uranium enrichment program (UEP). How large is it? Has it made weapon-grade uranium (WGU)? How much could it make in the future? But there are also

broader questions.

http://isis-online.org/uploads/isis-reports/documents/dprk_fissile_material_production_16Aug2012.pdf

From HEU minimization to elimination: Time to change the vocabulary

Corey Hinderstein, Andrew Newman, and Ole Reistad: *The Bulletin of the Atomic Scientists*, Volume 68/Issue 4, July/August 2012

There are approximately 1,440 tons of highly enriched uranium (HEU) in the world today. Because this material might be stolen by terrorists seeking to build a nuclear weapon, efforts are underway to reduce, secure, and consolidate stocks of HEU. But simply minimizing the use of HEU is no longer sufficient to the risk nuclear terrorism poses.

Low-enriched uranium (LEU) has proved acceptable for virtually all civilian applications, and LEU has been substituted for HEU in 63 reactors and facilities to date. There are few remaining technical impediments to the elimination of HEU use in civil and military naval nuclear facilities.

<http://intl-bos.sagepub.com/content/68/4/83.full.pdf+html>

Sustainability and the Fixed Bed Nuclear Reactor (FBNR) Farhang Sefidvash, FBNR Technology, August 6, 2012

(This article belongs to the Special Issue Sustainable Nuclear Energy)

Abstract: Sustainability as a multifaceted and holistic concept is analyzed. Sustainability involves human relationship with elements

such as natural environment, economy, power, governance, education and technology with the ultimate purpose of carrying forward an ever-advancing civilization. The Fixed Bed Nuclear Reactor (FBNR) is an innovative, small, simple in design, inherently safe, non-proliferating, and environmentally friendly concept that its deployment can generate energy in a sustainable manner contributing to the prosperity of humanity.

http://www.mdpi.com/2071-1050/4/8/1683?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email

Nuclear Iran: A Glossary of Terms Simon Henderson and Olli Heinonen, *Policy Focus 121*, August 2012

Co-publication of The Washington Institute for Near East Policy and Harvard Belfer Centre

INTERNATIONAL DIPLOMACY concerning Iran's nuclear program continues to centre on the country's

Compliance with agreements designed to ensure that peaceful nuclear work is not used as a cover for the development of nuclear weapons. The challenge of discovering what may be going on in Iran is difficult not only because of Tehran's obstructionism, but also because the same technologies, particularly uranium enrichment and spent fuel reprocessing, can be used for both civilian and military purposes.

[http://belfercenter.ksg.harvard.edu/files/Nuclear%20Iran%20A%20Glossary%20of%20Terms%20PolicyFocus121.pdf?utm_source=SilverpopMailing&utm_medium=email&utm_campaign=New%2520Joint%2520Report_Nuclear%2520Iran_A%2520Glossary%2520of%2520Terms%2520\(1\)&utm_content=&utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email](http://belfercenter.ksg.harvard.edu/files/Nuclear%20Iran%20A%20Glossary%20of%20Terms%20PolicyFocus121.pdf?utm_source=SilverpopMailing&utm_medium=email&utm_campaign=New%2520Joint%2520Report_Nuclear%2520Iran_A%2520Glossary%2520of%2520Terms%2520(1)&utm_content=&utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email)

Strengthening Nuclear Security Education and Training IAEA General Conference Side Event Highlights IAEA's "Essential Role"

IAEA, August 24, 2012

As the use of nuclear energy for power generation and radiation techniques in medical, industrial and other practices continues, protecting nuclear and other radioactive material remains a difficult security challenge for many countries worldwide. An effective way to address this challenge is through proper education and training, and the IAEA's Department of Nuclear Safety and Security's side event at this year's 56th General Conference will highlight the Agency's activities in this field.

http://www.iaea.org/newscenter/news/2012/strengtheneducation.html?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=3582aae2bb-RSS_EMAIL_CAMPAIGN&utm_medium=email

China's Evolution on Ballistic Missile Defense

Lora Saalman, *PROLIFERATION ANALYSIS*, AUGUST 23, 2012

China's approach toward ballistic missile defense is shifting. This area has long been regarded as a bastion of U.S.-Russian power politics and nuclear dynamics by Beijing. However, China has recently become a participant rather than an observer with its inclusion, along with Russia, as a dominant factor in the 2010 U.S. Nuclear Posture Review, and with its ground-based midcourse missile interception test in the same year.

<http://carnegieendowment.org/2012/08/23/china-s-evolution-on-ballistic-missile-defense/dkpkj>

IAEA Inspectors' Risk in Iran Mark Hibbs, *ARMS CONTROL* *WONK*, August 20, 2012

In a phone call at one o'clock in the morning on March 17, 2003, the U.S. Ambassador to the IAEA, Kenneth Brill, advised IAEA Director General Mohamed ElBaradei to remove his inspectors from Baghdad immediately. The following day, the IAEA gave orders for personnel to leave Iraq. On March 19, the U.S. launched Operation Iraqi Freedom.

Fast forward nine years. We're now moving into the fifth month of Iran-P5+1 diplomacy without any progress, Prime Minister Netanyahu is urging the powers to declare negotiations a failure, and the drums of war are once again beating in Jerusalem. So it's no surprise we're closing out the summer—and for good reason—by revisiting all the potential downsides of an Israeli attack against Iran's nuclear installations.

<http://carnegieendowment.org/2012/08/20/iaea-inspectors-risk-in-iran/djbf>

US Nuclear Regulatory Commission:

FINAL ENVIRONMENTAL IMPACT STATEMENT FOR PROPOSED URANIUM DECONVERSION FACILITY IN NEW MEXICO

The Nuclear Regulatory Commission has issued its Final Environmental Impact Statement (FEIS) on a proposed facility in Lea County, N.M., that would deconvert depleted uranium hexafluoride from the uranium enrichment industry to make it more suitable for disposal. The FEIS contains the staff's assessment that there are no impacts that would preclude licensing the proposed facility.

http://www.nrc.gov/reading-rm/doc-collections/news/2012/12-095.pdf?utm_source=Paulo%27s+Corner+Daily+Nuclear+News+Digest&utm_campaign=93459ec32e-RSS_EMAIL_CAMPAIGN&utm_medium=email

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Details are available at: http://www.pugwashindia.org/contribute_articles.asp

The Indian Pugwash Society aims to promote the study, discussion, and knowledge of and to stimulate general interest in, and to diffuse knowledge in regards to problems relating on WMD proliferation, arms control, disarmament, space security, export controls, nuclear technology and other related issues. This newsletter is part of the project "Emerging Nuclear Order in Asia: Implications for India" sanctioned to us by Department of Atomic Energy-Board of Research in Nuclear Sciences (DAE-BRNS).

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