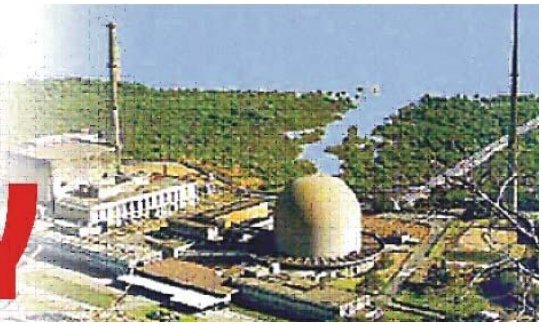
NUCLEAR SECURITY



A FORTNIGHTLY NEWSLETTER ON NUCLEAR DEFENCE, ENERGY AND PROLIFERATION FROM CENTRE FOR AIR POWER STUDIES

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OPINION- Hina Pandey

President Obama's Iran Deal- Part-II "Balancing International Commitment with Domestic Politics: Post Lausanne Talks"

The second breakthrough on the Iran –P-5 talks is the case of a 'hot potato'. Earlier this month, on 02 April 2015, a second framework of Agreement was achieved at Lausanne-Switzerland, bringing a much desired relief and advancement to the process. The 'Parameters for a Joint Comprehensive Plan of Action regarding the Islamic Republic of Iran's Nuclear Program' (JCPOA-2); a blueprint of the agreed framework was released by the White House the same day. The JCPOA-2 has clearly set the foundations upon which the final agreement would be based. It must be recognised that, by 30 June 2015, a final solution to the Iranian nuclear dilemma is to be delivered.

In under 1.5 years of the conclusion of the Joint Plan of Action (JPOA-1)at Geneva (24 November 2013), the negotiating parties have been able to achieve another breakthrough out of the Iran – P5+1 talks. It is interesting to note that, only three months ago, Iran and P-5+1 were under strenuous pressure to reach a formal agreement on the enrichment limit against a tight deadline as in the previous Joint Plan of Action (JPOA-1) a timeline for the 'final comprehensive solution' was already decided.

However, it must be recognised that the 'Parameters' as the title suggests are 'only' the parameters or agreed guidelines, upon which the -final 'comprehensive' solution would be negotiated. One must recognise that these guidelines are non-binding/ non legal in nature and still provides a huge scope for further deliberations. While an outline on the impending negotiation process is set; the texture of the talks might get rough in the coming days.

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What remains interesting is that, three versions of the 'Parameters' of the JCOPA-2 have been released so far by all the three key negotiating parties- a) the US State Department Press Release b) the EU-Iran Joint Statement (both released on the same day) and c) Summary of the Package of Joint Solutions for Reaching a Comprehensive Plan of Joint Action (Iranian version of the 'Parameters...'

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This makes the final phase of negotiations most vital and challenging. Not only the seven negotiating parties are pressed for time to arrive on decision based on 'consensus', as a condition explicitly stated in the JPOA-1, but also speculations on US GOP Congress's sabotaging efforts might become a reality in coming two months.While the former task is difficult, it is less complex in comparison to the latter, which includes, convincing the GOP Congress and Israel lobby to take a U-Turn on their one year old assertive hard work.

Why is GOP Congress Upset Over the Non-Proliferation Gains?

Non-Proliferation Gains: A scrutiny of the parameters of the JCPOA-2, as released by the US State Department reveals that negotiations at Lausanne have been able to make significant non-proliferation achievements. In principle, three main non-proliferation gains have been acquired out of the Lausanne talks. a) Reduction in the current enrichment capability b) Transparent and vigorous monitoring by the IAEA c) An extended timeline for (suspected) nuclear breakout.

This however is the American version of the gains; which at some specific points contradicts the Iranian 'Summary of the package'. For instance, the US has reassured its domestic audience of a permanent adherence of Iran towards the IAEA Additional Protocol (AD); the EU-Joint Statement and Iranian version however, reveals it to be of provisional in nature. Iran's official statement has also clarified that it would need ratification from the Islamic Consultative Assembly and the implementation of the AD is voluntary and temporary in nature. In addition to this a senior commander in the Revolutionary Guard -General Hossein Salami had already objected to the international inspection.

Specifically, the JCOPA-2 has been able to being the Iranian nuclear programme, especially its enrichment and reprocessing aspect under a pre-defined perimeter. For the next 10 years, Iran's current enrichment and its R&D will be limited. This includes a reduction of two-thirds of Iran's currently installed centrifuges. Iran has also agreed to not enrich uranium over 3.67 percent, combined with that Iran has been prohibited from building newer enrichment facilities for the next 15 years. This would likely to impact the breakout timeline of Iran's (suspected) acquisition of the nuclear weapons.

The JCPOA-2 has expanded the IAEA's monitoring and transparency upon the Iranian nuclear programme. A regular IAEA access to all of Iran's nuclear facilities, enrichment facilities, the access to supply chains, uranium mines and uranium mills has been put forward. Iran has also agreed to implement the Additional Protocol of the IAEA that gives greater access to nuclear related information. Furthermore, Iran has wilfully agreed to redesign and rebuild a Heavy Water Research Reactor at Arak, based upon the agreed design provided by the P-5+1. It is noteworthy that, the original core of the reactor would be destroyed under the specified P-5+1 design. The research reactor has previously produced weapons grade plutonium. Finally, Iran has given an indefinite committed towards a 'No' reprocessing of its spent fuel.

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Iranian 'Summary of the package…'. For instance, the US has reassured its domestic audience of a permanent adherence of Iran towards the IAEA Additional Protocol (AD); the EU-Joint Statement and Iranian version however, reveals it to be of provisional in nature. Iran's official statement has also clarified that it would need ratification from the Islamic Consultative Assembly and the implementation of the AD is voluntary and temporary in nature. In addition to this a senior commander in the Revolutionary Guard -General Hossein Salami had already objected to the international inspection. This would likely affect the upcoming talks severely.

The members in the GOP Congress would likely to deliver a tough decision on one of the most consequential matters of the American foreign policy. Not only they have all the right to decline a compromising nuclear deal for national interest, the nature of domestic politics itself is expected to not have President Obama an easy win on an important matter, especially, when the Presidential election campaign is underway.

Republican Reservation: The matter of intrusive inspection is not the only challenge that President Obama has to deal with. The Republican opposition is growing stronger and influential skeptics, including the Chairman of the US Senate Foreign Relations Committee-Bob Corker along with Senator Ben Cardin (D) has put forward the legislation which provides for Congress a 52-day window to reject the deal.

The hardliners in the US expects a disclosure of the classified annexure of the final solution. The three different versions of the JCPOA-2 has manifested more doubts in the minds of many hardliners. Until now, there are not clear answers for the GOP Congress as to what is exactly being provided in the 'parameters'. Furthermore, many of them wants the provision of 'anytime, anywhere inspections' on the Iranian nuclear programme. The final solution could possibly be jeopardised if doesn't include a stricter inspections. Another significant challenge is to find a middle ground on the exact timing of the lifting of the sanctions. Will they be phased as put forward by the US position, or will they be lifted immediately after the JCPOA-2 comes into effect as demanded by Iran.

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What Are the Voters saying? A recent conducted in the US, reveals that out of the 806 registered voters surveyed; 61 percent of voters don't want Congress to block the Iran deal. A large majority of the voters including the Democrats, Republicans and Independents are in favour of the JCOPA-2. Interestingly 41percent of the Republicans favour the parameters of the agreement. The provision relating to the intrusive, short notice inspection of Iran's nuclear programme by the IAEA was viewed in a positive light as depicted by the survey. Approximately 47 percent of the surveyed Republican voters favour the implementation of the agreement and the close monitoring of its implementation; however, 48 percent are in support of its prevention from getting finalised.

By and large the surveyed registered voters perceive the implementation of agreement and effective follow up as a better course of action than blocking the agreement. While the GOP Congress is getting ready with its own strategy to bulldoze the final outcome of JCOPA-2; a part of the Republican voters seems divided on the same issue.

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final outcome of JCOPA-2; a part of the Republican voters seems divided on the same issue.

Close Call for President Obama: President Obama has himself acknowledged that if the deal gets obstructed due to domestic politics, the US would be blamed for a diplomatic failure. The White House has promised a lobbying campaign. He is pressed to deliver effectively on a sensitive foreign policy issue not only for the sake of his promises that he made while campaigning for his Presidency , but also because a final solution is also going to subtly indicate a shift on the US-Israel relations.

It is indeed a sensitive situation for the Democratic President. He has to walk a real tight rope on this matter. In essence all the parties wants a timely solution to issue at hand, which means a nuclear programme for Iran –entirely peaceful in nature. The approach both the US and Iran takes in blending their differences would be a defining feature of the 'Final Comprehensive Solution'.

Source: Hina Pandey is working as an Associate Fellow at the Centre for Air Power Studies. http://www.perspectivesamericas.org/, 21 April 2015.

OPINION- Hans Blix

The Iran Deal and the NPT

Iran, the P5+1 powers and the EU announced on 02 April 2015 that they had agreed on the main points of a deal on Iran's nuclear energy program. This announcement came after 12 years of negotiations and a final round of high intensity talks. In most capitals around the world the news was received with feelings of relief. There was even a nascent hope that a no longer isolated Iran might help to reduce chaos and violence in the Middle East. ...In a document released by the White House that claims to reflect central agreed 'parameters', a number of measures mentioned will almost certainly be difficult to finalise. For example, it is unclear how the proposed mechanism to examine and approve the sale of certain nuclear energy related material and technology will be administered. Inspections shall be possible of some cargoes carried by sea. Iran shall give the IAEA inspection rights more extensive than any other state accepts today. Moreover, before any UN resolutions are to be rescinded, the IAEA is to have attained clarity about contentions and evidence it has received from national intelligence services on the alleged 'military dimensions' of activities carried out by Iran in the past.

It is unclear how the proposed mechanism to examine and approve the sale of certain nuclear energy related material and technology will be administered. Inspections shall be possible of some cargoes carried by sea. Iran shall give the IAEA inspection rights more extensive than any other state accepts today. Moreover, before any UN resolutions are to be rescinded, the IAEA is to have attained clarity about contentions and evidence it has received from national intelligence services on the alleged 'military dimensions' of activities carried out by Iran in the past.

According to the White House document, Iran will introduce limitations in its capacity to enrich uranium as well as in the quantities and levels to which enrichment is undertaken. An underground installation, resistant to bombing raids, that was intended for enrichment at Fordow will be geared to research and development. All production of plutonium will be prohibited. On the other hand, Iran will be able to take part in international nuclear cooperation, buy nuclear reactors from abroad and cooperate in matters relating to nuclear safety and security. Sanctions will be terminated when the IAEA verifies that Iran is fulfilling its key commitments. A new resolution of the UNSC will rescind its ongoing sanctions and will introduce some new time-limited requirements.

Perhaps those who released the document hoped that it would reduce resistance in Washington (and Israel) to an agreement with Iran. But the document may provide a stumbling block for a final text to be ready before the end of June 2015. The detailed US Government document stands in contrast to the rather brief common statement that

was made by the FM of Iran, Zarif and Mogherini, the EU High Representative for Foreign and Security Policy speaking on behalf the P5+1 (including the US). What is an alternative to the deal? What happens if the opponents succeed in stopping approval of it in the US? The most ardent American hawks have a simple answer: either bomb Iran or let Iran get the bomb. It seems unlikely, however, that the US would launch an armed attack against Iran any time soon. Not sadly out of qualms over breaching the UN Charter or fear of the almost certain international condemnation, but because there would be strong resistance inside the US to start a new armed adventure after conflicts in Afghanistan, Iraq, Libya, Syria and Yemen. No one knows where an armed attack would lead, how long it would last or what it would cost.

...How well supported are the suspicions that Iran planned to violate its obligations under the NPT and develop a nuclear bomb? During the 1980s, Iran found itself in a terrible war with Iraq. In 1981 Israel bombed an Iraqi research reactor that was claimed to be Saddam's route to develop nuclear weapons. It would have been understandable if during this period Iran had had thoughts to at least get closer to a nuclear weapon capacity. However, this was over 30 years ago. Neither in the 1980s nor after has it been asserted by the Security Council or the Board of Governors of the IAEA that Iran has made or is on the way towards making a nuclear weapon.

What has led to these suspicions is that Iran has developed a larger capacity for enrichment of uranium than should have been needed for an exclusively peaceful nuclear program. When, in addition, it was concluded that Iran had ignored some duties to report to the IAEA, many lost confidence that Iran had waived its nuclear weapons option. Centrifuges that enrich uranium to 4% can be employed to enrich uranium to 90% suitable for nuclear weapons. It is also true that enrichment plants in Japan and Brazil have prompted few objections. The difference is that there is international confidence that these countries have no weapons intentions. The manner in which the Iranian program grew in size did not create this kind of assurance. To develop a modern peaceful nuclear energy program that meets no international objections, Iran will need to implement what has so far been defined in a basic deal at Lausanne in the years to come.

The Lausanne deal will be the subject of many comments at the NPT Review Conference that will take place in New York at the end of April and beginning of May 2015. A vast majority of states will express satisfaction that the permanent members of the UNSC along with Germany and the EU have been able to reach a basic deal with Iran to prevent further nuclear proliferation in the Middle East. Iran will be welcomed back from isolation. It will be noted as a hopeful sign that despite their grave current differences on many issues the P5 have been able to join hands to solve one dangerous controversy.

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Some at the Conference may suggest that various features in the deal should be more widely emulated to achieve a further strengthening of the NPT. For instance, it may be argued that non-nuclear weapon states should avoid or minimise any engagement in the enrichment of uranium or production of plutonium. Some will undoubtedly urge that all NPT parties should follow Iran's example to accept the Additional Protocol of the IAEA and make it standard for high credibility international verification. It seems likely, however,

that the majority of non-nuclear weapon NPT parties will regard the Lausanne terms as an isolated solution for a particular controversy and only treat it as such....

Source: http://www.europeanleadershipnetwork.org/, 21 April 2015.

OPINION- Len Getz

An Open Letter to the President on the Nuclear Deal

Dear President Obama:

I appreciate the blast email you sent wanting me to understand exactly what is included in your deal to prevent Iran from getting a nuclear weapon. But I do have some concerns.

You say "spent fuel" from the Arak reactor will be shipped out of Iran, which is a good thing. But I understand Iran refuses to ship out its stockpile of enriched uranium, which is not a good thing. The best you offer is that it will "neutralize" a vast majority of it, which means a stockpile of enriched uranium will be maintained on Iranian soil. Why are you allowing that?

You say two-thirds of its installed centrifuges will no longer enrich uranium, which means one-third of its centrifuges will continue enriching uranium. I understand this equals 5,060 centrifuges. So by your own admission, Iran will maintain a stockpile of active uranium and thousands of centrifuges will continue enriching uranium. In 10 years, its most advanced centrifuges will be able to enrich uranium. How is Israel expected to prepare for Iran's ability to continue its uranium regime over the next 10 years?

I'm also having difficulty with the touting of your inspection clause. Words like "robust," "intrusive," "transparency" and "unprecedented access" are meaningless when surprise inspections are off the table. And wasn't this tried previously by the IAEA, whose members were unable to certify that all nuclear material in Iran is being used for peaceful purposes?

It also said that only one of its 12 queries to Iran had been even answered. Mr. President, not to be disrespectful, but are you trying to kid yourself, or us? While your shortest paragraph tries to comfort, it is actually the most frightening. "If Iran cheats, the world will know." And then what? Doesn't the world know that Iran is a state sponsor of terrorism? Doesn't the world know that Iran supplies arms to Hamas, Hezbollah, Syria? Wreak havoc in Iraq, Yemen? What does the world do about that? The mere fact that this deal does not foreclose Iran's ability to cheat is extremely problematic.

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In exchange, you are agreeing to release Iran from almost all sanctions over a brief period of time, but you assure us they can be "snapped back," like Legos. But isn't it true that Russia, China and all the other P5 +1 parties may not be so snappy to comply? What would happen then? Iran continues to cheat — i.e., move closer to getting a nuclear weapon — while you guys deliberate? How "historic" would that turn out?

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You say this agreement to relieve Iran of nuclear weapons sanctions doesn't apply to the sanctions imposed on Iran for its terrorist and human rights abuses. Could you please explain the difference between nuclear weapons sanctions and terrorism/human rights sanctions? Can you please tell us how

effective our terrorism/human rights sanctions have been?

Has it slowed Iran's terrorist activities and human rights abuses one iota? Could the relief of nuclear weapons sanctions be used to compensate for the imposed terrorism/human rights sanctions? I'm just asking. There's one more thing. If your deal is so historic, why are Israel, Saudi Arabia, Jordan, Egypt, United Arab Emirates and our Congress so skeptical about it? If your deal is the best that could possibly be achieved, why not convince Congress of that and let Congress decide whether the US should go forward with it or not?

Why are you first going to the UN and not to the folks who represent our nation — our Congress? Do you know what I think? It's because you don't have faith in it yourself. And that's what makes it so historic.

Source: Leonard Getz is a board member of the Zionist Organization of America, both locally and nationally http://jewishexponent.com/, 14 April 2015.

OPINION-Dr. Manfred Gerstenfeld

Existential Threats to Israel and the Anti-Paranoia Lobby

The framework of the recent agreement between the six major nations and Iran regarding its nuclear program has led Israeli PM Netanyahu to say that this agreement could endangers Israel's existence, once it is completed. One rarely finds other nations' leaders claiming that there is a possibility that their country may not survive. Some commentators thus claim that Israel is acting paranoid. This fear of its future destruction, however, is far from being a fallacious Israeli claim. Palestinian and other Arab leaders have a lengthy record of promoting and announcing the genocide of the Jews in Israel and in British Mandatory Palestine.

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For many years, the leader of the Palestinian so-called "moderates" was Jerusalem mayor Ragheb bey al-Nashashibi. After the 1929 riots, the non-Jewish French writer Albert Londres asked the mayor why the Arabs had murdered the pious old Jews in Hebron and Safed, with whom they had no quarrel. The mayor answered, "In a way you behave like in a war. You don't kill what you want. You kill what you find. Next time, they will all be killed, young and old."

Later on, Londres spoke to the mayor again and tested him by saying ironically, "You cannot kill all the Jews. There are 150,000 of them." Nashashibi answered "in a soft voice, 'Oh no, it'll take two days. The hard-line Mufti of Jerusalem, Haj Amin al Husseini, during the Second World War, developed plans for a Palestinian Auschwitz-like crematorium to kill Jews near Nablus.

Such statements and events reflect a much broader genocidal Arab mindset. Azzam Pasha, secretary of the Arab League, succinctly said during the 1948 Arab-Israeli war, "This will be a war of extermination and a momentous massacre which will be spoken of like the Mongolian massacres and the Crusades."

Nowadays, the Iranian leaders are prominent among those who proclaim a new Holocaust. Its first Supreme Leader Ayatollah Khomeini said about Israel, "This regime that is occupying Quds must be eliminated from the pages of history." The current Supreme Leader Ayatollah Khamenei has said that, "Israel is a cancerous tumor which must be uprooted from the region."

Former Iranian president Mahmoud Ahmadinejad said in a 2008 speech, "In the Middle East, they [the global powers] have created a black and filthy microbe called the Zionist regime, so they could use it to attack the peoples of the region, and by using this excuse, they want to advance their

schemes for the Middle East."In 2005, Ahmadinejad said, "We are in the process of an historical war between the World of Arrogance [i.e., the West] and the Islamic world," adding that, "a world without America and Zionism" is "attainable."

Former Iranian President Akbar Hashemi Rafsanjani said in 2002, "If one day...the world of Islam comes to possess the weapons currently in Israel's possession [meaning nuclear weapons] - on that day this method of global arrogance would come to a dead end. This...is because the use of a nuclear bomb in Israel will leave nothing on the ground, whereas it will only damage the world of Islam."Hamas has taken all this hatred further by promoting the extermination of all Jews in its charter. October 2012, a video showed then-Egyptian President Mohamed Morsi, of the Muslim Brotherhood, answering "Amen" to an imam who made a genocidal prayer request: "Oh Allah, destroy the Jews and their supporters."[12]

Against such a background, which is but a small selection of the existential threats against Israel, it is not surprising that many Israelis have always seen Israel's future as precarious. This reaction has been explicitly expressed by several of its leaders. Nahum Goldmann, who was the longstanding President of the World Jewish Congress, recounts in his biography how Israel's first Prime Minister, David Ben-Gurion, said to him shortly before his seventieth birthday in 1955:

When you, Nahum, ask me whether I will live in a Jewish state and be buried in it, I rather believe that. How long can I live? Ten or twelve years – until then, there will certainly be a Jewish state. If you ask me whether my son Amos...will have the opportunity to die in a Jewish state and be buried there, I would say, at best, 50%.[...The late Amos Ben-Gurion, who died in 2008, was indeed buried in Israel.

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The late Prime Minister Yitzhak Rabin told Israeli Ambassador Yehuda Avner, who was a close staff member, why he was in favor of the Oslo Accords. Rabin said that without some kind of peace, there was no way to guarantee Israel's continued existence. Rabin also pointed out that Israel was the only country whose existence was still publicly debated.[

Current Prime Minister Benjamin Netanyahu has, for several years, expressed concern about the country's survival. In 2011 he already said that "Iran is developing nuclear weapons and poses the greatest threat to our existence since the War of Independence. Iran's terror wings surround us from the north and south."[16]

Existential threats to Israel are an integral part of the ideology of important factions of Islam. Those who whitewash these threats and call the Israeli reactions "paranoid" are indirect allies and supporters of these genocide promoters.

Source: http://www.israelnationalnews.com/, 23 April 2015.

OPINION- V.R. Raghavan

No Frisson in Talks Over Fission

The 2015 Review of the NPT is a process expected to be stormy and contentious due to a new set of geopolitical drivers. Yet again, it could leave the dream of nuclear disarmament unattained and the purpose of preventing proliferation defeated,... The 2015 Review of the NPT will take place in New York from April 27 to May 22 and the process is expected to be stormy and contentious. The event marks some significant anniversaries of conflict: the 100th of the use of chemical weapons in Cypress, Belgium; the 70th of

The event marks some significant anniversaries of conflict: the 100th of the use of chemical weapons in Cypress, Belgium; the 70th of the bombings of Hiroshima and Nagasaki; and the 20th of the indefinite extension of the NPT. A new set of geopolitical drivers will work the agendas of nuclear and non-nuclear members of the Treaty.

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Coming into force in 1970, the Treaty has been subjected to numerous pulls and pressures which have left the dream of nuclear disarmament unattained and the purpose of preventing proliferation defeated. The last review, in 2010, followed the complete failure of the 2005 Review conference, as a consequence of serious disagreements which had emerged over a decade. The desire of non-nuclear states to see better progress on disarmament by the Nuclear Weapons States (NWS) will figure as before. The discourse on the humanitarian impact of nuclear weapons has given a new shape to the NPT debate.

Moscow's rhetoric and responses have led to a rethink on the role and relevance of nuclear deterrence, even among the non-nuclear states of Eastern Europe. As if this is not enough, the situation in West Asia will loom large since it involves the uncertainties of Iran, Israel, Syria and the Islamic State (IS) in particular and the rest of the Arab world in general. In comparison, the nuclear shenanigans of North Korea which were once viewed as a major global danger would remain a marginal issue.

Humanitarian Impact

The NWS have not been enthused by either of these two concepts. Relations among the NWS after Russian actions in Ukraine will have a substantial impact on the conference. Moscow's rhetoric and responses have led to a rethink on the role and relevance of nuclear deterrence, even among the non-nuclear states of Eastern Europe. As if this is not enough, the situation in West Asia will loom large since it involves the uncertainties of Iran, Israel, Syria and the Islamic State (IS) in particular and the rest of the Arab world in general.
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The NPT Review Conference in 2010 built a hard-fought consensus based on more than 60 action points spread over three broad areas. These three "pillars" were nuclear disarmament, non-proliferation and peaceful uses of nuclear energy. West Asia figured large, which primarily meant finding a way to a nuclear-free zone, which in turn meant addressing the issue of Israel's nuclear weapons. This has now been much muddied by Iran's own nuclear programme which in turn could now be resolved if the Joint Comprehensive Plan of Action (JCPOA) between the P5+1 (the United States, the United Kingdom, Germany, France, Russia, and China, facilitated by the European Union) and Iran comes to fruition. Three preparatory committee (Prepcom) meetings have been held so far to prepare an agenda or work plan for the 2015 Review Conference next week. Reconciling the wide range of views of 190-member states has never been easy. Consequently, various consensus drafts have been attempted and what emerges as the agreed agenda for the conference remains to be seen. The three pillars are in themselves complex and intractable as examined hereon.

Nuclear disarmament is possibly the easiest issue on the table, more so because there is no solution possible or even conceivable. As a result, a formulaic approach is likely to get used in which non-nuclear weapon states deplore the NWS's lack of progress on reducing their arsenals and making good on promises made in the past. On their part, the NWS will reaffirm their commitment to disarmament, but point to the strategic security scenario to justify the incremental and slow progress so far. This will be contested strongly at the conference.

Discussing Disarmament

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Mixed outcomes of the Arab Spring, the ongoing struggle for power within and among the states of the region, and the emergence of the IS have made West Asia a region of uncertainties. Progress on the Middle East Conference, agreed upon in 2010, has been at a glacial pace. Israel has shown no inclination to either join the conference or otherwise.

Shifts in West Asia

West Asia has undergone significant shifts of power and capabilities since the 2010 conference. Mixed outcomes of the Arab Spring, the ongoing struggle for power within and among the states of the region, and the emergence of the IS have made West Asia a region of uncertainties. Progress on the Middle East Conference, agreed upon in 2010, has been at a glacial pace. Israel has shown no inclination to either join the conference or otherwise. Iranian obduracy — or strategic skill — in holding out against sanctions and other pressures had led to a situation where the US turned towards a solution which favoured a postponed Iranian nuclear weapons capability, instead of an immediate cessation of weapons capacity building.

The Nuclear Weapons Free Zone in West Asia will have to be worked on wholly new parameters, whose shape and content remain unclear. The conference next week will thus provide a platform for a lively, if not hostile, conglomeration of protagonists and antagonists. Whether it leads to clarity or confusion on West Asia remains to be seen.

An agreement flowing from the JCPOA that provides for the lifting of sanctions on Iran (which has agreed to a stringent regime of nuclear regulation) will change altogether the balance of strategic strength in the region. Israel has serious objections to this plan and its PM Netanyahu's recent statements suggest no lowering in its hard stance on the issue. The Nuclear Weapons Free Zone in West Asia will have to be worked on wholly new parameters, whose shape and content remain unclear. The conference next week will thus provide a platform for a lively, if not hostile, conglomeration of protagonists and antagonists. Whether it leads to clarity or confusion on West Asia remains to be seen.

Developments in Ukraine

Events in the Ukraine have had a far-reaching impact in many fields, all of which have a bearing on the imminent NPT Review. Russian-US strategic arms control equations have reached their nadir. Russia is unwilling to engage in negotiations on bilateral arms reductions. Its annexation of Crimea, its continuing support to dissidents in Ukraine, and the reactions to it in Europe and from the US, will make it more difficult than ever for the Obama administration to even contemplate unilateral reductions. It is useful to remember that Ukraine gave up nuclear weapons from its territory after the Soviet Union collapsed, only to face a Russian-directed conflict threatening to dismember it. On its part, Russia is witnessing a narrative of resurgence in the face of containment and sanctions by the West. A "reset" of US-Russia relations does not seem likely in the foreseeable future. The first casualty in this stand-off will be nuclear proliferation and

disarmament.

South Asia's two states with nuclear weapons are also steadily improving their strategic capabilities of nuclear warheads, missiles and submarines. Pakistan continues to assert its new found capability in tactical nuclear weapons, as a counter to Indian conventional military capabilities. This is viewed as another form of proliferation by Western nuclear mandarins, whose best solution is confined to advising New Delhi on restraint in dealing with Pakistan.

The NPT Review 2015 will be held in a strategic scenario not very dissimilar to the Cold War antagonism of the 1980s. The glue of a globalised world economy and the prospect of a world without conflicts among developed states have been replaced by seemingly implacable positions. The situation is made explosive by the arrival on the scene of new forces of terror and coercion in and around states whose efforts had led to the signing and sustaining of the NPT over the decades. An idea of the straitjacket of ideas which drives the NPT can be had from the resolution passed in the UN 2014. This had demanded that India and other non-signatories to the NPT join the Treaty as Non Nuclear Weapons States. India had rightly rejected the resolution which ignores the ground realities. Therefore, expectations are not high for the Review Conference and there are competing definitions about what will constitute success in New York. The future of the NPT seems uncertain, and the best outcome of the Review Conference may be another extension to the agreed action plans of the past, even as the Treaty has failed to either stop nuclear proliferation or encourage disarmament.

Source: http://www.thehindu.com/, 21 April 2015

OPINION- Stewart Beck

India-Canada: Partners on Nuclear Energy

At a recent meeting of Indian provincial environment and forestry ministers, PM Modi noted that nuclear energy will play a critical role in helping the country to meet both its energy security and climate change mitigation goals. He stressed the need for developed countries to help India increase its nuclear energy production capacity by making nuclear fuels readily available.

...Canada's nuclear energy sector has a lot to offer India—and not just in terms of uranium. India and Canada's respective industries are highly compatible because nuclear power plants in both countries are derived from a common reactor technology. As a result, Canada and India can co-operate on developing technologies for enhancing the long-term performance of these plants. Both countries can also share best practices on the regulation and operation of their facilities.

Despite this compatibility, Canada-India nuclear energy co-operation has not achieved its full potential. The Canada-India Nuclear Cooperation Agreement came into force in 2013, putting in place the necessary mechanisms for preventing the use of nuclear materials for non-peaceful purposes. This opened the door for the sale of uranium and nuclear energy technology and services between the two countries, but trade outcomes have been limited.

First, Canada should seek to secure a win on the export of uranium to India PM Harper should use the opportunity to discuss developments in India's nuclear liability regime.

Canada was the first country to conclude this type of agreement with India, but our head start may come to nought if Canada does not move quickly to take advantage of the agreement. The US, France and Australia, whose companies sell uranium and/or nuclear energy technology and services, are moving fast to position themselves as key suppliers to India.

PM Modi's visit provides a perfect opportunity for Canada to give the Canada-India civil nuclear energy relationship a shot in the arm. First, Canada should seek to secure a win on the export of uranium to India—a high priority for PM Modi. It has been reported in both the Canadian and Indian media that Canadian uranium company Cameco is likely to make headway on a

commercial deal with India during PM Modi's visit.

Second, PM Harper should use the opportunity to discuss developments in India's nuclear liability regime. Many Indian and foreign nuclear energy technology companies have not been willing to supply nuclear technology and services to India because laws in the country leave suppliers open to financial liability for damages to third parties in the case of a nuclear accident. India is currently developing an insurance pool as one option to help Indian and foreign companies manage this liability. The two prime ministers should assign a high-level India-Canada joint committee to discuss potential solutions for managing risk to suppliers.

Third, Prime Minister Harper should propose the development of a comprehensive Memorandum of Understanding (MoU) on Canada-India co-operation on civil nuclear energy. This document would go beyond the Nuclear Cooperation Agreement to highlight specific areas of collaboration on nuclear energy, including research and development and the exchange of regulatory and operations expertise, amongst other areas.

Third, Prime Minister Harper should propose the development of a comprehensive Memorandum of Understanding (MoU) on Canada-India co-operation on civil nuclear energy. This document would go beyond the Nuclear Cooperation Agreement to highlight specific areas of collaboration on nuclear energy, including research and development and the exchange of regulatory and operations expertise, amongst other areas.

This MoU would have a number of benefits. It would highlight India's achievements in the area of civil nuclear energy technology, setting a tone of mutual collaboration between the two countries. It would also send a clear message to the Indian bureaucracy that the Prime Minister of India supports nuclear energy engagement with Canada. This would help Canadian nuclear energy technology companies successfully navigate the decision-making processes of India's government.

Furthermore, the agreement would draw attention to Canada's offerings as a tier one nuclear country at a time when other countries are moving to supply the Indian market. On this visit, Prime Minister Modi is looking for ways that Canada can contribute to India's energy security and economic growth objectives. Nuclear energy co-operation is an area in which Canada and India can make substantial advancements quickly. We should not let this opportunity slip by.

Source: This feature was written exclusively for Gateway House: Indian Council on Global Relations. Stewart Beck is the President and CEO of the Asia Pacific Foundation of Canada, and the former Canadian High Commissioner to India, http://www.eurasiareview.com/, 16 April 2015.

NUCLEAR STRATEGY

USA

REMARKS-Frank A. Rose, Assistant Secretary, Bureau of Arms Control, Verification and Compliance

The Strategic Imperative of Ballistic Missile Defense Cooperation in the Gulf

...As the Assistant Secretary of State, I have made US-GCC cooperation on ballistic missile defense (or BMD) one of my top priorities. During the past two years, I have made six trips to the Gulf to talk to senior Ministry of Defense and Ministry of Foreign Affairs leaders about the strategic imperative of US-GCC cooperation on BMD...

I believe that an important first step towards this goal is developing a common understanding of the role that BMD can play in ensuring regional peace and security...

US Commitment to Missile Defense

...The US has a deep and abiding commitment to the security of the Gulf region. This is a commitment motivated by our common security interests, our shared economic objectives, and the enduring personal relationships we have built with your leaders over many years... In the past years, the US has undertaken a robust series of

diplomatic, military, and intelligence actions to ensure that countries or actors that seek to undermine GCC states' security cannot and will not be permitted to do so. BMD is one of these areas.

Our recently released budget is further proof positive of our commitment to BMD.The President's Fiscal Year 2016 budget requests $9.6 billion total investment in missile defense. This includes $8.1 billion for the Missile Defense Agency and almost $38B for MDA over the Fiscal Years 2016 to 2020. Despite pressure on the DOD budget, funding for missile defense programs remains a priority. The budget funds new initiatives in response to evolving ballistic missile capabilities and ensures our missile defenses keep pace with a rapidly evolving security environment.

Despite pressure on the DOD budget, funding for missile defense programs remains a priority. The budget funds new initiatives in response to evolving ballistic missile capabilities and ensures our missile defenses keep pace with a rapidly evolving security environment.

Missile Defense Cooperation

...The US is committed to enhancing US-GCC BMD cooperation...We also are cooperating multilaterally such as in the US-Gulf Cooperation Council Strategic Cooperation Forum (or SCF) that first met in April of 2012...on 26 September 2014, Secretary Kerry and his Foreign Ministry counterparts reaffirmed their intent to "Enhance GCC-US security coordination, particularly on Ballistic Missile Defense (BMD), continuing to move forward on development of a Gulf-wide, interoperable missile defense architecture."

To help reach that goal, the US designated the GCC eligible for Foreign Military Sales, laying the groundwork for our nations to address regional ballistic missile defense in a multilateral context. That's the same designation we've given NATO and the African Union, allowing the GCC to invest in shared systems for mutual defense, even as the US continues a strong bilateral defense partnership with each individual GCC member. And it demonstrates our commitment to the US-Gulf Partnership, and our ultimate commitment to see the Gulf become a stronger, more capable partner in confronting the many challenges to our shared interests in the region...

Military and Diplomatic Coordination

But the US-Gulf partnership is not based on military might alone. Advanced, interoperable systems to intercept and destroy attacking missiles must be combined with diplomatic cooperation and coordination in order to most effectively protect the interests, and the security, of the Gulf region. Ballistic missiles can destabilize and weaken a region due to their short flight times and potentially devastating consequences. WMD armed missiles in particular can have broad consequences not only within a targeted country but within a region, as the effects of a successful attack may drift into neighboring countries.

To facilitate a dialogue with our Gulf partners on these issues, President Obama obtained specific legislative authority from the US Congress expanding the authority of the US Air Forces Central Command to conduct integrated air and missile defense training at the US-UAE Integrated Air and Missile Defense Center (IAMDC). We see the IAMDC as uniquely positioned to play a key role in advancing regional BMD cooperation.

...The nature of the ballistic missile threat means that we must be prepared both diplomatically and militarily well before the first missile is launched. This argues for thinking about ballistic missiles and our potential responses in a strategic context. US Secretaries of State and Defense work as active partners in the US-GCC Strategic Cooperation Forum to emphasize the need for planning, both diplomatic and military, when it comes to ballistic missile defense.

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Missile defense supports political and diplomatic activities by enhancing regional stability and by assuring leaders and populations under threat that they have a defense against attack. BMD raises the wall of deterrence by complicating an adversary's calculus, denying them the certainty of a successful attack, and signaling determination to resist intimidation. At a strategic level, we must continue to encourage better planning and preparation among both our military leaders and our senior diplomats...

BMD raises the wall of deterrence by complicating an adversary's calculus, denying them the certainty of a successful attack, and signaling determination to resist intimidation.

Our partnership can therefore bring together the strength of our combined forces with the skill of our strategic planning. We will be much more successful in advancing our shared interests by working together than by going it alone.

Source: Excerpted from http://www.state.gov/, 20 April 2015.

Congress Adds Cash to Special Account to Build New Nuclear Submarines

Congress plans to add money into a special fund established this year for the purpose of paying for the Navy's next-generation, nuclear-armed ballistic missile submarines, the Ohio Replacement Program. The 2015 National Defense Authorization Act established the National Sea-Based Deterrence Fund as an account created specifically to fund the program; however, it did not receive funding in the initial budget request.

The 2015 National Defense Authorization Act established the National Sea-Based Deterrence Fund as an account created specifically to fund the program; however, it did not receive funding in the initial budget request.

Rep. Randy Forbes, R-Va., chairman of the House Armed Services Committee Seapower and Projection Forces subcommittee, told Military.com that his Congressional subcommittee will add money to the fund as part of its current mark-up of the 2016 defense bill...The exact amount of the mark-up has yet to be revealed. Congressional and Navy leaders wanted to create the fund to separate its spending line from the Navy's formal shipbuilding budget in order to avoid depleting needed shipbuilding accounts. If the funding for the Ohio Replacement program would have come from the Navy's annual shipbuilding budget – it would have devastated the Navy's overall long-term plans for the fleet, officials have said.

Rear Adm. Joseph Tofalo, Director of Undersea Warfare, said there is historical precedent for the US coming up with innovative funding strategies for undersea nuclear deterrence. He cited the original Ohio-class ballistic missile submarines first built in the 1980s and the first nuclear armed submarines first built in the early 1960s, called "41 for Freedom."

...Slated to serve through 2085, the Ohio Replacement program, the nuclear submarine is scheduled to begin construction by 2021. Requirements work, technical specifications and early prototyping have already been underway at General Dynamics Electric Boat. Designed to be 560-feet–long and house 16 Trident II D5 missiles fired from 44-foot-long missile tubes, Ohio Replacement submarines will be engineered as a stealthy, high-tech nuclear deterrent.

Production for the lead ship in a planned fleet of 12 Ohio Replacement submarines is expected to cost $12.4 billion — $4.8 billion in non-recurring engineering or development costs and $7.6 billion in ship construction, the plan states. The Navy hopes to build Ohio Replacement submarine numbers two through 12 for $4.9 billion each.

Detailed design for the first Ohio Replacement Program is slated for 2017. The new submarines are being engineered to quietly patrol the undersea domain and function as a crucial strategic deterrent, assuring a second strike or retaliatory nuclear capability in the event of nuclear attack.

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The Navy is building 12 Ohio Replacement submarines to replace 14 existing Ohio-class nuclear-armed boats because the new submarines are being built with an improved nuclear core reactor that will better sustain the submarines, officials have said.

As a result, the Ohio Replacement submarines will be able to serve a greater number of deployments than the ships they are replacing and not need a mid-life refueling in order to complete 42 years of service.

The Ohio Replacement submarines will be able to serve a greater number of deployments than the ships they are replacing and not need a mid-life refueling in order to complete 42 years of service.

...In 2012, General Dynamics Electric Boat was awarded a five-year research and development deal for the Ohio Replacement submarines with a value up to $1.85 billion. The contract contains specific incentives for lowering cost and increasing manufacturing efficiency, Navy and Electric Boat officials said....

Source: Kris Osborn, http://www.military.com/, 20 April 2015.

RUSSIA

Russia Ships Second S-400 Missile System to Kamchatka Peninsula

Russia has reportedly delivered the second S-400 Triumf air defence missile system to Kamchatka Peninsula in the Russian Far East. A Russian Pacific Fleet's press service statement carried by Sputnik read: "More than 670t of cargo, and that's 36 units of equipment for the S-400 missile defence system has arrived by sea to the city of Petropavlovsk-Kamchatsky." According to the press service, the newly delivered system is the second of five missile defence systems that are scheduled to be stationed in the 1,250km-long peninsula.

Each S-400 system is delivered after comprehensive testing and training of personnel at the Kapustin Yar military range in the south of the country... An upgraded version of the S-300 missile system, the S-400 Triumf is a long-to-medium-range, surface-to-air missile system, and is designed to intercept a range of ground-based and airborne targets, including stealth aircraft, strategic carriers, and cruise and ballistic missiles at a distance of 400km. Code-named the SA-21 Growler, the system has been developed by Almaz/Antei Concern and features three different missiles including the extremely long-range 40N6, 48N6 long-range and a 9M96 medium-range missile.

According to the news agency, the system is expected to form the cornerstone of Russian air and missile defence by 2020. As of December 2014, Russia had nine anti-aircraft missile regiment equipped with the S-400 systems across the country. Apart from Russia, the system has also attracted interest from a number of foreign countries, including Saudi Arabia, Belarus and Turkey... In November 2014, Russian state-arms-exporter Rosoboronexport and the Chinese Defence Ministry signed a $3bn contract for the supply of at least six S-400 battalions.

An upgraded version of the S-300 missile system, the S-400 Triumf is a long-to-medium-range, surface-to-air missile system, and is designed to intercept a range of ground-based and airborne targets, including stealth aircraft, strategic carriers, and cruise and ballistic missiles at a distance of 400km.

Source: http://www.airforce-technology.com/ 22 April 2015

BALLISTIC MISSILE DEFENCE

INDIA

India Successfully Test Fires Nuclear-Capable Agni - III Ballistic Missile

India on 15 April 2015 successfully test fired its nuclear-capable Agni-III ballistic missile with a strike range of more than 3,000 km from Wheeler Island off Odisha coast. The indigenously developed surface-to-surface missile was test fired from a mobile launcher at launch complex-4 of the Integrated Test Range (ITR) at Wheeler Island by army at about 0955 hrs, defence sources said.

The Pakistani military successfully test-fired a medium-range ballistic missile (MRBM) The nuclear-capable Ghauri MRBM (aka Hatf-V), developed by Khan Research Laboratories under the Pakistani-integrated missile research and development program, is allegedly a variation of North Korea's Rodong-1 missile.

"The trial, carried out by the Strategic Forces Command (SFC of the Indian Army), was fully successful," ITR Director M V K V Prasad told PTI. Logistic support for the test was provided by the Defence Research and Development Organisation (DRDO). "It was the third user trial in the Agni-III series carried out to establish the 'repeatability' of the missile's performance," a DRDO official said.

For data analyses, the entire trajectory of today's trial was monitored through various telemetry stations, electro-optic systems and sophisticated radars located along the coast and by naval ships anchored near the impact point, the sources said.

The Agni-III missile is powered by a two-stage solid propellant system. With a length of 17 metres, the missile's diameter is 2 metres and launch weight is around 50 tonnes. It can carry a warhead of 1.5 tonne which is protected by carbon all composite heat shield. The sleek missile, already inducted into the armed forces, is equipped with hybrid navigation, guidance and control systems along with advanced on board computer.

The electronic systems connected with the missile are hardened for higher vibration, thermal and acoustic effects, a DRDO scientist said. Though the first developmental trial of Agni-III carried out on July 9, 2006 could not provide desired result,subsequent tests on April 12, 2007, May 7, 2008, February 7, 2010 as well as the first user trial on September 21, 2012 and next on December 23, 2013 from the same base were all successful.

Source: http://indianexpress.com/, 16 April 2015.

PAKISTAN

Pakistan Tests Ballistic Missile

The Pakistani military successfully test-fired a medium-range ballistic missile (MRBM)...The nuclear-capable Ghauri MRBM (aka Hatf-V), developed by Khan Research Laboratories under the Pakistani-integrated missile research and development program, is allegedly a variation of North Korea's Rodong-1 missile.

The test was conducted by the Strategic Missile Group of the Army Strategic Forces Command (ASFC)...The head of the Strategic Plans Division, Lt. Gen. Zubair Mahmood Hayat, congratulated the scientists, engineers, and all ranks of the strategic forces, expressing his satisfaction with the "excellent standard" displayed by Pakistan's strategic forces. It appears that the test involved a Ghauri-I MRBM with a range of 1,300 kilometers (807 miles) and the capacity to carry up to a 700 kilogram conventional or nuclear warhead. The missile was launched from a transporter erector launcher on the Tilla Test Range in Jhelum District, Pakistan, according to army-technology.com.

Pakistan also fields the Ghauri-II MRBM, with a maximum range of 2,300 kilometers. The development of a third variant, the Ghauri-III, with a range of up to 3,000 kilometers, has been abandoned for unknown reasons. The last test of a Ghauri MRBM occurred in November 2012. Back then, various Pakistani experts voiced concerns that the missile may not be capable of carrying a nuclear warhead and that it also might not be the ideal weapon of choice for Pakistan's nuclear

deterrent vis-à-vis India and other operational needs. Mansoor Ahmed, a lecturer in the Department of Defense and Strategic Studies at Quaid-e-Azam University, noted:

Unlike solid-fueled missiles, liquid-fueled ballistic missiles cannot store the fuel for long periods and have to be refueled prior to launch, which takes several hours, thus making them vulnerable to first strikes. Given the relative lack of Pakistan's strategic depth, such systems are not the first choice in missile systems for nuclear warhead delivery, which explains why the Ghauri remains the only liquid-fueled system in its missile inventory.However, testing liquid-fueled missiles is a cheaper alternative to solid-fueled MRBMs when testing launch and control systems, he acknowledged....

Source: http://thediplomat.com/, 18 April 2015.

RUSSIA

Russian Armed Forces Receive 24 Ballistic Missiles In 2015

The Russian Armed Forces have received 24 ballistic missiles, 36 Tornado-G multiple-launch rocket systems, BMD-4M and BTR-MDM Rakushka armored vehicles, as well as several naval ships since the beginning of the year, the Russian Defense Ministry has reported.

"Sixty units of armored force armament and hardware, as well as 36 Tornado-G multiple-launch rocket systems have undergone maintenance and have been upgraded. The Airborne Troops have been provided with 24 BMD-4M and BTR-MDM Rakushka armored vehicles and 483 different parachute systems," the ministry said in a press release...

...In the first quarter of the year, the Russian Land Forces were provided with 341 new vehicles, a Zoopark-1M artillery reconnaissance radar, more than 1,900 radio receivers in different modifications, as well as approximately 70,000 weapons and other kinds of military gear, it said. Russia's Strategic Rocket Forces (RVSN) are switching to advanced weapons and military hardware today well, the ministry said.

"In accordance with the schedule for putting the Yars stationary strategic missile system into service in the RVSN Kozelsk unit starting from 24 March 2015 the third stage of state-commissioned trials is currently under way with a focus on the system's command center, as well as its unified energy supply and automated protection systems. Different systems of this equipment are being adjusted by military unit specialists," the ministry said....

Source: http://asia.rbth.com/, 17 April 2015.

NUCLEAR ENERGY

CANADA-INDIA

Canada, India in Advanced Talks on Nuclear Fuel Supply: Report

.... Canada's biggest uranium producer Cameco is in advanced talks with India on a deal to supply it fuel for nuclear power plants and PM Modi's visit next week is likely to provide impetus to clinch the agreement... Modi has made it clear that obtaining a commercial supply of uranium from Canada's Cameco Corp is a major goal for him as he gets ready to visit Canada on April 14-16. "We look forward to resuming our civil nuclear energy cooperation with Canada, especially for sourcing uranium fuel for our nuclear power plants," Modi posted said on his Facebook page late last week.

Japan's government has proposed making nuclear energy account for between 20 and 22 percent of the country's electricity mix by 2030, with renewable energy to account for slightly more, media reported

Nuclear power is at the heart of a rapprochement between India and Canada in recent years. Canada banned exports of uranium and nuclear hardware to India in the 1970s after New Delhi used Canadian technology to develop a nuclear bomb. The two countries turned the page with a deal that took effect in 2013. A commercial deal to export Cameco's uranium to feed India's reactors would be another sign to the world that

India is recognised as a safe, responsible nuclear power despite its refusal to sign the NPT….

Source:http://www.thehindu.com/, 11 April 2015

JAPAN

Japan Wants a Chunk of Its Energy to Come From Nuclear Power By 2030

Japan's government has proposed making nuclear energy account for between 20 and 22 percent of the country's electricity mix by 2030, with renewable energy to account for slightly more, media reported…The proposal on nuclear energy, if adopted, is likely to be unpopular among a public that opinion polls show has been consistently opposed to atomic energy since three meltdowns at the Fukushima Daiichi plant north of Tokyo in 2011.

It will, however, mark a shift away from nuclear power, which contributed to about 30 percent of Japan's electricity supply before the world's worst nuclear disaster since Chernobyl in 1986.

It will, however, mark a shift away from nuclear power, which contributed to about 30 percent of Japan's electricity supply before the world's worst nuclear disaster since Chernobyl in 1986.All of Japan's reactors remain closed pending safety checks by a new regulator set up after the Fukushima crisis highlighted cozy links between industry and those meant to monitor safety at the country's nuclear plants along with lax regard for rules.

Uranium miner Paladin Energy has seen a substantial fall in its quarterly production, after a February well failure, but remains bullish on its short-term trend in uranium prices.

The government is proposing making coal account for 26 percent of electricity production, compared with 30.3 percent now…Japan has ramped up coal use to record levels since the nuclear shutdown, setting it at odds with countries including Britain and the US and pushing carbon emissions higher.

Two nuclear plants have cleared the main safety hurdle for restarts, but in the last two weeks courts have stepped in, preventing one of them from restarting and allowing the other to go ahead, complicating the return to nuclear

The mine remains a substantial strategic asset as the project provides the ability to increase production by 2.5 to 3 million pounds per year, when uranium prices justify a jump in production, according to the company. Paladin maintained its full-year guidance for production at 5 million to 5.2 million pounds of uranium oxide.

Source: http://www.businessinsider.com/, 23 April 2015.

URANIUM PRODUCTION

AUSTRALIA

Paladin Uranium Output Slumps

Uranium miner Paladin Energy has seen a substantial fall in its quarterly production, after a February well failure, but remains bullish on its short-term trend in uranium prices. Paladin said on 24 April 2015 ,production at the group's Langer Heinrich mine during the March quarter had slumped 10 per cent from the December quarter to 1.23 million pounds of uranium oxide. Output was constrained by a well failure leading to 12 days of lost production, as reported by the group in February 2015. The miner said it sold 440,000 pounds of uranium oxide at an average selling price of $US38.03 a pound in the quarter, leading to revenues of $US16.7 million.

…The miner forecasts higher uranium sales of around 1.7 million pounds for the June quarter and expects the average sales price to rise from the March quarter level. Paladin said the restart study of its suspended Kayelekera mine in Malawi was "well advanced" and should be completed by the end of June. The mine remains a substantial strategic asset as the project provides the ability to increase production by 2.5 to 3 million pounds per year, when uranium prices justify a jump in production, according to the company. Paladin maintained its full-year guidance for production at 5 million to 5.2 million pounds of uranium oxide.

Source: http://www.theaustralian.com.au/, 24 April 2015

NUCLEAR COOPERATION

CHINA-SOUTH AFRICA

China Helps South Africa Develop Its Nuclear Workforce

South Africa has signed two further nuclear energy cooperation agreements with China as part of preparations towards the possible construction of new nuclear power units. The move came as the first group of South African workers began a nuclear power plant training course at a Chinese university, as agreed under an earlier accord.

The latest agreements follow those signed in December 2014, including an MoU on a nuclear fuel cycle partnership, a financing framework agreement for the construction of a new nuclear power plant in South Africa, and an agreement on nuclear personnel training.

On 21 April 2015, Nuclear Energy Corporation of South Africa (Necsa) president Phumzile Tshelane signed a memorandum of understanding with China Nuclear Energy Engineering Group (CNEC) president Jun Gu. Under that agreement, South African trainees would undergo training in China on nuclear power plant construction.

Necsa also signed a cooperation agreement with China's State Nuclear Power Technology Corporation (SNPTC) for training on project management for nuclear power projects. The agreement calls for South Africa to send project managers to construction sites in China where demonstration CAP1400 units are planned...

The latest agreements follow those signed in December 2014, including an MoU on a nuclear fuel cycle partnership, a financing framework agreement for the construction of a new nuclear power plant in South Africa, and an agreement on nuclear personnel training...

South Africa plans to build 9.6 GWe of new nuclear capacity. As well as signing inter-governmental frameworks, the South African government invited would-be reactor vendors to attend 'vendor parade workshops', hosted by the country's Department of Energy. These were intended to form part of the government's technical investigations prior to making its procurement decision. They were attended by delegations from Canada, China, France, Japan, Russia, South Korea and the USA...The training will take place at the Shanghai Jiao Tong and Tsinghua Universities. The training will be in the form of lectures and visits to some of China's nuclear facilities.

Source: World Nuclear News, 24 April 2015.

CHINA- UNITED STATES

Industry Urges Congress to Renew US-China Nuclear Cooperation Agreement

The Obama administration has signed the renewal of a bilateral commercial nuclear cooperation agreement with China and sent it to Congress for review. This agreement is a prerequisite for continuing the substantial nuclear energy cooperation between the two nations. Following is a statement from Fertel, the Nuclear Energy Institute's president and chief executive officer.

"The US nuclear energy industry urges Congress to support renewal of the US-China Section 123 agreement. This agreement will enable continued US leadership and influence in the critical issues of international nuclear safety, security and nonproliferation.

Renewing the existing 123 agreement, which is scheduled to expire in December 2015, is essential for continued US nuclear energy cooperation with China. This cooperation easily can bring with it billions of dollars of US exports in goods and services, involve many US supply and sub-supplier companies across the country, and create tens of thousands of American jobs.

"Renewing the existing 123 agreement, which is scheduled to expire in December 2015, is essential for continued US nuclear energy cooperation with China. This cooperation easily can bring with it billions of dollars of US exports in goods and services, involve many US

supply and sub-supplier companies across the country, and create tens of thousands of American jobs.

"In response to soaring electricity demand and its severe air quality challenges, China is implementing an expansive national plan to develop up to 58 gigawatts of nuclear energy generation by 2020, 150 gigawatts by 2030 and considerably more by 2050. For the foreseeable future, China will be the single largest market for nuclear technology, goods and services. It already is building 26 nuclear energy facilities, including four Westinghouse AP1000s, a design that has been standardized for many of China's planned nuclear facilities.

The memoranda provide for a broad cooperation and joint initiatives in the field of nuclear energy, including deliveries of low-enriched uranium fuel and its components for research and power reactors in Argentina, supplies of TVEL-manufactured zirconium components of the nuclear fuel cycle, and joint research and development projects. The parties have also undertaken to establish a bilateral working group to represent all stakeholders.

"US equipment and technology exports have enabled China to deploy the safest nuclear technologies. The strong US presence in China's nuclear energy market and China's adoption of US technology has served to deepen its relationship with the US that has brought about significant advances in China's safety practices. US assistance in developing China's nuclear energy program also is helping China to mitigate its world-leading carbon emissions and other pollution. "The US must not forfeit these important gains and opportunities. The US-China nuclear cooperation agreement should be promptly renewed by the two countries on mutually acceptable terms."

Source: http://globenewswire.com/, 21 April 2015

These areas include design, construction, operation and decommissioning of nuclear power plants and research reactors, including water desalination facilities. They also include support of the nuclear fuel cycle, radioactive waste management and isotope production.

RUSSIA -ARGENTINA

Argentina, Russia Sign Nuclear Reactor and Fuel Deals

Russian President Putin is to sign an agreement on 23 April 2015, during a state visit to Moscow by Argentine President Kirchner, that paves the way for Rosatom to build a sixth nuclear reactor in the South American country. Kirchner said in a statement on 22 April, that the agreement reflected the leaders' shared belief that constructing nuclear power plants "will be a trend across the world" thanks to the appeal of low-cost electricity generation...

During her visit, Rosatom's nuclear fuel manufacturing subsidiary, TVEL, 22 April 2015, signed two memoranda of understanding with the National Atomic Energy Commission of Argentina (CNEA) and INVAP SE, a design and construction company wholly owned by the government of the Argentinian province of Rio Negro...

In a statement, TVEL said the memoranda provide for a broad cooperation and joint initiatives in the field of nuclear energy, including deliveries of low-enriched uranium fuel and its components for research and power reactors in Argentina, supplies of TVEL-manufactured zirconium components of the nuclear fuel cycle, and joint research and development projects. The parties have also undertaken to establish a bilateral working group to represent all stakeholders.

...The two countries also signed a deal on civilian nuclear energy projects. That document replaced an agreement that expired in December 2012 and expands areas of cooperation, Rosatom said at the time. These areas include design, construction, operation and decommissioning of nuclear power plants and research reactors, including water desalination facilities. They also include support of the nuclear fuel cycle, radioactive waste management and isotope production, it said.

Argentina has three nuclear power units in

operation - the 335 MWe Atucha I, 660 MWe Embalse and 745 MWe Atucha 2, which reached first criticality in June last year. All are pressurized heavy water reactors. In February, China and Argentina agreed to cooperate on the construction of a Chinese-designed Hualong One reactor in the South American country. They plan to participate in the construction of a new nuclear plant featuring a light water reactor and enriched uranium, adopting ACP1000 technology. In July 2014, the two countries signed an agreement towards construction of a third pressurized heavy water reactor at the Atucha plant. Through the agreement, China National Nuclear Corporation was to assist Nucleoeléctrica Argentina SA by providing goods and services under long-term financing. That agreement was ratified on 3 February.

The deal paves the way for South Korea to enrich uranium to produce non-weapons grade nuclear fuel under guidelines to be drawn up by the two countries and also requires the US to ensure it a stable supply of fuel for nuclear reactors.

Argentina in March, signed an agreement with Bolivia aimed at cooperation in promoting and developing infrastructure and institutions for the peaceful use of nuclear energy. Bolivian President Evo Morales said last July, following a meeting with Putin, that Russia had offered Bolivia "a comprehensive plan for the development of nuclear energy for peaceful purposes".

Source: http://www.world-nuclear-news.org/, 23 April 2015.

RUSSIA-HUNGARY

European Commission Gives Green Light to Hungary's Paks Upgrade

The European Commission (EC) has approved Hungary's agreement with Russia concerning radioactive fuel supplies for the Paks nuclear power plant, cabinet chief Lázár said. The EC has informed the government in an official letter that the Euratom Supply Agency (ESA) had granted its approval to the deal... The approval clears all obstacles blocking a planned upgrade of the Paks plant, he said. "Now the question is not if the upgrade goes ahead but in what way," said Lázár, adding that the actual construction of two new blocks could start in 2018.

Lázár called the Commission's approval a milestone, with which the implementation of the project aimed at maintaining and extending the capacity of the Paks Nuclear Power Plant has taken a big step forward. He insisted that it was a "great success" for the government to have been able to convince the EC that the Hungary-Russia agreement is "aimed at increasing Europe's energy security rather than at increasing Hungary's dependence on Russia". The cabinet chief noted that Hungary sought to conclude three agreements with Russia, concerning the construction and management of, and fuel supplies for, the two new blocks. The third deal required direct approval from the EC, he said. Lázár said, however, that talks between the government and the EC were still under way concerning economic competition and purchasing issues.

The cabinet chief recalled that one and a half months ago there were reports that the Supply Agency and the European Commission had blocked the Hungarian-Russian nuclear cooperation. At that time, Lázár said, the Hungarian government had made it clear that this was not the case, and that in fact the parties were going to closely cooperate in order to settle the difference of opinion. As a result of constructive negotiations, the EC has signed the Hungarian-Russian agreement, thus discussions on this matter have been concluded, he explained.

Source: http://hungarytoday.hu/, 21 April 2015.

USA-SOUTH KOREA

South Korea, US Reach Deal to Revise Civil Nuclear Pact

South Korea and the US reached a deal on 16 April 2015 to revise a 40-year-old civil nuclear pact that gives the Asian country limited freedom to produce fuel for power generation but continues to curb its ability to reprocess spent fuel. The deal paves the way for South Korea to enrich uranium to produce non-weapons grade nuclear fuel under guidelines to be drawn up by the two countries and also requires the US to ensure it a stable supply of fuel for nuclear reactors... The

agreement, which still needs approvals in both countries, contains no provision to allow South Korea to independently manage spent nuclear fuel through reprocessing, although it opened the way for easier movement of spent fuel to a third country for disposal.

South Korea, which runs 23 atomic plants that provide a third of its power, has pushed for greater leeway to manage its nuclear fuel and had sought to revise the original pact with Washington to let it reprocess spent fuel. But reprocessing of spent fuel is a thorny diplomatic issue because of proliferation concerns, especially on the Korean peninsula where North Korea has defied efforts by the international community and pushed to develop nuclear weapons.

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South Korea's nuclear reactors add a total of 750 tonnes of spent fuel every year to the 13,300 tonnes that filled 71 percent of its storage capacity as of 2013, according to operator Korea Hydro and Nuclear Power Co Ltd [KRHYDR.UL]. The deal reaffirms the two countries' commitment to non-proliferation of nuclear arms while addressing South Korea's need for stable fuel supply and spent fuel management, said US Ambassador to South Korea Lippert.

The deal reaffirmed the two countries' research into so-called pyroprocessing technology, which allows for the production of nuclear energy without separating plutonium, but which remains a distant prospect. A joint feasibility study is due by 2020.

The deal reaffirmed the two countries' research into so-called pyroprocessing technology, which allows for the production of nuclear energy without separating plutonium, but which remains a distant prospect. A joint feasibility study is due by 2020. South Korea said the agreement would promote its ambitious policy of exporting nuclear power plants under a new provision allowing the transfer of US nuclear material and equipment to third countries without authorization in individual cases. The existing deal between the two countries expired in 2014 but was extended for two years.

Source: The Reuters, 22 April 2015

NUCLEAR PROLIFERATION

IRAN

Iran Nuclear Agreement Oversight Under Consideration on Senate Floor

Debate officially began on the floor of the Senate as Majority Leader Mitch McConnell and bill author Bob Corker began the process of reviewing and voting upon the Iran Nuclear Agreement Review Act of 2015 (INARA). Senator Corker's bill and his statements promoting it have expressed the severe skepticism about President Obama's Iran strategy that has been predominant among congresspersons on both sides of the aisle, especially in the Republican Party.

...This fear of the possible content of a bill that passes without oversight is the reason why so many members of Congress have attached an extreme sense of importance to this bill, occasionally attempting to fast-track it or at least presenting it as a majority priority amidst congressional business. The Senate will vote on possible amendments to the bill on 28 April 2015 and the legislative body's leadership has declared that it expects to conclude the process of voting before Congress enters a one-week recess in May 2015.

If this comes to pass, Congressional oversight will be virtually guaranteed for nearly two months before negotiators from Iran and the P5+1 are scheduled to conclude a final agreement to trade restrictions on Iran's nuclear program for the removal of crippling economic sanctions. As talks on that issue resumed in Vienna ... Iranian Deputy Foreign Minister Abbas Araqchi demanded that the Americans "explain" the implications of the INARA, adding that congressional oversight could have "negative consequences" for the diplomatic process.

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But at the same time that oversight could complicate talks, partisan differences of opinion could still complicate the process of passing INARA by May. Although mutual fear of a weak Iran nuclear deal has prompted rare bipartisan agreement on this piece of legislation, not everyone is content with a bill that is acceptable to the majority of both parties.

Tom Cotton, the freshman Senator who authored a bill last month telling Tehran that Congress and a future president could simply overturn any nuclear deal, is among those Senators who are pushing for a much more aggressive and demanding congressional oversight bill. Possible amendments to the existing bill would raise the number of legislators who would have to sign off on a deal, and would impose a variety of conditions not directly related to the nuclear issue, including the end of Iran's support for terrorism and the recognition of Israel's right to exist.

The current bill reflects very modest compromises on the language originally drafted by Senator Corker. It reduces the mandatory congressional review period from 60 days to 30 days and removes the terrorism provision that Cotton and others are striving to put back in. But these changes preserve the overall goal of giving Congress a distinct role in the process.

The current bill reflects very modest compromises on the language originally drafted by Senator Corker. It reduces the mandatory congressional review period from 60 days to 30 days and removes the terrorism provision that Cotton and others are striving to put back in. But these changes preserve the overall goal of giving Congress a distinct role in the process, and they also helped to secure enough defined Democratic support for the bill that President Obama was apparently forced to withdraw his promise to veto it.

...There is little doubt that the Senate as a whole wants a bill that first and foremost guarantees enough restraints on the Iranian nuclear program to keep the country at least a year away from breaking out to a nuclear weapon. This desire is shared by the Senates constituency and also by lower levels of government, but support is less defined when additional concerns are mixed into the debate over Iran and nuclear weapons.

...Florida state Senate had voted to send a message to President Obama insisting that they want to see more sanctions imposed on Iran if the regime will not agree to a deal that eliminates its pathway to a nuclear weapon. The US Congress has also written legislation outlining new sanctions to be imposed in just such a case, but Democrats agreed to table that legislation to give the president an opportunity to conclude the process. But the bill remains ready to be enacted in the event that congressional oversight prevents the emerging bill from going into effect.

Source: http://irannewsupdate.com/, 26 April 2015.

RUSSIA-IRAN

Russia Lifts Ban on S-300 Missiles to Iran, Strikes Oil Deal

Russian President Vladimir Putin paved the way for long-overdue missile system deliveries to Iran and Moscow started an oil-for-goods swap with Tehran,... The moves come after world powers, including Russia, reached an interim deal with Iran

on curbing its nuclear program and signal that Moscow may have a head-start in the race to benefit from an eventual lifting of sanctions on Tehran.

The Kremlin said Putin signed a decree lifting Russia's own ban on the delivery of S-300 anti-missile rocket system to Iran, removing a major irritant between the two after Moscow cancelled a corresponding contract in 2010 under pressure from the West. A senior government official said separately that Russia has started supplying grain, equipment and construction materials to Iran in exchange for crude oil under a barter deal.

Sources said more than a year ago that a deal worth up to $20 billion was being discussed with Tehran and would involve Russia buying up to 500,000 barrels of Iranian oil a day in exchange for Russian equipment and goods...

The Kremlin said Putin signed a decree lifting Russia's own ban on the delivery of S-300 anti-missile rocket system to Iran, removing a major irritant between the two after Moscow cancelled a corresponding contract in 2010 under pressure from the West that Russia has started supplying grain, equipment and construction materials to Iran in exchange for crude oil under a barter deal.

"In exchange for Iranian crude oil supplies, we are delivering certain products. This is not banned or limited under the current sanctions regime...

Two to Tango

...Iran is the third largest buyer of Russian wheat, and Moscow and Tehran have been discussing the barter deal for more than a year. Russia's state-controlled grain trader in September lowered the value of its potential grain supplies to Iran under the barter to $500 million annually. In December, Iran's oil minister denied Tehran and Moscow were close to a deal.

Recognizing Russia's recent aggressive military actions and hostile rhetoric, UCS maintains it is precisely during times of heightened tension that misunderstandings and mistakes are most likely to happen. Current US and Russian nuclear weapon policies make such miscalculations potentially lethal on a global scale.

Ryabkov also suggested Russia had high hopes that its steady support for Iran would pay off in energy cooperation once international sanctions against the Islamic republic are lifted. "It takes two to tango. We are ready to provide our services and I am sure they will be pretty advantageous compared to other countries," he said...He also reiterated Moscow's line that an arms embargo on Iran should be lifted once a final nuclear deal is sealed. One upper house lawmaker asked Ryabkov whether lifting sanctions on Tehran could undermine Russia's position on global energy markets, including as the main gas supplier to Europe....

Source: http://www.themoscowtimes.com/, 13 April 2015.

NUCLEAR NON PROLIFERATION

UNITED STATES

US Science Group Urges President Obama: Use Upcoming UN Nuclear Weapons Conference to End "Hair-Trigger" Nuclear Weapons Alert

The Union of Concerned Scientists (UCS) is calling on President Obama to use the NPT Review Conference which begins this 27 April 2015 at the UN to announce an end to the Cold War practice of keeping US ground-based nuclear missiles on "hair trigger" alert. Recognizing Russia's recent aggressive military actions and hostile rhetoric, UCS maintains it is precisely during times of heightened tension that misunderstandings and mistakes are most likely to happen. Current US and Russian nuclear weapon policies make such miscalculations potentially lethal on a global scale.

...Today, just as at the height of the Cold War, U.S ICBMs are on hair-trigger status, ready to be fired in minutes in response to a warning of an incoming attack. Several instances of erroneous and misinterpreted warning signals illustrate how this "launch on

warning" posture creates a risk of a mistaken launch. Removing our 450 land-based missiles from hair-trigger alert would increase US security while retaining a secure deterrent, as US nuclear-armed submarines hiding in the oceans are invulnerable to attack and could be used to retaliate in the event of a nuclear strike. UCS has launched a new public initiative to persuade President Obama to exercise his authority as commander in chief and end hair-trigger status...

As candidates, both President Obama and former President George W. Bush called for an end to hair-trigger alert. This policy change also enjoys strong support among many US national security experts, including former secretaries of state and defense, members of the Joint Chiefs and commanders of US Strategic Command. The issue of nuclear risk reduction will be a prominent theme at this year's NPT Review Conference, which runs through May 22. In 2014, 160 countries voted in support of a resolution to "decrease the operational readiness of nuclear weapons systems, with a view to ensuring that all nuclear weapons are removed from high alert status."

Removing our 450 land-based missiles from hair-trigger alert would increase US security while retaining a secure deterrent, as US nuclear-armed submarines hiding in the oceans are invulnerable to attack and could be used to retaliate in the event of a nuclear strike.

In addition, the Non-Proliferation and Disarmament Initiative (NPDI), a coalition including Japan, Canada and Germany, will bring before the Review Conference a working paper that calls on all nuclear weapons states to take "concrete and meaningful steps, whether unilaterally, bilaterally or regionally, to further reduce the operational status of nuclear weapons." ...An announcement by the US that it will eliminate hair-trigger status for its land-based missiles would also send a strong signal to the NPT Review Conference delegates that the US is committed to reducing the risks that its nuclear weapons pose.

Source: http://www.ucsusa.org/, 22 April 2015

NUCLEAR SAFETY

FRANCE

Work at EDF's French Nuclear Plant to Continue Despite Reactor Anomalies

French power utility EDF said the construction work will continue at its Flamanville 3 nuclear plant in western Normandy, despite recently discovered anomalies in the reactor. Being constructed by Areva, the plant will be operated by EDF. Earlier this April, Areva has informed the French nuclear regulator Autorité de Sûreté Nucléaire (ASN), about the anomalies identified in the steel composition of the reactor vessel of the European Pressurised Reactor (EPR). The EPRs are being installed by EDF at the Flamanville plant. The anomalies were discovered after chemical and mechanical tests were carried out in late 2014 on a model of the reactor vessel head and bottom. ASN said that these revealed the presence of a zone in which there was a high carbon concentration, leading to lower than expected mechanical toughness values.

The EPRs are being installed by EDF at the Flamanville plant. The anomalies were discovered after chemical and mechanical tests were carried out in late 2014 on a model of the reactor vessel head and bottom. ASN said that these revealed the presence of a zone in which there was a high carbon concentration, leading to lower than expected mechanical toughness values.

EDF and Areva will undertake additional tests to identify the precise location of the anamolies. EDF and Areva said: "Teams are working to perform the additional tests as soon as possible, following approval by the French Nuclear Safety Authority on the test conditions, and to provide the safety authority with all the necessary information to demonstrate the safety and quality of the corresponding equipment." Meanwhile, the two firms said that

the manufacturing techniques, which are being implemented on the Flamanville 3 reactor vessel, complied with regulations...

Claimed to be safer than the conventional reactors, EPRs are being offered to the UK, US and China.

Areva is scheduled to supply two EPR reactors to Hinkley Point plant in England, and EDF is in talks with the authorities to build the facility. Greenpeace France's Rousselet told the Independent that the latest problems to beset the prototype power station in Normandy are 'clearly the coup de grâce for the EPR idea'. "What foreign client would want to buy this reactor when France itself is not capable of completing its construction?" he observed.

Source:http://nuclear.energy-business-review.com/, 20 April 2015

JAPAN

FoE Japan: Urgent Request to Halt Vetting Procedures to Restart Nuclear Reactors and Review New Nuclear Safety Standards Instead

Public statement to Japan's Nuclear Regulation Authority in response to the Fukui District Court injunction against restarting Takahama reactors No. 3 and 4. Urgent request to halt vetting procedures for the restart the nuclear reactors and instead to review the new nuclear safety standards (In response to the Fukui District Court provisional ruling to halt the restart of Takahama reactors)

"Justice lives!" This was the jubilant message on the steps of the Fukui District Court at 2 pm on 14 April 2015 The jubilation was because the content of the court ruling restates exactly what we citizens and experts have continually been saying. Our main point has been that Japan's nuclear safety standards do not ensure nuclear safety. With the Fukui District Court's decision to issue an injunction against the Takahama nuclear power plant, Kansai Electric Power Co. will be unable to restart reactors No. 3 and 4 there. NRA Chairman Tanaka, in response to the decision, made a comment to the effect that the NRA is not a party to this issue. However, that statement is incorrect. Indeed, the NRA is a key party even among the key parties.

With the Fukui District Court's decision to issue an injunction against the Takahama nuclear power plant, Kansai Electric Power Co. will be unable to restart reactors No. 3 and 4 there.

The court decision states that the fact that the Takahama nuclear plant is not subject to the new safety regulations makes it vulnerable, and points out specifically that the vulnerability cannot be reduced without, to name a few things, (1) a review of standards for design/reference seismic movement and implementation of fundamental seismic upgrading, (2) upgrading of external power supplies and main water supplies to S-class seismic standards, (3) enclosing spent nuclear fuel in robust facilities, and (4) upgrading the water supply facilities of spent nuclear fuel pools to S-class seismic standards. The decision also points out the need for better seismic resistance of monitoring equipment and the need for seismic isolation buildings.

In addition, the court ruling, while following the Ikata Supreme Court ruling (see note), states that "The rationality that should be sought in new regulatory standards is that they should be stringent enough that if nuclear facilities meet the standards there is no fear of causing a serious disaster even in a rare event." But the ruling says that the new regulatory standards are far from sufficient, and even if the power plant in question complied with standards, their safety is not assured. The new regulatory standards are lacking rationality." ...(Note: Ikata refers to the Ikata

The ruling says that the new regulatory standards are far from sufficient, and even if the power plant in question complied with standards, their safety is not assured. The new regulatory standards are lacking rationality.

Nuclear Power Plant in Ehime Prefecture, owned by Shikoku Electric Power Company.)

The Court ruling also states "As for the statement by (NRA) Chairman Tanaka regarding the Sendai Nuclear Power Plant that 'We vetted compliance with standards. We are not saying it is safe.'—This can have no other interpretation than acknowledging that 'Even if (the plant) complied to the letter with standards, this in no way means that safety is assured.' "(Note Sendai Nuclear Power Plant is in Kagoshima Prefecture, and is owned and operated by the Kyushu Electric Power Company.) Although this Court ruling relates directly to the Kansai Electric Power Co., the actual brunt of criticism is the NRA's nuclear safety standards, and the new regulatory standards based on them. If the new regulatory standards lack rationality, then the only possible conclusion is that it is not only Takahama reactors No. 3 and 4 but the safety of all nuclear power plants that is not assured.

If the new regulatory standards lack rationality, then the only possible conclusion is that it is not only Takahama reactors No. 3 and 4 but the safety of all nuclear power plants that is not assured.

Until now, the NRA has continued to completely ignore the opinions of outside experts, citizens, and the general public. We request that the NRA take very seriously the ruling of the Fukui District Court, stop all procedures currently underway to vet reactors for compliance with standards with the aim of restarting them, and that you undertake a fundamental review of the new regulatory standards...

In the reasons for the ruling, the Court points out that the country's new nuclear safety standards do not cover important aspects relating to nuclear safety, saying that "the new regulatory standards are far from sufficient, and even if the power plant in question complied with standards, their safety is not assured.

On April 14, 2015, the Fukui District Court in Japan issued an injunction to prevent the restart of No. 3 and 4 reactors at Kansai Electric Power Co.'s Takahama nuclear power plant. Regarding this court ruling, the Citizens Group to Watch Nuclear Regulations and Friends of the Earth Japan (FoE Japan) are paying particular attention to the Court's harsh criticism of Japan's nuclear regulations. In the reasons for the ruling, the Court points out that the country's new nuclear safety standards do not cover important aspects relating to nuclear safety, saying that "the new regulatory standards are far from sufficient, and even if the power plant in question complied with standards, their safety is not assured."....

Source: http://www.foei.org/, 19 April 2015.

UNITED KINGDOM

UK Nuclear Strategy in Doubt as 'Very Serious' Faults Found in French Plant

Further doubt has been cast over the future of three nuclear reactors under development in the UK, after the discovery of a potentially catastrophic mistake in the construction of an identical power plant in France. French regulators have been informed of "manufacturing anomalies" in components "particularly important for safety" at the Flamanville 3 power plant, in Normandy – a prototype of France's new generation of European Pressurised Reactor (EPR), touted as a safer and more efficient nuclear technology.

"It is a serious fault, even a very serious fault, because it involves a crucial part of the nuclear reactor," said Chevet, head of France's nuclear safety inspectorate. The anomalies have prompted a second investigation into the quality of the steel used to make a 50ft-high safety casing, or "pressure vessel", which encloses the groundbreaking new reactor at Flamanville. In a joint statement, French multinationls Areva and EDF said new tests were under way on the "reactor vessel head and bottom". The companies said this followed initial tests which had shown "greater

than average carbon content" – something French regulators said caused "lower than expected mechanical toughness" in the steel.

"Teams are working to perform the additional tests as soon as possible, following approval by the French Nuclear Safety Authority on the test conditions, and to provide the safety authority with all the necessary information to demonstrate the safety and quality of the corresponding equipment," the statement said. ...*The Independent* reports that if the steel does prove to be defective, the completion of the prototype UK plant – already behind schedule and nearly three times over budget – could be delayed for several years more. One of the main concerns, reports the BBC, is that questions about safety will spook the Chinese state investors who were expected to cover part of the cost of the £14bn Hinkley project, intended to supply 6 per cent of Britain's energy needs for 60 years.

If the steel does prove to be defective, the completion of the prototype UK plant – already behind schedule and nearly three times over budget – could be delayed for several years more. questions about safety will spook the Chinese state investors who were expected to cover part of the cost of the £14bn Hinkley project, intended to supply 6 per cent of Britain's energy needs for 60 years.

"What foreign client would want to buy this reactor when France itself is not capable of completing its construction?" asked Greenpeace France's Yannick Rousselet, in a statement describing the latest problems to beset the Normandy prototype as "the coup de grâce for the EPR idea." Sources in the French nuclear industry have told the newspaper Le Parisien that dismantling the faulty pressure vessel and ordering and manufacturing a new one could take several years.

...In the UK, it has taken the government months to negotiate a contract for EDF to supply electricity at a guaranteed price for 35 years. The final decision on the British project is expected in the coming months but is also delayed by the current lack of a fully functioning government – something which could be exacerbated if talks on forming a government drag on after the election.

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Source: http://reneweconomy.com.au/, 20 April 2015

NUCLEAR WASTE MANAGEMENT

CANADA

Council to Get Update On $20b Plan To Bury Nuclear Waste

...Michael Krizanc, communications manager with the Nuclear Waste Management Organization (NWMO), will give an overview of their work so far.The group has finished Phase 1 of its community consultation as it proceeds with long-term plans to spend $20 billion over several decades to bury used nuclear fuel deep underground.

The storage area would include multiple barriers, including the surrounding rock, which would ideally be solid granite. The used fuel bundles would likely be transported to the site by truck or rail. To transport used nuclear fuel, the organization uses specially designed 30-tonne storage containers. The containers are made of solid steel, with no seams or welds, and their walls are about 12 inches thick designed to carry five tonnes of used nuclear fuel.

While Sudbury is not among a list of potential host communities, Elliot Lake and Blind River are among the four towns in Northern Ontario closest to us that are still under consideration. The others are Manitouwadge, Hornepayne, Ignace and White River. Three

communities in southern Ontario are also still under consideration: Huron-Kinloss, South Bruce and Central Huron. The organization is in the third step of a nine-step process as it works toward the construction of a 500-metre repository for two million, half-metre cylindrical bundles that contain radioactive uranium dioxide pellets. The site could be operational by 2035. During a 10-year construction period, the project would create around 1,000 jobs.

The third step of the process has two phases, with assessments of potential communities as a first phase. That process has now been completed.Its 40-year operation period would support 600 to 800 jobs – ranging from maintenance to security – and an extended monitoring period would create a smaller number of jobs for more than 100 years.

Source: http://www.northernlife.ca/, 27 April 2015.

Centre for Air Power Studies

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

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