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FOR A NUCLEAR POWER FREE WORLD

The Great East Japan Earthquake and Tsunami, and accident at the Fukushima Daiichi nuclear power plant, have had dramatic impact around the world. In response to this massive disaster and its tragic consequences for people's lives and environment, the people of Japan are trying to take steps towards recovery.

(737.6194) Organizing Committee - Meanwhile, the nuclear power plant is still unstable and workers are forced to continue working in life-threatening conditions. As the radioactive contamination spreads, many people including children are forced to suffer from prolonged radiation exposure, unable to evacuate due to lack of support from the government.

It is vital that we do not keep making the same mistakes. It is now time for humanity to put an end to the nuclear age that started with Hiroshima and Nagasaki. In Japan, well over half the population now supports the goal of breaking away from nuclear power. However, many people question whether it is practically possible to bring nuclear power to an end. For these reasons and more, a coalition of Japan-based organizations will hold the Global Conference for a Nuclear Power Free World in Yokohama, Japan on January 14-15, 2012.

This conference will create a venue for people from all around the world to gather in Japan and respond to the reality of Fukushima. At the same time, we will bring together the voices of people who suffer from radiation exposure all around the world, whether by nuclear power or nuclear weapons - in other words, Global Hibakusha - and learn from each other's experiences, thus illustrating the human and environmental consequences of the nuclear chain. Combining the experiences of countries around the world, the conference will also aim to demonstrate that it is realistically possible to create a society that is not dependent on nuclear power. Through learning from experiences from around the world, we aim to create a road map for the safe removal of existing nuclear power plants, and from there present alternative policies based on renewable energy and propose action plans that can be implemented by Japan and other countries.

The input of people from around the world is vital to the success of this conference. Join us to together take these steps towards a sustainable, nuclear free world!

Contact: Global Conference for a Nuclear Power Free World
Web: www.npfree.jp/english.html

NUCLEAR FREE NOW
脱原発世界会議
GLOBAL CONFERENCE FOR A NUCLEAR POWER FREE WORLD
2012 YOKOHAMA

MONITORED THIS ISSUE:

IAEA: IRAN MILITARY N-PROGRAM "MAY STILL BE ONGOING"

On November 9, the International Atomic Energy Agency (IAEA) released its latest report on Iran. The assessment, which included a 13-page annex with key technical descriptions of suspect technology development and procurement by Tehran, says that the IAEA "has serious concerns regarding possible military dimensions to Iran's nuclear program." However, the report stopped short of claiming that Tehran is determined to acquire atomic weapons, nor does it argue that the Middle East state is on the cusp of becoming a nuclear power.

(737.6195) WISE Amsterdam - On November 10, one day after the IAEA rapport was published, Russia dismissed the document as “a compilation of well-known facts that have intentionally been given a politicized intonation.” IAEA officials rely in the document on “assumptions and suspicions, and juggle information with the purpose of creating the impression that the Iranian nuclear program has a military component,” the Russian Foreign Ministry said in released comments.

According to most commentators and blogers there is something a little phony about all the sound and fury about the latest IAEA Iran report. There is nothing in the report that was not previously known by the major powers. The West and Israel supplied most of the original tip-offs for the annex on weapons development, while Russia was briefed and no doubt knew one of its own scientists had been lecturing the Iranians on how to make explosive implosion devices (ostensibly for making tiny diamonds).

The bulk of the report is historical, referring to the years leading up to 2003. Its interpretation depends largely on whether you are a glass half-full or half-empty sort of person. On the one hand, the IAEA is confirming beyond reasonable doubt that there was a centralized, heavily funded, program: codenamed Amad and run by a man called Mohsen Fahkrizadeh.

On the other hand, the report is also adamant that Amad was halted in 2003.

After that, the report offers evidence of lower-key computer modeling of nuclear detonations in a more diffuse, scattered manner, albeit by some of the same people. But the evidence for this is sketchier, and it is clear the UN inspectors are less confident about making assertions about the more recent period: some of the activities associated with the effort "may still be ongoing"

So again, its significance is somewhat in the eye of the beholder.

The bottom line is it is not this report or the debate over weaponization that is driving the current sense of urgency on the global stage. It is Iran's accumulation of enriched uranium, which is the potential fuel for a nuclear arsenal. The IAEA report estimated Iran now has nearly five metric tons of low enriched uranium (LEU) easily enough for four bombs, if it was further enriched to weapons grade. It also has 73 kg of 20% enriched uranium - a fraction of what would needed for one warhead but it could be turned into weapons grade much faster.

Furthermore, the Iranians are moving more and more of its enrichment work into a chamber dug under a mountain at a military base at Fordow, where it would be far harder to get at. There are now about two and half 'cascades' of 174 centrifuges there and a large cylinder of (3.5% enriched) LEU has been moved there with the intention of turning it into 20% uranium.

So Iran has the raw materials and the skills necessary to make a small arsenal, perhaps in a few months, if it decided to "break out", which means leave the NPT and throw out the IAEA which is monitoring its uranium stocks and its enrichment activities. But that would be a huge step to take, and a step the current regime has shown it has no appetite for. Rightly so, as it would be seen by many of its neighbors as a declaration of war and simultaneously a short window of vulnerability before Iran put its bomb together and tests it.

So the "break out" scenario is not the biggest threat. Far more worrisome is the possibility that Iran has a parallel, covert program underground somewhere, silently spinning away while the world and its inspectors keep eagle eyes on Natanz and Qom etc. This is very hard to pull off as the whole fuel cycle has to be kept under wraps from the moment the uranium ore comes out of the ground. There is evidence that Iran has tried to do this, but also evidence that the international community has had success thwarting those efforts.

What it should tell us is that it shows very clearly how the existence of a civilian nuclear power industry makes it easy for nations to develop nuclear weapons expertise under a peaceful camouflage. Experts in nuclear weapons construction can maintain that they are merely giving technical advice for commercial nuclear power developments. Factories built to enrich uranium can be portrayed as part of the civilian nuclear fuel chain. Even separating and stockpiling plutonium can be excused as an exercise in planning for eventual use of "advanced fuel cycles".

Thoughtful persons everywhere should reflect on the fact that, in the absence of a civilian nuclear power industry, none of these activities could be portrayed as anything but an overt attempt to develop nuclear weapons. If the world turns away from nuclear power and closes the door on this dangerous technology, the early detection and prevention of attempts to construct a nuclear weapons arsenal would be much easier, and the world would become correspondingly much safer.

The IAEA-report: "Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran" is available at http://iaea.org/newscenter/focus/iaeairan/bog112011-65.pdf

Sources: Gordon Edwards, email, 6 November 2011 / Guardian (UK), 9 November 2011 / Global Security Newswire, 9 November 2011

INDIA: THOUSANDS FAST AGAINST KOODANKULAM

Launched in Augusts, the anti-Koodankulam struggle, coordinated by People's Movement Against Nuclear Energy, is not a sudden upsurge against the 2x1000 MW reactors that were scheduled to attain criticality one after the other within this year. It was a continuous process that started around 24 years ago when the project was conceptualised by the then prime minister Rajiv Gandhi. This long struggle at Koodankulam now has its reflections on various other nuclear projects in the country.

(737.6196) WISE Amsterdam - On November 23, the latest phase of the people's struggle against the Koodankulam nuclear power project in Tamil Nadu (India) entered its 100th day. It began August 16 at Idinthakarai and is spearheaded by the People's Movement Against Nuclear Energy (PMANE). The relay fast against the plant entered its 5th week two days earlier.

As of November 17, police said they have registered 76 cases for various offences including unlawful assembly, use of place of worship for propagating against the government, spreading rumors, instigating protests, preventing government employees from doing their work and public nuisance. Police have booked several persons, including its leader S P Udhayakumar, a bishop, and social activist Medha Patkar on different counts.

As the stir against Koodankulam spread to the seas on November 21, police swiftly slapped sedition charges against protestors saying that they moved too close to the plant. The police registered cases against 3,015 persons, under various sections, including 121 (waging war against country) and 124-A (sedition).

As, on November 21, the relay fast against the plant entered its 35th day at Idinthakarai, people from the fishing community from Tirunelveli and Thoothukudi districts had in large numbers laid siege to the seas off the project site, with black flags hoisted on their boats.

Sasi, a fisherman from Idinthakarai, said that fishermen from Idinthakarai in 460 fiber boats took part in the protest and reached up to the restricted area of the Koodankulam nuclear plant. At the same time hundreds of women staged a protest on the shore shouting slogans against the nuclear power plant. Around 700 policemen were deployed around the plant.

An earlier hunger-strike impelled the Tamil Nadu cabinet to demand suspension of the reactors' construction until people's apprehensions about nuclear hazards are allayed.

The movement against the two 1,000 MW reactors being built by the Nuclear Power Corporation of India Ltd (NPCIL) in Tirunelveli district's Koodankulam area, about 650 km from here, began Aug 16 at Idinthakarai and is spearheaded by the People's Movement Against Nuclear Energy (PMANE). The struggle is now in its third phase as there were two breaks in the relay fast - the first between Sep 21-Oct 9 and the second break on Oct 17 for the local governing body elections.

The staying power of the activists and the support from the local people has put the spotlight on Koodankulam. "Once the fishermen decide on a thing, they remain steadfast. As to the funds, the fishermen's association in each village chips in with funds. There are no major expenses for us except water and the tent. It is a fasting protest so there is no expense on food," M. Pushparayan, convener of the Coastal People's Federation and a PMANE leader, said. He continued saying fishing villages which participate in the relay fast take care of the expenses for their team.

As the local people determinedly continue to resist the commissioning of the Kudankulam reactors, the statements of the nuclear establishment have acquired a desperate edge. The chief of the Nuclear Power Corporation of India Limited (NPCIL) claimed that a “foreign hand” was behind the protests.
But, as one activist replied: “It is not the people’s movement that has foreign backing, but the government that has foreign forces behind its decision as India’s main nuclear suppliers are Russia, America and France.”

The former President, A.P.J. Abdul Kalam, assured the locals that the reactors were “100% safe,” The idea that any technology, especially a complex hazard-prone one like a nuclear power, is '100 percent safe' is patently unscientific. All technologies carry finite risks. The more complicated, energy-dense, and dependent on high-pressure high-temperature systems they are, the higher the risk.

There is a very simple indirect test by means of which even a non-expert can evaluate the question of nuclear safety. If there was really a “0% chance” of an accident, why would nuclear vendors work so hard to indemnify themselves? Atomstroyeksport, the vendor of the Kudankulam plant is protected by a special intergovernmental agreement, which would prevent victims from suing it in the event of an accident. Companies like Westinghouse are holding back on reactor sales to India, since the new liability law includes some very mild liability for suppliers. When nuclear companies are unwilling to stake their financial health on these claims of “100% safety,” how can the government ask local residents to risk their lives?

Kalam also argued that nuclear energy is India's ticket to modernity and prosperity. Such claims go back several decades; for example, Jawaharlal Nehru compared the “Atomic Revolution” to the “Industrial Revolution,” arguing that “either you go ahead with it or ... others go ahead, and you ... gradually drag yourself.” However, in the intervening half century, atomic energy has failed to live up to its promise, and the idea that it is linked to progress and economic success is now both clichéd and historically inaccurate.

Sources: The Hindu, 12 November 2011 / Tirunelveli (TN), 17 November 2011 / New Indian Express, 22 November 2011 / Express News Service, 23 November 2011
Contact: S.P. Udhayakumar at WISE India

TAIWAN: FALLACIES AND TRUTHS BEHIND OFFICIAL NUCLEAR PHASE-OUT PLAN

On November 3, Taiwan government declared a new energy policy which confirms that current reactors will be phased out, but the nuclear power plant under construction will be brought into commercial operation. This "pseudo" nuclear phase-out plan implies that Taiwan can become nuclear free as early as 2055. Furthermore, this new energy policy is formulated based on fallacies which will only place Taiwan under the darkest shadow of nuclear threat.

(737.6197) Green Citizen Action Alliance - On November 3, President Ma Ying-Jeou held a press conference by himself, declared a new energy policy which confirms that the current three nuclear power plants (with six reactors) will be phased out during 2018 to 2025, but the fourth nuclear power plant (at Lungmen, consisting of two 1350 MW reactors) under construction will be brought to into commercial operation over the next five years.

With the concerns on energy security, reasonable electricity price and greenhouse gas emissions reduction, he insisted that Taiwan only can take a gradual path toward a nuclear free homeland, which is stated clearly by Environmental Basic Law.

In the "new" energy policy, the government provided a scheme to ensure the nuclear safety of all nuclear power plants and several counter-measures on energy efficiency enhancement and renewable energy promotion. Comparing to the situation before Fukushima catastrophe, the government deed takes a U-turn on nuclear power policies which seek the life extension and add more reactors at existing plants during past three years. It seems that government had finally responded to the public demand shown by the demonstrations in March and April. However, there are three key fallacies hiding behind this pseudo nuclear phase-out plan, and those fallacies will only place Taiwan under dark shadow of nuclear threat.

Fallacy 1:
de-growth of electricity demand is not possible

Implementation of this policy implies that Taiwan will still be trapped by energy-intensive development pathway in next two to three decades. Taiwan government emphasizes that the efforts on energy efficiency enhancement will be maximized, but at the same time intimidates citizens that if the fourth nuclear power plant is not able to fully operational in 2016, we will suffer electricity shortage that will lead to huge economic consequence and downward quality of life. But the covered truth is that this policy is actually built on the assumption that electricity demand will grow 3.2% annually, which then will lead to a 24% increase of electricity consumption at 2016 compared to 2010. The manufactured gap of electricity supply is created based on the assumption that the improvement rate of energy efficiency is only able to increase slightly, and the material output of electronics, petrochemical and steel industries will be expanded 30% in next five years. The upsurge growth of electricity demand contradicts the crucial measures in the nuclear phase-out scenarios being proposed in Germany and Switzerland: electricity demand should be restrained. But it is also against the vision of a true energy revolution that Taiwanese long for.

Fallacy 2:
international peer-review process can ensure the safety

Owing to the enormous design and engineering errors of the fourth nuclear power plant revealed during the past three years the official 'Oversight Commission on the safety of the fourth nuclear power plant' (which includes representatives from environmental NGO, local community and engineering experts) even made a resolution this August, stating that the construction process should be stopped, unless Taipower reforms their engineering procedure before the end of this year. Ignoring those warnings, the government still attempted to persuade the public that the safety of the fourth nuclear power plant can be ensured through a peer-review process by international experts. However, from the government's perspective, the only want to invite experts from World Association of Nuclear Operators (WANO) and Nuclear Regulatory Commission (NRC) from the United States. The credibility of these two organizations hasn't been questioned in Taiwan, even after the Fukushima catastrophe.

As we witness all kinds of flaws exposed by the Fukushima catastrophe, we also need to point out that the existing peer-review process is not equal to safety, since Fukushima Daiichi power plant just went through WANO peer-review process in 2009.

Like Indian government used the result of WANO peer-review process to suppress the public opposition on the construction of Koodankulam nuclear power plant in recent months, this scene will repeat in Taiwan and many other countries. Hence, to expose the fallacy of the existing peer-review process should be viewed as an important issue for global anti-nuclear movement.

Fallacy 3:
existing stress test is well-organized and useful

President Ma pointed out that all current reactors are examined through the stress test that follows EU criteria. However, according to the first stage near-term safety assessment of nuclear power plants released this October by the regulatory body, Atomic Energy Council (AEC), only few key safety issues are answered. Even AEC already recognizes that the seismic design of the Chin-Shan nuclear power plant is not sufficient; however Taipower Company is still reluctant to take practical actions. Under this loose stress test, not only extreme climate events or terror attacks are absent, the most fundamental issue such as loss of electric power, AEC only asked Taipower to provide measure to response to a 24 hours blackout, not 72 hours blackout as occurred at Fukushima Daiichi. The most unacceptable issue is the lack of public participation during the whole stress test process, neither hearings or public consultations were held, only selected scholars were invited to comment on the report.

From Grassroots to Politician's Drama

The above three fallacies exhibit that the promise of a nuclear free future made by President Ma, is merely hot-air. In the meantime, the President Candidate from the Democratic Progressive Party, Miss Tsai Ing-Wen declared that she will seek a true nuclear free homeland which includes retirement of

existing reactors and abolishment of fourth NPP commercialization. However, she didn't seem to be aware that degrowth of electricity consumption is the necessity to a nuclear free Taiwan, thus her commitment is not more reliable. This circumstance implies NGOs should keep generating political pressure to fight for the true alternative. After the two major demonstrations, NGOs chose diverse approaches to increase political pressure and raise public awareness, which included petition for a referendum on the fourth nuclear power plant, public education on nuclear disasters in primary school, or minor demonstrations in different forms. In memory of Fukushima catastrophe, all main NGOs involved in the anti-nuclear movement have a joint action at every 11th day of the month.

After ten years of absence on the main political agenda, the Fukushima catastrophe opens a new window of opportunity for the anti-nuclear movement in Taiwan. However, the anti-nuclear NGOs are all aware that the realization of nuclear free homeland should not solely relay on the overturn of the ruling party. Therefore, we need global support to help us to expose the above fallacies, to earn the public trust that a nuclear free Taiwan is necessary. Moreover, the global energy revolution cannot be achieved without a model for newly industrialized countries; Taiwan could be such a model to present a different development pathway and proof it is possible.

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RUSSIA TO BUILD NPP IN BANGLADESH – ATTEMPT # ??

Russia is to build Bangladesh's first nuclear power plant at Rooppur under an intergovernmental cooperation agreement signed in Dhaka on November 2. The agreement was signed by Sergei Kiriyenko, head of the Russian state nuclear energy corporation Rosatom, and Yafesh Osman, Bangladesh's minister of state for science, information and communication technologies. Rooppur is designated as the location for a nuclear reactor since 1963.

(737.6198) WISE Amsterdam - The signing ceremony was attended by dignitaries including Bangladeshi prime minister Sheikh Hasina. Under the agreement, Russia will construct two 1000 MWe reactors at Rooppur, in Pabna district, about 200 km from the capital, Dhaka. It specifies that Rosatom's AtomStroyExport division will act as the contractor, while the Bangladesh Atomic Energy Commission will be the customer. Russia will also support Bangladesh in developing the necessary infrastructure for the proposed plant. The agreement calls for Russia to provide fuel for the plant on a long-term basis, as well as taking back the used fuel for long-term management and permanent disposal. Russia will also train workers to operate the plant. A separate agreement will be signed for Russia to provide the necessary financing for the Rooppur plant's construction. The Government of Bangladesh is considering either a Government-owned turnkey project or a Build-Own-Operate-Transfer (BOOT) contract.

Kiriyenko said that the proposed reactors "will meet all the international post-Fukushima requirements." He noted that the plant will feature double containment, a passive heat removal system, hydrogen recombiners, a core catcher, as well as other safety features. According to a Reuters report, Osman said that construction of the reactors at Rooppur would begin by 2013 and will take five years to complete.

Russia, China and South Korea had earlier offered financial and technical help to establish nuclear power in Bangladesh. In March 2009, Russia made a formal proposal to construct a nuclear power plant in the country. The Bangladeshi government approved this proposal the following month. The latest agreement between the two countries follows the signing of an intergovernmental agreement in May 2010 on cooperation in the field of atomic energy for peaceful purposes. That agreement provided a legal framework for cooperation in the field of nuclear energy.

Plans to built a nuclear reactor at Rooppur were first drawn up in 1963 and after Bangladesh became independent from Pakistan after a war in December 1971 the plans were revived and an Atomic Energy Commission was set up. In April 1974 it signed a deal with India for information exchange about the "peaceful uses of nuclear energy" (less than a month later, on May 18, India exploded its first nuclear device code named Operation Smiling Buddha). On August 29, 1980, the government singed an agreement with France to provide technological and financial aid for the construction of a 300 MW nuclear power plant. The Saudi Arabia agreed to provide two-thirds of the finance, but Bangladesh was unable to find the rest of the money. In September 1981 it signed an Agreement for Coorperation Concerning the Peaceful Uses of Nuclear Energy with the US and in December 1984 Russia offered to finance and supply a 440 MW reactor, supply and take back the fuel for an estimated price fo US$600 million. But again it did not materialize.

Then, in September 2007 after announcing the construction of 2 reactors in Rooppur for the xth-time, Bangladesh asked the IAEA for 'technical assistance and support'. Russia won a state-to-state-deal for ten construction. In a November 21 2011 report, the IAEA announced Bangladesh has "achieved notable progress in its nuclear infrastructure development of nuclear power". An Integrated Nuclear Infrastructure Review (INIR) mission concluded that Bangladesh has "mostly met the conditions for knowledgeable decision-making and is actively preparing for the Rooppur Nuclear Power Plant project."

Sources: New Scientist, 13 December 1984 / Financial Express (Bangladesh), 3 February 2010 / World Nuclear News, 2 November 2011 / IAEA, November 21 2011 / Laka files on Bangladesh

EDF CONVICTED OF SPYING ON GREENPEACE

On November 10, a French court convicted the French state electricity company, Electricité de France SA (EDF), on charges of spying on Greenpeace, fined the company 1.5 million euro, and ordered it to pay 500,000 euros in damages to the environmental organisation for non-material loss.

(737.6199) WISE Amsterdam - EDF, Europe's largest producer of electricity, was charged with complicity in concealing stolen documents and complicity to intrude in a computer network. In 2006, EDF hired a hacker and a private investigator in a "cloak-and-dagger" undercover effort to spy on Greenpeace France's operations. The spying operation monitored Greenpeace while it challenged plans by the UK government to work with EDF to expand its nuclear operations. The hacking caused the theft of more than 1,400 documents from the computer of the Greenpeace France programme director.

EDF's spying operation monitored Greenpeace while they challenged plans by the UK government to work with EDF to expand its nuclear operations. Clearly worried about this - and losing the nuclear debate in France, EDF somehow decided a cloak and dagger espionage operation was the way to go. In 2006, the company hired private investigation company Kargus Consultants to spy on Greenpeace France. Kargus went too far, and hacked into, then stole 1,400 documents from the computer of Greenpeace France's program director. But they got caught.

The men prosecuted were Pascal Durieux, head of EDF's nuclear safety at EDF in 2006, Pierre-Paul Francois, EDF's second in command of nuclear safety security during the same period; Thierry Lorho, the boss of Kargus, and Alain Quiros, Kargus computer scientist.

This spying scandal and verdict against EDF couldn't have come at a worse time for the global nuclear industry which is reeling from the fallout of the Fukushima disaster. In recent weeks and months countries like Germany, Italy, Switzerland and Belgium have turned their backs on nuclear power. The new generation of nuclear reactors (with which EDF are heavily involved) is years behind schedule, billions over budget, and beset by construction defects and safety concerns.

"The fine against EDF, and the damages awarded to Greenpeace send a strong signal to the nuclear industry that no one is above the law", said Adélaïde Colin, Greenpeace France communications director. "In the run up to the next presidential elections, this verdict shows that the nuclear industry is not compatible with French democracy. Voters should keep this scandal in mind and try to ensure that the energy issue in France is not taken hostage by the nuclear industry and politicians."
At present, the four French European Pressurised Reactors (EPR) are being built in Finland, France and China are well behind schedule, hampered by significant construction problems and billions over budget, in the case of EDF's reactors in Finland, and France.

Source: Greenpeace Press release, 10 November 2011 / Greenpeace blogpost by Justin McKeating, 10 November 2011
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KEDO DEMANDS COMPENSATION FOR REACTORS FROM NORTH KOREA

KEDO, an international consortium tasked to build two light-water reactors in North Korea earlier this decade will soon demand the Stalinist state hand over US$1.89 billion (1.4 billion euro) to compensate for losses incurred by the failed project. KEDO agreed in 1994 to build two 1,000-megawatt light-water reactors as part of a denuclearization-for-aid deal and the project was about 35 percent complete when cancelled.

(737.6200) WISE Amsterdam - The demand by the Korean Peninsula Energy Development Organization (KEDO) is the latest in a back-and-forth debate over the project once considered a sign of progress toward the North's denuclearization. It comes after North Korea filed its own compensation claim worth some US$5.8 billion in September, saying it suffered heavy financial losses and other troubles from the failed project.

KEDO, comprised of South Korea, Japan and the United States, agreed in 1994 to build two 1,000-megawatt light-water reactors in the North as part of a denuclearization-for-aid deal between Washington and Pyongyang. After years of delays due to poor funding and other problems, the project fell through in 2006 after the U.S. caught North Korea pushing a second nuclear weapons program based on enriched uranium in addition to its widely known plutonium-based one. The US$4.2 billion project was about 35 percent complete when the KEDO called it off.

A government official said on condition of anonymity that KEDO has sent a letter to the North each year requesting it to pay for the losses incurred by its breach of the agreement. "North Korea has given no response, and its sudden claim for compensation is completely unacceptable." The wrangling also comes as part of increased regional dialogue as players try to resume long-stalled multilateral talks on Pyongyang's denuclearization. Those 'Six-Party Talks' between North Korea, South Korea, Japan, China, Russia, and the United States began in 2003 with the goal of denuclearizing the Korean Peninsula.

The North walked out of the six-party

talks in April 2009 over international sanctions for its missile and nuclear tests. Last year, it upped the ante for their resumption by revealing the uranium program and twice waging deadly attacks on the South. Tensions have cooled somewhat since July, when the two Koreas sat down for surprise denuclearization talks that led to similar meetings between Washington and Pyongyang that aimed to resume the multilateral format.

Seoul and Washington want the North to halt the uranium program and allow for international verification of the move among other steps before coming back to the table, while Pyongyang insists the talks should start without preconditions.

Domestic Light-water reactor
Meanwhile, North Korea has made rapid progress on the construction of its new nuclear reactor, with work nearly complete on the building's outside walls, an analysis of recent satellite images shows. The 25 or 30-megawatt light-water nuclear reactor has been constructed with no apparent outside help and no international oversight. The reactor is part of a recent North Korean plan to revamp its nuclear capabilities.

Outside analysts weren't sure whether isolated and impoverished North Korea had such a capability, even though it had received important Pakistani technology and manuals in the 1990s. That skepticism disappeared last November when a U.S. scientist was given a tour of the Yongbyon nuclear facility. The scientist, former Los Alamos National Laboratory director Siegfried Hecker, was shown a modern uranium-enrichment facility with 2,000 centrifuges — enough to produce fuel for a modest light-water reactor. North Korea also would have to produce uranium dioxide fuel pellets to power the reactor. When Hecker toured the facility last year, he was told that the uranium-enrichment facility was operational, but he didn't see it in use.

Hecker also saw the beginnings of North Korea's light-water reactor. At the time, the reactor was just a 23-foot hole in the ground and a concrete foundation. Hecker spotted 50 workers in blue coveralls and a sign that read, "Safety first — not one accident can occur!"

Because the reactor building is yet to be loaded with sensitive nuclear equipment, the plant might not be operational for another two or three years, one analyst said. But the accelerated pace of construction lends credence to Pyongyang's claim that it has the materials and know-how to build nuclear plants on its own.

There is concern about how North Korea would reliably cool the reactor core; newly laid piping connects to a nearby river that freezes in winter. And it is less clear whether North Korea wants the plant as a power source or as a decoy for its weapons program.

North Korea is trying to build up its infrastructure — improving its factories, its electrical grid and its supply of hard currency — in advance of 2012, the 100th anniversary of the birth of founder Kim Il Sung. North Korea has touted 2012 as a showpiece year for its achievements, and officials told Hecker that the light-water reactor would be finished in time for the anniversary.

Sources: Korean Times, 14 November 2011 / Yonhap News Agency, 14 Nov, / Washington Post, 15 November 2011

LARGE SPIKES IN RADIOACTIVE RELEASES DURING REFUELLING REACTORS

For the first time, recent German data reveal large spikes in radioactive releases during the refuelling of nuclear power stations. Until now, the nuclide amounts were only published as annual averages throughout the world. Now, after requests by IPPNW and the Green Party in the Bavarian State Parliament, non-averaged values have been made available for scientific evaluation for the first time anywhere in the world. This provides a plausible explanation for the findings of the KiKK study published in 2007 and 2008 that under-fives living near nuclear power plants are considerably more at risk of cancer, particularly leukemia, than children living further away.

(737.6201) IPPNW Germany - In September 2011, the Gundremmingen nuclear power plant (located between Ulm and Augsburg in Southern Germany) emitted much larger amounts of radioactive noble gases during inspection/refuelling than are emitted during normal power operation. According to the International Physicians for the Prevention of Nuclear War (IPPNW) in Germany, the normal emission concentration of released radioactive noble gases during the year is about 3 kBq/m³.

However during inspection/refuelling on September 22, this concentration suddenly increased to an average of ~500 kBq/m³ with a peak of 1,470 kBq/m³. During the following week (September 22 - 29), the concentrations were still much higher (average 150 kBq/m³) than during normal power operation (see table).

In order to refuel, reactor pressure vessels must be opened about once a year. This releases to the local environment very large volumes of radioactive gases and vapours, including noble gases, H-3 (tritium), carbon-14, and iodine-131. Until now, the nuclide amounts were only published as annual averages throughout the world. Now, after requests by IPPNW and the Green Party in the Bavarian State Parliament (Landtag), non-averaged values have been made available for scientific evaluation for the first time anywhere in the world.

Analyses by IPPNW Germany and Nuremberg physicist and statistician Dr Alfred Körblein demonstrate dramatic increases in the emissions during the brief inspection and refuelling period at Gundremmingen. Dr Körblein stated "At its maximum value, the concentration of noble gas emissions during refueling was 500 times greater than during normal reactor operation ".

These release spikes result in considerably larger radiation doses to people living nearby. IPPNW Germany warns of the probable health impacts of such large emission spikes. "Especially at risk are unborn children. When reactors are open and releasing gases, pregnant

women can incorporate much higher concentrations of radionuclides than at other times, mainly via respiration" said Reinhold Thiel, member of the German IPPNW Board. "Radioactive isotopes inhaled by the mother can reach the unborn child via the blood and placenta with the result that the embryo/fetus is contaminated ('labelled') by radioactive isotopes. This contamination could affect blood-forming cells in the bone marrow later resulting in leukemia. This provides a plausible explanation for the findings of the KiKK study published in 2007 and 2008 that under-fives living near NPPs are considerably more at risk of cancer, particularly leukemia, than children living further away".

He demanded "Up to now, supervisory authorities and nuclear operating companies have kept these spikes secret by only providing annually-averaged figures, [illegible]

for disaggregated data. We need these half-hourly data of the releases of each radioactive nuclide from all German NPPs for scientific evaluation. This is necessary for the protection of unborn children near German nuclear reactors. "

Since 1998, the IPPNW is trying to raise awareness of the increase of children's cancer rates in the vicinity of nuclear power plants. After a massive public campaign by the IPPNW in 2001 due to elevated childhood cancer rates by Bavarian nuclear power plants, the Federal Office for Radiation Protection approved a scientific investigation resulting in the study "Childhood Cancer in the vicinity of nuclear power plants (KiKK study)." Its highly significant result was: "under-fives living near nuclear power plants are considerably more at risk of cancer, particularly leukemia, than [illegible]

and industry-friendly scientists still deny, however, the influence of radiation on these increased disease rates. Supposedly, the emitted radiation from the nuclear power plants is a factor of 1000 too low to cause the disease. But this argument is now contradicted by this research on release spikes during the refueling outage.

More on KiKK-study at: http://www.bfs.de/en/kerntechnik/kinderkrebs/kikk.html

Source: Press release IPPNW Germany, 11 November 2011
Contacts: German Section of the International Physicians for the Prevention of Nuclear War: Doctors for Social Responsibility (IPPNW). Reinhold Thiel, Tel. 0049 172-24 57 852 or Henrik Paulitz, Tel. 0049 171-53 888 22
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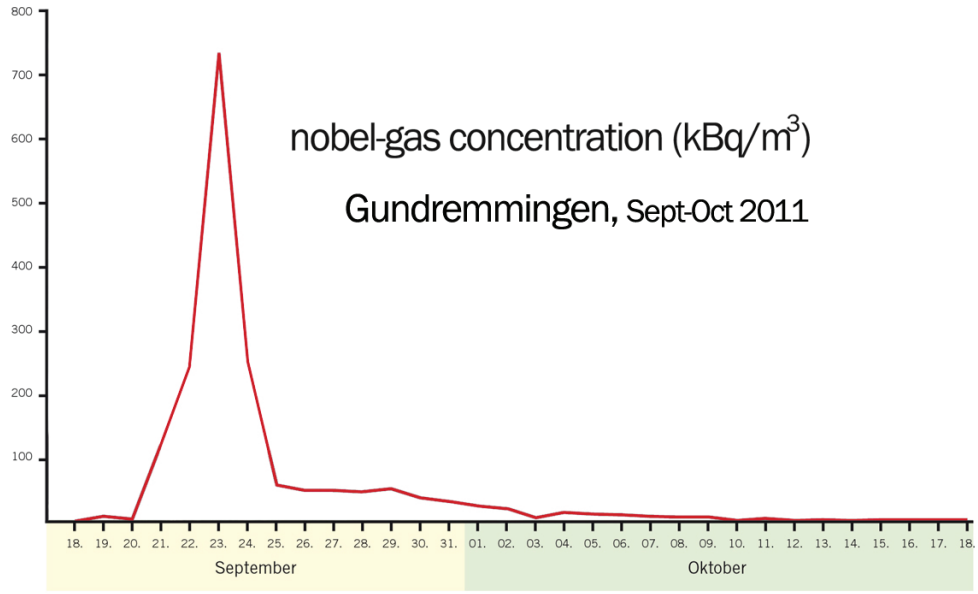

NO URANIUM EXPORTS TO INDIA!

Australian Prime Minister Julia Gillard is seeking to overturn a ban on Australian uranium exports to India: "Selling uranium to India will be good for the Australian economy and good for Australian jobs." Australia, holder of the biggest known uranium reserves, has a long standing policy of not exporting uranium to India, because it hasn't signed the Nuclear Non-Proliferation Treaty.

(737.6202) WISE Amsterdam – Over the next couple of weeks as the Australian Labor Party (ALP) national conference is getting closer, we are going to hear a lot about uranium sales to India. Prime Minister Gillard and others within the Labor Party are on a mission to overturn Labor's long-standing opposition to selling uranium to India. One Labor Senator has declared that if the ban gets overturned then ALP will be "selling out everything we've stood for as a party for the last 40 years". The debate is heating up and members of the Labor left are ready to fiercely oppose this change in policy at the National Conference.

On November 16, any organizations and individuals from Australia and India signed onto a letter urging Prime Minister Julia Gillard, Resources Minister Ferguson, Foreign Minister Rudd and some senators, to reconsider plans to export uranium to India. Many nuclear disarmament organizations are strongly opposed to India's being able to import Australian uranium, as this will inevitably contribute to a nuclear arms race in the Indian subcontinent.

India has a limited quantity of unsafeguarded uranium of its own that can be

set aside and used for nuclear weapons purposes.

There has been speculation over the last couple of decades that India would be unable, without importing uranium, to be able to sustain both the ambitious civil nuclear power program it has, and to keep up with Pakistan's aggressive nuclear weapons program, a program that is set to soon exceed, in warhead numbers, that of the UK.

We would like to remind you that back in December 2002-January 2003, Indian and Pakistani military faced each other across the 'line of control' and that the worlds number one wire story was 'India, Pak, move nukes to line of control'.

At that point the large-scale use of nuclear weapons between India and Pakistan was very much on the agenda. We note that on the very day on which you made your announcement, India conducted a successful test of its nuclear-capable Agni-IV (Agni-II Prime) missile.

This is surely not a sign of a subcontinent that is moving in a peaceful direction.

Authoritative, peer-reviewed scientific studies have recently predicted that a nuclear war between India and Pakistan would create catastrophic changes in global climate and massive destruction of Earth's protective ozone layer.

Leave uranium in the ground!
(It's not as radical an idea as it might sound). Uranium accounts for a paltry 0.3 per cent of Australian export revenue and 0.03 per cent of Australian jobs. Few would notice if the industry vanished and still fewer would miss it. Uranium sales to India would do very little to expand Australia's export revenue. If Australia supplied one-fifth of India's current demand, uranium exports would increase by a measly 1.8 per cent. Even if all reactors under construction or planned in India come on line, Australia's uranium exports would increase by just 10 per cent.
The Age, November 1, 2010 / Jim Green, Abc.net, November 18, 2011

This would lead to the coldest average weather conditions in the last 1000 years and greatly increase the amount of harmful UV-B light reaching both the Northern and Southern Hemispheres. Consequently, these long-term environmental consequences would significantly decrease global agricultural production and lead to global nuclear famine.

Selling uranium to India will involve radical alterations to Australia's long-standing (and till recently bipartisan) nuclear nonproliferation policy, according to which Australia will sell uranium only to signatories of the Nuclear Nonproliferation Treaty (NPT). India is not and cannot be, an NPT signatory due to its significant nuclear weapons program (and therefore cannot sign the additional protocol to the NPT which presumes NPT signatory status).

The undersigned organizations therefore urge the Australian government to retain Australia's long standing and correct policy of not exporting to India.

Source: Bloomberg, 15 November 2011 / John Hallam (Letter coordinator), 16 November 2011
Contact: John Hallam, People for Nuclear Disarmament NSW Nuclear Flashpoints, Surry Hills Sydney NSW, Australia.
Email: johnhallam2001[at]yahoo.com.au

IN BRIEF

French revolution? They have been talking about this for months, mostly behind closed doors; the French Parti Socialiste (social-democrats) and the French Greens have agreed upon a joint positionon the future of nuclear power. The Greens will support the PS candidate in return for his promise to cut France's reliance on nuclear energy for its electricity from about 75 per cent to just half by 2025. If François Hollande, the socialist candidate wins over current President Sarkozy in the next spring's presidential elections it will have profound implications for state-owned EDF, now making two-thirds of its operating profit domestically, mostly from its 58 atomic reactors.
EDF is in trouble anyway; the Fukushma disaster has lead to newly to-be implemented safety measures for the French nuclear fleet, with soaring costs as a to-be expected result. The shares have lost 35 per cent of their value in a year, even though profits were healthy and management won praise for cutting its net debt from 34.4 billion euro (US$46 bn) at the end of 2010 to 29.2 billion euro (US$ 39.2 bn) by June 30 of this year. EDF, the world's leading supplier of nuclear power, has not officially responded to Mr Hollande's plans for reasons of political propriety. But their lobby machinery was in full-swing, warning for instance that a cut to 50 per cent supply would create additional costs of 60 bn euro and that "1 million jobs are in peril" should the country abandon atomic power completely.
Of course there is always still a chance that Mr Sarkozy, a skilled campaigner, wins the elections or that Mr Hollande waters down his policy once confronted with the realities of office. The two opposition parties agreed to campaign for the shutdown of 24 nuclear reactors by 2025 and the immediate halt of the oldest plant at Fessenheim. The Greens favor a complete halt of France's nuclear reactors, while the PS called for the lowering of France's dependence on atomic power to 50 percent by 2025. Dispute between the parties is still ongoing over the question of the future of the reprocessing- and MOX fabrication plant in La Hague and the question whether the new EPR in Flamanville, currently under construction.
Anti-nuclear organizations criticized the accord as not going far enough. But considering the French history of massive support for nuclear power, also or even especially in for instance social-democratic and communist left-wing circles, the development can be seen as a serious breakthrough in the French political interrelations
Financial Times, 15 November 2011 / Bloomberg, 16 November 2011

Sellafield's 'Reassurance' Monitoring. Some road drains located on the main approach road to the village centre of Seascale (near Sellafield) have shown a significant rise in levels of Caesium-137 (Cs-137) and Americium 241 (Am-241) in 2010 compared to previous years. In 1988, following the cull of an estimated 2000 feral pigeons at Seascale that were found to be highly

contaminated after roosting in Sellafield buildings overnight, radioactivity in the sediment of 18 Seascale road drains was assessed by Copeland Borough Council and the National Radiological Board. Since the cull and the wholescale removal of gardens and driveways to reduce contamination levels, subsequent annual reassurance monitoring of sediment in drains has been carried out by the Environment Agency and has shown a decline and levelling off of radioactivity levels – until last year.
For 2010, it is reported that in one drain on the Drigg Road, levels of Cs-137 have risen from 310 Becquerels per kilogram (Bq/kg) in 2009 to 1800 Bq/kg, and an increase in Am-241 from 31 Bq/kg to 130 Bq/kg. Elevated levels of Strontium 90 (Sr-90) and plutonium were also present in the drain sediment – with a second drain on the Drigg Road also showing raised concentrations of radioactivity.
An urgent explanation of this unprecedented hike in radioactive concentrations is required from Sellafield and the Environment Agency. Until then, there can be little public reassurance on the sudden appearance of these high levels being found in Seascale some 13 years after the effects of the Seascale pigeon saga were supposed to have been remediated. Put in context, the 2010 levels of Cs-137 in drain SS233 are some 500% higher than those reported for river estuary sediment around Ravenglass – an area known to be heavily contaminated by decades of Sellafield's reprocessing discharges.
CORE Briefing, 20 November 2011

Japanese gov't reform body: cancel Monju and ITER. A government body tasked with reforming public policy began a four-day review session Sunday, with ruling party lawmakers and private-sector experts proposing a sweeping review of long-running nuclear research programs in the wake of the crisis at the Fukushima No. 1 power plant. The review process conducted by the Government Revitalization Unit of the Cabinet Office is aimed at identifying government policies for medium- and long-term reforms and will cover 10 areas including science, education and telecommunications.
In the first such screening sessions under Prime Minister Yoshihiko Noda, all seven members engaged in reviewing energy policy told an open-door screening session that a program to develop the Monju prototype fast-breeder reactor needs radical revision. They recommended the cancellation of 2.2 billion yen (US$ 28.6 million, 21 million euro) of Monju-related spending included in the fiscal 2012 national budget request. According to press reports in September, the science ministry effectively froze research related to Monju by cutting 70 to 80 percent of its current 10 billion yen budget for the next fiscal year from April.
The reactor project, on which the country has so far spent about 900 billion yen (US$ 11.7 billion or 8.6 billion euro), has been hobbled by a series of problems. The reactor first achieved criticality in 1994 but was shut down because of sodium coolant leakage and a resulting fire in 1995. On May 6 2010, Monju was restarted, after being shut down for over 14 years, but on August 26, 2010 when a 3-ton relay device used during replacement of fuel was being removed, it dropped back into the reactor vessel. Since then the reactor is closed again.
The screening body also urged the government to either halt, delay or cut spending for an international project known as ITER to build an experimental fusion reactor in southern France by holding negotiations with participating countries. ITER is a joint project being conducted by China, the European Union, India, Japan, South Korea, Russia and the United States.
Mainichi Daily News, 26 Septemebr 2011 and 20 November 2011 / CNIC file on Monju

Areva: jobcuts in Germany. Things are not going well with Areva, as mentioned in the last Nuclear Monitor. According to German weekly Der Spiegel on November 20, Areva will cut 1,300 jobs in Germany and close down two of its sites. The firm will slash its workforce by around 20 percent at its main site in Erlangen in central Germany, as well as making cuts at other sites across the country. The extent of the job cuts would be nearly twice as high as the 800 redundancies cited in the French press. Extra jobcuts in Germany could well be seen as a kind of 'revenge' for it's decision to abandon nuclear power. The company is expected to announce the move on December 13 in Paris.
Der Spiegel, 20 November 2011

Vietnam to lend 9 bn from Russia to buy Russian reactor. Russia agreed to lend Vietnam as much as US$9 billion (6.7 bn euro) to fund the construction of the nation's first nuclear power plant. The lending period will be as long as 28 years, but the interest rate has not been disclosed. Vietnam said last year it plans to build as many as 13 nuclear power stations with a capacity totalling 16,000 megawatts over the next two decades. The announcement attracted interest from nuclear plant builders including Russia's Rosatom and China's Guangdong Nuclear Power Group. Construction of the two 1,000 MW advanced light-water reactors (called Ninh Thuan 1) is said to start in 2014. It is very likely that Rosatom sings the contract for construction, if the project will develop, and in that case Vietnam is lending money from Russia to buy a Russian reactor.
Bloomberg, 22 November 2011

Axpo says no to uranium from Mayak. Swiss nuclear utility Axpo has instructed Areva, its fuel supplier, to exclude uranium processed at Russia's Mayak plant from its supply chain pending the completion of environmental investigations. Axpo owns the Beznau nuclear power station as well as stakes in the Gösgen and Leibstadt plants. It has been carrying out investigations into the quality and safety credentials of the Mayak processing plant near Chelyabinsk and at the Siberian Chemical Combine (SCC) in Seversk following criticisms from environmental groups. In the process of its investigations, Axpo was given access to Seversk by the plant's operators and had been due to visit Mayak in June, but was denied access to the plant, which is in a military area, at the last minute.
The company now says it has been able to complete enough work to enable it to conclude that current production at both plants meets statutory requirements and does not pose an environmental threat. However, its failure to gain access to Mayak means that it has now instructed its fuel supplier Areva, to exclude uranium from Mayak from its supply chain until such time as the chain can be fully monitored. Instead, it will use fuel from the SCC plant in Seversk. Greenpeace Switzerland welcomed Axpo's move towards greater transparency but questioned its decision to continue to source uranium from Seversk.
World Nuclear News, 14 November 2011

WISE/NIRS NUCLEAR MONITOR

The Nuclear Information & Resource Service was founded in 1978 and is based in Washington, US. The World Information Service on Energy was set up in the same year and houses in Amsterdam, Netherlands. NIRS and WISE Amsterdam joined forces in 2000, creating a worldwide network of information and resource centers for citizens and environmental organizations concerned about nuclear power, radioactive waste, radiation, and sustainable energy issues.

The WISE/NIRS Nuclear Monitor publishes international information in English 20 times a year. A Spanish translation of this newsletter is available on the WISE Amsterdam website (www.antenna.nl/wise/esp). A Russian version is published by WISE Russia and a Ukrainian version is published by WISE Ukraine. The WISE/NIRS Nuclear Monitor can be obtained both on paper and in an email version (pdf format). Old issues are (after two months) available through the WISE Amsterdam homepage: www.antenna.nl/wise.

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