NUCLEAR MONITOR

A PUBLICATION OF WORLD INFORMATION SERVICE ON ENERGY (WISE)
AND THE NUCLEAR INFORMATION & RESOURCE SERVICE (NIRS)

wise
World Information Service on Energy
founded in 1978

NUCLEAR INFORMATION & RESOURCE SERVICE
www.nirs.org

JUNE 4, 2009 | No. 689

RESTART KK-7: EMERGENCY COOLING MALFUNTIONS

In the most recent issue of the Nuclear Monitor (688, published on May 7) we ran an article on the pressure to restart Kashiwazaki-Kariwa reactor number 7 in Japan. A few hours before printing the issue came the news that the reactor would be restarted in the next days. Too late to rewrite the article but just in time to do a "latest news" box. Just a few days after the restart workers the emergency cooling-system failed, twice.

(689.5951) WISE Amsterdam - On May 9, after months of intense pressure from Tokyo Electric Power Company (TEPCO) and the central government, the Governor of Niigata Prefecture and the Mayors of Kashiwazaki City and Kariwa Village gave their permission to TEPCO to restart Unit 7 of the Kashiwazaki-Kariwa Nuclear Power Plant (KK) for the first time since the 16 July 2007 Chuetsu-oki Earthquake. In doing so, they are gambling with the safety of the people of Niigata Prefecture and beyond.

Their decision flies in the face of scientific arguments presented in two subcommittees established by Niigata Prefecture to investigate the impact of the earthquake on the plant. Neither of these subcommittees has resolved crucial questions about the nature of the earthquake, the impact of the earthquake on the plant, or the future safety of the plant. In the end, pressure from TEPCO and the central government have prevailed over sound science.

In particular, the following issues have not been resolved (see Nuclear Monitor 688 for more details).
(1) Seismic Safety
TEPCO, the Nuclear and Industrial Safety Agency (NISA) and the Nuclear Safety Commission (NSC) argue that it is sufficient to set the magnitude of the design-basis earthquake at M7.0. By comparison, the Chuetsu-Oki Earthquake was M6.8 on the Japanese scale.
(2) Unstable Ground
The ground beneath the buildings is moving. The ground level has been measured on three occasions since the earthquake, but each time the direction and size of the inclination of the buildings was different.
(3) Seismic Safety of Equipment in Doubt
There are concerns that during an earthquake in excess of M7 the casing within which the recirculation pump motors are contained could buckle and break.

Important technical questions under the following three broad headings have not been answered:

- "What magnitude earthquake should the plant be designed to withstand?"
- "Why does the ground continue to move?"
- "Can the plant withstand the next earthquake?"

As long as scientific answers to these questions are not found, there can be no basis for confidence in the safety of the plant.

TEPCO, the central government and the prefectural and local governments are making the same mistakes that have been repeated throughout the history of KK. As in the past, once again they have decided to sacrifice sound science and public safety for the sake of national policy.

Reactor malfunctions after restart
TEPCO began withdrawing the control rods at 1:53pm on May 9 and started up the reactor. Problems first arose that

MONITORED THIS ISSUE:

RESTART KK-7: EMERGENCY COOLING MALFUNTIONS 1
EDF SPIES ON ANTI-NUCLEAR ORGANISATIONS 2
DRAFT FISSILE MATERIALS CUTOFF PACT 3
INDIA: URANIUMMINING AND SOCIAL JUSTICE 4
NORTH KOREA: SECOND NUCLEAR TEST 6
ANTI-NUCLEAR EUROPEAN FORUM 8
TURKISH NUCLEAR TENDER: A HUGE QUESTION MARK! 9
THE SENATE CLEAN ENERGY BANK PROPOSAL 10
IN BRIEF 11

night at 11:15pm in a valve in the main steam system. More problems occurred on May 11. TEPCO's press release described the May 11 problems, which occurred at 6:43am and 6:53am, as follows:
"[W]hile performing an activation test of the reactor core isolation cooling system (RCIC), water level of the suppression pool went beyond the normal level...[T]he RCIC could not be shut down by normal procedure and had to be shut down manually at the site."

The problems led to a departure from the "Limiting Condition for Operation" stipulated in the Technical Specification. TEPCO had intended to start the turbines and begin sending electricity to Tokyo on May 15, but as a result of these problems it was not able to do so until May 19.

Sources: Statement of Protest, Citizens' Nuclear Information Center (CNIC), 8 May 2009 / Asahi Shimbun (Japan), 12 May 2009 / Nuke Info Tokyo, May/June 2009

Contact: Philip White (CNIC International Liaison Officer)
Tel: +81-3-3357-3800
Email: cnic@nifty.com
Web: http://cnic.jp/english/

EDF SPIES ON ANTI-NUCLEAR ORGANISATIONS

On March 16, the French satirical newspaper Le Canard Enchaîné broke the story that the computer of a former campaign director of Greenpeace France had been hacked a few years earlier. This was uncovered while the police were investigating hacking related to drug testing by a French laboratory, but at this stage no details were available on who was responsible.

(689.5952) Greenpeace International - Two weeks after this revelation, the investigative journalism website Mediapart.fr published a story entitled "EDF spied on Greenpeace". It turned out that the French electricity company Electricité de France (EDF) had hired Kargus Consultants, a company specialising in information risk management, to spy on all activities that could affect the safety or image of EDF. Alain Quiros, a hacker working for Kargus Consultants, confessed to having hacked into a Greenpeace computer.

Later it was revealed that EDF has also been using the services of a Swiss company, Securewyse, to spy on Sortir du Nucleaire, another French anti-nuclear movement. They also reported that the investigators found a CD with files from Yannick Jadot's computer in the office safe of EDF official Pierre François. Finally, the Greenpeace France warehouse is reported to have been under surveillance by EDF.

From the court documents, it was clear that at least two contracts were signed between EDF and Kargus, in 2004 and 2007, for the provision of "operational support for the ongoing strategic surveillance of environmental organisations and their activities and practices." It was revealed that EDF's Pierre Francois said in a statement: "It was a question of the non-governmental group's organisation in Belgium, Spain, perhaps Britain, let's say Europe".

Two senior EDF officials are under investigation in French court: Pierre François, site protection engineer and a former police detective, and Admiral Pascal Durieux, security director of EDF. On April 10, EDF announced that the two staff members had been suspended from their duties, "a precautionary measure following an internal inquiry". Greenpeace France is civil party in the investigation against Kargus and EDF.

EDF is also awaiting the outcome of another investigation. On March 10th the European Commission's antitrust authorities raided EDF's headquarters in Paris looking for evidence that it had abused its dominant market position to inflate electricity prices in France. It is so far unknown whether the competition body found any evidence. Even as it expands its reach internationally, France's nuclear champion is coming under increased scrutiny.

EDF's spying practices are a symptom of the secrecy inherent to nuclear energy. As has been demonstrated over and over again, democracy and the nuclear industry do not mix. The fact that non-violent environmental organisations are being treated like terrorists because we dare to question nuclear energy shows just how frightened the nuclear industry is of transparency and a democratic debate.

Greenpeace has been pushing this scandal in many countries where EDF/the French nuclear industry has a presence, resulting in the story being covered in e.g. English, Spanish, Italian, German, Belgian and Danish media. In the UK, Germany, Belgium and Spain, Greenpeace is demanding assurances from EDF/EDF Energy/EnBW that those offices have not been subject to similar spying practices.

The Economist analysed the spy-affair as follows:
“The affair is embarrassing for EDF, Europe's biggest energy company, which is 85% owned by the French government. The firm hopes to profit from a global revival of nuclear power. In December it bought half of the nuclear assets of Constellation, an American utility, and in January it completed a deal to buy British Energy, a nuclear utility. This week Jean-Marc Sabathé, director of security at EDF, told Le Monde, a French newspaper, that as a result of the affair "our industrial reputation is at stake at the moment when EDF is engaged in the renewal of civil nuclear power in France and internationally.”

Allegations of corporate espionage also reflect badly on the French nuclear-energy industry as a whole, which has been trying to improve its image and become more transparent.

Source: Rianne Teule, Greenpeace International / "EDF and Greenpeace - Nuclear conflict", Economist, 23 April 2009
Contact: Dr. Rianne Teule, Greenpeace International, Ottho Heldringstraat 5, 1066 AZ Amsterdam, The Netherlands.
Tel: +31-0-207182229
Email: rianne.teule@greenpeace.org

DRAFT FISSILE MATERIALS CUTOFF PACT

The International Panel on Fissile Materials presented a proposed version of a long-awaited international treaty to ban the production of fissile materials for nuclear weapons. The draft treaty designates plutonium, enriched uranium, neptunium and americium as the covered fissile materials. It also defines what it means to produce fissile materials, including separating fissile materials from irradiated nuclear material through reprocessing or any other process; increasing the percentage of uranium 235 and uranium 233 isotopes to 20 percent or more; or increasing the fraction of plutonium by any isotopic separation process.

(689.5953) IPFM - The International Panel on Fissile Materials (IPFM) was founded in January 2006 and is an independent group of arms-control and nonproliferation experts from both nuclear weapon and non-nuclear weapon states. The mission of the IPFM is to analyze the technical basis for practical and achievable policy initiatives to secure, consolidate, and reduce stockpiles of highly enriched uranium and plutonium. These fissile materials are the key ingredients in nuclear weapons, and their control is critical to nuclear weapons disarmament, to halting the proliferation of nuclear weapons, and to ensuring that terrorists do not acquire nuclear weapons.

The 27-page document (A Fissile Material (Cut-Off) Treaty. A Treaty Banning the Production of Fissile Materials for Nuclear Weapons or Other Nuclear Explosive Devices) , published on May 11, covers the definition, verification, implementation and organization issues associated with such a pact. Negotiation of a fissile material cutoff treaty was endorsed without a dissenting vote in 1993 by the U.N. General Assembly. Talks at the Conference on Disarmament have stalled over the years largely due to disagreements on verifying the terms of the pact and whether it should ban the use of pre-existing nuclear material stocks for weapons.

U.S. President Barack Obama said last month that establishing a cutoff treaty would be one of the "concrete steps toward a world without nuclear weapons." "To cut off the building blocks needed for a bomb, the United States will seek a new treaty that verifiably ends the production of fissile material intended for use in state nuclear weapons," the president said in an April 5 speech in Prague. "If we are serious about stopping the spread of these weapons, then we should put an end to the dedicated production of weapons-grade materials that create them. That's the first step"

"We worked on a draft treaty as a kind of exercise for how could you do it," former Dutch diplomat and arms control negotiator Arend Meerburg said during a panel discussion at the Carnegie Endowment for International Peace.

The International Panel on Fissile Materials supports a total halt to production of fissile materials for weapons. This approach would lead to nuclear reprocessing plants and programs being dismantled, rather than "standing idle" and eventually converted to civilian use, he explained. The draft treaty designates plutonium, enriched uranium, neptunium and americium as the covered fissile materials. The last two materials have not been included in previous nuclear treaties but "should have been added a long time ago," according to Meerburg. The draft treaty states neptunium and americium also could be used for "weapons manufacture and are therefore sometimes referred to as 'alternative nuclear [weapons] materials.'"

The document also defines what it means to produce fissile materials, including separating fissile materials from irradiated nuclear material through reprocessing or any other process; increasing the weighted concentration of uranium 235 and uranium 233 in any mixture of uranium isotopes to a level equivalent to or greater than 20 percent; or increasing the fraction of plutonium by any isotopic separation process.

Verification "challenges" for ensuring a full halt to production of weapon-purposed fissile materials would be found at sites including shuttered nuclear facilities, active uranium enrichment or plutonium reprocessing plants and military nuclear sites, according to Alexander Glasser, a scholar at Princeton's Program on Science and Global Security. All such sites would require on-site inspections, he said.

The Nuclear Nonproliferation Treaty should be the "benchmark" for verification under a fissile material treaty, Glasser said. The draft treaty says each member state must accept the International Atomic Energy Agency's verification safeguards.

The document proposes the creation of a "Conference of State Parties" to enforce a possible treaty. Meerburg was adamant that the study group wanted to avoid standing up a large organization because they envision verification work being performed by the IAEA. The panel imagined a small secretariat in Vienna handling a bulk of the treaty work, he said.

Perhaps as important as what is contained in the draft treaty is what is left out. For instance, the document shies away from a requirement in place for the Comprehensive Nuclear Test Ban Treaty, which requires ratification by 44 specific nations before entering into force.

Instead, a fissile materials treaty would take effect upon "ratification by [40] states including at least [four] states with at least one significant quantity of unsafeguarded fissile material as determined by the [International Atomic Energy Agency] director general," the document states. To demand that 44 particular countries sign on is "not such a good idea for this treaty," Meerburg said. "It would lead to a very long delay. We think it would be more important to have at

least a number of nuclear weapons states involved so you can further develop the regime change necessary and put pressure, after some time, on nuclear countries that have not joined immediately." He said that treaty membership by any combination of the five NPT nuclear powers would influence other states that possess nuclear arsenals but "to have it as condition that all eight or nine countries have to be part would mean you are very far away from enforcing this treaty also," according to Meerburg.
When the Nuclear Nonproliferation Treaty was first opened for signature in 1968, organizers did not wait for countries recognized as nuclear weapon states to sign on before the document could be enforced. Developing verification procedures and gaining the momentum "required to have the treaty enforced and not limited by the politics of the most reluctant countries would be a benefit," according to the Panel.

Frank von Hippel, professor public and international affairs at Princeton (U.S.) and co-chairman of the Panel, thinks that while the technical challenges of verification for a possible fissile materials treaty are "significant," they are not as daunting as the political challenges of negotiating such a compact. He said Russia likely would soon consider such a treaty while the United Kingdom and France are "quite interested." He said China was interested at one point. India and Pakistan "are not ready" and would have to be "encouraged to join," and Israel has declared that a fissile materials treaty would not solve the "problem" with Iran's nuclear program.

The report: "A Fissile Material (Cut-Off) Treaty. A Treaty Banning the Production of Fissile Materials for Nuclear Weapons or Other Nuclear Explosive Devices" can be found at http://www.fissilematerials.org/ipfm/site_down/fmct-ipfm_mar2009draft.pdf

Sources: NTI, Global Security Newswire, 12 May 2009
Contact: International Panel on Fissile Materials, Princeton University, 221 Nassau Street, 2nd Floor, Princeton, NJ 08542, USA
Tel: +1-609-258-4677
Email: contact@fissilematerials.org
Web: www.fissilematerials.org

INDIA: URANIUM MINING AND SOCIAL JUSTICE

The Uranium Corporation of India Ltd has applied for renewal of a mining lease for uranium and also for fresh allotment of 15 hectares of forest land for the construction of a tailing pond that will house the radioactive waste generated during the milling of uranium ore. The ore present in Jadugora in West Singhbhum district is of poor quality: 0.06% of natural uranium. Incidentally, this expansion plan is happening after the Government of India signed the Indo-US Nuclear deal and IAEA guidelines for nuclear co-operation with the Nuclear Supplier's group.

(689.5954) JOAR - Every day, more than three thousand tons of radioactive waste in slurry form is discharged from the uranium mill. While more than half the uranium in the ore would be extracted by the mill, all other major radionuclides in the uranium-chain, accounting to about 80% of the original radioactivity in the ore, will be found in the slurry. Burst of these pipes have almost become a routine event in UCIL. Such accidents and callous mismanagement after the accident have caused contamination of the people land and water sources.

The much-awaited public hearing by the Uranium Corporation of India Ltd (UCIL) is over. There was lots of public and there were also lots of policemen and members of different security forces. For every person not in uniform, there was one person from the forces in uniform, some wielding batons, others with rifles and some in riot gear. UCIL has about 2000 permanent workers and nearly 1000 people who are either on casual or temporary employment. So the total number of beneficiaries is about 3000, if you add the other members in the families of the beneficiaries, then UCIL family has more than 15,000 people. Though most of the workers are exposed to dangerous levels of radiation, most of them consider themselves fortunate and lucky. That is quite expected in a country where the wage rates/returns in farming is very low and there is not any other job opportunity.

On May 26, 200 villagers of Matigoda entered the UCIL premises and started ploughing the land. Even though the land was acquired long back, the villagers were paying the tax. They were not paid any compensation. Nobody got a job either. The situation became tense. They were invited for a negotiation after few hours. They were taken to the local police station. The meeting lasted for a few hours and ended with some promises, but no document was signed.

The public hearing was held in the private land of UCIL, near the camp of the Central Industrial Security Forces. Early morning, hundreds of UCIL workers and other beneficiaries had occupied the chairs kept in the hall for the public hearing. The real public, who have lost their lands for the mines and whose health has been damaged due to radiation, had no place in the entire process.

The hearing was held to get the peoples' consent for a capacity addition of 20% and for another tailing pond to house the radioactive mill tailing. The total tailing that will be let off in the pond will be about 850,000 tons per year. About 15 acres of forest land has also been sought for these. UCIL got all what they sought.

A UCIL sponsored group carrying different banners supporting UCIL and its activities came and entered in the venue and placed their banners. Some of these banners were carried by small children, who did not understand the meaning of what was written on them. One banner carried by the supporters read: "when compared with hunger, pollution is a small issue. Save UCIL".

When JOAR (Jharkhandis Organization Against Radiation) and other groups carrying their banners were trying to enter the venue, UCIL supporters man-

handled, few women activist were beaten up and people were pushed away. Some fell down. Police and other security forces were mute spectators to this denial of a place to sit and air their grievances. Finally, the company supporters and the forces pushed the villagers out of the hall.

No one was allowed to enter the hall and allow to speek, in this situation JOAR and other organization decided to boycott the public hearing. We also joined them with shouting slogans - "public hearing is farce" - "stop false public hearing"-"land water and forest is ours", we came out and sat for a Dharna.

UCIL succeeded in convincing the workers that those who were critical of the project were working towards closing down the mining and milling activities in Jadugoda. The slogans shouted by the workers and other beneficiaries and the placards they were carrying all said about saving UCIL. Incidentally, the critics' position that they are demanding safe operations for workers, people in the neighborhood and the ecop-system was unheard.

Around 11 AM, the General Manager of UCIL read out a document listing the details of the project. The GM appeared like reading from a science text book. There were technical terms like Becquerel, in his speech. A journalist who was covering the event asked one of us: what does a Becquerel mean? The presentation by the general manger lasted for about 30 minutes. After this, the organizers announced the names of the speakers from the 'public'. Everybody was unanimous on one issue - UCIL provides jobs, food, clothing and houses. All talks about radiation is anti-national propaganda. UCIL has to be protected at any cost. There is no need to hear any viewpoint which is against the interests of the company.

JOAR and other organizations fighting on environmental issues related to radiation, livelihood issues related to loss of land due to mines and contamination of farmlands and water bodies decided to boycott the drama called public hearing, as there was no possibility of presenting the view of the affected people. Ghanashyam Biruli,

Health Effects

Health studies were conducted by Dr Sanghamitra Gadekar of Anumukti and recently by the Indian Doctors for Peace and Development, the Indian affiliate of the International Physicians for Prevention of Nuclear War (IPPNW). Conducted in two different phases, while one survey concentrates on villages within the radius of 2.5 km from the mines, a similar one was undertaken in villages about 30 km from the mining areas. A total of 2,118 households in the first category, while another 1,956 households were studied in the second category. According to the survey, more children - about 9.5 per cent of the newborns - are dying each year due to extreme physical deformity, primary sterility is becoming common with 9.6 per cent of women not being able to conceive even three years after marriage. Cancer deaths in nearby villages are about 2.87 per cent and 68.33 per cent people are dying before the age of 62.

The Environmental Impact Assessment (EIA) report quotes only health studies conducted by UCIL. There is no mention about methodology or the details of the experts who conducted the study. According to those studies there are no abnormalities, whatsoever, which could be attributed to the operations of UCIL. While the independent researchers have published their reports in detail, the UCIL researchers have not made their reports public. As such, it is impossible to review them.

Dumka Murmu and Charan Murmu of JOAR briefed the press. Among their demands are (a) no new uranium mine (b) bring the existing mine under the international safety guide lines (c) return of tribal land acquired earlier, but not utilized for mining (d) provide livelihood and rehabilitation to the displace people.(f) clean up of the contamination (g) an independent study about the environmental contamination and health effects among the people (h) continuous monitoring of the water bodies to ensure that the radionuclides do not seep into the aquifer, the life line of more than 100,000 people. The activists also reiterated their position that there is no compelling need to expand the capacity of UCIL as the country can now buy uranium from international market.

Conclusion

There have been several research studies conducted by independent experts showing adverse environmental and health impacts among the people involved in mining and the communities living downwind and downstream the facilities in Jadugoda. Besides the scientific studies, the plight of the local population has been captured in an award winning documentary film - Buddha Smiles at Jadugoda. These evidences cannot be ignored or dismissed as anti-national propaganda.

We saw that India is producing less than one percent of the total uranium produced in the world. Nowhere in the world can one find a uranium mine and mill in the midst of thickly populated villages. Here, the distance between the tailing pond and the residence of the communities is less than a few meters.

UCIL has been operating for over four decades now. Many of the social problems like the just compensation for the land acquired, cost of medical treatment for radiation-caused illnesses among the workers and the local population, contamination of land, water and air have not been addressed at all. UCIL has to realize its corporate responsibility towards the First People of Singhbhum district, who has been forced to make sacrifices for attaining nuclear capability

Source and contact: Jharkhandis Organization Against Radiation (JOAR)
Web: http://jagugoda.jharkhand.org.in

NORTH KOREA: SECOND NUCLEAR TEST

On May 25 North Korea conducted a second underground nuclear test. History shows that - in contrast with import of uranium enrichment technology - there is nothing illegal about the acquisition of the weapons-grade plutonium by North Korea and its nuclear test. It's an everlasting myth that underground nuclear blasts don't cause any radioactive contamination. In fact they can just only conclusively proved by this phenomenon. The only way to stop nuclear testing is to stop and to prevent the rationale of deterrence by mediating conflicts.

(689.5955) Laka Foundation - The May 25 blast was up to 20 times more powerful than the first nuclear test on October 9, 2006. This first test was considered to have been relatively weak, about 1 kiloton, suggesting design problems. Pyongyang's official Korean Central News Agency (KCNA) gave no details of the location of the latest test. However, South Korean officials said a tremor was detected around the north-eastern town of Kilju, near where the first test was conducted, close to the Russian border.

In a comment in The Times Dr. David Lowry, former director of the European Proliferation Information Centre, stated that Korea's actions are not unlawful or illegal, though they are certainly against progressive security norms. In January 2003, North Korea didn't illegally leave the Non-Proliferation Treaty (NPT), as under treaty Article X this is permitted. Lowry: "Among the grievances North Korea cited to justify departure from the NPT was continuous verbal aggression by a bellicose U.S., including dubbing North Korea a "rogue state," and President Bush including North Korea with Iraq and Iran as part of the infamous Axis of Evil."

Radioactive pollution

In order to calm down the public in Russia's Far East, the Russian media reported that a team of meteorologists hasn't detected an increase in radiation levels in the air. However, an anonymous U.S. official said that tests for radioactivity in air samples from the region were still underway. After the 2006 nuclear test, it took a U.S. airplane less than a week to detect radioactive material in air over the East Sea. Though the seismology readings are consistent with an atomic explosion, an initial round of analysis did not confirm that Pyongyang fired a second atomic bomb. Another defense source declared to the South Korean press agency Yonhap that South Korea is checking air samples for radioactive material at the military facility in Dongducheon, 40 km north of Seoul and only 15 km from the border, and where the U.S. Forces has a large portion of its troops stationed. They operate jointly with other centers across South Korea to confirm the North Korean announcement of a nuclear test, the source said.

Virtually all underground tests leak a fraction of their radioactive noble gases after the blast. These gases can be detected hundreds of meters high at distances hundreds or thousands of kilometers away. This is where the anonymous official was referring to. South Korea, Japan and the U.S. are currently sampling the air downwind of the North Korean test site and trying to detect traces of radioactive xenon, a common tracer of a nuclear explosion. About 8 percent of the elements created in the fission explosion comprise radioactive noble gases of krypton and xenon. These radioactive gases can damage our genetic material and many many of them decay into solid radioactive particles that are known as deadly substances.

History of North Korea's nuclear program

North Korea's nuclear program started in the 1950s with conducting research on radioactive isotopes for multiple applications at the Academy of Sciences. The Yongbyon nuclear energy research complex was built in the early 1960s. After completion the Soviet Union provided the IRT-2000 Nuclear Research Reactor at the site in 1965. The small research reactor first went critical in August 1965, but did not become fully operational until 1967 after two years of testing. The IRT-2000 was originally 2MW(th), but North Korea expanded its capacity to 4MW(th) in 1974, and to 8MW(th) in 1987. Pyongyang subsequently expanded the complex and built a number of new facilities. The Yongbyon facility houses thousands of scientists and researchers, many of whom studied nuclear technology in the Soviet Union, China and Pakistan. The military runs the nuclear weapons program along with the intelligence service - under the direct supervision of President Kim Jong-Il.

Reprocessing

The Yongbyon nuclear energy research complex includes a large plutonium reprocessing plant as known as the Radiochemistry Laboratory. This facility is a six-story building, approximately 180m in length, 20m in width, and about the size of two football fields. The primary function of the installation is to reprocess spent nuclear fuel. One assumes the construction began in 1985, and by 1992 it had been completed. North Korea signed the NPT in 1985 but did not submit to IAEA inspections until May 1992. In May 1992 North Korea declared to the IAEA that this facility was for training nuclear specialists in separating plutonium, and for handling nuclear waste. However, during IAEA inspections in 1992, the IAEA concluded that it was a reprocessing facility. In 1993, IAEA inspectors discovered that North Korea was preparing to install a second reprocessing line in the building. At that time, inspectors estimated that about 70 percent of the facility's internal equipment had been installed.

Experimental Reactor

The plutonium North Korea separated in the Radiochemistry Laboratory for building their nuclear weapons was probably mainly from the spent nuclear fuel of its 5MW(e) Experimental Reactor. This is a graphite-moderated, gas-cooled reactor with a thermal power range of 20-25MW. In his

comment in The Times Lowry reminds to a long forgotten written Parliamentary answer in the House of Commons by Douglas Hogg, when he was a junior foreign office minister 15 years ago. Responding to Llew Smith, then a backbench Labour MP with strong anti-nuclear leanings "We do not know whether North Korea has drawn on plans of British reactors in the production of its own reactors. North Korea possesses a graphite moderated reactor which, while much smaller, has generic similarities to the reactors operated by British Nuclear Fuels plc." He then added: "However, design information of these British reactors is not classified and has appeared in technical journals." A few months earlier, Hogg, responding to another Smith question asking whether the foreign office had been requested by the IAEA to provide details of the Magnox nuclear plant design from which the North Koreans developed its nuclear reactor design for the plant currently part of the nuclear inspection effort of the special IAEA safeguards inspection team presently in North Korea, revealed "Information has been provided to the IAEA on Magnox reactor design to allow it to validate a computer program used for reactor physics calculations. Such calculations can be applied in the safeguarding of any graphite moderated reactor." This Magnox reactor design was the one used at Calder Hall at Sellafield to produce military plutonium for the U.K. nuclear weapons program […]."

Construction of the Korean Calder Hall clone reactor began in either 1979 or 1980, and was reportedly under construction by at least July 1980. The reactor is fueled by natural uranium, which is abundant in North Korea. Another advantage by using this reactor design is the use of carbon dioxide in the cooling system, which means that it doesn't need heavy water. In addition, the reactor uses graphite as a moderator. Graphite is also available in North Korea. The problem with this type of reactor is that it is difficult to store the spent fuel for an extended period - the fuel cladding is magnesium, which breaks down when exposed to water or moisture - turned out to be an advantage for North Korea. There isn't necessarily a suspicion for military purposes when the spent fuel is reprocessed, because this activity is a necessity in this case. The reactor went critical on August 14, 1985 and operational in 1986. According to North Korea the reactor was operated between 1986 and 1994. According to data presented on the website of the Nuclear Threat Initiative (NTI) the reactor was shut down for 71 days in 1989, about 30 days in 1990, and about 50 days in 1991. These periods could have been used to discharge the spent fuel. The reactor was not being monitored by the IAEA because North Korea did not ratify a safeguards agreement until April 1992.

Plutonium stocks in the 1990s

The amount of plutonium that could have been taken from the Experimental Reactor depends upon the operational history of the reactor, the reprocessing technology, and the measure in which North Korea exploited the opportunities provided by shutdowns of the reactor in 1989, 1990 and 1991. According to IAEA inspectors North Korea almost certainly reprocessed plutonium in all three years. It is widely assumed that about 4 kg of plutonium has been reprocessed from the IRT-2000 Nuclear Research Reactor and that the upper bound for the amount of plutonium that could have been extracted from the Experimental Reactor is approximately 6.9 to 10.7 kg. These amounts, calculated by David Albright are widely accepted by analysts. Enough weapon-grade plutonium for two bombs. Sources within Japanese and South Korean intelligence services claim North Korea may have extracted more plutonium during reactor slowdowns in 1990 and 1991, with a total amount of 24 kg of plutonium. In 1993 the German weekly magazine Stern cited a Russian counterintelligence report claiming that North Korea had bought 56 kg of Russian plutonium on the black market.

IAEA safeguards inspections

In April 1992, after inspection of the Experimental Reactor and other nuclear facilities in Yongbyon, the IAEA discovered discrepancies in North Korea's initial declaration. This led to special ad hoc inspections. In June 1993, Pyongyang began bilateral negotiations with Washington to resolve the impasse. North Korea allowed the batteries and film for cameras to be replaced, but not the return of IAEA inspectors to complete the inspections that began in May 1992. In May and June 1994, North Korean technicians, without the supervision of IAEA inspectors, once again discharged the reactor's spent fuel rods and placed them in the cooling pond. This action nearly led to a military confrontation with the United States, before former President Jimmy Carter's trip to Pyongyang defused the crisis. Carter's trip encouraged Kim Il Sung to accept some guidelines that resulted in the negotiation and conclusion of the Agreed Framework in October 1994.

Nuclear trade with Khan

With the abandonment of its plutonium program after the Agreed Framework, U.S. officials claimed North Korea began a uranium enrichment program. Around 1997, according to U.S. intelligence officials, Pakistan, through Abdul Qadeer Khan, supplied key technology and information to North Korea in exchange for missile technology. From Pakistan, ultracentrifuge technology, knowledge and material, were exported to among others North Korea. A mixture of legal and illegal transactions, involving businessmen from all over the world as well as individuals in the higher circles of the military and political elite in Pakistan allowed nuclear proliferation to proceed much faster than even those familiar with the issue expected. In the 1970s Khan obtained the most modern blueprint from the drawing board of Urenco's ultracentrifuge technology in the Netherlands.

President Musharaf acknowledged in 2005 that Khan had provided centrifuges and their designs to North Korea. Some evidence points to the existence of this program as early as 1987. This program apparently received new life in 1997 when Pakistan, strapped for cash by U.S. sanctions, began paying for its North Korean missile imports with uranium enrichment technology. In a written statement - that was mentioned in relation to Khan's public confession of having leaked nuclear technology on 4 February 2004 - Khan himself is said to have confessed to selling nuclear

technology to Iran, Libya and North Korea.

A December 2001 U.S. National Intelligence Council report ascertained that in the mid-1990s, North Korea had produced one, possibly two, nuclear weapons. In December 2002, Pyongyang lifted the freeze on its plutonium-based nuclear weapons program and expelled IAEA inspectors. On 10 January 2003, North Korea declared its withdrawal from the NPT and on 10 February 2005, North Korea announced that it had manufactured nuclear weapons.

Current plutonium stocks
In May 2008 the U.S. received North Korean Plutonium Program documents. North Korea delivered 18,000 pages of documents describing the nation's plutonium production program to a senior U.S. State Department official. Included in the records is information on the state's efforts in 1990, 2003 and 2005 to reprocess plutonium for nuclear weapons. The records should help to clarify the amount of plutonium produced by Pyongyang. Officials there have apparently placed the stockpile at around 30 kg, while U.S. officials believe the actual amount could be closer to 50 kg. The receipt of the documents took place during talks that were held aiming at breaking the deadlock over the October 2007 six-nation agreement under which North Korea would receive economic, security and diplomatic benefits in exchange for giving up its nuclear sector.

Rationale of nuclear tests and necessity of nuclear disarmament
In line with the statements made by Dr. David Lowry, David Krieger - president of the Nuclear Age Peace Foundation - notes that the rationale for virtually all nuclear tests by all states has been to bolster a country's nuclear deterrent for the purpose of self-defense. The five permanent members of the U.N. Security Council, all nuclear powers, have tested nuclear weapons in total more than 2,000 times. The U.S. alone has tested over 1,000 times. That means that North Korea, which has conducted two nuclear tests, has tested one thousandth the number of times as the five recognized nuclear weapons states have tested and one five-hundredth the number of times the US has tested. Krieger adds to these clarifying comparisons: "It is, of course, dead wrong that deterrence provides a country with protection. In fact, it may lead to a country being attacked by nuclear arms." U.S. President Barack Obama promised to place nuclear nonproliferation and nuclear disarmament high on his administration's agenda. He seems to understand the threat of an increasing nuclear deterrence on the globe. Hopefully, these first steps of the Obama administration will have major follow-ups.

Sources: The Moscow Times, 27 May 2009 / AFP, 29 May 2009 / Yonhap. 26 May 2009 /
'Nuclear explosions conducted underground are definitely not safe'at www.idealist.ws / www.scribd.com/doc/13192820/Safety-for-Americans-from-Nuclear-Weapons-Testing-Act / www.nti.org/e_research/profiles/NK/index.html / Nuclear Monitor, 15 May 2008 / Korea's actions are not unlawful, The Times, 29 May 2009 / A.Q. Khan, Urenco and the proliferation of nuclear weapons technology at www.laka.org/info/publicaties/Khan/khan.html / www.transnational.org/Resources_Treasures/2009/Krieger_NKorea.html
Contact: Laka Foundation, Ketelhuisplein 43, 1054 RD Amsterdam, The Netherlands.
Tel: + 31-20-6168294
Email: info@laka.org
Web: www.laka.org

ANTI-NUCLEAR EUROPEAN FORUM

In the autumn of 2007 the European Nuclear Energy Forum (ENEF) was established. Within ENEF it was aimed that all aspects of this controversial form of energy should be discussed. Both, Czech Republic and Slovakia showed intensive efforts for the organization of ENEF. Semi-annual meetings take place in Prague and Bratislava alternately. The most recent forum was held in Prague on May 28-29.

(689.5956) ANEF - Unfortunately, ENEF failed to fulfill ENEF´s official objectives and is used one-sided as a propaganda instrument for the promotion of nuclear power instead. The Prime Ministers Topolanek and Robert Fico used the opening of the forum several times for unqualified unilateral cheering speeches on nuclear energy, while the discussion of the negative aspects of nuclear energy use has been largely ignored, which resulted in increasing dissatisfaction of the critical participants.

ANEF
ANTI-NUCLEAR EUROPEAN FORUM

A balanced discussion within the next ENEF meeting on 28th- 29th of May seems impossible and therefore we decided - after intensive discussions with Austrian and international NGOs - to organize a counter event - the European Anti-Nuclear Forum (ANEF) -, under which at least some of the negative aspects of nuclear energy will be discussed on an international level. At the same time ANEF aims to send a strong signal across Europe that the EU-funded renaissance of nuclear energy is not an appropriate instrument to fight climate change. The event is

organized by the office of the Anti-nuclear Representative of Upper Austria - Radko Pavlovec-in cooperation with the NGO's Antiatom Szene and Antiatom-Komitee.

Anti-Nuclear European Forum (ANEF) will take place in Linz, Upper Austria on 17th of June 2009. Your participation is very important because it needs a strong signal against the nuclear renaissance. The organizers would like to warmly invite you to participate in ANEF.

Please register by sending an email to office@antiatomszene.info and to the office of the Antinuclear Representative of Upper Austria tem.post@ooe.gv.at.

Antiatom Szene - Das Zukunftsnetzwerk gegen Atomenergie, Thurnerweg 3, 4061 Pasching, Austria.
Tel. +43 650 6660065
Email: office@antiatomszene.info
Web: www.antiatomszene.info

TURKISH NUCLEAR TENDER: A HUGE QUESTION MARK!

Turkey's fourth nuclear tender continues, being shaken with scandal news and creating lots of question marks in minds. When the envelopes containing the bids had opened in September 2008 with five 'thank you but no' messages and just one bid, all the experts were pretty sure that another Turkish Nuclear Tender was going to be cancelled.

(689.5957) Greenpeace Turkey - But the TETAS (Turkish Electricity Trading and Contracting Co.) and the Government insisted to continue with the procedures clarified within the Nuclear Tender Regulations. After the first step, second one was the appropriateness to the TAEK (Turkish Atom Energy Authority)'s criteria for the reactor design offered by the consortium. Russian Atomstroyexport offer was to build four VVER-1200's with a total capacity of 4800 MW.

TAEK's criteria was already missing some basic elements like information on the content of reactor core (i.e. estimate of maximum amount of radioisotopes, needed to estimate radiological impact of accident), amount of waste that will be produced, waste management system on site, waste management plan (long term), evacuation plans (in case of accident)…etc. but there were two major mistakes in the process; first one was related to the possible security deficiency of the chosen area. The ground license of Akkuyu (the area Government is planning to build the nuclear reactors) was approved 35 years ago and in that period a fault line was discovered underneath the area. Also one of the scientists from the committee that approved the license had admitted that the sea temperature wasn't appropriate for a nuclear reactor. Secondly in its criteria TAEK had stated that they would only choose proven technologies but VVER-1200 is a prototype reactor (only 2 constructions have started in July 2008 at Russia).

Blinking the facts, TETAS continued to the third phase where the envelope containing the sales price (to TETAS not consumers) was going to be opened which was another unpleasant surprise for the Turkish electricity bureaucracy. The price bid was astronomical 21,6 US cents for 1 kwh; 7 times Turkey's electricity production average. The consortium wanted to change their bid to 15,4 US cents, but in the nuclear tender regulations it was forbidden to make further negotiations after the envelopes were handed in.

The verbal negotiations on the price bid are taken to court by Greenpeace and 22 other NGO's; giving the argument that public should know what sides are promising to each other behind closed doors. A month after environmental groups filed the lawsuit a journalist/researcher discovered that TETAS's tender committee had written a negative report to the Atomstroyexport-Ciner consortium bid but was pressured by the Energy Ministry to change it. The consortium also reportedly offered 10% of the proceeds 'like a bribe' to TETAS for a positive answer.

We still don't know if TETAS's tender committee took revised bid to consideration in their report (not published yet) or what the decision of the Government is going to be but during Turkish Prime Minister Erdogan's visit to Putin, sides continued negotiations on nuclear energy. It's also being said in the media that Russia is putting the nuclear tender to the table as a precondition upon Turkey's request to sell Russian natural gas to third countries and other energy issues. The tender probably will be concluded in July after TETAS hands in its report regarding the bid.

Nuclear energy isn't the answer

When the previous Energy Minister announced that they were going to start a nuclear tender for Akkuyu his major arguments were to decrease energy costs and provide energy security. The bid itself disproved the first argument and when we look at the projections by the Energy Ministry, Turkey will be using twice as much coal and lignite, and the same amount of natural gas. Nuclear energy will only cover 4% of Turkey's energy need.

In the past, Turkey was harmed quite a bit from the high fixed price purchase guaranteed contracts made for natural gas power generators and politicians seem to be repeating the same mistakes again.

On the other hand, being second in Europe in wind energy resources, lots of sunny days as a Mediterranean country, and huge biomass potential, Turkey has a chance to provide energy security from renewable energy sources in a much quicker and less expensive way.

Source and Contact: Korol Diker, Anti Nuclear Campaigner, Greenpeace

Mediterranean. Istiklal Caddesi, Kallavi Sok. No: 1 Kat: 2, Beyoglu/Istanbul, Turkey
Tel: +212-292 76 19
Email: korol.diker@greenpeace.org

THE SENATE CLEAN ENERGY BANK PROPOSAL

These days, clean energy ranks right up there with Mom, apple pie and ice cream as an All-American attribute. You can barely sit through a TV show, listen to the radio, or even read a blog without coming across an ad from someone extolling the virtues of some "clean" energy form or another. Never mind that some of them-from nuclear power to "clean" coal-bear no resemblance to genuinely clean energy sources. Some industries have more money to spend on ads than others...

(689.5958) NIRS - So what could be more virtuous than a federal Clean Energy Bank? The idea sounds perfect: the federal government would set up a bank to support the development and implementation of clean energy technologies, especially those that private investors can't or won't fund. In fact, it's so perfect the Senate Energy Committee has already approved the concept as part of its upcoming energy bill, as has the House Energy Committee in its Waxman-Markey cap and trade climate bill.

So why has much of the environmental community been lining up to oppose the Clean Energy Bank?

Well, there are a couple of teeny-tiny little problems with the concept, especially in the Senate version. Kind of like there were *teeny-tiny* little problems with unregulated derivatives trading, or lack of federal oversight and regulation, or corporate greed, that brought the U.S. economy to its knees last October.

It is not far-fetched-indeed, it's completely foreseeable-that, as the Senate Clean Energy Bank legislation is currently written, we could see trillion dollar or more taxpayer bailouts of "clean energy" technologies within the next decade. You didn't like TARP? Wait until taxpayers have to bail out the likes of Duke Power, UniStar Nuclear, and Southern Company at levels that might make even Citigroup or General Motors blush.

The Senate' s Proposal

Let's face it: it's pretty tough for environmentalists to oppose something called a Clean Energy Bank.

But here's the reality: Sen. Bingaman's Clean Energy Bank, which is incorporated in S. 949, the Senate Energy bill still being considered by the Senate Energy Committee, would provide more concrete government backing for dirty energy technologies than anything any lobbyist for the nuclear power or coal industries could have dreamed of even a year ago. Indeed, Sen. Bingaman's bank would place **NO** limit to the amount of money that can be federally guaranteed for "clean energy" technologies by this proposed bank. US$10 billion? No problem. US$100 Billion? No problem. US$1 Trillion? No Problem!

The Bingaman bank would authorize this new entity--the Clean Energy Development Administration, which would have an administrator and a nine-member Board of Directors, and virtually no other oversight--to issue as much money in taxpayer-backed loan guarantees as it wants for any projects that fall under an exceedingly broad "clean energy" definition.

In this case, "clean energy" would include-and this is clearly part of the intent --new nuclear reactors, as many as the industry might consider building. That alone has the environmental community up in arms, since no matter what industry propaganda may say, the U.S. environmental movement remains adamant that nuclear power is not a solution to the climate crisis.

"Clean coal" could also be funded under this definition, including such environmentally dubious concepts as coal-to-liquids and unproven carbon sequestration technologies.

But even if this Bank were only oriented toward renewable energy and energy efficiency, it would still be problematic. With all respect and love toward those designing and building new solar PV, solar thermal, wind, geothermal and other 21st century technologies, even they don't deserve *unlimited* taxpayer backing for their projects.

The Congressional Budget Office and Government Accountability Office both have projected a 50% or greater failure rate for loan guarantees for new nuclear reactors. And there is no denying that the failure rate for renewable energy projects is going to be above zero. While it's fine for taxpayers to take some risk for new energy technologies, it's not so fine to bet potentially hundreds of billions of dollars on risks of 50% or more, especially on such capital intensive projects as new reactors, which are now projected to cost US$10 billion or more each.

The nuclear power industry is the one most in need of this money. Why? Because there is no private capital available to support construction of new nuclear reactors, private investors simply won't take that risk. If Bank of America or Citigroup have been thinking for the past few years that nuclear reactors are too risky but subprime mortgages aren't, then a 50% projected failure rate might be too low.

The reality is that the nuclear industry already has asked for US$122 billion in taxpayer-backed loan guarantees (most of which would actually be taxpayer-funded as well, through the Federal Financing Bank). And that would cover only about 20 reactors. Getting to the Republicans' dream of 100 new reactors by mid-century (outlined by Sen. Lamar Alexander (R-Tenn) in the GOP Saturday radio address early May and repeated late May as a goal for both Senate and House legislation), would cost at least five times that amount-and that's before the cost overruns start rolling in. For comparison, a Department of Energy study of 75 existing reactors found an average cost overrun of 207%. If that level holds true for a new generation of reactors, we'd be looking at trillions of taxpayer dollars at risk.

The House Clean Energy Bank

The House Energy Committee approved as part of the climate bill a different version of the Clean Energy Development Administration. Reflecting discomfort with some of the more

outlandish provisions of the Senate version, the House rejected unlimited loan guarantees, and instead would subject the bank to the normal annual Congressional authorization and appropriations process-a major improvement.

And the House version, which came as an amendment offered by Reps. John Dingell (D-MI), Jay Inslee (D-WA) and Bart Gordon (D-TN), places some priority on those technologies that can reduce carbon emissions the fastest and at the lowest cost per emissions reduced-neither of which would necessarily benefit either nuclear or coal.

It also would prohibit any single technology from receiving more than 30% of bank funds. Still, theoretically nuclear and coal together could receive 60% of this "clean energy" money. So while better than the Senate version, it still reflects a misguided vision of what constitutes clean energy.

There is a long way to go for both of these versions: there are likely to be amendments offered when each reaches its respective floor and differing House-Senate versions would have to be reconciled if they get that far. But leave it to the U.S. Congress to take a concept as simple and potentially beneficial as a clean energy bank, and turn it into a bureaucratic nightmare that could provide most of its funding for decidedly dirty technologies.

Source and contact: Michael Mariotte at NIRS Washington

IN BRIEF

Drop in global nuclear output. Nuclear power plants provided 2601 billion kWh during 2008. This lowest figure for five years drops its contribution to world electricity supplies to an estimated 4%.

No new reactors started operation in 2008, but, according to the World Nuclear Association, construction did begin on ten units: China (six units), Russia (two) and South Korea (two).

World Nuclear Association, 29 May 2009

Sellafield - a lost cause. In February, in an embarrassing case of remembering *'where but not what'*, operators of the Low Level Waste repository near Drigg had to resort to place an ad in a local newspaper asking past employees if they could remember what items of nuclear waste they had tumble-tipped into the site's open trenches way back in the 1960's & '70's. Now, in an equally embarrassing reversal of misfortune - a case of *'what but not where'*, Sellafield operators admit that whilst they can describe two items of waste listed on their books at Sellafield - they can't remember where they put it. Sellafield's in-house Newsletter of April 29, reports that a routine stock take had identified that two storage cans containing a small quantity of legacy material were missing from their expected location. A detailed and extensive search was underway and the incident had been classified at Level 1 on the International Nuclear Event Scale (INES).

Whilst the May 8, edition of the Sellafield Newsletter makes no further mention of the loss, the local Whitehaven News newspaper helpfully reveals that the radioactively 'hot' storage cans, capable of giving off a high dose of radiation, are still missing and the search for them could take several more weeks. The cans, described as being the size of thermos flasks, can only be handled by remote control robotic equipment and were listed as being stored in a sealed cave within the Windscale Active Handling Facility which analyses old reactor fuel and where human entry is forbidden because of the high radiation levels.

Though Sellafield Ltd is clinging to the hope that the lost cans, described only as containing historic or legacy waste, have been moved to another secure facility on the site, they have so far offered no explanation as to how remotely controlled robots could have effected such a removal service unobserved by managers and workers alike, or by the site's alert security services. The Regulators have been informed.

CORE Briefing, 8 May 2009

EDF calls for support for nuclear industry. New nuclear power stations will not be built in Britain unless the government provides financial support for the industry. According to the Financial Times, Vincent de Rivaz, chief executive of the UK subsidiary of EDF, said that a "level playing field" had to be created that would allow the nuclear industry to compete with other low-emission electricity sources such as wind power.

However, Mr de Rivaz said the company still needs to assure its investors, which include the French government with an 85 per cent stake, that the investment makes commercial sense. "We have a final investment decision to make in 2011 and, for that decision to give the go-ahead, the conditions need to be right," he said. Mr de Rivaz suggested that the best way to support the nuclear industry would be to make sure penalties paid by rival fossil fuel power generators under the European Union's emissions trading scheme were kept high enough to make nuclear investment attractive. Since the emissions trading scheme began operating in 2005, however, the price of the permits has proved highly volatile and has fallen sharply in the past year.

His comments call into question the government's plans for a new generation of nuclear power stations, which ministers have insisted can be delivered without any additional subsidy.

Financial Times, 26 May 2009

German nuclear waste storage site developed illegally? The salt dome at the Gorleben nuclear waste depot in north Germany was developed illegally into a permanent storage facility claims a newspaper, citing an internal assessment by the

government agency that runs the depot. After first refusing to say whether the internal assessment exists, the Federal Office for Radiation Protection (BfS) now denies that the salt deposit has already been made a final repository. And it also emerged that Angela Merkel, now German prime minister, in 1996 ignored scientific warnings by the environment ministry she then headed that keeping nuclear waste in the Gorleben salt was likely to contaminate regional drinking water supplies. Since work began on the underground facility in the 1980s, only permission for 'exploration' has been granted.

The May 28 edition of the daily Frankfurter Rundschau alleged that without official authorization, the costs of assessing the salt dome's suitability were high because 'the construction of the permanent storage depot was begun parallel to the investigation'. Although not wanting to confirm the existence of the document, the paper said, the agency did admit that costs had been higher than necessary. Some 1.5 billion Euro (US$ 2.13 billion) has been invested in the site.
Work on the Gorleben mine has been suspended since 2000, when the government decided to wait until 2010 to resume the controversial project. The appearance of the documents has confirmed the doubts of nuclear energy opponents, who all along have alleged that Gorleben was earmarked as final repository before the safety of the salt was adequately investigated.
Diet Simon, Email 29 May 2009

U.S.: Obama signs US-UAE nuclear deal.
President Barack Obama gave official backing to the agreement allowing the U.S. to share nuclear technology with the United Arab Emirates. Obama at first planned to sign the deal in April but a number of lawmakers voiced concern, particularly following the airing on U.S. television networks of a video showing an Abu Dhabi sheikh brutally beating an Afghan businessman (see Nuclear monitor 688, 'InBrief'). Some lawmakers argued Abu Dhabi doesn't have enough legal safeguards against leakage of nuclear technologies. U.S. officials said they viewed the nuclear agreement and video as separate issues. The Obama administration has praised the legal infrastructure Abu Dhabi is developing in support of its nuclear program as well its close cooperation with the U.N.'s nuclear watchdog, the IAEA. The U.A.E. has renounced its right to enrich uranium or reprocess plutonium, which, according to U.S. officials, minimizes the risk of nuclear materials being diverted for military purposes. Once the State Department submits the U.A.E. legislation to Congress, lawmakers will have 90 days to amend or seek to kill it. Some U.S. representatives, including Republican vice chairman of the House Foreign Affairs Committee, have said they will fight it. Some say the deal could spark a nuclear arms race across the Mideast.
Wall Street Journal, 21 May 2009

Alberta, Canada: Pro-nuclear vandals strike. The nuclear debate in Peace River is no longer peaceful. Pro-nuclear vandals attacked a trailer used by nuclear opponents to get their message out. The pro-nuclear vandals painted a swastika and profanity on the side of the trailer. They also threw Molotov cocktails to further destroy the sign. The damage to the sign was bad enough but the situation could have been much worse. They cut the farmer's fence along highway 743 to get into the trailer. The horses in the field could have easily got on the highway and been involved in a collision with a vehicle. It was fortunate that the flames from the Molotov cocktail did not ignite the surrounding dry grass as the ensuing fire could have easily travelled to the farmer's home which was only 200 feet (70 meters) away. The fire could have spread a long way before anyone noticed as the vandals attacked during the middle of the night. This attack on our message came a day after two nuclear opponents received a death threat because of letters they wrote to the newspapers voicing their concerns about the impact the nuclear reactors will have on their farms. The police are investigating both occurrences.

Bruce Power announced they have set aside Can$50 million (US$45m, 32m Euro) to promote the construction of a nuclear reactor at Peace River. Grass-roots organizations and community residents have virtually no resources to publicize the nuclear information that Bruce Power doesn't want the public to know about. The trailer that was attacked by "pro-nuclear vandals" used up the majority of our resources.

Peace River residents are being asked to be the nuclear sacrifice zone for Alberta yet the local, provincial and national media have provided scant coverage of our concerns. This week, it was vandalism and death threats. Will someone have to be hurt or killed before our struggle becomes newsworthy?
Email: 10 May 2009, Pat McNamara, entwork@hotmail.com

The NUCLEAR MONITOR

The Nuclear Information & Resource Service was founded in 1978 and is based in Takoma Park, Maryland. The World Information Service on Energy was set up the same year and is housed 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.

The 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, a Ukrainian version is published by WISE Ukraine (available at www.nirs.org). Back issues are available through the WISE Amsterdam homepage: www.antenna.nl/wise and at www.nirs.org.

Receiving the Nuclear Monitor

US and Canadian readers should contact NIRS to obtain the Nuclear Monitor (address see page 11). Subscriptions are $35/yr for individuals and $250/year for institutions.

New on NIRS Website

*Update on key Senate Energy Committee votes
*Sign petition to Maryland Public Service Commission
*Comparison of Senate and House Clean Energy Bank proposals

WISE AMSTERDAM/NIRS

ISSN: 1570-4629

Editorial team: Dirk Bannink and Peer de Rijk.

With **contributions** from: WISE Amsterdam, Citizens' Nuclear Information Center, NIRS Washington, Greenpeace International, Greenpeace Mediterranean, Jharkhandis Organization Against Radiation and Laka Foundation.

Next issue of the Nuclear Monitor (#690) will be mailed out on June 18, 2009.

Please note:
The "Elfi Gmachl Foundation for a Nuclear-free Future" / PLAGE-Salzburg supports the Nuclear Monitor financially..

WISE/NIRS offices and relays

WISE Amsterdam
P.O. Box 59636
1040 LC Amsterdam
The Netherlands
Tel: +31 20 612 6368
Fax: +31 20 689 2179
Email: wiseamster@antenna.nl
Web: www.antenna.nl/wise

NIRS
6930 Carroll Avenue, Suite 340
Takoma Park, MD 20912
Tel: +1 301-270-NIRS
(+1 301-270-6477)
Fax: +1 301-270-4291
Email: nirsnet@nirs.org
Web: www.nirs.org

NIRS Southeast
P.O. Box 7586
Asheville, NC 28802
USA
Tel: +1 828 675 1792
Email: nirs@main.nc.us

WISE Argentina
c/o Taller Ecologista
CC 441
2000 Rosario
Argentina
Email: wiseros@ciudad.com.ar
Web: www.taller.org.ar

WISE Austria
c/o Plattform gegen Atomgefahr
Roland Egger
Landstrasse 31
4020 Linz
Tel: +43 732 774275; +43 664 2416806
Fax: +43 732 785602
Email: post@atomstopp.at
Web: www.atomstopp.com

WISE Czech Republic
c/o Jan Beranek
Chytalky 24
594 55 Dolni Loucky
Czech Republic
Tel: +420 604 207305
Email: wisebrno@ecn.cz
Web: www.wisebrno.cz

WISE India
42/27 Esankai Mani Veethy
Prakkai Road Jn.
Nagercoil 629 002, Tamil Nadu
India
Email: drspudayakumar@yahoo.com;

WISE Japan
P.O. Box 1, Konan Post Office
Hiroshima City 739-1491
Japan

WISE Russia
P.O. Box 1477
236000 Kaliningrad
Russia
Tel/fax: +7 95 2784642
Email: ecodefense@online.ru
Web: www.antiatom.ru

WISE Slovakia
c/o SZOPK Sirius
Katarina Bartovicova
Godrova 3/b
811 06 Bratislava
Slovak Republic
Tel: +421 905 935353
Email: wise@wise.sk
Web: www.wise.sk

WISE South Africa
c/o Earthlife Africa Cape Town
Maya Aberman
po Box 176
Observatory 7935
Cape Town
South Africa
Tel: + 27 21 447 4912
Fax: + 27 21 447 4912
Email: coordinator@earthlife-ct.org.za
Web: www.earthlife-ct.org.za

WISE Sweden
c/o FMKK
Barnängsgatan 23
116 41 Stockholm
Sweden
Tel: +46 8 84 1490
Fax: +46 8 84 5181
Email: info@folkkampanjen.se
Web: www.folkkampanjen.se
c/o FMKK

WISE Ukraine
P.O. Box 73
Rivne-33023
Ukraine
Tel/fax: +380 362 237024
Email: ecoclub@ukrwest.net
Web: www.atominfo.org.ua

WISE Uranium
Peter Diehl
Am Schwedenteich 4
01477 Arnsdorf
Germany
Tel: +49 35200 20737
Email: uranium@t-online.de
Web: www.wise-uranium.org

Nuclear Monitor seeks more contributors

he Nuclear Monitor exists for more than three decades already. In 1978 the first issue was produced, although it was called "The WISE News Communiqué" at that time.

Since 1978 many things have changed, but to produce 20 issues of the magazine annually is still a struggle. And equally important for that matter. Our readers (you) value both quality and quantity.

The Nuclear Monitor is produced by a very small group of people. We do not pay for articles being written for us, we never did and it's hard to imagine we ever will. But that small group is looking for some help.

In short: we are looking for people, especially in Asia and Africa, but also in Australia and the Americas, who are willing to write about local and regional developments concerning (anti-) nuclear issues.

We think that currently the content of the magazine leans too much on West-European sources and contributors. To have a more balanced and global perspective, we need people with knowledge of, and access to, non-English and/or non-German sources and background. There are so many things we are not aware of, even in this digital highway day and age. It is simply not enough to read all the wires from the big agencies, we want the stories from the ground, the grassroots fighting the nuclear industry, the reports of actions and campaigns, the incidents and accidents that not make it to the mainstream media, the analysis no-one wants to make because they are 'too difficult'

So, if you want to contribute - be it regularly or sporadic- to the Nuclear Monitor, or want to become more involved in the (production) of the magazine please contact WISE-Amsterdam at wiseamster@antenna.nl

The NUCLEAR MONITOR

Nuclear Information and Resource Service
6930 Carroll Avenue, Suite 340
Takoma Park, MD 20912