NUCLEAR MONITOR

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

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World Information Service on Energy
founded in 1978

NUCLEAR INFORMATION & RESOURCE SERVICE
www.nirs.org

JUNE 30, 2006 | No. 647

INES 2 ACCIDENT AT KOZLODUY

On March 1, block 5 of the Kozloduy NPP in North Bulgaria experienced what is arguably its largest incident to date. Out of the 60 regulation (or control) rods* in the reactor, 22 did not appear to be functioning. This means that in the case of an emergency shutdown with loss of cooling water, it would not have been possible to stop the reactor quickly, which could have led to a meltdown.

(647.5754) WISE Brno - The incident only became public knowledge almost two months later, after whistleblowers released information to Austria and Germany and the incident's subsequent upgrade from (International Nuclear Event Scale) INES 0 to INES 2.

The Kozloduy director, Ivan Ivanov, was fired from his position four months after the incident and Bulgarian Economy and Energy Minister Ovcharov has also come under attack from environmental groups that accuse him of exaggerating international support for the Belene nuclear power plant project.

Kozloduy incident

The definitive account of the events of March 1 at Kozloduy's 5 VVER 1000/320 reactor was given by Georgi Kaschtschiev, who formerly held the posts of director at Kozloduy and director of Bulgaria's Nuclear Regulation Office and who currently works as a researcher at the Institute for Risk Analysis in Vienna.

On April 23 Kaschtschiev told the German daily *Tagesspiegel* that operators had tried to activate one cluster of regulation rods to reduce the reactor's capacity by 30% after one of its four main cooling pumps became disconnected. (1) Of the six rods in the cluster, three remained in place. In order to run down the reactor, workers pumped boric acid in to prevent a chain reaction. After the reactor was stabilised, the remaining nine clusters were tested by carrying out an emergency shutdown resulting in a total 22 of the 60 regulation rods remaining stuck in the highest position. Kaschtschiev compared the situation to driving a car at full throttle without functioning brakes.

This situation was made possible after the Russian maintenance company Hydropress made changes to the fuel lay-out during one of the safety upgrades at Kozloduy block 5 in the summer of 2005 - an upgrade programme was partially funded with money from Euratom. The plan was to perform the same upgrade on the other Bulgarian VVER 1000 reactor, Kozloduy 6, this summer. The Bulgarian press has speculated that Hydropress failed to test the new layout and the functionality of the regulation rods because it had already tested a similar upgrade in Russia. These claims were subsequently denied by the Bulgarian Nuclear Regulatory Agency in an interview with the Platts publication *Nucleonics Week* (2).

MONITORED THIS ISSUE:

Kozloduy 5 remained off-line for ten days following the incident, which was rated at INES 0 by its operator. Information released to the press did not reveal the true gravity of the incident and thus was completely ignored by the Bulgarian press. It was not until whistleblowers from the power station leaked the details to their former chief Kaschtschiev in Vienna and he in turn informed the German press almost two months later, that Bulgaria became aware of the real circumstances behind the incident.

The Bulgarian Nuclear Regulation Agency immediately reacted to the revelations by upgrading the incident rating to INES 1. Kozloduy's then-director Ivan Ivanov, gave an interview to the daily *Trud*, while apparently intoxicated, in which he accused the Bulgarian press of being un-patriotic for sourcing information on the incident from the German press. He made several incredible statements during the furore actually denying the facts, "What accident? There is no accident, boy! There is no real situation". Ivanov also told reporters that, "Things like this happen every day in the power station" and "You can write we have said it. Write: Ivan Ivanov is a criminal. He does not understand anything." (3)

The commemoration of Chernobyl in Sofia - two exhibitions by Dutch photographer Robert Knoth and a night vigil held by activists from Za Zemiata, Bankwatch, Greenpeace, Ekoglasnost, the Foundation for Environmental Justice and other members of the BeleNE! Coalition in front of Bulgaria's Economy and Energy Ministry - drew a lot of media attention that further whipped up the debate around the Kozloduy incident. Economy Minister Ovcharov tried his best to duck critical questions and seemed to back up Ivanov's smear campaign against Kaschtschiev by describing him as a non-expert. Nevertheless, Kaschtschiev's version of events could not be denied and following a vacuous press conference held at the Ministry of Energy and Economy on May 3, the credibility of the authorities amongst Bulgarian journalists reached rock-bottom and the Bulgarian regulator found itself exposed and forced to upgrade the incident rating to INES 2. (4)

The reactor was finally shut down for repairs on June 17 and will remain off-line until early September. (5)

Kozloduy closure plan unveiled

Executives at the Kozloduy nuclear power plant have presented a strategy for the closure and dismantling of the first four reactors at the site. The proposal would need to be approved by officials at Bulgaria's Nuclear Regulatory Agency and the Ministry of Energy and Economy before it could be implemented.

The strategy reportedly includes a detailed plan that specifies deadlines as well as the estimated cost of closing and dismantling the reactors. The owners of the plant are expected to fund the majority of the work but the project could also receive funds from the European Commission.

A special team of inspectors will now access which parts of the reactors are not radioactive and can thus be sold on to other Bulgarian power plants. The radioactive waste would be disposed of at a specially built facility near the site, which is located in a region of seismic activity.

Sofia Echo, June 29 2006

In the mean time, Ivanov's position as director of Kozloduy became untenable although he did attempt to rescue his post and reputation by offering an official apology for his previous *Trud* interview in the same newspaper on May 4. The subsequent weeks saw Bulgaria heavily criticised by the European Union for its failure to dismantle Kozloduy blocks 1 and 2, which were closed in 2002. This censure, coupled with the March 1 incident, forced Economy Minister Ovcharov to dismiss Ivanov on June 6. (6)

Minister misleads

Environmental organisations united in the BeleNE! Coalition, along with Greenpeace and the German bank-watching group urgewald, have accused the Economy and Energy Minister Ovcharov of attempting to save the Belene NPP project through deception.

The country plans to build another two VVER 1000 reactors 150 kilometres downstream of the Danube and near the towns of Belene and Svishtov, which lost 200 people in a 1977 earthquake. In recent months, Ovcharov claimed that he had secured financing for the project from, amongst others, four German banks - Bayerische Landesbank, Deutsche Bank, Commerzbank and HVB. When Bayerische Landesbank denied having an interest in the project (7), Ovcharov, in a rather amazing about-turn, then claimed that the bank had never been contacted. In the following weeks, Commerzbank told its shareholders meeting that it would not finance any NPP project that could not meet the highest global standards. That explicitly included nuclear plants in seismically active zones like Belene. HVB and Deutsche Bank told their shareholders meetings that high safety and environmental standards would need to be met before either would be willing to provide financing for Belene.

Petko Kovatchev of CEE Bankwatch concluded, "If these banks are serious about what they say, Belene does not stand a chance." Heffa Schücking of urgewald announced that a coalition of NGOs would also address other reportedly interested banks like UniCredit Group of Italia and CitiGroup of the United States to discourage involvement with the project.

On several occasions over the last months, Ovcharov had been reported in the Bulgarian press as stating that Belene would get a loan - an amount of 300 million Euros - from Euratom. However, Euratom itself denies having any formal or informal contact with the Bulgarian government since an exchange of innocuous letters at the end of 2004. Ovcharov also claimed to have the support of IAEA president Mohamed ElBaradei but public relations officials at the IAEA PR strongly denied

this when questioned by Bankwatch and said that ElBaradei would never have supported the Belene project.

**Regulation or control rods absorb neutrons and regulate the rate of fission reaction. Moving the rods in and out of the reactor allows operators to regulate the capacity. In case of an emergency shutdown or scram, the electro-magnets on which the regulation rods hang are released so that the rods can fall freely into the reactor thus directly stopping the chain reaction. Should the rods not function, operators have two options for running the reactor down - either boric acid is pumped into the cooling water or the installed sprinkler system is used to flood the entire reactor with a boric acid solution.*

Sources:

(1) *Der Tagesspiegel*, April 23 2006, "Schwere Panne in bulgarischem Kernkraftwerk"
(2) *Nucleonics Week*, Volume 47 / Number 18 / May 4, 2006, "Regulators reviewing sticking of Kozloduy-5 control rod drives"
(3) *Trud*, May 1 2006, "You can write: there are idiots in the NPP"
(4) *Nucleonics Week*, Volume 47; *Sofia Echo*, May 9 2006, "Debates in Bulgaria on the Re-Opening of Kozlodui NPP's Fifth Block"
(5) Sofia News Agency, June 17 2006, "Bulgaria Shuts Nuclear Reactor for Repair"
(6) AFP, June 6 2006, "Bulgarian Energy Minister Fires Nuclear Power Plant Boss"
(7) UPI, May 2 2006, "Bank halts financing of Bulgarian plant"

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NEW WELSH CANCER CLUSTER

A television documentary transmitted on June 13 has revealed the results of a survey that suggests that cancer rates in women under the age of 50 and living near the shutdown Trawsfynydd plant is over 15 times the UK national average.

(647.5755) Low Level Radiation Campaign - The programme shown on Wales' fourth television channel S4C unveiled the results of a survey carried out in the Gwynedd villages of Llan Ffestinidg, Gellilydan and Cwm Prysir located the vicinity of Trawsfynydd nuclear power station in north Wales. The plant was closed in 1991 and is now being decommissioned.

Researchers took their questionnaire door to door and spoke to almost a thousand people of all ages in three communities around the nuclear plant. The questionnaire asked about the incidence of cancer within each household from 1996 to 2005 and showed levels of cancer that former Environment Minister Michael Meacher described as "sensational".

The results of the questionnaire were analysed by Dr. Chris Busby, director of the environmental consultancy Green Audit, and the report of this analysis can be found at ww.llrc.org/traws/htm.

The overall picture is of increased risks of all types of cancer relative to national rates. Additionally, there appears to be a greater effect in the latter part of the study period, due to "data leakage" - people becoming lost to the study because they die or move away, or because, after the death of the patient, the surviving family members move away.
The data obtained show that the farther back in time one goes, the less cancer is reported. In addition, the relatively small number of lung cancer cases reported is clear evidence of the effect of data leakage since lung cancer typically accounts for around a quarter of all cancers. It is therefore very probable that the results for the later period 2003 to 2005 reflect the reality of cancer incidence in the locality - a doubled overall risk of cancer with increased relative risks in the younger age groups.

The relatively higher excess rates in the under 50 age group are hard to explain and leave questions to be answered by further research. The 11.3-fold excess contains a greater than 15-fold excess risk for women, which is not due to high breast cancer rates (Relative Risk 15.3; very high statistical significance). Breast cancer in the 51 to 60 year age group, however, is five times the national average for women of that age (Relative Risk 4.9; high statistical significance).

Alerted by a significant proportion of the breast cancer victims who reported that they had sometimes eaten fish from Trawsfynydd Lake, the researchers conducted a further survey to ascertain the background rate of fish eating. Trawsfynydd Lake covers almost five square kilometres, is artificial and was used as a cooling lagoon throughout the active life of the power station. The lake-bottom sediment down to a depth of 300 mm is known to be highly contaminated with a mean concentration of 4¼ million Bequerels per tonne of radioactivity. This is more than ten times the concentration that under UK legislation is defined as Low Level Radioactive Waste requiring control. The lake is nevertheless advertised as a sports amenity for swimming, boating and fishing although authorities are known to regularly monitor the lake trout. The second survey found that eating fish from the lake was more than twice as common among the recent cancer patients (i.e. in 2003 to 2005) than among the healthy population. This is a statistically significant finding. The only cancer patient under 20 found by the study - an 18 year old with lymphoma - was said to be an avid angler who had fished the lake regularly. [Note: the expected numbers of cancer cases in young people in this population is 0.102 cases in the ten years.]

There is also a notably high incidence of mesothelioma (highly statistically significant based on 3 patients). This cancer is usually associated with exposure to asbestos but 20% of cases are thought to be due to radiation, according to the Oxford Textbook of Pathology.

The Welsh Cancer Intelligence and Surveillance Unit is responsible for collating cancer figures for the whole country but has never published a breakdown of cancer rates for specific

areas. Unit director Dr. John Steward dismissed the new survey and questioned the methodology used claiming that results were likely to be biased since they were based on reports from cancer sufferers and not confirmed by medical records. Welsh newspaper the Western Mail called on the official body to produce its own epidemiological data for the relevant area instead of dismissing the work done by others.

Plaid Cymru councillor and cancer patient Linda Ann Jones told of how villagers had long expressed concern that the nuclear power plant was responsible for the high cancer levels in the area. Jones urged the UK government to consider the survey's results and to launch an investigation into the risks posed to local communities by nuclear power plants before allowing new plants to be built.

Michael Meacher said, "This is the most significant evidence of all and I think it is absolutely clear that we should not go ahead with a new round of nuclear power station build until we have looked at the health and environmental effects of nuclear power stations. These are very worrying statistics. . It is up to us in Parliament and the public and those who are health specialists and those who have looked at these statistics to demand a full public inquiry."

Sources: LLRC press release, June 11, 2006, Daily Post & Western Mail (Wales), June 13, 2006

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WANA ON CoRWM DRAFT RECOMMENDATIONS

"Within the present state of knowledge, CoRWM considers geological disposal to be the best available approach for the long term management of all the material categorised as waste in the CoRWM inventory when compared with the risks associated with other methods of management." CoRWM's draft recommendation 1.

(647.5756) Welsh Anti Nuclear Alliance - Disposal is not 'management' it is the cessation of control and containment. Groundwater travels for up to 600 miles. In the management of radioactive waste to ensure its future containment and stability, it is the length of time over which it remains a hazard that produces a philosophical problem. Geological disposal shifts the risk far into the future in order to lessen the risks to the generation that created the hazard. This approach is unethical on grounds of intergenerational equity. The technical problems with deep disposal of high-level long-lived radioactive waste are such that the concept cannot be said to be 'proven'. Scientific uncertainty over the future stability and containment of radioactive waste deep underground precludes irreversible actions being taken.

Given the degree of uncertainty involved, and setting the present state of knowledge against approaches for the long term, the only 'decision' that can be taken now that will not appear foolish and irresponsible in fifty or a hundred years from now is to retain control over the waste through management rather than to relinquish control over it through disposal.

If storage of radioactive waste on the surface is regarded as too vulnerable to terrorist attacks then near-surface underground storage should be considered to balance ease of management against degree of protection. Deep underground 'management' makes little sense, and is quite obviously designed to encourage three irresponsible human traits: (a) 'out of sight out of mind' (b) inertia and (c) indolence, so that the waste will be left where it is regardless of any misgivings about its containment and stability. Deep underground disposal is presented as helpful to future generations because it bequeaths our radioactive legacy in a form that they do not have to deal with. In reality it gives them a legacy in a form that they cannot do anything about.

CoRWM should make it clear whether or not the waste disposed of would be monitored.

CoRWM states that it takes no position on the desirability or otherwise of nuclear new build.

There is a contradiction in CoRWM's approach on current waste management on the one hand, and its approach to new build on the other. The current 'muddling through' approach to radioactive waste management is clearly unacceptable to CoRWM. Given that any new nuclear power stations would produce large volumes of highly radioactive spent fuel that would have to stay on each reactor site the hazard (and vulnerability to terrorist attack) thus created far outweighs the current hazards of radioactive waste.

It is insufficient to claim that 'any additions to the inventory should be the subject of an additional stage in the process' of establishing a radioactive waste site. CoRWM should make it clear to Government that any degree of public support for the management of present radioactive waste would be jeopardised by the creation of yet more hazardous waste around the country.

Without this degree of clarity CoRWM's work will rightly or wrongly be seen as the 'thin end of the wedge' rather than helping to address a finite nuclear legacy in an orderly way.

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WANA Appendix

In response to Q570 "Could you explain the concern you have about nuclear waste?" posed by a member of the Welsh Affairs Committee during a House of Commons inquiry into Energy in Wales on March 21, Hugh Richards offered the following response.

.... back in 1980, when there was a test-drilling programme for high-level radioactive waste disposal, I was working for the local authority and I was told, basically, "Stop it; go out there and stop it." As a local government officer, that was like giving me 007. Basically, I did do a lot of 'phoning round, I spoke to a lot of people and one of the persons that I spoke to was Sir Kingsley Dunham, who had just retired as the Government's Chief Geological Adviser, and he was quite worried. He had made a speech about his worries about plutonium, long-lived radioactive waste, and it was for that reason I tracked him down and had a conversation with him. Basically, I asked him, "What are the geological characteristics of a place deep underground where you could dispose of radioactive waste?" What he said was that it needs to be flat-bedded, sedimentary rock which has not been subjected to tectonic activity, it has not been crumpled up by mountain-building, with a very low, or no, water table and no population; in other words, a desert in the middle of a continent. I said, "Well, where does that leave us, in Britain?" and there was just silence; so I assume that is the sort of advice he was giving to the Government before he retired. Everything we have had since is looking at the possibility of disposing of radioactive waste in Britain and this is where I find it is terribly, terribly simple. Can you dispose of it, which means relinquish control over it, or not? If you cannot relinquish control over it, because you have not got enough scientific certainty about what will happen to the method of encapsulating it and putting it underground, then you have to store it.

The full (uncorrected) transcript of the oral evidence given to the committee can be found at http://www.parliament.uk/parliamentary_committees/welsh_affairs_committee.cfm

CoRWM'S DRAFT RECOMMENDATIONS

Since 1997, there has been a vacuum in UK policy on the long-term management of long-lived and more highly active radioactive wastes. CoRWM has drafted the following integrated package of recommendations. This is the start of a process, leading to CoRWM's final recommendations. Once made, they should be acted upon urgently.

1. Within the present state of knowledge, CoRWM considers geological disposal to be the best available approach for the long-term management of all the material categorised as waste* in the CoRWM inventory when compared with the risks associated with other methods of management.

2. CoRWM recognises that there are social and ethical concerns that might mean there is not sufficient agreement to implement geological disposal at the present time. In any event, the process of implementation will take several decades. This period could last for as long as one or two generations if there are technical difficulties in siting or if community concerns make it difficult, or even impossible, to make progress at a suitable site.

3. These uncertainties surrounding the implementation of geological disposal lead CoRWM to recommend that a programme of interim storage is required as a contingency and therefore must play an integral part in the long-term management strategy.

4. Therefore, CoRWM recommends a staged process of implementation, incorporating the following elements:

a. A commitment to the safe and secure management of wastes through the development of an interim storage programme that is robust against the risk of delay or failure in the repository programme. Due regard should be paid to:

- reviewing and ensuring security, particularly against terrorist attacks;
- ensuring the longevity of the stores themselves;
- minimising the need for re-packaging of the wastes; and
- addressing other storage issues identified during CoRWM's public and stakeholder engagement process, such as avoiding unnecessary transport of wastes.

b. A commitment to an intensified programme of research and

development aimed at reducing uncertainties at a generic and site-specific level in the long-term safety of geological disposal, as well as better means for storing wastes in the longer term. Appropriate R&D should be undertaken into alternative management options.

c. A commitment to ensuring that flexibility in decision-making within the implementation process leaves open the possibility that other long-term management options (for example, borehole disposal) could emerge as practical alternatives.

d. A continuing public and stakeholder engagement process aimed at building trust and confidence in the proposed long-term management approach, including the siting of facilities.

e. A set of decision points providing for a review of progress with an opportunity for re-evaluation before proceeding to the next stage, or before foreclosing alternatives.

5. CoRWM has not yet decided whether to make recommendations regarding the precise form of geological disposal. This will be an element in the next round of public and stakeholder engagement.

6. If a decision is taken to manage uranium, spent nuclear fuel and plutonium as wastes, they should be added to the inventory and immobilised

for secure storage followed by geological disposal. There must be clarity about the inventory that is to be disposed of by the time that communities are invited to express a willingness to participate in the implementation process (see below). Any additions to that inventory should be the subject of an additional stage in the process.

7. Community involvement in any proposals for the siting of long term radioactive waste facilities should be based on the principle of volunteerism, that is, an expressed willingness to participate. Participation should be based on the expectation that the well being of the community will be enhanced.

8. Willingness to participate should be based on the provision of community packages that are designed both to facilitate participation in the short term and to ensure that a radioactive waste facility is acceptable to the host community in the long term.

9. Community involvement should be achieved through the development of a partnership approach, based on an open and equal relationship between the potential host community and those responsible for implementation.

10. At the end of each stage of the decision making process there should be provision for a review and the right of communities to withdraw from the process before proceeding to the next stage, up to a pre-defined point.

11. In order to ensure the legitimacy of the process, the key decisions at each stage should be ratified by the appropriate democratically elected body (ies).

12. CoRWM considers that an open and transparent process is an essential precondition to successful implementation of these recommendations.

CoRWM takes no position on the desirability or otherwise of nuclear new build. We believe that future decisions on new build should be subject to their own assessment process, including consideration of waste. The public assessment process that should apply to any future new build proposals should build on the CoRWM process, and will need to consider a range of issues including the social, political and ethical issues of a deliberate decision to create new nuclear wastes.

**CoRWM's reference position is that reactor decommissioning wastes within CoRWM's inventory will be treated the same as ILW, destined for geological disposal. However, we recognise that management options taken forward for LLW on reactor sites may also be appropriate, if a safety case could be made, for some reactor decommissioning wastes.*

For more information visit

WENRA INFORMATION MEETING

SKI (The Swedish Nuclear Power Inspectorate) held a two-hour information meeting on March 24 at the Nordic Sea Hotel in central Stockholm on WENRA (Western European Nuclear Regulators' Association) and its project aimed at harmonising European nuclear regulations.

(647.5757) WISE Sweden - The meeting had been publicised as a general information meeting open to the public on the SKI Website (www.ski.se) a month in advance but of the 28 people in attendance, about 17 were from the Swedish nuclear industry and seven from SKI itself. Included in the remaining four were two representatives of environmental organizations.

In opening the meeting, Judith Melin, General Director of SKI, and WENRA Chairperson, expressed her appreciation that "the environmental movement" was in attendance. Melin then provided brief background information on WENRA - which is made up of the heads of European nuclear regulatory agencies - and the harmonization project, noting that, "We haven't gotten far on the decommissioning issue." Melin added that WENRA, "Encourages openness and continual improvement."

Erik Jende, SKI's International Coordinator presented details on WENRA's harmonization project, focusing on the European-wide survey of current regulations. Information on a comparison of the results obtained from the survey of current regulations, and in particular the results for Sweden, was shared with participants and despite noting that there were still several areas that need to be addressed - for example functional testing and protection against internal fires - Jende on several occasions insisted that Sweden was "doing great" and that "There are no acute issues." When discussing decommissioning, he actually stated that much had not been done in that area because, "An operating reactor should not be burdened with a decommissioning plan."

At one point Jende held aloft a thick report and stated that it documented the results of the European survey. His purpose was to prove that the documentation does exist but he then went on to add that the report had not been released into the public domain because any resulting comparisons would demonstrate a wide variation between countries and, "could be embarrassing for some countries." Thus the results of the international survey were not revealed. Despite this, he insisted that member countries were encouraged by WENRA to publish their own results on their Websites, and that Sweden's results would be published that very day. Jende further explained that the WENRA policy allowed each individual country to determine what national information it wished to make public but that all other international data had to remain confidential.

Once Jende's presentation, which included 39 slides with numerous bar charts and tables, was eventually over, there remained just ten minutes left for questions. When asked by one of the environmentalists present if any independent analysis had been done to reach the current results, he confirmed that it had not and that "the survey was purely an internal exercise." Judith

Melin informed the meeting that comments from the general public were welcome and could be submitted via the WENRA Website (www.wenra.org). She added, "There are absolutely no restrictions on what can be commented on."

Despite the heads of European nuclear regulatory agencies encouraging themselves to publish their own data, at the time of this writing no national results, Sweden included, had yet been published. Further, considering the huge number of regulatory issues raised by Judith Melin and Erik Jende, it was remarkably quiet in the room. The meeting was able to end on time, perhaps thanks to Judith Melin's announcement at the outset that "the environmental movement" was in attendance.

Source and contact: Miles Goldstick at WISE Sweden

INFO ALERTS

7th Russian Anti-nuclear Camp, Tomsk, Siberia from July 26th to August 3rd 2006

This year the Ecodefense (WISE/NIRS Russia) anti-nuclear camp will focus on the issue of radioactive waste imports. The camp will be held near Tomsk in Siberia and activists from environmental groups and NGOs are invited to participate.

The program will include seminars and training programs on nuclear waste imports to Russia, transportation, access to information, resistance and non-violent protest. Strategy sessions for environmental groups to develop activities are also planned and protests may be held at cities located near the camp.

For more information on how to participate contact Ecodefense.

Greenpeace Eco-Camp 2006, Jasov, Slovakia from July 24th to 31st 2006

Greenpeace intends to inform the Slovakian public, specifically the population of Košice Slovakia's second largest city and the surrounding villages, about the risks associated with the proposed uranium mine to be sited on Jahoda hill, a local holiday destination.

The uranium deposit was discovered in the 1980s, is from 250 to 650 underground and is thought to contain over one and a quarter million tons of uranium ore.

For more information on how to register, contact Klaudia Bednárová at Greenpeace Slovenska, PO Box 58, 814 99 Bratislava, Slovakia. Email klaudia.bednarova@greenpeace.sk, Phone +421 (0)905 70 66 55

International Anti-nuclear Summer Gathering, Dordogne, France from August 13th to 20th 2006

This event, organized by the French anti-nuclear network 'Réseau Sortir du Nucléaire', aims to create and strengthen links as well as promote cooperation and joint campaigning between antinuclear groups. Both French and English will be spoken and the proposed agenda includes discussion on the best energy policy for the planet, development and dwindling resources, theory and techniques for non-violent action, discussion of activities for the 50th anniversary of Euratom in 2007, the 1 million signature campaign against nuclear power and a possible action at the nearest nuclear installation.

For more information contact André Larivière, Nérol, 43440 Champagnac le Vieux, France, andre.lariviere@sortirdunucleaire.fr, +33 (0)4 71 76 36 40 or +31 (0)6 76 69 54 98 or Bue Alred, Beau Champs, 24610 Montpeyroux, France, bue.alred@barkmail.com, +31 (0)5 53 82 69 98.

Trans-European Bicycle Tour for Chernobyl

Canadian-born Engineer Christian Boyko, 31, and Swiss-born Special Education Teacher and Art Therapist Emmanuelle Plattet, also 31, will cycle over 2,100 km (1,300 miles) from Friburg, Switzerland, to Kyiv, Ukraine to raise awareness about the long term social, health, and environmental effects of the Chernobyl accident.

The cyclists will travel an average of over approximately 100 kilometers (62 miles) per day for 34 days through Switzerland, Germany, the Czech Republic, and Poland, toward their final destination in Ukraine. The pair leave from Friburg, Switzerland, on July 6 and conclude their trip on August 8, in Slavutych, Ukraine having traveled through some of the front-line communities that were home to many of the people relocated after the 1986 tragedy.

These include the towns of Borodyanka, Ivankiv, Slavutych, Korosten, and Boyarka in Ukraine, and Gagarin, Uzlovaya, Bolhov, and Nikolskaya Sloboda in Russia. These communities are home to a network of psycho-social rehabilitation centers engaged in addressing a broad spectrum of social issues - everything from addressing Chernobyl-related fears about health; education for youth regarding healthy lifestyle practices in light of continued contamination of the land and limited access to health care; and, the impact of economic conditions resulting, in part, from the Chernobyl disaster.

For more information, please visit Christian and Emmanuelle's website at http://www.2000k.soliloq.com, and FOCCUS' website at http://www.foccus.org

FOCCUS press release, June 28 2006

IN BRIEF

BNG in court over THORP. British Nuclear Group has pled guilty to three charges brought by the Heath & Safety Executive (HSE) North West for the 2005 accident at Sellafield's Thermal Oxide Reprocessing Plant (THORP) where 83,000 litres of highly radioactive liquor leaked from a fractured pipe. Summarising the case and its highly technical nature, the prosecutor requested that the matter be moved from the Magistrates Court in Whitehaven, West Cumbria, to the Crown Court since the penalties the court could impose were limited to 5000 pounds for each of the charges. The Magistrates agreed to the request and moved the case to the Crown Court in Carlisle setting a hearing for July 7. The decision to prosecute follows a lengthy investigation into the accident by the HSE's Nuclear Installations Inspectorate (NII). Ownership of THORP was transferred from BNG to the Nuclear Decommissioning Authority (NDA) on April 1 2005, just days before the accident was confirmed to the NII (April 20 2005). One year on, the plant remains closed and unrepaired, and plans to repair the damaged section of THORP have still not been approved by the NII.
Core press releases, June 8 & May 3, 2006

Australian nuclear review. Australia's Prime Minister John Howard has announced a study into whether the country should develop nuclear power to shift energy production from coal and gas. The expert panel responsible will also consider whether it was "economically feasible to contemplate the establishment of nuclear power…" and is expected to present its verdict in a report to government by the end of the year. Howard previously called for a debate on the issue of developing nuclear power in the country, claiming to have an "open mind" on the subject. The processing of uranium to provide nuclear fuel will also be debated. All six state governments and the federal opposition (Labour) oppose nuclear power of further uranium mines - Australia holds 40% of the world's known uranium reserves and has a three-mines uranium policy despite calls by uranium miners for further mines in the country.
BBC News, June 6 2006; Reuters, May 22 2006

Nuclear threat to Champagne. Greenpeace France has warned that the country's Champagne vineyards could become contaminated after radioactive groundwater from leaks at the nuclear waste storage facility in Soulaine, eastern France, was found just ten kilometres from the region. The organisation presented the results of a recent study, which revealed that significant levels of tritium had leaked into the environment, to the French Senate on May 30. Samples of groundwater taken near other waste storage showed levels from 90 to 170 times higher than European safety limits. The French Senate on May 31 adopted the nuclear waste strategy bill that had already been passed by the National Assembly in April. The bill calls for nuclear waste to be stored deep under ground in sealed containers and would herald the establishment of a national programme for waste management.
***Nuclear Fuel*, June 5 2006; *The Financial Times* and AP, May 31, 2006**

EU Parliament Committee votes to subsidise nukes. The European Parliament's Industry Committee has allocated 2.7 billion Euros to nuclear energy. Green MEPs condemned the decision, calling it a disgrace. Rebecca Harms, David Hammerstein and Claude Turmes said in a joint statement, "… the nuclear Euratom programme would once again absorb the bulk of EU energy funding at the expense of safer, less expensive energy technology…" and added that "It is a good result for the nuclear lobby but not for the environment or the EU taxpayer."
The Greens/EFA in the European Parliament press release, May 30, 2006

U.S. hampers Swiss nuclear probe. A Swiss investigation into an international nuclear smuggling ring is being held back by a lack of cooperation from the United States. Authorities in Switzerland requested judicial assistance from U.S. counterparts on several occasions since 2005 but are yet to receive any response. The news was revealed by former UN weapons inspector David Albright, now president of the Institute for Science and International security, at a U.S. hearing into the nuclear trafficking ring run by Pakistan's Abdul Qadeer Khan. Albright said, "It is difficult to understand the actions of the U.S. government. Its lack of assistance needlessly complicates this important investigation. Swiss authorities arrested three men on suspicion of helping to supply Libya with gas centrifuge parts for the country's clandestine nuclear weapons programme between 2001 and 2003.
Swissinfo, May 29 2006

DOE must remove nuclear waste. A federal judge has ruled that the U.S. Department of Energy must remove all high-level radioactive waste stored at the federal nuclear research compound in southeastern Idaho. District Judge Edward Lodge rejected the argument that a 1995 agreement with the state only covered waste stored in barrels on asphalt pads at the Idaho National Laboratory and not other containers of waste dumped in open pits and buried before 1970. The judge said that all the waste had to be shipped out state for disposal by 2018. The DOE tried to argue that leaving the waste buried could be safer than exhuming it since some radioactive materials can spontaneously explode when exposed to oxygen. State leaders are said to be opposed to the waste being abandoned since studies have shown that buried radioactive materials are seeping towards the underground aquifer that feeds Snake River.
Yahoo news, May 26 2006

ITER agreement signed. Ministers representing China, the EU, India, Japan, South Korea, Russia and the USA met at the European Commission building in Brussels to initial an agreement on the construction, operation and decommissioning of the ITER research facility to be built at Cadarache in southern France. The project seeks to demonstrate the potential of nuclear fusion as an energy source. The European Commission will spend 3.6 billion Euros on the project, that is one third of the construction and operation costs, to be funded through Euratom. Friends of the Earth Europe has called on the European Council and the European Parliament to reject the Euratom budget proposal and instead use the funds for research and development programs to develop sustainable and environmentally-friendly energy technologies. Silva Hermann, energy campaigner at FoE Europe said, "Nuclear Fusion may never be economically or technically practical. It is a new technique that has been a few decades away from reality for nearly 50 years. This goal of commercial viability has become a moving target and we have no guarantee that it will ever actually be reached."
ENS, May 25 2006

Brazil unveils uranium enrichment facility. Brazil has inaugurated its first uranium enrichment plant at a former coffee plantation in Resende in the state of Rio de Janeiro. The facility will produce up to 60% of the enriched uranium required to run the country's two nuclear plants (Angra 1 and 2) between now and 2012 and is expected to fulfil 100% by 2015. Brazil previously bought its nuclear fuel from the European enrichment consortium, Urenco at a cost of US$16 million per year. The plant has cost US$172 million to build and is able to enrich uranium to less than 5% uranium-235 - 95% uranium-235 is required for bomb making. Science and Technology minister Sergio Rezende stressed Brazil's commitment to the 'peaceful' use of nuclear power - the country's constitution forbids the military use of nuclear energy as well as the export of uranium. In an interview given on March 7 during a state visit to London, Rezende announced that Brazil plans to build seven new nuclear power plants. Electronuclear, operator at Angra, said that US$1.8 billion would be required to finish Angra 3 - the uncompleted plant that was meant to state operation in 1988 and which has already cost the nation US$750 million - within five years. Nuclear power currently makes up just 2.2% of Brazil's total generating capacity of 100,000 megawatts - 70% is provided by hydropower.
Bloomberg, June 5 2006; *LA Times* & www.OneWorld.net, May 9, 2006

Ireland's campaign against Sellafield in doubt. After appealing to the UN in 2001 over British plans to extend the Sellafield nuclear plant on the Cumbrian coast opposite Ireland, Dublin has now been told that it acted illegally by involving the UN. The European Court of Justice has ruled that the case should have been referred to it first before going to the UN - by law such disputes between member states should be resolved by the EU. Ireland has long argued that the plant should be closed to prevent it further contaminating the Irish Sea. It is not yet clear whether Ireland will choose to start again by mounting its legal challenge at European level.
***The Guardian*, May 31 2006: *The Economist*, May 24 2006**

France's response to Chernobyl probed. Pierre Pellerin, France's top nuclear official at the time of the Chernobyl accident, has become the first person to be questioned in a lawsuit brought against the government by 500 people who developed thyroid and other cancers believed to be linked to the 1986 nuclear accident. The newspaper *Liberation* reported that Pellerin could be accused of involuntary injuries stemming from the suspicion that he hid the levels of radiation damage to France. The French government has been accused of intentionally downplaying the effects of France to protect the country's powerful nuclear industry. At the time of the accident, while other European governments were issuing warnings to their populations, the French government insisted that the radiation from the accident had not reached France. Government agencies have since adjusted the initial radiation data but deny intentional deception.
Pravda, May 29 2006

Polish nuclear plans. According to both the German and Polish media, an unnamed researcher at the nuclear physics institute of the Polish Academy of Sciences has named the town of Gryfino and two other locations near Szczecin (all close to the German border) as possible sites for a planned nuclear power plant to be built after 2015. Poland currently has no nuclear power plants having halted the construction of the first planned plant after the Chernobyl accident. A majority of the Polish population are known to be opposed nuclear power and the government now plans to start a public debate in an attempt to reverse this.
Bernd Frieboese by email, May 7 2006

France can phase out nuclear power. France is experiencing increases in greenhouse gas emissions despite being the world's most nuclear energy dependent country - somewhat debunking the nuclear lobby's claims that nuclear power equals low emissions. A new report by the Institute of Energy and Environmental Research (IEER) is the first to detail technologies and policies tat could meet the same lifestyle and economic choices as a high-nuclear, high carbon

WISE AMSTERDAM/NIRS

ISSN: 1570-4629

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With **contributions** from CoRWM, LLRC, WANA, WISE Brno and WISE Sweden.

The next issue (648) will be mailed out on July 14, 2006.

emissions future without the use of nuclear energy and significantly reduced CO_2 emissions. "Low-Carbon Diet without Nukes in France" presents two scenarios that show that nuclear energy could feasibly be phased out in France while reducing emissions by around 40% in the next few decades. The report can be found in English and French at www.ieer.org
IEER press release, May 4 2006

Spain's oldest NPP shuts. After 38 years of operation, the Cabrera nuclear power station at Zorita has been permanently shut down. The plant had long being plagued with safety and security problems and have been campaigning for its closure for years. Greenpeace Spain's executive director, Juan López de Uralde said, "The closing of the plant categorically demonstrates that Zorita's operation was very dangerous because of numerous technical problems and the absence of a security culture." The organisation demanded that the government of Jose Luis Rodriguez Zapatero to fulfil its promise to phase out nuclear energy in Spain, starting with Santa Maria de Garoña, a first generation plant that has a cracked reactor vessel caused by corrosion.
Greenpeace press release, May 1 2006

German NPP keys lost. 150 locks had to be changed at a nuclear power plant in the town of Philippsburg after the plant's manager reported the keys to the secure area missing. The locks were changed after an extensive search for the twelve keys failed.
***Deutsche Welle*, April 6, 2006**

Dutch extend life of nuclear plant. A 20-year lifetime extension agreement for the Borssele nuclear power plant meaning that the plant will now operate until December 2033 - a total of 60 years. Secretary of State for the Environment Pieter van Geel signed the agreement the plant's operator EPZ and its shareholders, Delta and Essent. One of the conditions of the deal is that Delta and Essent invest a total of 250 million Euros (US$314 million) in sustainable energy. The government has set aside another 250 million Euros. In the meantime, the new chairman and CEO of Delta, Peter Boerma, has said that the utility is looking into the construction of a new reactor at the Borssele site. He said that a new unit could be operating by 2016 and that Delta would be looking for partners to fund the new build project, which would cost an estimated 2 billion Euros.
WNA News Briefing 06.24, June 14-20 2006

Pakistan dumps nuclear waste in open. A Pakistani lawmaker has accused the country's nuclear authorities of dumping radioactive nuclear waste near a village in the central Punjab province. Senator Sardar Jamal Khan Leghari said tons of contaminated waste from milled uranium had been dumped outside abandoned mines in Baghalchur village, some 350 kilometres (218 miles) southwest of Islamabad. Leghari, son of a former president, said that villagers and their livestock had been seriously affected and told of cases of cancer, miscarriages and infertility. Pakistan's Atomic Energy Commission (PAEC) denied this was the case and said that all waste was disposed of in caverns that were fenced off and guarded against intruders. PAEC also said that it had found no radioactivity in the water, vegetation or air during its routine inspections of the area. Leghari responded, "I have proof. We collected about 1,200 samples from Choti", adding that he planned to turn the evidence over to parliament.
Reuters, May 24 2006

Khan supplied Syria. According to U.S. Intelligence agencies, the nuclear proliferation network led by Pakistani scientist AQ Khan had supplied nuclear weapons technology to Syria. The revelations was made in the 'Intelligence Report to Congress', which said that Pakistani investigators had confirmed IAEA reports that Khan's network "offered nuclear technology and hardware" to Syria. The Middle Eastern country has three nuclear facilities at Dayr, Al Hajar and Dubaya. The U.S. report covered 2004 and said, " We continue to monitor Syrian nuclear intentions with concern." "In 2004, Syria continued to develop nuclear capabilities, including uranium extraction technology and hot cell facilities which may also be potentially applicable to a weapons programme."
Press Trust of India, May 13 2006

Belgian man severely irradiated. A technician at the Sterigenics sterilization facility in Fleurus, Belgium, was exposed on March 11. France's Institute for Radiological and Nuclear Safety said that the man's body dose was calculated at between 3.8 and 4.5, which is "sufficient to seriously damage (his) bone marrow". The man was treated at France's Percy military hospital, which has a specialized service for victims of radiation. The man was irradiated when he entered a room containing the source when the source was out of its pool because of a technical failure. The dose he received is one of the most severe recorded in recent years leading the incident to be rated at Level 4 on the seven-level International Nuclear Event Scale (INES).
Platts Nuclear News Flashes, April 5 2006

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The NUCLEAR MONITOR

The Nuclear Information & Resource Service was founded in 1978 and is based in Washington, DC. 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.

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