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HARASSMENT OF YUCCA MOUNTAIN WHISTLEBLOWERS

The U.S. Dept. of Energy (DOE) has grown accustomed to earthquakes shaking the walls of its Yucca Mountain Project (YMP) facilities in Nevada. But jolts of a different sort have struck the YMP recently. Glaring *Las Vegas Review-Journal* (RJ) newspaper headlines have reported harassment of whistleblowers trying to call attention to lapses on science and safety, and an anonymous letter sent to U.S. Senator Harry Reid alleging that 50% of Yucca's scientific data is missing.

(578.5466) NIRS – The RJ reported on 24 November that two quality assurance specialists were ousted to silence concerns about Yucca's safety. U.S. Labor Dept. investigators have affirmed that the mistreatment may have been meant to silence employee concerns that the YMP sacrificed science and safety to meet imminent deadlines in the rush leading up to DOE site recommendation and Congressional approval earlier this year.

YMP quality assurance specialist Jim Mattimoe reported to DOE's Lake Barrett, in charge of Project oversight, that Yucca Mountain's employee concerns program was corrupt, casting doubt on the credibility of investigations dating back a decade. Alleged corruption included the withholding of evidence, and attributing statements to employees who had never actually been interviewed to make it appear that concerns were resolved. Mattimoe was then summarily fired, apparently at Lake Barrett's urging, according to a Labor Dept. report that called Barrett's actions "extraordinarily egregious." The Labor Dept. has ordered that Mattimoe be reinstated, his record cleared, and his costs reimbursed.

Robert Clark, Mattimoe's co-worker, was transferred after being told by a DOE official to "take [a hit] for the project."

In response to these revelations, Nevada's U.S. Senators, Harry Reid and John Ensign, fired off a letter to the General Accounting Office (the investigatory agency of Congress) on 25 November, demanding a full-scale investigation of DOE intimidation of employees trying to call attention to YMP technical deficiencies.

Reid also requested an investigation into allegations contained in an anonymous whistleblower's letter sent to him that "Currently as much as 50 percent of the data used to support the site recommendation of the Yucca Mountain Project is lost," and that "NRC is aware of this."

Bill Belke, a now-retired veteran of the U.S. Nuclear Regulatory Commission (NRC) with 28 years experience, expressed no surprise at the allegations of missing data. As resident NRC inspector at Yucca for 7 years, Belke documented "significant problems" with: the qualifications (or lack thereof) of technical workers; companies providing calibration services for scientific studies; data collection; software complications; documentation of data quality; the ability of quality assurance employees to do their job; and a lack of accountability.

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This is quite disconcerting, for DOE's early 2002 site recommendation, which President Bush and Congress approved over Nevada's objections, was based on the supposed integrity of YMP data concerning such issues as earthquake and volcanic activity and groundwater flow. Unfortunately, Bemke also encountered a lack of support from his superiors in NRC management levels. This is distressing, in that the NRC is supposed to serve as the objective, unbiased agency deciding upon whether or not to grant DOE an operating license to open Yucca.

For more background on the Yucca Mountain project, see the NIRS web site (www.nirs.org) or the following articles: *WISE/NIRS Nuclear Monitor* 571.5423, "Senate approves Yucca; fight is far from over....", *WISE/NIRS Nuclear Monitor* 564.5381, "Yucca Mountain update" and *WISE News Communique* 550.5287, "Yucca Mountain nuke dump update".

Sources: *Las Vegas Review-Journal*: "Yucca Mountain Project workers say site problems kept quiet," Nov. 24, 2002; "Yucca: Missing data 'no surprise' ", Nov. 28, 2002. Some of the federal documents cited by the RJ were obtained under the Freedom of Information Act.

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WELD FALSIFICATION SCANDAL IN GERMAN PWR

Cracks have been found in pipes of the secondary cooling circuit of the German PWR Unterweser. Further investigation revealed irregularities, including an incomplete weld and an undocumented "repair", in three of the reactor's four steam generators, all of which had been replaced since 1999.

(578.5467) WISE Amsterdam - The Unterweser reactor in the State of Lower Saxony was taken off line on 4 September due to a malfunctioning electricity generator, which had to be replaced. Owner E.ON Nuclear decided to conduct certain integrity tests that were originally planned for the 2003 revision period.

Inspections were conducted on the pipes of the secondary cooling water circuit. In a PWR, hot water from the reactor core flows to the steam generators where the heat is passed on to the secondary circuit and steam is produced. The Unterweser reactor has four steam generators and a pipe connected to one of the steam generators showed a crack in a weld of 26 centimeters length and 5 millimeters depth (1). Pipes at two other generators showed similar irregularities (2).

As the cracks have been found in welds it is assumed that the cracks have been present since the construction of the steam generators but were not discovered due to failing quality controls after construction. The federal ministry for the environment (BMU) cannot exclude the possibility of deliberate falsification of documents to conceal construction failures. The BMU has demanded further tests in other German reactors as well to see whether quality tests in those reactors have been insufficient. A restart of Unterweser will only be allowed when the cause of the cracks has been clarified as well as the question of why they haven't been found earlier (3).

The Lower Saxony minister of the environment, Wolfgang Jüttner, has called the findings a "very serious problem" and informed the federal prosecutor as a precautionary measure. The minister stated that the quality tests of the constructors must be investigated because of the inconsistencies found between the construction documents and the present irregularities found in the welds (4).

As well as the cracks, one of the welds showed substantial "repair" work that had been carried out by the manufacturer. While the documents specified a maximum width of 2.5 cm, the weld was in fact 6 cm wide. In another case, the tube was only welded on the outside and not on the inside. Ten such irregularities were found on one of the steam generators alone.

The four steam generators were replaced by Siemens (now Framatome ANP) only a few years ago, between 1999 and 2002. However, attention has focused on the quality control company MPA Leuna, part of the TÜV-NORD group. A worker who tested the steam generators been suspended from duty, and MPA Leuna has been banned from further nuclear work because of a conflict of interest, since the firm had seconded staff to the manufacturer whose products it was testing. Minister Jüttner said he could

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The next issue (579) will be mailed out on 20 December 2002 and will be accompanied by a special supplement: a strip-cartoon entitled "Helen and Tom and the nuclear reactor"

COURT BATTLES AGAINST YUCCA MOUNTAIN

The *New York Times* reported on 3 December that the State of Nevada, Clark County and the City of Las Vegas have filed yet another lawsuit against the U.S. Dept. of Energy's (DOE) Yucca Mountain Project. The brief argues that Yucca does not live up to regulations requiring natural geological features to adequately isolate radiation from the environment for 10,000 years. It cites DOE predictions that if man-made containers leak, radiation will enter the biosphere, primarily through flowing groundwater. Such leakage would raise radiation doses six times above permissible levels after just a thousand years, and 67 times permissible doses after 3,000 years.

The filing cites a DOE statement from two decades ago that "the host rock with its properties provides the justification for geologic disposal and is the main element in containing the waste within the repository." Nevada asserts that relying primarily on man-made burial containers is "essentially abandoning" the Nuclear Waste Policy Act's mandate "that the site's geology form the primary isolation barrier." Yucca dump critics have pointed out that Yucca's geology is so leaky and unsuitable for high-level waste burial that the same level of "safety" could be achieved by dumping the wastes in the basement of DOE headquarters, the catacombs beneath the U.S. Capitol, or the bowling alley under the White House in Washington, D.C.

Additional lawsuits opposing Yucca filed by Nevada against DOE, the U.S. Nuclear Regulatory Commission, and the U.S. Environmental Protection Agency (EPA) earlier this year will be heard in tandem, over a one to two day period, in Sept. 2003 by a three judge panel of the U.S. Court of Appeals for the District of Columbia Circuit. Nevada argued for this intense "Yucca Fest" condensed schedule so that the same judicial panel could comprehend the big picture at Yucca (rather than separate panels getting only snapshots spread out over the course of many long months), and hopefully understand that environmental laws and regulations have been violated and weakened time and time again at the unsuitable site. Pro-Yucca dump attorneys representing the federal agencies and the industry's Nuclear Energy Institute argued vehemently against the arrangement (a sure sign that Nevada's strategy is a good one!), but the court ruled in Nevada's favor.

NIRS is a co-plaintiff, along with a coalition of environmental organizations, in a lawsuit against EPA for its woefully weak Yucca regulations. NIRS' case against EPA has been consolidated with Nevada's.

not rule out the possibility that people had been bribed to approve the faulty steam generators (5).

The 1300 MW Unterweser reactor has been in operation since 1978 (6) and has a foreseen remaining lifetime until 2013 under the consensus agreement for nuclear phaseout (7,8). In 1998 it was the scene of the first nuclear incident in Germany to be classified Level 2 on the 7-level International Nuclear Event Scale (INES), when a set of back-up valves was found to be inoperable (9).

ANOTHER EXPLOSION AT BRUNSBÜTTEL

On 27 November, there was an explosion in a non-nuclear area of the Brunsbüttel nuclear power plant. It seems that oil had leaked onto a heating apparatus in a store for hydrogen and carbon dioxide. This caused a fire, which in turn caused a mixture of gases to explode. No-one was injured, and damage was initially estimated at around 50,000 Euros (US$50,000).

Brunsbüttel was the scene of a much more serious explosion just under a year ago, when a pipe in the reactor core spray system exploded. The operators thought that there had only been a minor leakage, and kept the reactor running. Only two months later, after pressure from the supervisory authorities, did they reduce power and inspect the damage (see *WISE/NIRS Nuclear Monitor* 564.5379, "Germany: Explosion in Brunsbüttel reactor").

AFP, 28 November 2002; AP, 29 November 2002

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7. *World Nuclear Industry Handbook* 2000
8. *WISE News Communique* 532.5186, "Germany: Government and utilities reach agreement on phaseout"
9. *WISE News Communique* 502.4955, "Schröder's phaseout: Restart license without minister's consent"

Contact: WISE Amsterdam

HUGE STATE HANDOUT AIMS TO KEEP BRITISH ENERGY AFLOAT

An end may just be in sight for the financial crisis gripping British Energy (BE), the publicly listed nuclear generator, after the UK government offered a massive £3 billion (US$4.6 billion) in subsidies spread over the next ten years. The proposed restructuring deal also requires selling off all North American reactors and the write-off of most of the company's debts. Even so, the package may not be enough to save BE from going under.

(578.5468) Mark Johnston – The UK government has revealed details of a complex rescue plan for British Energy, the struggling nuclear generator that is still close to bankruptcy. In a statement to Parliament on 28 November, Trade and Industry Secretary Patricia Hewitt MP said the controversial emergency loan of £650 million issued in September has been extended to a final deadline of 9 March 2003, six months exactly since the crisis first emerged. Before that date, British Energy must convince all its trading and financial partners to accept a plan to radically restructure the company and its balance sheet.

The plan involves a number of elements. Firstly, the UK Government has offered to pay £150-200M per year into a newly set-up Nuclear Liabilities Fund (NLF). Most of this cash is likely to be used to displace BE's share of the running costs for the THORP reprocessing plant at Sellafield in the north of England, and for other back-end costs. The second part of the package comes directly from state-owned BNFL itself, which has cut its annual £300 million reprocessing bill by around 40% or £120 million per year. (BNFL is itself already losing money and is virtually bankrupt.)

In return for these offers of subsidy, all private creditors, including stock and bondholders, must accept write-downs in their investments of at least 75%, and in some cases more. BE must also sell its shares in its North American operations, Amergen (USA) and Bruce Power (Canada), all by mid-February. The company must also pay £20 million and 65% of all net cash flow per year to the NLF on an on-going basis. BE has also temporarily suspended near term payments to several key creditors. This includes £300 million outstanding to Enron, the former energy company now under the control of the US courts.

Several commentators have described the plan as "re-nationalization by stealth", referring to the sell-off of BE by the UK Government only six years ago. The whole deal is also subject to European Commission approval under EU competition law. It is likely that the so-called "state aid" will be objected to by a number of other EU member states and by other generators who maintain they are being cheated by the distortion of the UK power market.

It is too early to say what the chances the plan has of succeeding. Some sources close to the deal have already indicated their skepticism. A central issue is the fact that wholesale electricity prices are set to remain at all time low. Although a long-term policy statement is due from government in the spring, there are no indications that market conditions will change significantly. This leaves BE still looking desperate for some time to come.

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PRESSURE GROWS FOR EURATOM CHANGES

Anti-nuclear groups across Europe are stepping up pressure for "scrapping" the 1957 Euratom Treaty, an agreement made by European Union (EU) states to both promote and regulate the development of the nuclear industry.

(578.5469) Mark Johnston - The context is the growth of the EU from 15 to 25 states in 2004. A new European constitutional convention is looking at a wide range of changes to how the Union works. Most existing EU states either do not have or want to abandon nuclear power. Friends of the Earth and other anti-nuclear groups in Europe this week stepped up their efforts to force the European Union to abandon the Euratom Treaty. The new initiative follows a September conference and workshop in Brussels (1), and already involves hundreds of groups across the continent in a coordinated effort to mount lobbying campaigns in each of their own countries.

Whilst there have been many attempts in the past to change Euratom – which is virtually unchanged since the day it was

written 45 years ago – current circumstances are thought to present a unique opportunity for a break-through. Enlargement of the European Union in 2004 from 15 to 25 countries will be the biggest ever. The complexity of revising the half-dozen or so treaties on which the EU is founded has led to a 2-year constitutional convention, led by the former French Prime Minister Valéry Giscard d'Estaing, and with representatives from all the current and prospective EU member states.

So far, the Convention has not formally agreed to examine the Euratom Treaty, despite a number of official requests to do so. Pressure is however growing, not just from anti-nuclear groups but from certain governments too, including Germany and Austria. It is hoped that, with sufficient lobbying of convention members and of governments around Europe, Euratom reform will officially be on the Convention agenda early next year.

The main tactic is a sign-on declaration that, after wide circulation, will be presented to the Convention early in 2003. FOE is not calling for the abolition of nuclear power in its campaign. This is a tactical move that aims to win over support from the many key players who do not take a view for or against nuclear power, but are simply concerned with creating a new EU constitution that gains maximum public support. Parts of the campaign therefore simply describe Euratom as having a conflict of interest and out of date, and argue for a 'level playing field' for all energy options within a common EU energy framework.

FOE's campaign also calls for the European Commission's new "nuclear package", a loose grouping of new laws and loans under Euratom(2), to be suspended while an overhaul of Euratom takes place. The Treaty has no requirement for co-decision making with the European Parliament (a commonplace procedure elsewhere), which leads to new laws, including the current proposals, being decided by undemocratic means.

The clash between the Commission's new "package" and those who want to bring down the whole Treaty is set to grow. There is a final deadline for EU enlargement in May 2004. Both sides know the clock is ticking.

For more information, see web sites www.foeeurope.org & www.european-convention.eu.int

References:
(1) *WISE/NIRS Nuclear Monitor* 574.5442, "Euratom and the EU 'nuclear package' "
(2) *WISE/NIRS Nuclear Monitor* 576.5453, "Nuclear waste 'Euro-dumps'?"

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SCIENTISTS BOYCOTT SEMINAR OVER TRANSMUTATION CLAIMS

Environmental groups in Denmark and Sweden held an international seminar in Copenhagen, Denmark to raise concerns about a projected research facility – the European Spallation Source – in nearby Lund in Sweden. Scientists from the project originally agreed to attend, but decided to boycott the seminar after revelations of how the facility could easily be adapted to carry out research into partitioning and transmutation of nuclear waste.

(578.5470) WISE Amsterdam – Lund is one of five candidate locations for the European Spallation Source (ESS), a huge nuclear research facility expected to cost over 1.5 billion Euros (over US$1.5 billion). To raise awareness of this, four groups – Barsebäcksoffensiv, the Danish Ecological Council, FMKK/WISE Sweden and the Swedish Green Party – organized a seminar in Copenhagen on 29 November 2002.

The ESS is designed to produce very fast neutrons – faster than those produced in nuclear reactors – by bombarding a "spallation" target with high-energy protons from a linear accelerator. This linear accelerator would be one of the most powerful in the world, at 1,334 MeV (mega-electron-volts). Physically it would be something like a kilometer long, and the entire set-up would consume 100-150 MW of electricity, as much as tens of thousands of homes.

Barsebäck

Anti-nuclear groups have pointed out that if the ESS is built in Lund, it could provide a further excuse to delay the closure of the nearby 600 MW Barsebäck-2 reactor. Barsebäck-1 was closed in December 1999 (1) but the closure of unit 2 has been repeatedly postponed (2). Barsebäck's location in the middle of the most densely populated part of Scandinavia makes it possibly the most stupidly situated nuclear power station in the world(3).

As well as consuming large amounts of electricity, the facility poses safety risks. The "spallation" target consists of mercury, a poisonous liquid metal which would become radioactive during use. Thew target has to be cooled, and if the cooling fails, there could be an explosion which could spread mercury over the city of Lund, according to Bo Wennergren from the Working Group against ESS in Lund.

Yet the most controversial aspect of the conference was not the electricity usage or the risks, but the question as to whether the facility could be used for experiments into the transmutation of nuclear waste.

Boycott
The scientists from ESS Scandinavia boycotted the event because the organizers insisted in examining the links between ESS and transmutation (4). Indeed, transmutation was a feature of the original ESS plans, but was dropped from the plans when they were scaled down in June 2001. Yet, a study commissioned by the conference organizers showed that the ESS design could be modified to enable transmutation experiments, as has already been done for the SINQ facility in Switzerland (5).

While regretting ESS Scandinavia's boycott of the event, the organizers welcomed a clear written statement from ESS Scandinavia that they would not use the facility for transmutation research (6).

Because ESS boycotted the event, the only pro-nuclear voice heard was that of Professor Waclav Gudowski, who is not involved in the ESS but in transmutation research. Gudowski therefore had the difficult double task of defending ESS in their absence, and trying to argue for partitioning and transmutation of nuclear waste.

Reprocessing
Transmutation is the idea of putting long-lived radioactive waste into a nuclear reactor to convert it either into non-radioactive isotopes, or if this is not possible, into radioactive isotopes with shorter half-lives. This sounds great, but would only work if the waste were first reprocessed to remove plutonium and uranium. Reprocessing, as at Sellafield in the UK and La Hague in France, leads to radioactive discharges much greater than those of nuclear power plants, and production of plutonium which can be used in nuclear weapons.

After removal of plutonium and uranium, the remaining waste would undergo "partitioning" – which is more complex and potentially even more messy than reprocessing – to separate the long-lived radioactive isotopes from the short-lived and stable isotopes (7). Otherwise, short-lived or stable isotopes could be converted into long-lived ones, making the problem worse (8).

Even the Swedish Nuclear Power Inspectorate (SKI) has criticized transmutation (9), so Gudowski had a hard task justifying it scientifically.

"Sing Sing" reactor
Gudowski quoted a passage in Sweden's nuclear energy law which, he said, forbids planning or making cost estimates for new nuclear power reactors. He claimed that this contravenes academic freedom. He calls his design for a commercial transmutation reactor a "Sing Sing" reactor after the famous New York prison.

The nuclear industry and their friends in academia have made similar complaints ever since the Swedish people decided in a 1980 referendum to phase out nuclear power (10). The propaganda effort seems to have succeeded, since an opinion poll this year suggested that Sweden is by far the most pro-nuclear country in the EU (11).

Following Gudowski, Yves Marignac from WISE-Paris and Swedish Green MEP Inger Schörling talked about the "nuclear package" of proposed EU legislation (12).

In answer to a question at the end of the seminar, Gudowski admitted that transmutation is "an expensive extravaganza" that only makes sense if the reactors are kept going instead of being phased out as planned.

Gudowski admitted that transmutation is "an expensive extravaganza" that only makes sense if the reactors are kept going instead of being phased out as planned.

Notes:
(1) *WISE News Communique* 522, "In Brief"
(2) *WISE/NIRS Nuclear Monitor* 560.5361, "Sweden: Barsebäck-2 closure postponed"
(3) This was pointed out, not by an anti-nuclear activist, but by Prof. Gudowski, the only pro-nuclear voice heard at the conference.
(4) ESS Scandinavia press release, 28 November 2002
(5) *The European Spallation Source Project and Nuclear Waste Transmutation,* WISE-Paris, 27 November 2002. [WISE-Paris is entirely independent of WISE Amsterdam or WISE Sweden.]
(6) Organizers' conclusions and recommendations, 5 December 2002
(7) *WISE News Communique* 503.4965, "Partitioning and transmutation: A hype"
(8) *Nuclear Alchemy Gamble: An Assessment of Transmutation as a Nuclear Waste Management Strategy,* IEER, May 2000
(9) "However, Ski does not consider transmutation to be a realistic method for the treatment of spent nuclear fuel from Swedish reactors". *SKI's research strategy,* SKI, October 2002, p. 28.
(10) *WISE News Communique* 545.5259, " 'Yes-and-no' - A winning strategy to preserve Sweden's nuclear industry?"
(11) Eurobarometer 56.2, "Europeans and Radioactive Waste", 19 April 2002. People were asked for their opinion on the following pro-nuclear statement: "If all the waste is managed safely, nuclear power should remain an option for electricity production in the European Union". See europa.eu.int/comm/public_opinion/archives/eb/ebs_165_en.pdf
(12) See article "Pressure grows for Euratom changes" in this *WISE/NIRS Nuclear Monitor.*

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UPDATE ON THE TEPCO FALSIFICATION SCANDAL

The falsification scandal in the Japanese nuclear industry continues. The government claims that the scandal occurred because standards were too strict, and plans to introduce new standards permitting "allowable reactor defects". Yet according to Hideyuki Ban, Co-director of the Citizens' Nuclear Information Center (CNIC), the problem lies with organizational behavior and legal procedures, and unless these are changed, a similar scandal could occur again.

(578.5471) CNIC – It was on 29 August that falsification and concealment of the inspection data by Tokyo Electric Power Company Inc. (TEPCO) was revealed by a tip-off from a former employee (1). Subsequently, many other electric companies, such as Chubu, Tohoku, Chugoku, and Shikoku electric power companies, and the Japan Nuclear Energy Institute, were found to be conducting similar wrongdoings.

The Nuclear Industrial Safety Agency (NISA) required each electric company to investigate the case in more great detail, and TEPCO announced on 15 November that there was no evidence of fraud being found in the inspection reports for the past three years. The investigation posed the question of validity and trustworthiness concerning its results, since it was carried out mostly by TEPCO's internal researchers with one or two researchers from outside. Every electric company is expected to submit the reports of inspections for the past ten years to NISA.

Electric power companies in other regions have a similar structure and characteristics to TEPCO. Therefore, it would be surprising if the inspections for the rest of the electric companies, whose reports are to be issued by the end of this fiscal year, do not find any falsifications or attempts to hide the data. According to a media report on 29 November, another four cover-ups have been reported at the Tohoku Electric Power Company, Inc., which may implicitly indicate the future possibility of similar cases to be found in other companies.

Nuclear installation inspections in Japan are categorized into two types: periodical inspections and voluntary inspections. The former are legally mandatory, but the latter do not directly affect the operating permits nor require submitting an official report to the agency. Even though flaws were found in the reactor assemblies that are subject to voluntary inspections, appliance manufactures (e.g. Toshiba, Hitachi) and electric power companies collaborated to permit the operation of the plant based on their own judgment. If their report indicated the defects in the nuclear reactor, this would immediately require the electric companies to fix the problems. Therefore, to avoid this, they might decide not to report any problems to the agency.

However, in another revelation at Fukushima I-1 (BWR, operation started in 1971), a falsification was carried out during the inspection of the containment building leak rate test (2).

This is one of the statutory inspection tests, which requires the presence of a government inspector. The suspected containment building was not able to maintain the required leakage rate of less than 0.5% a day during the inspection in 1991. Therefore, the test was conducted while compressed air was surreptitiously injected into the containment building. In the following year, in addition to the injection of air to reduce the leakage rate, a pipe was closed to terminate the connection to the leaking valve (the problematic valve has now been replaced). These falsifications are obviously illegal acts; therefore, the NISA ordered a suspension of operation of Fukushima I-1 for one year. TEPCO have confirmed that they have received this order.

The official report on the scandal includes other repair work conducted without notice in addition to the inspection falsification. Yet the announcement itself assumes that the statute of limitations for this falsification (3 years under the Electricity Utilities Industry Law) has run out. A group of citizens argues that TEPCO and the government have arbitrarily selected only the cases of falsification that have expired under the statute of limitations. They are preparing a citizens' prosecution which is aimed at revealing other cases that can be applicable for criminal action, where the statute of limitations is 5 years.

Mr. Toshiya Minami, the former president of Tokyo Electric Power Company, Inc., criticized the current strict regulatory scheme at his resignation press conference, saying that the company had to conceal the data because nuclear regulation in Japan was too strict. And now, the bill easing the regulation of inspection standards has been debated in the Diet (the Japanese parliament). This is an attempt to introduce the "allowable reactor defects" standard.

The tenor of the argument is that the "allowable defects" standard has been adopted in Europe and the U.S. already, which also implies that Japan is lagging behind. On the contrary, Japan has not actively promoted the introduction of this kind of regulation. Mr. Toshiaki Enomoto, the former vice president of TEPCO, pointed out that there are severe social and environmental circumstances, which are unique to Japan. By "severe social and environmental circumstances" he means the strong opposition

movements against nuclear power. He seems to recognize this problem.

Some readers might be surprised to read that there are strong anti-nuclear movements in Japan where 52 reactors are currently operating at 17 sites. Yet, although the construction of nuclear power plants had been proposed in 21 sites, the opposition movements have been successful in preventing the four additional installations. Nuclear reactors in Japan tend to be concentrated in particular sites; there are three nuclear units at each site on average. This suggests that there are difficulties in the construction of nuclear power plants at a newly proposed site.

Currently, the Liberal Democratic Party has a majority in the national Diet; therefore, the proposed bill is expected to pass the Diet. In fact, the examination of the "allowance defects" standard started in 1992 and emerged as a practical matter after 2000. The Committee for Natural Resources and Energy had recommended adapting nuclear safety standards one month before the announcement of the scandal. According to the committee's report, the government was about to arrange for the introduction of the standard in 2004.

Since the amendment of the law concerning nuclear regulation was proposed one year earlier, the specific degree of the "allowable defects" standard has not been determined yet; the related government agencies are to spend a year discussing it in more detail. To that end, an evaluating committee was established to examine the continued operation of nine nuclear plants that have been found to have several defects, but have not yet been repaired.

Fukushima prefecture, where there are a total of ten nuclear reactors operated by TEPCO, condemns the cover-ups scandal as "it is the innate characteristics and system of the government that they forcefully promote their policy while they neglect the voice of local residents in a power producing area." As for the "characteristics" of the government, Mr. Kensuke Namiki, former employee of the TEPCO, said in a telephone interview by the media that when he was a nuclear plant manager in the 1970s, the then Ministry of International Trade and Industry (MITI) asked him not to report any indications of cracks during the inspection period.

Nonetheless, two investigative committees (the evaluation committee and the committee for the legalization of safety regulation) which were convened under the Ministry of Economy, Trade and Industry (METI) and the Nuclear Industrial Safety Agency (NISA) never address the organizational "characteristics and system" which are inherent in the government. If they did, the collusive relationship between the government and nuclear industry could be scrutinized. However, the committee never brings the issue to the table.

Regarding the organizational "characteristics" issue, the government committee has not found out who doctored the inspection data or who actually instructed them to do so. In other words, no investigation has been conducted to disclose who are responsible for the falsification and what kinds of judgment they made at the time of falsification. Therefore, the people concerned (who ought to have been identified already) have never borne the responsibility for the data cover-ups and their concealment.

Following the revelation of the "scandals", three executives including Mr. Gaishi Hiraiwa, Mr. Hiroshi Araki, and Mr. Toshiya Minami (the then TEPCO president), as well as Mr. Toshiaki Enomoto (the former manager of the nuclear division) resigned from TEPCO. Another 35 employees suspected of involvement in the scandal have received penalties such as a reprimand. The government released only the names of the penalty recipients. That's all; no other information has been disclosed.

At NISA, only Mr. Yoshihiko Sasaki, the current chair of the committee, was given a warning for failure to supervise the company, although five other officials had unofficial reprimands or cautions from their bosses. The penalties handed out to the officials of NISA were never reported to the public via the mass media, even though the agency claimed they were. In fact, there are hardly any press releases on the government website.

In a case of corporate crime in Japan, the person in charge of the corporation may take responsibility, but may not be accused on grounds of individual social responsibility, because the organization itself is regarded as being responsible in the first instance. This is primarily due to Japanese social culture, which paradoxically has produced a hotbed for organizational falsification and concealment. There are growing demands to appeal to the conscience of employees. This is very important, of course, but it is also essential to address the responsibility of those involved in the matter in order to prevent the same kind of scandal occurring again.

There are many tip-offs of illegal practices in the operation of the nuclear industry and some of them have already been disclosed to the public. However, the individuals involved had never been accused of illegal acts. Incidents like the TEPCO scandal will probably occur again unless organizational behavior and legal procedures are changed.

References:

(1) WISE/NIRS Nuclear Monitor 573.5436, "Japan: whistleblowing turns into tornado"
(2) WISE/NIRS Nuclear Monitor 574.5441, "Japan: nuclear scandal widens and deepens"

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DUTCH SWITCH FROM NUCLEAR TO GREEN

Dutch consumers now have the choice to switch to "green" electricity. Yet, while utilities promote this "green" electricity option, some of these same utilities continue to import or produce nuclear electricity. WISE Amsterdam is campaigning for customers to boycott nuclear power and switch to "green" electricity from a non-nuclear provider.

(578.5472) WISE Amsterdam – In 1997 the Dutch parliament took the decision to close the last nuclear power reactor in Borssele, a 450 MW PWR, by 1 January 2004, leaving only two small nuclear reactors used for medical and academic purposes in the Netherlands. After this decision nuclear campaigning in the Netherlands almost came to a standstill.

In the mean time the electricity market was being liberalized, resulting in a lot of imported (around 20%) electricity from Germany, Belgium and France, where nuclear power generates a much higher proportion of the electricity. This greatly increased nuclear's share of the electricity used in the Netherlands.

The second thing that happened was that the operator of Borssele stated that there was no agreement on the closure of the reactor, and therefore they would not close by 1 January 2004. The Dutch government was forced to start a court case to argue that there was an agreement (1). For us it was time to take action.

Campaigning
The WISE campaign was set up to achieve one simple thing: abolishment of nuclear energy in the Netherlands, whether it is produced in the Netherlands or imported.

For this we targeted the biggest energy company in the Netherlands: Essent. Essent owns 50% of the shares of the Borssele nuclear reactor and 10% of their energy is imported. This means that they have more than 10% of nukes in their total fuel mix.

A small regional electricity provider owns the other 50% of the shares from the plant. We have decided not to target them at this moment.

For all the other big electricity companies the story is very complicated. They also have nuclear power in their fuel mix, but as we didn't know how much (and they refused to tell us) the picture is not as clear as for Essent.

We have collected signatures for a petition calling upon Essent to close down the nuclear power plant as originally agreed and stop importing nuclear energy.

Liberalization
The electricity market for the Netherlands is partially liberalized. This leads to a lot of confusion and lack of transparency, with new companies arising everywhere. WISE Amsterdam is not in favor of this. We think that electricity, like all basic services, should be state-owned and regulated.

Consumers at the moment can switch if they decide to buy "green energy". The marketing strategies of electricity companies are all about promoting themselves as "green" and "sustainable". Essent, for example, busily promotes its own version of "green energy" – their leaflets in Dutch post offices offer new customers a panda cuddly toy from the WWF – but they say nothing about the nuclear component in their "ordinary" electricity.

Court case
September 2002: In the court case around the closure of the nuclear plant, the judge decided that there was an agreement to close the plant...but...it was not legally binding (2). We were shocked! How could it be possible, given that the former minister of Economic Affairs and the former Director of the state-owned power plants both said in the courtroom to the judge that they reached an agreement? An agreement both saw as legally binding. We read the ruling over and over again, but nothing was going to change...

Switch!
With the court case lost, and the political landscape at the moment in favor of nuclear energy, there was not really much we could expect from politicians. What to do next? We had been talking about switching before, but we were not in favor of it. There wasn't a good alternative. Until we had a talk with a small company: Echte Energie. Led by a former Greenpeace nuclear campaigner, they were prepared to call upon Essent to close down the plant, and they could guarantee to sell green energy 24 hours a day.

We started a new campaign. From collecting signatures, we are now starting to ask people to do something more: to leave Essent as their energy provider and move to a sustainable and reliable provider. The campaign to get people to switch is very successful. In the first two weeks (we started 22 November 2002) more than 500 people have switched. We will continue for a few more months. We hope a few thousand people will switch, to really show them consumer power!

References:
1. *WISE News Communique* 551.5290, "Netherlands: Court case on closure date Borssele NPP"
2. See box "Borssele" in *WISE/NIRS Nuclear Monitor* 574.5443, "Netherlands: Serious failure at Petten HFR".

Source and contact: Bart Brugmans at WISE Amsterdam

IN BRIEF

Argentina: no waste agreement with Australia. The efforts of WISE Argentina and others, mobilising thousands of people and over 300 NGOs, to stop Argentina importing nuclear waste from Australia have had some success. The Chamber of Deputies failed to discuss the agreement before the end of the parliamentary session on 29 November 2002. There remains a remote possibility that the deputies could consider the deal in one of the extraordinary summer sessions in the coming months (summer in Argentina is the same time as winter in the Northern Hemisphere). For more details see *WISE News Communique* 553.5312, "Argentina: 'No to Australian nuclear waste, yes to the national constitution' " and *WISE/NIRS Nuclear Monitor* 576, "In Brief".
WISE Argentina, 3 December 2002

North Korea refuses IAEA demands. As this *WISE/NIRS Nuclear Monitor* goes to press, North Korea continues to reject the demands of the International Atomic Energy Agency (IAEA) that it allow inspections of its alleged nuclear weapons program. A BBC report contrasted the U.S. policy on North Korea, where work is continuing on the Kumho nuclear power plant which the U.S. is helping to build, with Iraq, where the U.S. threatens war if the weapon inspectors are impeded in any way. (See also *WISE/NIRS Nuclear Monitor* 566.5390, "U.S. approves $95 million aid for 'axis of evil' country").
BBC, 30 November and 4 December 2002

The "red photo" of Davis-Besse. The latest piece of damning evidence in the Davis-Besse case can now be seen on the NIRS web site (www.nirs.org): a photo showing large amounts of red corrosion products issuing from the reactor lid. The photo was taken in April 2000, yet it was not included in the report that operator FirstEnergy sent to the U.S. Nuclear Regulatory Commission (NRC) in November 2001, when they successfully persuaded the NRC to postpone shutting down the reactor until February 2002. A huge hole was subsequently found in the reactor lid (see *WISE/NIRS Nuclear Monitor* 565.5385, "Millimeters from disaster" and 575.5448, "Davis-Besse: gambling safety for profits"). NIRS has called for Davis-Besse's operating license to be revoked.
***The Plain Dealer,* 1 December 2002**

Russian secret service raids NGO. Russia's FSB, a secret service which arose from the former KGB, has raided the offices of environmental NGO Baikal Environmental Wave (BEW) in Irkutsk, Siberia on 23 November 2002, confiscating 15 of the group's 18 computers. The group had been mapping radioactive contamination near the Angarsk Electric Combine, which according to its web site (www.aecc.ru) produces and enriches uranium hexafluoride. The FSB first claimed that BEW's map included secret information, but the next day they said that BEW would not be charged with disclosing state secrets, and said they would return the computers that they had confiscated.
Antiatom.ru, 23 and 24 November 2002

USEC chooses Ohio. The U.S. Enrichment Corp. (USEC) has chosen its closed Portsmouth plant in Piketon, Ohio rather than its still-operating plant in Paducah, Kentucky for a pilot uranium enrichment plant using centrifuge technology. USEC said it chose Portsmouth partly because of existing buildings from an earlier centrifuge test installation that could be re-used, and partly because Paducah lies in an earthquake zone whereas Piketon doesn't. Meanwhile, the campaign continues against the plans of USEC's rival Louisiana Energy Services (LES) to build a centrifuge enrichment plant in Hartsville, Tennessee.
***Seattle Post-Intelligencer,* 4 December 2002**

U.S. reactor plan. Entergy Nuclear is taking early steps towards building a new reactor in Grand Gulf, Mississippi. The company said that it plans to apply for an early site review by June 2003. If Entergy is granted an early site permit as a result of this review, it will be able to "bank" the approval for up to 40 years before constructing the reactor. Entergy wants to take advantage of a Department of Energy program that will pay for half of the estimated US$9 million cost of applying for the early site permit (see *WISE/NIRS Nuclear Monitor* 575.5447, "Taxpayer dollars for new U.S. reactors?")
www.heraldtribune.com, 24 November 2002

Skull Valley. A mid-November "Platts Nuclear News Flash" reported that the U.S. Nuclear Regulatory Commission may grant an operating license to Private Fuel Storage as early as mid-December to "temporarily store" 40,000 metric tons of high-level radioactive waste on the tiny Skull Valley Goshutes Indian Reservation in the US state of Utah. If PFS gets its license and construction proceeds far enough in 2003, the first of 4,000 waste containers bound for Skull Valley could roll down U.S. railways in 2004 (PFS has proposed rail-only shipments).
NIRS, 4 December 2002

Vanunu hearing delayed again. Mordechai Vanunu, the whistleblower who revealed Israel's nuclear weapons program in 1986, has had his parole hearing postponed until 31 December 2002. Vanunu has now served 16 years of his 18-year sentence for revealing state secrets – a sentence that started in 1988 after he had been kidnapped in Rome and taken to Israel by Mossad agents. Most prisoners in Israel are eligible to be released on parole after serving two-thirds of their sentence (i.e. 12 years in the case of an 18-year sentence) so Vanunu has already

served four years more than an "ordinary" prisoner would. Vanunu has received two more awards in 2002: Nuclear Free Future Award and the Francisca Mateos Fight for Peace Award.
WISE-Paris news, 2 December 2002; E-mail from Rayna Moss, 29 October 2002

Israel plans nuclear power plant. Avi Lerner, spokesman for the Infrastructure Ministry, said on 27 November that Israel intends to build a nuclear power plant in the Negev Desert, not far from the Dimona nuclear facility where whistleblower Mordechai Vanunu once worked. Lerner said that if the results of a financial and safety study are favorable, construction would begin in 2010 with completion planned for 2020. Egypt has protested since the site is just 10km (6 miles) from the Egyptian border and is near to a Bedouin village, and says that construction must be banned since Israel refuses to sign the Non-Proliferation Treaty.
***Jerusalem Post,* 27 November 2002; *Al-Anbaa,* 3 December 2002**

Westinghouse to supply EdF. Westinghouse has entered into a contract with French utility Electricité de France (EdF), the world's biggest nuclear utility, to supply up to 20% of its nuclear fuel needs during the coming years. The contract came about because European Union competition authorities said EdF needed to diversify its supply. The fuel for EdF will be made at the ENUSA plant in Juzbado, Spain and at Westinghouse's existing facility in Vasteras, Sweden, with most of the assembly components coming from the Westinghouse U.S. fuel fabrication facility in Columbia, South Carolina.
Platts, 2 December 2002; *PR Newswire,* 2 December 2002

South Korea-Vietnam agreement. A memorandum of understanding has been signed in which South Korea agrees to assist Vietnam in the development of its long-term energy strategy, including nuclear power. Vietnam has been considering nuclear power for years, and at one time hoped to finance a nuclear plant partly witth "carbon credits" (see *WISE News Communique* 526.5143, "Clean Development Mechanism: A new nuclear subsidy?"). However, after successful action by NGOs including NIRS/WISE Amsterdam, nuclear was excluded from the Kyoto Protocol, putting a stop to this idea (see *WISE News Communique* 553.5313, "Kyoto victory at Bonn").
WNA weekly news, 29 November 2002

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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 in 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 issues.

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