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INDIA: THE ENERGY CARROT AND THE CHINA STICK

In a paper entitled "India as a New Global Power: An Action Agenda for the United States", Ashley J. Tellis, a US-India relations specialist at Carnegie Endowment, identifies three constraints on India's rapid economic growth and on its emergence as a great power: insufficient access to energy, shortage of foreign investment and infrastructure weakness.

(633.5708) WISE India - Suggesting the creation of an energy dialogue as a means to jump-start the US-India relations, Tellis points out that India's energy challenges cut across multiple realms such as foreign policy, geo-politics, environmental concerns and proliferation.

Discussing in detail the different aspects of India's civilian nuclear power program and its strengths and weaknesses, such as the Department of Atomic Energy's (DAE) three-stage program and its implications, India's shortage of natural uranium, the rich thorium reserves etc., Tellis insists that Washington should satisfy New Delhi's need for nuclear energy.

To circumvent the problem of integrating India into the global nonproliferation order, he comes up with five illustrative options the United States has and envisions six end-states of integrating India into the Global Nuclear Regime.

However, two considerations weigh heavily in the analysis of Tellis that reflect the concerns of his Washington masters. One, the US should increase India's access to civilian nuclear energy that implies integration with the global regime, "because this course of action alone provides the best guarantee that New Delhi will scrupulously control its national capabilities permanently and thus choke off the only real security threat emanating from India to the United States."

Two, integrating India into the nonproliferation order at the cost of capping the size of its nuclear deterrent could "place New Delhi at a severe disadvantage vis-à-vis Beijing, a situation that could not only undermine Indian security but also U.S. interests in Asia in the face of the prospective rise of Chinese power over the long term."

In other words, Tellis, who is a close confidant of Robert Blackwill, the former American ambassador to India, who has brokered this current US-India deal proposes that the US should help India with the civilian nuclear program and get a foothold in Indian affairs and policies and also advocates closer bilateral relations that is steeped in American military sales and support for India's growing nuclear weapons program. Thus the so-called India nuclear deal, as the American media have christened, comprises of 'the energy carrot and the China stick' that the United States will employ to drive India into subservience.

According to the "Indo-US Joint Statement," the Indian nuclear establishment will have to identify and separate civilian and military nuclear facilities and programs "in a phased manner" and file a declaration regarding the civilian facilities with the International Atomic Energy Agency (IAEA).

It should take a decision to "place voluntarily its civilian nuclear facilities under IAEA safeguards" and should also sign and adhere "to an Additional Protocol with respect to civilian nuclear facilities." India will continue the "unilateral" moratorium on nuclear testing and persist with the non-proliferation export control policies. India will also work with the US on concluding the Fissile Material Cut-Off Treaty (FMCT) and adhere to the guidelines of the Missile

IN THIS ISSUE:

Technology Control Regime (MTCR) and the Nuclear Suppliers Group (NSG). Interestingly enough, nobody knows what these "phased manner," "declaration," voluntary placement, IAEA safeguards, and the "Additional Protocol" all mean or will consist of.

The "Indo-US Joint Statement" is also vague about its nuclear fuel commitments. It says that the US administration will work with the US Congress and their friends and allies in order to "adjust" the national laws and policies and the international regimes "to enable full civil nuclear energy cooperation and trade with India, including but not limited to expeditious consideration of fuel supplies for safeguarded nuclear reactors at Tarapur."

So nuclear fuel for Tarapur plants are promised even without talking about the four-decade-old plants' continued viability or the decommissioning aspects. Similarly, the US "will encourage its partners" to consider the fuel request expeditiously. Although this is a rather clumsy and vague undertaking, countries like Russia, who have been constrained by the NSG commitments and hence reluctant to supply the fuel for Tarapur and construct additional nuclear plants in India, may jump at this opportunity and go berserk.

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Editorial team: Tinu Otoki (WISE Amsterdam), Michael Mariotte (NIRS). With **contributions** from NIRS, WISE India, WISE Russia and WISE Sweden. **The next issue** (634) will be mailed out on 16 September 2005.

Oops! In the last issue article 632.5701 "U.S. radiation panel: no radiation dose safe" contained a numerical error. The first bullet point should of course have read "60 million people worldwide" instead of 60 billion…

The deal also talks about the United States' willingness to "consult with its partners…with a view toward India's inclusion" in the ITER and Generation IV International Forum (1).

New Delhi along with its 'big-on-words-and-small-on-action' Department of Atomic Energy (DAE) is embarking upon a highly ambitious plan of producing 20,000 MW power from nuclear power plants by the year 2020 and increasing that ceiling to 40,000 MW eventually. For such a grand plan to fructify, India needs lots and lots of natural or enriched uranium fuel.

Although the DAE has been talking about fast breeder reactors, using thorium as fuel, and constructing advanced heavy water reactors (AHWRs), New Delhi seems to have realized that the only way to get so much nuclear fuel and generate more power is through some kind of an arrangement with external sources. For such a thing to happen, the Nuclear Suppliers Group should relax its strict regime and make exceptions for India. And that could happen only with the blessings of the United States.

However, the current US Non-proliferation Act prevents India and other countries that have not signed the nuclear Non-Proliferation Treaty from acquiring a wide range of US military technology that included components that could be used for nuclear programs. Although the current deal promises assistance with civilian nuclear program, it all remains to be seen if the US Congress will be willing to change the nonproliferation act that bars American nuclear energy aid to nuclear weapons states or if the NSG will be ready to bend its rules for India.

It will also be interesting to see if the US, that has not built a new nuclear power station since 1996, will resume constructing nuclear power projects. After all, the American public is not enthusiastic about this. For instance, when the Oyster Creek nuclear power plant came up for re-licensing in the state of New Jersey last summer (2004), the entire civil society was up in arms against the move and stopped it.

The United States has specific goals to achieve in signing the current deal. It wants to accelerate India's rise as a global power only to place it as a regional counterweight to China. Interestingly, a Pentagon report on China's military strength, released when Dr. Manmohan Singh was in the US, argues that China is increasing its nuclear arsenal and that the Chinese missiles can strike India, Russia, and all of the United States.

As a country that thrives on the sale of weapons and military technologies, the United States also has business plans in mind. According to the Indo-US Joint Statement, President Bush has said, "as a responsible state with advanced nuclear technology, India should acquire the same benefits and advantages as other such states." These "benefits and advantages" would be India's purchasing US$5 billion worth of conventional military equipment from the US including anti-submarine patrol aircraft that could spot Chinese submarines in the Indian Ocean, and Aegis radars that could help the Indian destroyers operating in the strategic Strait of Malacca monitor the Chinese military.

It is also speculated that India may be allowed to buy the Arrow Missile System developed by Israel with American technology. Some analysts have pointed out that the US may also try to sell the AP-1000 reactors made by Westinghouse. It is important to note that the Bush administration tried to sell the same to China with the largest-ever loan granted by the U.S. Export-Import Bank.

Strangely enough, these "benefits and advantages" that India may be bestowed with for its responsibility, democracy and all of that do not include even a simple acknowledgement of India's aspirations for a seat in the UN Security Council, or its recognition as a nuclear power with a seat in the NSG.

In return for the American promises

25 YEARS AGO

What happened 25 years ago? We go back to news from our 1980 WISE Bulletin*, comparing anti-nuclear news then and now.*

Then

In Vol. 2, Nr. 3 of the *WISE Bulletin*, we reported on the utilization of wave power: "Japan: About 1000 houses were supplied, Tuesday December 25th, with electricity generated by ocean waves"

Now

In many countries around the world, and especially in Asia where electricity demands are growing rapidly each year, several plans are being developed for the construction of power plants using energy from the sea. For too long wave and tidal power have been seen as just technical opportunities rather than as an energy sources with huge potential for long term practical application and even now are only used sparingly.

The wave industry comprises of many small businesses and is still in the early stages of development compared to other renewable sources. In 2003, just one megawatt (MW) of wave power was installed globally but the prospects for this renewable energy source are improving as the energy industry becomes more aware of the economic viability as well as the environmental.

In 2000 the world's first commercial power plant producing energy from tidal waves was installed in Scotland. It has a capacity of 500 kilowatts (KW), enough to power over 200,000 homes. South Korea expects to complete the 260 MW Sihwa Tidal Power Plant in 2009 – the plant will be the largest in the world and will cost an estimated total of US$250 million to complete. South Korea plans to quadruple its share of renewable energy from the current level of 1.4% to 5% by 2011. Rapidly expanding countries like China and India are also amongst those researching the commercial use of wave and tidal energy. (www.iran-daily.com/1384/2287/html/energy.html)

Although engineers have long been aware of the potential to generate energy from the sea, tidal power has not expanded in the same way as wind power for example. The first patent for a wave energy generator was actually issued in 1799 and some 300 devices have since been patented but commercial applications have been limited. (www.ecoworld.org/Home/artivles2.cfm?TID=334)

Change is however on the horizon. The European Marine Energy Centre (EMEC) opened in Orkney, Scotland in 2004 and will test potential wave energy generators. It is expected that this will give a boost to the development and implementation of the wave energy, which could provide 50-700 terawatt-hours per year (TWh/year) in UK waters alone – current electricity consumption in the UK is around 380 TWh/year. (www.scotland.gov.uk/News/Releases/2004/08/10103847 ; www.ecoworld.org/Home/articles2.cfm?TID=334)

By 2010, EU officials estimates that energy sourced from the sea will generate over 950 MW of electricity, which is enough to power almost a million homes in the industrialized world. http://www.eere.energy.gov/consumerinfo/factsheets/nb1.html

(most of which are vague and unpromising), India seems to have given some important security, energy and foreign policy concessions to the United States. For example, right after signing the deal, the Indian Prime Minister remarked to The Washington Post that the US$7.4 billion India-Pakistan-Iran gas pipeline project was fraught with risks and difficulties. The United States is opposed to this project and their objection emanates from the fact that the project could generate much needed hard currency for Iran and from the fear that it could be used for Tehran's nuclear program.

The joint statement is also completely silent about the traditional principles and values that India has consistently voiced in the international arena such as nuclear disarmament, total abolition of weapons of mass destruction and so forth.

Instead, the deal simply mentions the American welcome of "the adoption by India of legislation on WMD (Prevention of Unlawful Activities Bill)." Just as the WMD Bill was hurriedly passed before the prime minister's trip to the US, the Atomic Energy Act of 1962 is also being amended to facilitate private investment in nuclear power generation. Dr. Singh's call for investment may prod US companies to jump into nuclear energy production with serious repercussions to our strategic interests, national security, sovereignty, independence and freedom.

The claim that opening up our civilian nuclear power plants for international inspection will curtail India's diverting the spent uranium fuel to be reprocessed into weapons-grade plutonium is also misplaced. It is important to remember that the plutonium for the 1974 test came from the safeguarded Tarapur plant after all.

Moreover, there will always be research reactors, and underhanded methods that are not altogether unknown in the field of nuclear

science and in the military-industrial complex. Most importantly, the agreement is deliberately silent about India not producing weapons-grade plutonium or not expanding the country's nuclear arsenal.

It is highly unlikely that the United States will ensure the strict implementation of the IAEA safeguard procedures and hold the DAE accountable for all its commissions and omissions. First, a complete and thorough stocktaking is very hard to do since it will be the DAE that will be guiding the IAEA authorities.

Second, since the American interests weigh heavily in the whole scheme and they want India to do the dirty job of containing the Chinese, they may turn a blind eye to the whole process. Washington will certainly poke its nose into the Indian nuclear program for espionage and business purposes and to monitor the growth of the Indian advanced technology sector.

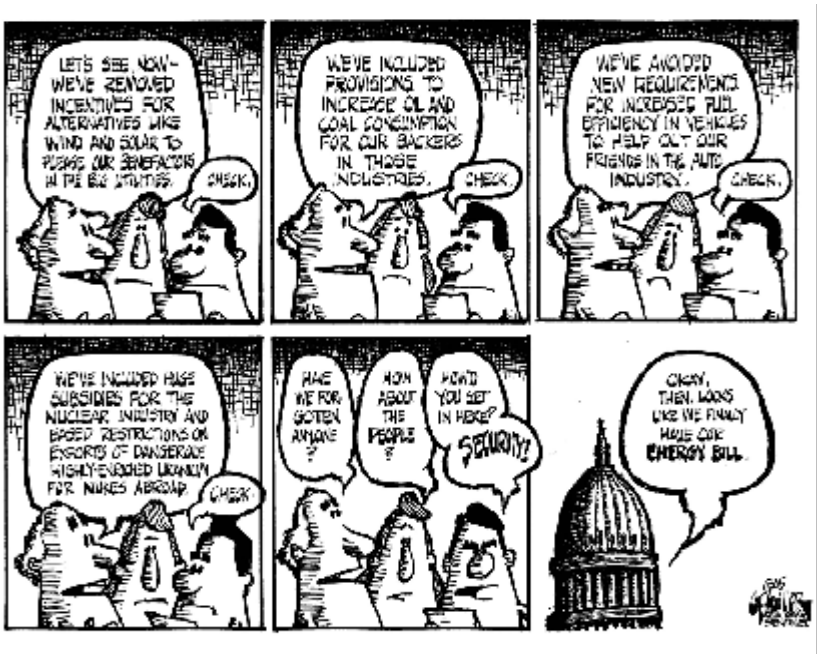
After all, the US has expressed its willingness to "adjust U.S. laws and policies" and to "work" with friends and allies to "adjust international regimes" to accomplish the current deal. This "adjustment" culture is not an expedient measure but a time-tested oft-repeated 'wink and nod' practice in the political-diplomatic world.

So, one would be thoroughly mistaken if one were to think that the specified safeguard measures mentioned in the deal would finally bring some kind of transparency, accountability and popular participation (TAPs) to the workings of the DAE.

In fact, the Indian Foreign Secretary, Shyam Saran, has already indicated that they would not agree to any discriminatory safeguards, meaning India would object to obligations that discriminated between nuclear weapons states and non-nuclear weapons states. In other words, the IAEA team could do in India what it would do in the United States and other nuclear powers and nothing more.

If this "India nuclear deal" somehow goes through, the non-proliferation efforts of humanity will take a severe beating as it will justify all the clandestine nuclear programs around the world. In fact, the Chinese premier has already talked about enhancing bilateral nuclear cooperation between his country and Pakistan by selling the latter two more nuclear reactors.

The legal and policy "adjustments" that the US administration promises to India will expose Washington's hypocrisy and double-standards and seriously undercut their efforts to confront North Korea, Iran and other countries. In the international arena, clandestine nuclear program may even become a tool to win the major powers' attention and other incentives. If India wins Western patronage and pampering through the nuclear route, next in line may be Brazil, South Africa, South Korea, Taiwan and others who are capable of producing nuclear weapons.



The one and only silver lining in this dark and gloomy cloud is that the international safeguards and verification may finally call the DAE's bluff, and expose their stale and sordid science and copycat Chandni-Chowk-type technology. Quite understandably, the Indian nuclear establishment is very much worked up about the likely chances of subjecting their civilian nuclear facilities to international safeguards and verification.

It is not that they have invented anything new or original or valuable that may be prematurely exposed to the outside world and thus it would curtail their scientific prowess or advancement. Having gobbled up unlimited amount of public money and national resources for more than five decades, the DAE produces less electricity than the rickety windmills generate with little attention or support from the government.

The latest nuclear accomplishment in India is going bananas. The Bhabha Atomic Research Centre (BARC) scientists have developed the technology to extract the juice from banana. According to these scientists, as much as 60% of the total soluble material in a banana can be extracted and the leftover pulp can be used as an additive in confectioneries, milk shakes and baby food. How wonderful!

A simple cost-benefit analysis of the "India nuclear deal" would reveal the nasty picture that is emerging. We will have Uncle Sam sitting in our living room poking his imperialistic nose into every sphere of our national life constantly calculating his selfish gains and cunningly pushing us into our neighbor's yard. We would be doing the dirty job of confronting China at

U.S. LIFTS RESTRICTIONS

Six Indian nuclear and space facilities, were removed from the U.S. restricted Entities List on August 30 implementing the first of the steps agreed as part of the nuclear pact recently made by the leaders of both countries. The lifting of the restrictions means that exports could now be made to the six facilities although end-user certification will still be necessary. Tarapur (TAPS 1&2), Rahasthan (RAPS 1&2) and Koodankulam (1&2) nuclear reactors are among the six. The deal to share civilian nuclear technology means that Congress will need to change the U.S. law banning nuclear cooperation with countries yet to submit to full inspections before any technology can actually be exported. U.S. ambassador to India, David Mulford, said that a series of hearings and testimonies are already scheduled and that the process of law amendment would start in early September when Congress reconvenes.

***The Times of India*, 31 August 2005; *The Guardian*, 30 August 2005**

the cost of jeopardizing our (relatively) good neighborly relations.

The already anti-democratic and anti-people money-guzzling Indian nuclear establishment will continue with its lackadaisical performance and gain considerably from the newly found international legitimacy. The nuclear expenditure will increase exponentially; there will ensue militarism, arms race with China, insecurity and underdevelopment. The ordinary Indian citizen will scrape along in poverty and misery as he has always been.

Notes: (1) The International Thermonuclear Experimental Reactor (ITER) is a project in which six countries are experimenting under the aegis of IAEA with a hydrogen plasma torus to design and build nuclear fusion power plants. Generation IV is a project undertaken by ten countries under the US Department of Energy's Office of Nuclear Energy, Science and Technology to examine concepts that may bring about economical, safe, proliferation-resistant and less-waste-producing nuclear reactors.

References:
"India as a New Global Power: An Action Agenda for the United States" (2005) by Ashley J. Tellis can be found at www.carnegieendowment.org/files/Tellis.India.Global.Power.FINAL.pdf

The joint Indo-US statement issued on July 18, 2005 in Washington D.C. can be found at http://www.dae.gov.in/jtstmt.htm

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U.S. ENERGY BILL TO BRING NEW REACTORS

President Bush signed the controversial and long-fought energy bill on August 8th – ironically and typically insensitively on the week of the 60th anniversary of Hiroshima and Nagasaki – at the nuclear weapons/power complex of Sandia National Laboratory in Albuquerque, New Mexico.

(633.5709) NIRS - Flanked by the top two members of the Senate Energy Committee, chairman Pete Domenici and ranking member Jeff Bingaman, both of New Mexico, Bush vowed in his signing statement that, "we will start building nuclear power plants again by the end of this decade."

And clearly the nuclear industry was the biggest winner in the bill, with billions more added for nuclear subsidies during conference committee on provisions that had never received a congressional hearing. All told, the bill authorizes some US$13 billion — and possibly more — to enrich the industry and attempt to spur new reactor construction. According to an analysis by Public Citizen, among other nuclear subsidies, the bill:

• Authorizes US$2 billion in "risk insurance" to pay the industry for any delays in construction and operation licensing for six new reactors, including delays due to the Nuclear Regulatory Commission or State agencies, litigation, sabotage or terrorist attacks, or other events. In other words, if NIRS, state agencies, local groups, etc. intervene in a license proceeding and win on the merits, the utilities will get paid for that—even while already being paid by DOE to go through the licensing process in the first place!

• Authorizes more than US$1.25 billion from FY2006 to FY2015 and "such sums as are necessary" from FY2016 to FY2021 for a new reactor in Idaho to generate hydrogen fuel.

• Authorizes unlimited taxpayer-backed loan guarantees for up to 80% of the cost of a project, including building new reactors. Authorizes "such sums as are necessary," but if Congress were to appropriate funding for loan guarantees covering six new reactors, this subsidy could potentially cost taxpayers approximately US$6 billion (assuming a 50% default rate and construction cost per plant of US$2.5 billion as the Congressional Budget Office has estimated)

• Reauthorizes the Price-Anderson Act,

extending the industry's liability cap to cover new nuclear power plants built in the next 20 years.

• Provides incentives for "modular" reactor designs (such as the pebble bed reactor) by allowing a combination of smaller reactors to be considered as one unit, thus lowering the amount that the nuclear operator is responsible to pay under Price-Anderson.

• Provides a production tax credit of 1.8-cent for each kilowatt-hour of nuclear-generated electricity from new reactors during the first 8 years of operation, which could cost the U.S. Treasury US$5.7 billion in revenue losses.

• Authorizes more than US$432 million over 3 years for nuclear energy research and development, including the Department of Energy's (DOE) *Nuclear Power 2010* program to construct new nuclear plants, and its *Generation IV* program to develop new reactor designs.

• Authorizes US$580 million over 3 years for DOE's program for research and development of nuclear reprocessing and transmutation technologies.

The nuclear industry, of course, was delighted with the bill, having received even more than they had believed possible; the US$2 billion risk insurance provision, for example, was inserted during conference committee without hearings or congressional examination — and no member of the committee would stand up and challenge it.

Indeed, the bill generally showed the weakness of progressive legislators. Perhaps they secretly hope the bill will fail — it certainly does nothing to solve the most immediate energy issue that touches most people in the U.S.: soaring gasoline prices.
While providing considerable incentives to the polluting coal and oil industries, the bill does little to promote clean or sustainable energies, with even the modest improvements that passed the Senate earlier being thrown out in conference committee. And the bill does essentially nothing to address — and likely will even worsen — the dominant environmental challenge of our time, the growing climate crisis.

For that reason, even though the Congress generally does not like to deal with controversial energy issues, more legislation, especially direct climate change legislation, can be expected next session. Whether that legislation will also be used to promote nuclear power, or whether it actually will provide some solutions to global warming, remains to be seen and may depend on the mobilization and power of the environmental movement, which was unanimous in condemning this energy bill but which could not muster the public support necessary to block a determined Bush administration and industry-oriented Congress.

It is important to note that the energy bill only authorizes money, it does not actually appropriate it, and without appropriations money cannot be spent. Thus, the battle over energy priorities, and particularly nuclear spending, is far from over. A mobilized movement can have the power to prevent appropriations and even redirect spending priorities, especially if Congress changes in the 2006 elections.

Also spending money does not ensure successful nuclear construction, as many utilities learned to their chagrin in the first nuclear era, when more reactors were ordered than were ever completed and billions of dollars were spent on ultimately cancelled reactors. Public opposition to new reactors, which public opinion polls show is growing, and a determined anti-nuclear power movement can still play a major role — indeed, must play a major role — in implementing our energy future.

WHAT YOU CAN DO

NIRS is continuing to collect signatures on our Petition for a Sustainable Energy Future (sign and/or download at www.nirs.org). Our intent is to gather as many signatures as possible and present them to the new Senate that will take office in January 2007 as an initial means of directing debate on energy issues.

NIRS is sponsoring and co-sponsoring a series of regional strategy meetings on the new nuclear circumstances; make sure you are on our e-mail alert list to learn about ones near you (to join, just send your name and address to nirsnet@nirs.org).

Source and contact: Michael Marriotte at NIRS

WHERE WILL YOU BE ON APRIL 26, 2006?

April 26, 2006 will mark the **20th anniversary of the Chernobyl disaster**. NIRS and WISE are working on a major international conference in Kiev, Ukraine to focus media and grassroots attention, and are also seeking to help coordinate the messaging and outreach of related activities across the globe. Not only to draw attention to the poor conditions many affected people still live in but also to reiterate a very important message; that nuclear power is not safe, not clean, not cheap and does not help save the climate.

Start thinking now about activities for your community to commemorate the Chernobyl disaster next April, when the world's media will be focused on nuclear power issues.

Send your ideas for appropriate actions and activities, or just let us know what your group will be doing to wiseamster@antenna.nl or nirsnet@nirs.org. Listings for known activities can be seen at www.antenna.nl/wise.

SWEDISH NUCLEAR WASTE TO SELLAFIELD?

In 1986 the Swedish Parliament ruled that henceforth all waste produced by the Swedish nuclear programme would be processed and stored in Sweden. Finding a sustainable, domestic method to deal with the waste was made a condition for the expansion of the nuclear programme (from 6 to 12 reactors) and the reactors' future operation in Sweden.

(633.5710) WISE Sweden - In the UN and other multilateral venues Sweden has long worked to achieve global nuclear disarmament. Few people today are aware that back in the 1950s Sweden, too, wanted "the bomb" and actually had its own R&D (research and development) programme to develop one. The waste in question here derives from that near-forgotten era, more specifically from "R1", a research reactor that came on line in Stockholm in the 1950s.

On August 5th a Swedish company, AB Svafo, announced that it had contracted with the "B205" unit at Sellafield to reprocess about 4.7 tons (the decimal varies in different accounts) of spent fuel. The shipment is to take place in mid-2007.

In return Svafo will receive 1.6 cubic metres of vitrified high-level waste and 1.2 kg plutonium, which the company says it will donate (!) to Oskarshamn Kraft Grupp AB, a Swedish power company who have a limited-term permit to use mixed oxide (MOX) fuel in one of their three reactors.

The transaction is in direct violation of the parliamentary ban of some twenty years' standing. The Swedish regulatory agency, the Swedish Nuclear Power Inspectorate (SKI) point to a change in EU law and say they can do nothing. Since 2000, transactions of this kind no longer require the permission of national regulatory authorities. The authority needs only be notified.

The distinction is, however, moot; SKI has never objected to the plan and would happily have granted a permit — but for the wrath of Parliament and (possibly) the Ministry for the Environment. Acting during the Parliament's summer recess and armed with a feasibility study (see below) to appease the Minister, Svafo saw its way clear.

Who, then, is this fearless valiant, AB Svafo? Until recently the company was a jointly owned subsidiary of the nuclear power industry, focused more or less exclusively on the problem of the spent fuel from the R1 research reactor.

In March 2003, Studsvik AB, a totally commercial enterprise listed on the Stockholm Stock Exchange, acquired the company. The acquisition also brought access to some 1,2 billion SEK (Euro 129 mill, USD 157 mill) in the Nuclear Waste Fund, funds earmarked for treatment and disposal of the R1 waste.

Like Magnox

The waste is said to be "like spent Magnox fuel" and shares Magnox's troublesome properties with regards to long-term storage. It is certainly not compatible with the deep-deposit strategy in coastal (wet!) granite formations that the Swedish nuclear industry is pursuing.

A feasibility study — protected from scrutiny for reasons of commercial secrecy until last week — rules out alternatives to reprocessing abroad. Already, environmentalists have criticized the report for not taking more serious account of dry deposit, the alternative even the British are adopting as Magnox processing facilities at Sellafield are phased out in the coming decade.

There are two units at the Sellafield complex that process Magnox-type fuel: SMP and B205. Both are losing propositions, financially speaking. The Swedish waste is destined for B205, the older of the two, to be decommissioned in 2012. The Norwegian environmental group Bellona and Greenpeace have identified B205 as the prime source of radioactive emissions from Sellafield.

Ironic

Unilaterally, together with Nordic neighbours, and in the context of the OSPAR Convention, Sweden has repeatedly complained to the British government, demanding that Sellafield's emissions of nuclides to the sea cease.

Now, Minister for the Environment Lena Sommestad has to explain to an astonished public and colleagues abroad why Sweden has opted to prolong the life of one of the very units her predecessors have wanted shut down.

A clearly embarrassed Minister stresses that this is an exception, a one-time occurrence that will not be repeated. Sommestad states that there is simply no alternative. The shipment is the last remainder of a bygone era. By seeing to it that the plutonium content is put out of the reach of black-market dealers and terrorists, Sweden has shouldered its responsibilities. At the same time, she makes a disclaimer: This is not a matter for the Ministry, but for the regulatory agency, SKI.

As noted above, SKI has been on record for years as favouring reprocessing of the R1 fuel abroad. (One would expect that the regulators would find it easier to assume responsibility, but no.)

There are a number of inconsistencies in the "explanations" offered. For example: If the Ministry can do nothing and SKI need only be informed, how can the minister or anyone else in government assure us that this is a one-time occurrence?

Will the Swedish Parliament take the violation of the ban lying down?

Parliament will soon be in session again. Already on MP from the Greens and a Left Party member of the standing committee on energy have both voiced anger. Unfortunately, neither party is large enough to cause the government trouble. And due to summer holidays, the environmental movement has been relatively passive on this matter to date.

Perhaps Sweden's neighbours and Ireland can persuade the government to stop Svafo's plans. Speaking on Norwegian television the day after the announcement, Ms. Sommestad's Norwegian counterpart, Knut Arild Hareide said what many of us in Sweden are thinking: "It seems that Sweden is no longer mistress of her house when it comes to the import and export of nuclear waste."

References: *The Guardian*; *The Independent*; www.bellona.no/en/energy/nuclear/sellafield/39273.html

Contact: Charly Hultén of WISE Sweden at inotherwords@swipnet.se

WASTE NOT WANTED: EUROPEAN NUCLEAR WASTE IN RUSSIA

Novouralsk, a small military-style city located 60 km north-west of Ekaterinburg, Russia's third largest city and one of its most important political centers hosts the uranium enrichment facility contracted by western-European countries to re-enrich their uranium tails. From August 4-12, the city also played host to the sixth national anti-nuclear camp organized by Ecodefense (WISE/NIRS Russia).

(633.5711) WISE Russia - Some 90 activists from over 30 environmental and human rights groups gathered in Novouralsk to discuss the issue of radioactive waste imports into Russia. They came from a total of 15 Russian cities, from Kaliningrad in the West to Barnaul in the East, and were joined by a few western European guests.

Uranium tails import

On August 4, a press conference was held to highlight the release of a report uncovering the scheme that allowed radioactive waste to be sent from Germany and other European countries to Russia. According to the document, "Re-enrichment of West-European Depleted Uranium Tails in Russia" prepared for Ecodefense by Peter Diehl of WISE-Uranium, the Western European companies Urenco and Urodif have been sending so-called uranium tails to Russia for re-enrichment since 1996.

These companies then obtain some re-enriched product back while the large amounts of radioactive wastes generated during the process remain in Russia. This dirty business involves the Ural electrochemical plant in Novouralsk, and similar facilities near three other cities in Siberia - Tomsk, Krasnoyarsk and Irkutsk.

The report states that evidence exists to show that nearly 10,000 tons of radioactive waste (uranium tails) was transported to Novouralsk from the German enrichment plant in Gronau from 1996 to 2001, and claimed that from 2001 to 2005 similar amounts of such waste were also brought into Russia.

Between 67% and 76% of the imported uranium tailings remain in Russia. Thus, the volume of radioactive waste accumulated just in Novouralsk between 1996 and 2005 is about 14,000-15,000 tons. The disposal of nuclear wastes in Russia is economically profitable for Western companies because the costs involved in the disposal of radioactive products in the West are much higher.

The uranium tails re-enrichment scheme is said to contravene article 48 of the Russian Law on Nature Protection, which prohibits the import of radioactive wastes for any purpose. At the press conference, plans were announced to stage protests and appeal to the regional prosecutor in order to stop the import of any more radioactive waste from the EU.

The German environmental group "Arbeitskreis Umwelt Gronau", campaigning against Gronau facility in Germany, expressed their support to Russian activists. "The enrichment plants in Germany and other must be stopped and the nuclear waste transports from Germany to Russia must be stopped too", the group said in its statement of August 2.

The tailings report received a great deal of coverage in local and national media with accounts broadcast to over half a million local residents.

Protest

On August 11, activists from various Russian groups staged a demonstration against the import of radioactive waste in Ekaterinburg. A one hundred meter banner reading "No nuclear waste import" and "Radiation = Death" was hung from the main bridge in the center of city. One activist was arrested but later released after 3 hours. One national and five local television channels broadcast news of the action in a rather supportive manner. One local newspaper, owned by the governor, accused the activists of seeking to destroy an economically profitable business that brings cash to the local economy.

The groups protesting countered that any attempts to bring new radioactive waste in any form must be stopped since there is no safe technology to solve the problem of radwaste anywhere around the world.

Another radioactive waste problem

In attendance at the anti-nuclear camp were activists from Krasnoufimsk, a

tiny city 200 km east of Ekaterinburg, who reported on the dangerous situation in their city regarding radioactive materials and requested help to organize and attract more publicity to the issue.

Nearly 82,000 tons of radioactive monazite (source of thorium) is presently stored in Krasnoufimsk. Concentrated monazite appeared in Krasnoufimsk at the end of 1940s when, according to the Russian government, the nuclear weapon industry developed a plan to use monazite. But later these plans were abandoned and the monazite storage was forgotten, left without physical protection for over 50 years.

The building was never maintained and was nearly destroyed by adverse weather conditions. According to local experts, the monazite storage is in extremely bad technical condition and is leeching radiation onto public land.

The local government's plan to deal with the problem includes the construction of a reprocessing plant that would extract thorium and other radioactive elements from the monazite. The amount of radioactive waste in that case would increase to 984,000 tons, which is why local residents rightly oppose the plan.

In 2003, over 90% of local citizens signed a petition demanding that the construction of the thorium producing plant stop because of environmental concerns. The citizens have also asked that a modern and safe storage be built for the monazite but the local government has been resistant.

On August 8, the anti-nuclear campers staged a protest at the office of local governor as an act of solidarity with people of Krasnoufimsk. Activists demanded that efforts be made to build a new storage for the radioactive monacite and that the reprocessing plant idea be rejected. Several local television channels covered protest in a very positive way causing a continuation of the case long after the activists had left town.

The local government held a special meeting about the Krasnoufimsk situation on August 22 and decided to adopt plans for improving safety at the monazite storage facility.

The report "Re-enrichment of West-European Depleted Uranium Tails in Russia" can be found at http://www.wise-uranium.org/pdf/reenru.pdf

Source and Contact: WISE Russia

IN BRIEF

U.S. states to tackle GHG emissions. A coalition of nine northeastern states from New Jersey to Maine is to introduce mandatory controls on greenhouse gas emissions. The regional agreement will freeze CO2 emissions from power stations (initially only those with output over 25MW) by 2009 and reduce emissions by 10% by 2020. Of course, the targets set in this agreement are less stringent than those set out in Kyoto but it is a clear indication that state governments in the U.S. understand the urgency of the situation. To the west of the country, California, Oregon, Washington and New Mexico are amongst another group of state exploring similar agreements and in another initiative earlier this year 130 city mayors, including New York and Los Angeles, agreed to meet emissions targets as envisaged in Kyoto, independent of federal government policy.
***The Guardian*, 25 August 2005**

Sierra Club ED awarded Order of Canada. Dr. Elizabeth May, Executive Director of the Canadian environmental group Sierra Club has been named an Officer of the Order of Canada in recognition of her decades of service and dedication to the environmental cause. Dr. May, we congratulate and salute you!
Sierra Club press release, 31 August 2005

World Bank to consider funding nuclear power projects. The new president of the World Bank, Paul Wolfowitz, has said that the bank will consider the possibility of financing nuclear power projects following a request during the G8 meeting in Scotland in July. At a press conference on August 20 to conclude his visit to India, Wolfowitz said that nuclear power had to be looked at but admitted that the environmental problems posed by nuclear could turn the bank off. In the past the World Bank has admitted that nuclear energy was unacceptable in many parts of the world because of concerns over safety, waste and proliferation. It also said that world experiences had shown nuclear to be a risky high-cost investment that private investors shy away from and that the time-consuming and costly approval processes, lack of waste disposal options and risks of major accidents raised grave doubts as to the future viability of nuclear power.
Press conference transcripts on World Bank website, 20 August 2005; World Bank on Nuclear Power Q&A, 1998

Bandazhevsky freed. After serving four of an eight year sentence, Professor Yury Bandazhevsky was granted a conditional release from prison on 5 August under a recent amnesty declared by President Lukashenka of Belarus to celebrate the 60th anniversary of the end of World War II. Bandazhevsky had been sentenced in 2001 after being convicted of taking bribes but is widely believed to have been convicted on false charges because of his criticism of the response of authorities to the Chernobyl disaster. Amnesty International, who adopted him as a Prisoner of Conscience and campaigned for his release, will continue to campaign in order to get the conditions placed upon him as a condition of his release lifted.

Professor Bandazhevsky is expected return to work studying the pathologi-

cal effects of radioactive products and will, with CRIIRAD, an independent French laboratory specializing in monitoring and protecting against radiation, work towards establishing a biomedical laboratory in Belarus.
NEAR International alert, 16 August 2005; CRIIRAD by email, 11 August 2005

U.S. govt can be sued for crimes against climate. In a landmark ruling, a federal judge in the U.S. District Court for the Northern District of California has ruled that a case filed in 2002 by Friends of the Earth, Greenpeace and four U.S. cities (Oakland, Arcata, Santa Monica and Boulder) against the Export-Import Bank (Ex-Im) and the Oversees Private Investment Corporation (OPIC) for providing public money to fossil fuel projects that caused harm to the climate can proceed. The suit also challenges the federal government for failing to evaluate the impacts of its actions on the climate and U.S. citizens. The judge highlighted evidence showing that "projects supported by Ex-Im and OPIC are directly or indirectly responsible for approximately 1,911 million tonnes of carbon dioxide and methane emissions annually, which equals nearly 8% of the world's emissions and is equivalent to one third of the total of carbon emissions from the United States in 2003." Jerry Brown, Mayor of the City of Oakland said that the federal government had violated federal law and that the case would be fought until federal laws were properly enforced.
Friends of the Earth press release, 24 August 2005

Global nuclear cleanup bill US$1 trillion. Costs for the decommissioning and disposal of the world's nuclear programmes are estimated at US$1 trillion in total from 2001 to 2050. According to the recently released International Atomic Energy Agency (IAEA) annual report 2004, the USA is expected to spend US$400 billion on clean up costs and Russia and China US$200 billion each. The UK's Nuclear Decommissioning Authority recently released its own figures of GBP56 billion (comparable with IAEA projections of US$100 billion for the UK) with an additional GBP10 billion (US$18 billion) required if plutonium and uranium reprocessing wastes from Sellafield are included. The sum represents an increase of GBP18 billion (US$32 billion) on the amount projected three years ago. Analysts suggest that many companies will find it hard to meet the increasing costs of decommissioning and will find it difficult if not impossible to fund a new generation of plants because of this. According to a report in *The Business*, the period from 2006 to 2010 will be the busiest for decommissioning, even though 2036-2040 is when the bulk of the world's nuclear power plants will be shut-down.
Nuclear Engineering International News, 24 August 2005; N-Base Briefing 464, 21 August 2005; Dow Jones Newswires, 12 August 2005

UK's Drigg waste repository unsafe. Currently the national low-level waste (LLW) repository, Drigg has been declared a health and safety risk by the Environment Agency and should not be used for future decommissioning material. According to the agency, estimates of radiation doses from existing disposals 'significantly exceed current regulatory targets' and it also said that BNFL had failed 'to demonstrate that the wider benefits to the UK from continued LLW disposal on the site outweigh the potential future impacts'. The Nuclear Decommissioning Authority wants to close Drigg and will put the contract to build a new LLW facility at Dounreay in Scotland to tender next summer.
***N-Base Briefings* 464 & 465, 21 & 27 August 2005**

Russia approves floating NPPs. After years of speculation, Russia's Federal Atomic Energy Agency (Rosatom) finally approved the construction of what would be the world's first floating nuclear heat-and-power plant although funding is yet to be secured. Construction is expected to begin in 2006 at the SevMash naval station in Severondvinsk, in the region of Arkhangelsk. The floating plant will cost a projected US$180 million, including the US$30 million already spent on design.
***Nucleonics Week*, 28 July 2005**

ALERT - International Conference on Updating International Nuclear Law, Oct 20 - 23, 2005, Salzburg (Austria)

Highly favourable structures found in international law and institutions have allowed nuclear research and nuclear industry to survive. PLAGE, Salzburg, Austria, is trying to initiate a process aimed at the adjustment of international law to the dimensions of nuclear risks. With the industry fiercely trying to make a comeback, such a process appears ever more urgent and long overdue.

A conference will be held in Salzburg from 20-23 October to identify new norms that will protect the human right to a healthy and safe environment (with regard to ionising radiation) and ensure that the real costs of nuclear power are internalised. Also, we will try to start building a "think tank" of jurists (scholars & practitioners & legislators/politicians) interested in creating up-to-date and "up-to-risk" legal structures for nuclear industry and commerce.

Interested parties are asked to contact the PLAGE office by e-mail or fax (see below) as soon as possible in order to get the Conference Agenda and further information.

PLAGE - Überparteiliche Plattform gegen Atomgefahren (Independent Platform Against Nuclear Dangers),
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ENEL to build more Slovak reactors. Italian utility ENEL is to invest EUR1.55 billion (US$1.9 billion) into the completion of the Mochovce 3 & 4 nuclear reactors in Slovakia. Work is to begin in 2006 and should be completed by 2010. Following ENEL's successful bid of EUR840 million (US$1.3 billion) to purchase 66% of Slovak Electric (SE) utility, owner and operator of Slovakia's six reactors at Bohunice and Mochovce, ENEL agreed a strategic investment plan for SE in accordance with local government requests.

Despite this, the plan has yet to receive the support of politicians who are said to disapprove of the conditions ENEL has placed on its investment. The Italian utility is said to view the completion of the two units as a poor investment and has asked that the Slovak state provide compensation in the form of tax relief but the Slovak Ministry of Finance is not expected to agree. Press reports have suggested that ENEL could seek to recoup its investment by increasing the price of electricity by 10% over the next two years with further increases in 2012 and 2015.

Czech Press Agency, 23 August 2005; WNA Weekly Digest, 26 August 2005; AGI/Reuters, 8 August 2005

EDF to build 30 EPRs in 20 years. French utility EDF has submitted a plan to the country's Financial Markets Authority (AMF) outlining its aim to build at least one 1,600 MW European Pressurized water Reactor (EPR) unit every year from 2020 to at least 2040. The proposal would mean that the majority of current nuclear power units would be replaced with EPR.

EDF is to build its prototype EPR at Flamanville-3 at an estimated cost of EUR3 billion (US$3.7 billion) and has recently entered into an agreement with Italian utility ENEL, which will now take a 12.5% stake in Flamanville-3. ENEL will fund the corresponding share of capital, operating, procurement and fuel management costs as well as decommissioning and long-term waste management.

Nucleonics Week, 28 July 2005

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WISE/NIRS NUCLEAR MONITOR

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

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

Receiving the WISE/NIRS Nuclear Monitor

US and Canada based readers should contact NIRS for details of how to receive the *Nuclear Monitor* (address see page 11). Others receive the *Nuclear Monitor* through WISE Amsterdam. For individuals and NGOs we ask a minimum annual donation of 50 Euros (20 Euros for the email version). Institutions and industry should contact us for details of subscription prices.

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