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Editorial

Dear readers of the WISE/NIRS Nuclear Monitor,

In this issue of the Monitor, we cover a range of nuclear security failings in the US; ongoing problems at Fukushima; and the controversy over a proposed Deep Underground Dump (DUD) in Canada. The Nuclear News section has items on uranium mining in Niger and derailment involving nuclear fuel flasks in the UK.

Feel free to contact us if there are issues you would like to see covered in the Monitor.

Regards from the editorial team.

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US reactors vulnerable to terrorist attack

US commercial and research nuclear facilities remain inadequately protected against two credible terrorist threats – the theft of weapon grade material to make a nuclear weapon, and sabotage attacks intended to cause a reactor meltdown – according to a report by the Nuclear Proliferation Prevention Project (NPPP) of the LBJ School of Public Affairs at Texas University.[1]

769.4335 The report, released on August 15, finds that none of the 104 commercial nuclear power reactors in the US States is protected against a maximum credible terrorist attack, such as the one perpetrated on September 11, 2001. Operators of existing nuclear facilities are not required to defend against the number of terrorist teams or attackers associated with 9/11, nor against airplane attacks, nor even against readily available weapons such as high-power sniper rifles.

The report finds that some US nuclear power plants are vulnerable to terrorist attack from the sea, but they are not required to protect against such ship-borne attacks. Another terrorism danger is posed by three civilian research

reactors that are fueled with bomgrade uranium, which is vulnerable to theft to make nuclear weapons. These facilities are not defended against a posited terrorist threat, unlike military facilities that hold the same material. The facilities are supposed to convert to non-weapons-grade, low-enriched uranium fuel. But they will continue to use bomb-grade uranium for at least another decade according to the latest schedule.

The US government does not require nuclear power plants to be protected from rocket-propelled grenades or .50 caliber rifles with armour piercing shells — weapons that the Nuclear Regulatory Commission (NRC) initially proposed that plants guard against, but

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that were removed from requirements after pressure from the nuclear industry to keep costs down.

Coastal nuclear facilities in at least eight states are vulnerable to nautical attacks but are not required to protect against them because the NRC deems airborne and seaborne attacks beyond the design-basis threat.

Report co-author Prof. Alan Kuperman said: "More than 10 years have come and gone since the events of September 2001, and America's civilian nuclear facilities remain unprotected against a terrorist attack of that scale. Instead, our civilian reactors prepare only against a much smaller-scale attack, known as the "design basis threat," while the government fails to provide supplementary protection against a realistic 9/11-type attack. It would be a tragedy if the United States had to look back after such an attack on a nuclear reactor and say that we could have and should have done more to prevent the catastrophe."

The report also notes that some US government nuclear facilities – operated by the Pentagon and Department of Energy – are protected against most or all of the above threats. But other US government nuclear sites remain unprotected against such credible threats because security officials claim that terrorists do not value the sites or that the consequences would not be catastrophic. However the NPPP report argues it is impossible to know which high-value nuclear targets are preferred by terrorists, or which attacks would have the gravest consequences.

The report recommends that Washington require a level of protection at all potentially high-consequence US nuclear targets – including both nuclear power reactors and civilian research facilities with bomb-grade material – sufficient to defend against a maximum credible terrorist attack. To meet this standard at commercial facilities, the NRC should upgrade its "design basis threat," and the US government should provide the requisite additional security that is not supplied by private-sector licensees.

Edwin Lyman, a senior scientist with the Union of Concerned Scientists,

said that civilian research centres are subject to even fewer security requirements than the nuclear power plants, such as having a trained, armed response force with semi-automatic weapons. If facilities housing the research reactors cannot boost their security, he said, "there is a good case for shutting down research reactors in densely populated areas. It's something the country has ignored for a long time." Since 9/11, Lyman said, seven nuclear research reactors using highly enriched uranium have converted to low enriched uranium but the larger, higher-powered reactors have yet to make the transition.[2]

The NPPP report attracted widespread mainstream media reporting, prompting some unhappy responses from nuclear apologists – one complaining about "gullible reporters" promoting a "student paper".[3] The NRC also responded, challenging some of the claims made in the NPPP report and noting that 'Design Basis Threats' set by the NRC are not made public.[4] That lack of transparency is itself a problem.

Air Force fails drill

Meanwhile, an Air Force unit that oversees one-third of the United States' land-based nuclear missiles has failed a safety and security inspection. Lt. General James Kowalski, commander of Air Force Global Strike Command, said a team of "relatively low-ranking" airmen stationed at Malmstrom Air Force Base, Montana, "did not demonstrate the right procedures" in a single exercise.[5]

A statement posted on the command's website said the 341st Missile Wing received an unsatisfactory rating after making "tactical level errors – not related to command and control of nuclear weapons – during one of several exercises conducted during the inspection. This failure resulted in the entire inspection being rated 'unsatisfactory.'" The Air Force is "looking into" the possibility of disciplinary action against the 341st, Kowalski said. The wing did well overall, he said, scoring excellent or outstanding in most of the 13 areas being tested.[6]

In March, the deputy commander of the 91st Missile Wing complained of

"rot" in the group after an inspection gave its missile crews the equivalent of a "D" grade on Minuteman 3 launch operations. Although the 91st passed that inspection, the failed simulation of ICBM launch operations resulted in the temporary removal and retraining of 19 personnel. In 2008, the 5th Bomb Wing at Minot failed the nuclear security component of an inspection. The Air Force nuclear mission has hit a number of bumps since 2008, including a B-52 bomber flight over several US states during which the crew was unaware that actual weapons were onboard.[5]

On August 19, a US Air Force crew ejected from a B-1 bomber that ran violently aground during a training flight. The four crew members all sustained "some injuries." [7]

In January 2013, Energy Department personnel pretending to be terrorists reached a substance representing nuclear-weapon fuel after they fought through defenses in an exercise at the Savannah River Site in South Carolina, the Project on Government Oversight reported.[8]

In July 2012, three Plowshares peace activists successfully broke into the Y-12 National Security complex in Tennessee (transformnowplowshares.wordpress.com). The activists – aged 83, 64 and 56 – are in jail in Georgia and face up to 30 years in prison after losing their plea for the most serious charge to be dropped. Sentencing hearings are scheduled in January 2014.[9]

Security review after mass shooting at naval base

Defense Secretary Chuck Hagel announced a review of physical security and access at all global US military installations following the mass shootings in Washington on September 17. A government contractor and former Navy reservist is accused of killing 12 civilian workers at the Washington Navy Yard prior to his own shooting death. The security review was ordered following the disclosure that an unpublished Defense Department inspector general's report had concluded that "potentially numerous felons may have been able to gain unrestricted access to several military

installations across the country due to the insufficient background checks, increasing the risk to our military personnel and civilian employees.”[12]

NRC failing on employee security checks

An audit by the US NRC’s Office of the Inspector General, released on September 12, cites concerns with an NRC policy that does not call for punishing personnel who fail to disclose personal circumstances that could raise doubts about whether they can be trusted with access to sensitive nuclear materials. [13,14] NRC employees “rarely comply with personnel reporting responsibilities” that require them to disclose if they are alcoholics or dealers of illegal drugs, the audit states. The Inspector General’s audit examined materials from 35 re-investigations of NRC employees, and found over two dozen files with evidence of incidents that “should have been reported” to NRC security officials.

Unaccompanied access to ORNL buildings

As many as 6,400 foreign visitors from China, India, Egypt, Pakistan, and other countries were allowed “unaccompanied access to numerous buildings” at the Oak Ridge National Laboratory (ORNL) according to an Office of Inspector General report released last month.[15,16] ORNL is the nation’s central repository for bomb-grade uranium.

Each visiting foreigner is given a plan that lays out in detail where they may go accompanied by their host. But “7 of the 16 hosts we interviewed did not maintain contact with foreign nationals during their entire stay,” the report warns, and “these issues have the potential to increase Oak Ridge’s security risk that sensitive information and national security assets could potentially be lost or compromised.”

Some who were given free rein in the nuclear facility had not even been checked against the Department of Energy’s Foreign Access Central

Tracking System prior to their arrival in the US. Previous audits highlighted similar issues with unaccompanied foreign nationals that have still not been resolved.

British nuclear police drunk, stoned

In June, documents released under a Freedom of Information Act application revealed that that Police officers with the elite force that guards Britain’s nuclear power stations have been caught drunk, using drugs, misusing firearms and also accused of sexual harassment and assault.[10]

In June, UK bomb disposal experts were called to the radioactive waste repository at Drigg, south of Sellafield, after more than 100 unexploded shells were found washed up, creating a mile-wide exclusion zone along the shore. Experts from the Northern Diving Group gathered the shells and pieces together and carried out controlled explosions. The majority of the material was comprised of 12- and 18-inch shells, apparently having been dumped there after World War II.[11]

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(Written by Nuclear Monitor editor Jim Green.)

Illicit Nuclear Trade

The Institute for Science and International Security has released a report, 'Future World of Illicit Nuclear Trade: Mitigating the Threat'. Of the roughly two dozen countries that have pursued or obtained nuclear weapons during the past 50 years, almost all of them depended importantly on foreign supplies. The ISIS report assesses that the scourge of illicit nuclear trade appears to be worsening and if left unchecked, it could emerge as one of the most significant global challenges to combating the future spread of nuclear weapons.

Yet, this future world of illicit nuclear trade is not inevitable; the expected trends can be prevented and new threats headed off. The report

presents over 100 specific recommendations in the following 15 broad policy areas

- 1) Build greater awareness against illicit trade
- 2) Make export controls universal and more effective
- 3) Promote better enforcement and use of UN, unilateral, and regional sanctions
- 4) Improve controls over sensitive nuclear information and assets
- 5) Stop the money flows related to illicit trade
- 6) Better coordinate prosecutions and more vigorously prosecute smugglers
- 7) Enhance early detection methods
- 8) Emphasise interdiction
- 9) Create a universal standard against illicit nuclear trade
- 10) Prevent additional developed/

industrialised market nations from developing nuclear weapons

- 11) Reinvigorate a US policy to discourage uranium enrichment and plutonium separation capabilities in regions of tension
- 12) Gain and verify pledges to renounce illicit nuclear trade
- 13) Obtain additional state commitments not to proliferate
- 14) Prevent non-state actors from obtaining nuclear weapons via illicit trade
- 15) Implement relevant arms control agreements and extend security assurances.

The report is posted at isis-online.org or use this shortcut: tinyurl.com/illicitnuketrade

Fukushima “under control”?

Japan's Prime Minister Shinzo Abe assured the International Olympic Committee (IOC) on September 7 that the Fukushima situation – in particular the leakage of contaminated water from holding tanks and the constant flow of contaminated groundwater – was “under control”.

769.4336 A survey by the Asahi Shimbun newspaper found that 76% of Japanese do not believe the Prime Minister contention that the radioactive water problem is under control.**[21]**

Senior TEPCO official Kazuhiko Yamashita said the water leaks were not under control. “We regard the current situation as not being under control,” he said. “Predictable risks are under control, but what cannot be predicted is happening.”**[1,2]**

Shunichi Tanaka, chair of Japan's Nuclear Regulation Authority (NRA), said on September 6 that TEPCO “has not been properly disclosing the situation about the contamination and the levels of contamination.” He added: “This has caused confusion domestically and internationally. Because of that, the Japanese government has a sense of crisis and I, personally, feel a little angry about it.”**[3]**

The NRA itself came under criticism on September 30 from a group of intellectuals studying the Fukushima crisis and participating in a review of the NRA's first year of operation.**[28]** Shuya Nomura, a lawyer who served on a Diet panel that investigated the Fukushima accident, criticised the NRA for its handling of the radioactive water leaks, saying NRA members should go to the plant instead of demanding explanations from TEPCO. Others pressed for reforms of the NRA Secretariat, which is staffed mostly by personnel from the previous, discredited regulator. NRA chair Shunichi Tanaka said he feels the organisation has been given a mandate bigger than its capacity, but that NRA members will try to improve.

Speaking in Tokyo on September 24, Gregory Jaczko, the former chair of the US Nuclear Regulatory Commission, expressed befuddlement that

the issue of contaminated water has only recently come under the spotlight. “This was known from the beginning that there would potentially be these contamination problems,” he said. Jaczko said he hopes Japan pours its resources and energy into coming up with ways to function without atomic power: “I think the Japanese people have the ability to do that.”**[29]**

Hiroaki Koide, an associate professor at Kyoto University Research Reactor Institute, said: “I was flabbergasted by Abe's speech. The problem of contaminated water is far from being solved. This problem has been going on all the time since the reactors were destroyed. Contaminated water has been leaking into the ocean ever since.”**[4]** Kiyoshi Kurokawa, a medical doctor who chaired the Nuclear Accident Independent Investigation Commission last year, said: “Japan is clearly living in denial ... Water keeps building up inside the plant, and debris keeps piling up outside of it.”**[24]**

The situation in Fukushima “has never done or will do any damage to Tokyo,” the Prime Minister said. But radioactive fallout and contaminated food and

water are problems that have been felt in Tokyo and beyond. The Mayor of Tokyo, Naoki Inose, publicly denounced the Prime Minister by saying that the problem of contaminated water leaks was “not necessarily under control” and that: “The government must acknowledge this as a national problem so that we can head toward a real solution.”[5]

On October 3, TEPCO announced another leak – this time 430 litres of contaminated water spilt from a tank. TEPCO said the “contaminated water may well have flowed into the sea”. On October 4, TEPCO announced yet another problem with its water treatment plant – known as the Advanced Liquid Processing System – resulting in its temporary shut down. The stoppage came just four days after TEPCO got the system up and running after a breakdown when a piece of plastic clogged the machine.[18]

Then on October 6, the NRA announced that pumps used to inject water to cool damaged reactors at Fukushima were hit by a power failure, but a backup system kicked in immediately. A worker conducting system inspections mistakenly pushed a button turning off power to some of the systems in the four reactor buildings.[22] Earlier this year, TEPCO lost power to cool spent fuel rods at Fukushima after a rat tripped an electrical wire.

On October 4, NRA secretary general Katsuhiko Ikeda berated TEPCO over “the inappropriate management of contaminated water”, saying the “problems have been caused by a lack of basic checks.” He added: “I can’t help but say that standards of on-site management are extremely low at Fukushima Daiichi. ... That these leaks occurred due to human error is very regrettable. ... The failure to make rudimentary checks reflects a clear deterioration in the ability to manage the site.” Ikeda said the problems at Fukushima raised serious questions about TEPCO’s ability to operate its other nuclear plants, like the huge Kashiwazaki-Kariwa plant that TEPCO wants to restart. [18,19]

Prime Minister Abe said: “The contaminated water has been contained in an area of the harbour only 0.3 square

kilometres big.” No it hasn’t. There is routine release of contaminated water, in part because the barrier between the ‘contained’ area and the ocean has openings so it can withstand waves and tidal movements.[6] On July 10, the NRA said it “highly suspected” that the Fukushima plant was leaking contaminated water into the ocean, and TEPCO acknowledged that fact on July 22.[7,8]

US experts urged Japanese authorities to take immediate steps to prevent groundwater contamination two years ago, but their advice was ignored. TEPCO reportedly lobbied against the proposed construction of a barrier – a measure that will now be taken with government funding – because of the high cost.[1]

Princess Takamado – daughter-in-law of the Japanese Emperor – told the IOC: “The Olympic bid has given the young people in the area affected something to dream for, the motivation to move forward with courage ... I know one of the IOC’s most important aspects is the legacy a Games leaves. The IOC will certainly remain in the heart of these young people.”[9]

Princess Takamado did not explain how newly-built sports stadiums in Tokyo would improve the lives of young people in Fukushima Prefecture, or the lives of the 160,000 evacuees from the nuclear disaster who remain dislocated.

The Prime Minister has contradicted his own statements about Fukushima being “under control” by calling for more foreign assistance dealing with water management and other problems.[23] “My country needs your knowledge and expertise,” Abe said on October 6. “We are wide open to receive the most advanced knowledge from overseas to contain the problem.”

Former Liberal Democratic Party Prime Minister Junichiro Koizumi has made a public about-face from his previous embrace of atomic power. In a speech to business executives on October 1, Koizumi said: “There is nothing more costly than nuclear power. Japan should achieve zero nuclear plants and aim for a more sustainable society.”[25] He urged

the LDP to adopt a no-nukes policy: “We should aim to be nuclear-free. If the Liberal Democratic Party were to adopt a zero-nuclear policy, then we’d see a groundswell of support for getting rid of nuclear energy.”[26] A small group of currently-serving LDP politicians is arguing against reactor restarts and calling for improvements in the management of the Fukushima site.[27]

Namie Resolution

The town assembly of nuclear disaster-hit Namie, Fukushima Prefecture, passed a resolution against Prime Minister Shinzo Abe on September 20 for declaring the situation “under control.” The Namie Town Assembly unanimously passed the resolution stating that there is a “serious problem” with Abe’s remarks as they “contradict reality.” The resolution states: “The situation has never been ‘under control,’ nor is the contaminated water ‘completely blocked.”[9,11]

Regarding Abe’s claim that “there are no health-related problems until now, nor will there be in the future,” the Namie resolution pointed out that there had been 1,459 deaths related to the triple disasters in Fukushima Prefecture thus far. “We can’t help but feel resentment against the government and plant operator Tokyo Electric Power Co., both of which are disregarding Fukushima Prefecture,” the resolution states.

Contaminated fish

Prime Minister Abe’s comments to the IOC are contradicted by contaminated fish. Radioactivity levels have been dropping but contaminated fish exceeding safety limits are still being detected.[12,20]

Toshimitsu Konno, a fisherman in Soma, Fukushima Prefecture, responded to the Prime Minister’s comments to the IOC meeting: “He must be kidding. We have been tormented by radioactive water precisely because the nuclear plant has not been brought under control.”[13]

As the string of scandals surrounding contaminated water unfolded, South Korea greatly expanded bans on fish imports on September 6. A ban on fish imports from Fukushima Prefecture

was extended to a further seven prefectures.[14]

South Korean fisheries vice-minister Son Jae-hak said that Japanese authorities had failed to provide timely and detailed information about the

water leaks and that the ban would stay in place indefinitely. The fisheries ministry said the ban was necessary “as the government concluded that it is unclear how the incident in Japan will progress in the future and that the information the Japanese government

has provided so far is not enough to predict future developments”.[15] Among other countries, the US, China, Taiwan and Russia also have fish import bans in place.[16,17]

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(Written by Nuclear Monitor editor Jim Green.)

TEPCO continues to pay pro-nuclear village

TEPCO donated tens of millions of yen to a pro-nuclear village government in August despite promising to abolish such payouts to accelerate compensation for victims of the Fukushima nuclear disaster. TEPCO and Tohoku Electric Power Co. paid a combined 200 million yen (US\$2 million) to Rokkasho, Aomori Prefecture.

“The payment is associated with construction of a nuclear plant, and we believe it is different from a donation,” a TEPCO official said. The industry ministry, however, said the

payment is “close to a donation.” Masaru Kaneko, a professor of public finance at Keio University, said the government should do something to end such actions by TEPCO: “The provision of this sort of money is abnormal, given that compensation for nuclear disaster victims and containment of contaminated water have stalled and that further hikes in electricity rates have been mentioned.”

In May 2012, TEPCO said it would stop making donations to local governments. When TEPCO applied to increase its electricity rates in 2012,

the company included the payment to Rokkasho into power generation and other costs used as a basis for calculating the rates. However, the industry ministry refused to include the payment in such costs, saying “it is not essential to supply electricity and is, therefore, close to a donation.”

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The 2020 Olympics, Fukushima and trust

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The recent leaks from the Fukushima nuclear plant demonstrate that the accident that started on 11 March 2011 is by no means over.

769.4337 When the announcement about Tokyo being selected for the 2020 Olympics came – after the Japanese Prime Minister Shinzo Abe made a strong pitch to the International Olympic Committee (IOC) – one of my acquaintances on Facebook reacted with a three-letter acronym that is not used in polite language (Hint: the third letter corresponds to a four-letter word that starts as “Fukushima” does!) What else can one say to the kind of assurances that Prime Minister Abe had offered to the IOC. Witness, for example, his answers to questions by Norwegian IOC member Gerhard Heiberg about the recent leaks in Fukushima as well as the 2011 accident. According to Yahoo News, Prime Minister Abe said (in Japanese, of course): “It poses no problem whatsoever. ... There are no health-related problems until now, nor will there be in the future. ... I make the statement to you in the most emphatic and unequivocal way.”

This is problematic on so many levels. First, there is little doubt that there will be some health-related problems in the future, for the simple reason that any exposure to radiation comes with an increased probability of developing cancer and similar endpoints. Based on a “comprehensive review of the biology data”, the United States National Research Council’s Committee to Assess Health Risks from Exposure to Low Levels of Ionizing Radiation (BEIR Committee) concluded that “the risk would continue in a linear fashion at lower doses without a threshold and that the smallest dose has the potential to cause a small increase in risk to humans”.

Estimates of cancer mortality based on early estimates of radiation exposure suggest that there would be something of the order of a thousand victims over the next few decades. Still more would suffer from cancer but are expected to recover due to modern treatment

methods. By most standards, cancer incidence, even if successfully treated, should count as a “health-related problem”.

Second, the recent spate of leaks at Fukushima demonstrates that the accident that started on 11 March 2011 is by no means over. While the probability of a further large-scale release of radioactivity into the atmosphere has receded, the continued escape of radioactive materials into the soil and the sea means that Fukushima will pose additional hazards to human and marine health. The continued releases also mean that estimates made so far of the likely long-term total health and environmental effects of Fukushima are necessarily incomplete, even if future contributions to the total radiation dose may not – or may – add significantly to the already incurred dose.

Third, it is still unclear whether the Tokyo Electric Power Company (TEPCO), or the Japanese government, will be able to stop these leaks anytime soon. If the Fukushima

reactors had only a few leaks, then it is possible that the problem could be ended if and when they are sealed. However, the plant currently is, in the words of a recent visitor to the site, “like Swiss cheese”, i.e., full of holes. And the problem has been ongoing for a while now. The reason for the sudden intervention by the Japanese government, as Jeff Kingston from Temple University in Japan observed, was essentially due to the concern that alarm about Fukushima imperilled Tokyo’s Olympic bid as well as Prime Minister Abe’s plans to quickly restart nuclear reactors.

It is also unclear how effective the proposed solutions, such as building a frozen wall at the cost of US\$470 million, will be over the long term. Not only is the frozen-wall strategy untested on the scale that is being contemplated, it would be vulnerable to loss of power and

possibly earthquakes. It is difficult to believe that this complicated scheme would successfully prevent any radioactive materials from ever contaminating the sea, sooner or later. Assessments of the time scale – before the Olympics – for bringing the Fukushima reactors “under control” are likely to be inaccurate.

Fourth, trying to control a hazardous technology such as nuclear power is always linked to the possibility of failures and errors, and events going disastrously wrong. TEPCO’s problems offer further evidence for what sociologists like Lee Clarke have argued: often plans for dealing with accidents and emergencies might look good on paper, but could well prove inadequate in the face of an actual accident.

Finally, there is the question of trust. On nuclear issues, there is widespread distrust of Japanese officials,

belonging to the nuclear establishment or the government, in that country. A recent poll by the Asahi Shimbun showed that 94% of Japanese believe that the Fukushima accident has not been brought under control. Prime Minister Abe’s strong claims about there being no problems at Fukushima, and his emphatic reassurances that there are no health effects only increase the levels of distrust. Regaining that trust is going to take both full transparency and openness as well as a complete overhaul of Japan’s “nuclear village”. There is little evidence of either of these happening anytime soon.

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www.epw.in/postscript/2020-olympics-fukushima-and-trust.html

Growing opposition to proposed nuclear waste dump in Canada

Ontario Power Generation (OPG) relied too much on the support of Kincardine town council when the company decided to bury nuclear waste near the town, First Nations representatives have told a federal Joint Review Panel.

769.4338 OPG proposes to bury 200,000 cubic metres of low- and intermediate-level nuclear waste in 31 caverns at a depth of 680 metres near Lake Huron despite growing opposition in nearby areas of Canada and the US.

“To this point I must be absolutely clear,” Chief Randall Kahgee of the Saugeen Ojibway Nations (SON) told the panel. “Kincardine cannot speak for us or our territory in these matters. We must speak for ourselves, and this must be recognized not only by OPG, but by governments as well.”^[1]

While the town of Kincardine invited the nuclear waste site to the area, SON was left out, Kahgee said. “We played no role. Largely, these processes operated under a policy of exclusion where we’ve been left on the outside looking in at our own territory.”^[2]

Kahgee said: “Our people are being asked to accept this project in the heart of our territory, and to accept the risk of the project forever. If we do not proceed thoughtfully and with care and caution, we will only shift our burden to future generations and subject them to permanent risk.”

Kahgee said the SON is working to re-establish a fishery, and is highly dependent on tourism. Both those enterprises could be stigmatised if the public isn’t persuaded that the nuclear waste site is safe, he said.

OPG has now promised that it won’t proceed with the nuclear waste project without SON’s support. Kahgee said SON is willing to work toward a solution to the waste storage issue, but the formal brief submitted with his presentation to the federal panel underlines that the process may not be speedy. The brief states: “SON and OPG must now build on the commitment to work

together on a new model for decision-making in SON territory. This will not be a quick or easy process.... SON communities do not currently have confidence in OPG’s assessment of the potential impacts and risks of the [Deep Geological Repository] project.”^[3]

Growing opposition

In addition to local citizen opposition, numerous NGOs have been actively working to stop the dump plan including the Canadian Coalition for Nuclear Responsibility, Southwest Research and Information Center (SRIC) in New Mexico, Northwatch, Ontario Clean Air Alliance, Nukewatch (Wisconsin), the Canadian Environmental Law Association, Durham Nuclear Awareness, US Beyond Nuclear, Save Our Shores, and the Toledo Coalition for Safe Energy.

In his testimony to the federal panel, Kevin Kamps from Beyond Nuclear focused on the inadequacy of OPG’s environmental assessment of cumulative impacts, as well as synergistic effects, of radiological and toxic chemical hazards in the Great Lakes

bio-region caused by nuclear power facilities, as well as other dirty, dangerous and expensive energy industries, such as fossil fuel burning power plants.[4]

Gordon Edwards from the Canadian Coalition for Nuclear Responsibility questioned OPG's assurance that a repository would be secure for a million years. "The great lakes were not even here 10,000 years ago and the half-life of plutonium is 24,000 years," Edwards told Kincardine News. "We have become a bit arrogant in thinking we can predict the future over such time scales." [5]

The dump proposal is expanding even before it has been approved. OPG recently said it plans to dispose of reactor decommissioning waste in the dump even though that waste is not considered in its application documents. The Canadian Environmental Law Association wants the federal panel to adjourn indefinitely until OPG can come up with a new plan that takes into account its long-term decommissioning plans.[6] Then there is the potential for new reactors, generating still more radioactive waste – and eventually still greater amounts of decommissioning waste. OPG acknowledges that waste from future reactors could also be disposed of at the planned site.

Last but not least, there is high-level nuclear fuel waste – a separate, less advanced process is in train to secure a disposal site for high-level waste.

More information:

- Canadian Association of Physicians for the Environment: www.cape.ca
- American Academy of Environmental Medicine: www.aaemonline.org
- Stop The Great Lakes Nuclear Dump: www.stopthegreatlakesnucleardump.com
- Beyond Nuclear: www.beyondnuclear.org
- Save Our Shores <http://saveoursaugeenshores.org>
- Canadian Environmental Assessment Agency: www.ceaa-acee.gc.ca/050/details-eng.cfm?evaluation=17520
- Canadian Nuclear Safety Commission: www.cnscc.gc.ca
- Joint Review Panel: http://nuclearsafety.gc.ca/eng/commission/joint_review_panel/deep-geologic-repository/index.cfm

Sign the petition opposing the Lake Huron nuclear waste dump: www.gopetition.com/petitions/stopthegreatlakesnucleardump.html
(Written by Nuclear Monitor editor Jim Green.)

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- 1 John Spears, 25 Sept 2013, 'First Nations must speak for themselves, nuclear hearing told', www.thestar.com/business/2013/09/25/first_nations_must_speak_for_themselves_nuclear_hearing_told.html
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- 3 John Spears, 16 Sept 2013, 'Securing approval for nuclear waste site won't be 'quick or easy process': First Nations', www.thestar.com/business/economy/2013/09/16/securing_approval_for_nuclear_waste_site_wont_be_quick_or_easy_process_first_nations.html

Thirty-one Canadian and US environmental and public interest groups have lodged a 'Request for Ruling' with the Joint Review Panel asking for clarification on whether or not high-level nuclear waste could be dumped in the planned repository near Lake Huron. [10]

A consultant hired by the federal panel criticised the way in which OPG had calculated the dump's environmental impact. Peter Duinker didn't comment on the merits of burying nuclear waste next to the Great Lakes. But he said OPG's analysis of why it should be allowed to do so was neither credible nor reliable.[6]

In towns along Ontario's West Coast, lawn signs proclaiming, "No Nuclear Waste Dump" and "Save Our Shores" have sprouted like weeds according to the Globe and Mail. On the US side of the Great Lakes, towns in Ohio have passed resolutions against the plan, while Michigan's State Senate unanimously endorsed a motion opposing a nuclear waste repository on the shores of the lake it shares with Canada.[7]

The role of the Canadian Nuclear Safety Commission (CNSC) has also come under question. CNSC president Michael Binder met in 2009 with pro-development mayors in the region. Notes taken of the meeting by a municipal employee, later obtained under the Access to Information Act, describe Binder as telling the mayors that he next hopes to see them at a

ribbon-cutting ceremony for the waste dump. "The CNSC seemed to think its role was to promote the project and make people feel good and safe about it," said Pat Gibbons, a retiree in Sauguen Shores.[7]

Police intimidation

Ahead of federal panel hearings into the OPG nuclear dump plan, Ontario Provincial Police phoned and visited people who planned to testify. One of those visited was Beverly Fernandez, an organiser with Stop the Great Lakes Nuclear Dump. Police asked if a protest was planned and told her that numerous undercover police would be attending the hearing. Fernandez said: "I wasn't intimidated because I'm not easily intimidated ... but others were." Even the Nuclear Safety Commission says it was dismayed by the police tactics. Director general Patsy Thompson said: "The CNSC considered that such actions by the [police] would be perceived as harassment and intimidation." [8]

US witnesses were also contacted. Ohio resident Michael Leonardi says police phoned wanting to know if any protests were planned. Leonardi said: "[The police officer] said there was some possibility that organizations like Greenpeace might demonstrate and that police didn't want any fatalities." [9] No matter that no Greenpeace protest has ever resulted in a fatality.

"I couldn't help but think the call was meant to deter me from testifying," Leonardi said.

- 4 Beyond Nuclear, 26 Sept 2013, 'Momentum building of international opposition against OPG DUD', www.beyonduclear.org/radioactive-waste-whatsnew/2013/9/26/momentum-building-of-international-opposition-against-opg-du.html
- 5 Steven Goetz, 23 Sept 2013, 'Radioactive waste will need attention, low-level Kincardine DGR panel told', Kincardine News, www.lucknowsentinel.com/2013/09/22/radioactive-waste-will-need-attention-low-level-kincardine-dgr-panel-told
- 6 Thomas Walkom, 19 Sept 2013, 'Planned Ontario nuclear waste dump hits heavy weather', www.thestar.com/news/canada/2013/09/19/planned_ontario_nuclear_waste_dump_hits_heavy_weather_walkom.html
- 7 Shawn McCarthy, 12 Sept 2013, 'How Ontario plans to deal with tonnes of nuclear waste: Bury the problem', The Globe and Mail, www.theglobeandmail.com/news/national/ontarios-nuclear-waste-solution-bury-the-problem/article14300723/
- 8 Colin Perkel, 24 Sept 2013, 'OPP should stay out of homes of nuclear waste opponents: Editorial', www.thestar.com/opinion/editorials/2013/09/24/opp_should_stay_out_of_homes_of_nuclear_waste_opponents_editorial.html
- 9 Thomas Walkom, 22 Sept 2013, 'OPP quizzing U.S. witnesses too at Lake Huron nuclear waste hearing', www.thestar.com/news/canada/2013/09/22/opp_quizzing_us_witnesses_too_at_lake_huron_nuclear_waste_hearing_walkom.html
- 10 Beyond Nuclear, 3 Oct 2013, 'Resolutions, legislators, and petition signatures against Canadian Great Lakes radioactive waste dump!', www.beyonduclear.org/radioactive-waste-whatsnew/2013/10/3/resolutions-legislators-and-petition-signatures-against-cana.html

Areva targeting Canadian Arctic

The French mining company Areva has already polluted Niger, Gabon, Kazakhstan, Australia and large parts of Canada. Now it has its eye on Nunavut, the Canadian Arctic territory inhabited by the Inuit. This uranium mining project threatens an ecosystem which has already been weakened by climate change, as well as the Inuit way of life.

In conjunction with Makita, an Inuit NGO active against Areva, Sortir de Nucleaire has launched a petition

against the Areva project, which can be signed at: <http://groupes.sortirdunucleaire.org/Petition-nunavut-en> (English) <http://groupes.sortirdunucleaire.org/Petition-Nunavut> (French)

More information:
makitanunavut.wordpress.com

Meanwhile, the Sierra Club has alleged that Cameco is releasing toxic substances well in excess of permitted limits at the Key Lake, McArthur River and Rabbit

Lake uranium mines in northern Saskatchewan. Cameco has applied for renewed mining and milling licences at the mines. Cameco denies the charges and the Canadian Nuclear Safety Commission is assessing the applications.

'Cameco, Sierra Club face off over uranium licences for Saskatchewan mines', 30 Sept 2013, The Canadian Press,

www.brandonsun.com/lifestyles/breaking-news/cameco-sierra-club-

Nuclear News

Niger audits U mines, seeks better deal

The Nigerien government has ordered an audit of French nuclear group Areva's uranium mines. Areva operates two mines in Niger – Somair and Cominak. The Nigerien government holds a 36.4% stake in Somair (Areva 63.6%), which produces roughly 3,000 tonnes of uranium a year, and a 31% stake in Cominak (Areva 34%), which has an annual output of 1,500 tonnes.

With the two mines' 10-year contract coming up for renewal at the end of this year, Niger wants to increase its tax take and is calling on Areva to make infrastructure investments, including a new road to the remote mining region of Arlit, more than

1,000 km north of the capital Niamey.

President Mohamadou Issoufou, elected in 2011, has said he wants to dramatically increase state revenues from uranium, which accounted for 5 percent of the 1.4 trillion CFA franc (US\$2.9 billion) budget last year.

Former president Mamadou Tandja succeeded in 2006 in roughly doubling the official uranium price, used to calculate profits and tax revenues, and ended Areva's monopoly on uranium extraction in 2007 by inviting in China's SinoU, which now operates the Somina mine.

Development of the uranium sector has been complicated by insecurity in

northern Niger. The Somair mine was targeted by Islamist suicide bombers in May, killing one person and shutting down production, in retaliation for a French-led military operation against an al Qaeda-linked enclave in neighbouring Mali. The mine resumed full operation in August.

Daniel Flynn and Abdoulaye Massalatchi, 20 Sept 2013, 'Exclusive: Niger audits Areva uranium mines, seeking better deal', www.reuters.com/article/2013/09/20/us-niger-areva-idUSBRE98J0MY20130920

'Niger mine resumes full operation', 7 August 2013, www.world-nuclear-news.org/ENF-Niger_mine_resumes_full_operation-0708134.html

UK: Derailment of empty nuclear transport flasks

During the process of moving a consignment of three empty High Level Waste flasks from the Barrow docks spur line onto the main railway line (heading for Sellafield), one of the three flasks derailed and a second flask partially derailed on September 16. Drawn by two Direct Rail Services locomotives (DRS – a wholly-owned subsidiary of the Nuclear Decommissioning Authority), the transport is said to have been travelling at approximately 5 mph when the derailment occurred on the main line causing a partial blockage of the line and forcing the cancellation of some main line services for several days.

The third transport flask had remained upright and, following the rectification of the partially derailed flask, the two flasks were returned to the Ramsden Dock nuclear shipping terminal for inspection. Righting the fully derailed flask took a further four days because of what was described by Network Rail as a process that was 'extremely challenging due to the location and the ground conditions in the area'. An

investigation has been launched and whilst the exact cause of the derailment has not yet been established, it is understood that some repairs to the main railway line are necessary. Once repairs are completed, the three flasks will be taken to Sellafield.

The empty HLW flasks had earlier arrived at the Ramsden Dock nuclear shipping terminal from Japan on board the ship Pacific Grebe. At Sellafield, the flasks will subsequently be loaded with further canisters of HLW before returning to Japan as required under the 'returns clause' of the contracts signed up to by overseas customers whose spent nuclear fuel has been reprocessed at Sellafield. Japan is scheduled to take back almost 900 canisters of vitrified waste in 35 flasks up to year 2017. To date, 132 canisters have so far been returned to Japan in three separate shipments.

The programme of returning HLW to Japan has been jinxed by a number of events. When the first shipment of one flask (January 2010) arrived in Japan, the HLW canisters within the transport flask failed to tally with

the official paperwork – a number of them being 'out of position' within the holding channels of the transport flask. As a result, a scheduled HLW return to Holland had to be postponed whilst an investigation was carried out.

When the second shipment, made in July 2011 and consisting of 76 canisters in 3 flasks, arrived in Japan, radioactive contamination above Japanese acceptance limits was found on some canisters – with one found to be contaminated at almost 50 times the acceptance limit. And now the derailment of the empty HLW flasks at Barrow, following the return of the Pacific Grebe from its third shipment to Japan in January this year has further blotted the INS copy book.

A fourth and fifth HLW return shipment to Japan are scheduled from Sellafield in the first quarter of 2014 and for mid-2015 respectively.

– Abridged from Cumbrians Opposed to a Radioactive Environment, 23 Sept 2013, www.corecumbria.co.uk/newsapp/briefings/briefsmain.asp?StrNewsID=322

WISE / NIRS Nuclear Monitor

The World Information Service on Energy (WISE) was founded in 1978 and is based in Amsterdam, the Netherlands.

The Nuclear Information & Resource Service (NIRS) was set up in the same year and is based in Washington D.C., US.

WISE and NIRS joined forces in the year 2000, creating a worldwide network of information and resource centers for citizens and environmental organizations concerned about nuclear power, radioactive waste, proliferation, uranium, and sustainable energy issues.

The WISE / NIRS Nuclear Monitor publishes information in English 20 times a year. The magazine can be obtained both on paper and as an email (pdf format) version. Old issues are (after 2 months) available through the WISE homepage: www.wiseinternational.org

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