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Editorial

Dear readers of the WISE/NIRS Nuclear Monitor,

In this issue of the Monitor, we cover:

- Niger's uranium debate and the history of uranium mining in Niger.
- The impacts of low uranium prices on the uranium industry in Africa.
- The latest round of bad news for the nuclear power industry in the US.
- Cameco's plan to mine uranium in Western Australia and the threat it poses to a national park.

The Nuclear News section has reports on the Litvinenko polonium poisoning case; radioactive spills and fires; the upcoming Radioactive Exposure Tour in Australia; monetary fines imposed in the US for inadequate waste management and for falsifying safety data; the environmental persistence of depleted uranium; the construction start of a 'small modular reactor' prototype in Argentina; and more.

Feel free to contact us if you have feedback on this issue of the Monitor, or if there are topics you would like to see covered in future issues.

Regards from the editorial team.

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Monitored this issue:

Niger's uranium debate

Hundreds of people protested in Niger's capital Niamey on February 6 against French nuclear giant Areva. A statement issued by the protesters complained that 90% of Niger's population lives without electricity while the country "produces enough uranium to light one in every three light bulbs in France."[1]

Up to 2,000 people participated in a similar protest in Niamey on December 21 with protesters carried placards reading "Areva respect the law instead of making it" and "Stop Areva: 45 years of fraud, enough is enough".[2,3]

Around 5,000 demonstrators marched through the uranium mining town of Arlit on 12 October 2013. Arlit residents complained they have benefited little from Areva's uranium mine. "We don't have enough drinking water while the company pumps 20 million cubic metres of water each year for free. The government must negotiate a win-win partnership," said Azaoua Mamane, an Arlit civil society spokesperson.[4] Another Arlit resident said: "The population has inherited 50 million tonnes of radioactive residues stocked in Arlit, and Areva continues to freely pump 20 million cubic metres of water each year while the population dies of thirst."[5]

In Arlit, a Reuters report notes, around 2,000 Areva mine employees live in neat estates, with a clubhouse and restaurants, while the rest of the city is dirt-poor, with unpaved streets and ramshackle mud-brick homes.

Local governments are meant to receive a 15% share of the royalties tax under a 2006 mining law, but they complain that payments are more than two years overdue, blaming the Nigerien government for the delays.[6] In any case Areva pays a low royalty rate and is resisting application of the 2006 mining law to its operations.

The Nigerien government and Areva are locked in negotiations over the terms of uranium mining. The protracted negotiations have been ongoing for over a year but may be concluded by the end of February. The agreement governing Areva's uranium operations in Niger expired on December 31 but has been temporarily extended.

Areva owns 64% of the open-cut Somair mine near Arlit, which produced just over 3,000 tonnes of uranium oxide last year, and 34% percent of the smaller underground Cominak mine. Areva is also developing the Imouraren uranium mine in northern Niger.

Areva has been operating the Somair and Cominak mines since the early 1970s and it pays just 5.5% royalties on extracted ore as stipulated under deals Niger signed with France, its former colonial ruler, in 1961 and 1968.[7]

Now, there is pressure for Areva to conform to a 2006 Nigerien mining law that ends tax breaks for foreign companies like Areva, which has thus far been exempt. The likely outcome will be a compromise between current arrangements and the provisions of the 2006 law (including a 12% tax rate), as well as an agreement from Areva to speed up development of the Imouraren mine.

Areva has been in no hurry to develop Imouraren because of low uranium prices, and the original planned opening in 2012 has been pushed back to 2016.[8]

The uranium agreements between Areva and Niger's government have never been made public. But Reuters acquired an agreement signed in 2001 and effective from 2004-2013.[6] The agreement stipulates that:

- Areva pays no export duties on uranium;
- Areva is exempt from all entry taxes, customs duties and value-added tax, on materials, equipment, machines, parts and petroleum products used in mining operations, including everything from sulfur and other chemicals used to process ore, vehicles, and even protective clothing;
- Areva is protected by a stability clause so that an increase in royalties tax under a new 2006 mining l aw did not affect them;
- Areva is protected so that if another uranium miner negotiated better terms, Areva would automatically benefit from the same conditions;
- any audit of the mines ordered by Niger will remain strictly confidential; and
- an exoneration of up to 20% of corporate income tax to help fund future prospecting.

Another example of Areva's secrecy is its refusal to publicly release a profit breakdown for its operations in Niger.[6] The French utility's secrecy - and its behaviour more generally - is a conundrum for French development minister Pascal Canfin, a champion of domestic resource mobilisation in poor countries and a backer of EU initiatives on transparency in the mining sector.[9]

Nigerien Mining Minister Tchiana said Areva's tax breaks cost the government €23-30 million (US$31.6-41.3 million) annually in potential tax revenue.[6] Sanoussi Jackou, an adviser to President Mahamadou Issoufou, recently said that "Areva's people take advantage of negligence by successive regimes in Niger to practise their greed."[7]

Ali Idrissa of Rotab, a Nigerien NGO, is demanding the application of the 2006 tax law to Areva. "Neither Areva's blackmail of its personnel, nor a ban on demonstrations by Nigerien authorities, will dampen our determination to fight for a win-win contract," Idrissa said.[10] "Our 2010 constitution gives the Niger people exclusive ownership of natural resources. It is not down to a company to choose its own tax regime."[3]

Although mining made up 71% of Niger's exports in 2010, it contributed only 5.8% of the country's gross domestic product. Areva made a loss of €99m (US$136.2m) last year, but expects to make an operating profit of more than €1.1 billion (US$1.51 billion) this year, helped in part by its uranium mining business.[9]

The IMF has suggested that tax exemptions to mining companies in Niger may be counterproductive given the low level of tax revenue, and that the system should be reviewed. The European Union is supporting efforts to overhaul the mining code in Niger, including the tax regime. "A mission of experts started working with officials at the Niger mining ministry this week," the EU mission's charge d'affaires in Niamey Rafael Aguirre said in December, noting that this was not connected to ongoing negotiations between Areva and Niger.[11]

Niger's nuclear history

US academic Prof. Gabrielle Hecht has written extensively about uranium mining in Africa including a 2012 book, 'Being Nuclear: Africans and the Global Uranium Trade'. Below is an extract from an article published in the *Bulletin of the Atomic Scientists* in 2012:

Niger gained its independence from France in 1960, but the CEA [Commissariat à l'énergie atomique] remained in the country to develop newly found uranium deposits. The agency created two companies to conduct mining, each allocating a portion of its capital to the Nigerien state (25 percent in one case, 32 percent in the other).

Hamani Diori, Niger's first post-colonial president, sought to maximize the benefits of these deposits in order to secure his nation's sovereignty over its natural resources. He and his advisers kept close track of nuclear debates and developments in France. They fully grasped France's desire for national nuclear exceptionalism and explicitly linked Niger's uranium to France's nuclear interests. Diori insisted that two successive French presidents acknowledge, in writing, the special significance of uranium-related transactions, then used this as leverage to ensure that uranium revenues and prices were discussed as matters of state diplomacy, rather than matters for corporate negotiation.

Inspired by the Organization of Petroleum Exporting Countries' (OPEC) 70 percent increase in the price of crude oil in 1973, Diori sought similar leverage over the price of uranium. In 1974, he tried to emulate OPEC's model with the help of Gabon, France's other main uranium producer. Under the rubric of nuclear exceptionalism, Niger's representatives argued that "the content of uranium transcended commercialism."

They reasoned that if Niger could contribute to the exceptional nuclearity of France, then surely France could make exceptional contributions to the economic development of Niger - notably, by paying a price for uranium that reflected its political, nuclear significance.

In response, the French delegation sought to denuclearize uranium by insisting on the banality of the market. Drawing upon IAEA definitions of what did and didn't count as a nuclear material - and upon various market devices that uranium mining corporations and international agencies used to convert uranium into a sellable commodity - the French insisted that the only possible way to determine the value of uranium was to treat it like an ordinary market commodity.

Trilateral discussions were interrupted when Diori was ousted by a military coup in April 1974. His successor, Seyni Kountché, went for a different sort of market arrangement. Kountché negotiated an agreement that entitled Niger to sell - directly and independently - a proportion of yellowcake output equal to the percentage of its capital holdings in the mining companies. This in turn freed Niger to develop a customer list that many Western governments would find increasingly dangerous.

Under Kountché, the state found it more lucrative to plunge directly into the uranium market. National and regional issues mattered far more to Niger's leaders than Cold War superpower politics. For example, in 1981 - not long after Libya's attempt to annex Chad - Kountché declared that Niger needed funds so badly that "if the devil asks me to sell him uranium today, I will sell it to him" (the devil, in this rendition, being none other than Muammar Qaddafi).

Reliable, accessible sources on yellowcake contracts signed by Niger are scant. But most agree that customers for Niger's portion of uranium between the mid-1970s and the mid-1980s included Iraq (around 300 tons in 1981 - not the infamous 500 tons claimed in 2003), Libya (perhaps up to 2,700 tons), and Pakistan (around 500 tons in 1979, routed secretly through Libya, and perhaps more in the mid-1980s).

The denuclearization of uranium - its treatment as an ordinary commodity - thus posed a threat to the world order embodied by the NPT.

References:

1. 8 Feb 2014, 'Niger: Hundreds protest French nuclear giant', www.nzherald.co.nz/world/news/article.cfm?c_id=2&objectid=11198281
2. Reuters, 6 Jan 2014, 'Niger says may scrap efforts to raise royalty tax for France's Areva', www.miningweekly.com/article/niger-says-may-scrap-efforts-to-raise-royalty-tax-for-frances-areva-2014-01-06
3. Reuters, 21 Dec 2013, 'Protesters in Niger capital call on Areva to pay more tax', www.chicagotribune.com/business/sns-rt-us-areva-niger-20131221,0,557668.story
4. www.reuters.com/article/2013/10/12/niger-areva-protest-idUSL6N0I20H220131012
5. www.france24.com/en/20131012-thousands-protest-niger-against-french-nuclear-giant-areva-uranium
6. Daniel Flynn and Geert De Clercq Reuters, 5 Feb 2014, 'Special Report: Areva and Niger's uranium fight', www.reuters.com/article/2014/02/05/us-niger-areva-specialreport-idUSBREA140AA20140205
7. 4 Feb 2014, 'Areva Reopens Uranium Mine In Niger Amid Tax Negotiation', www.ventures-africa.com/2014/02/areva-reopens-uranium-mine-in-niger-amid-tax-negotiation/
8. 7 Jan 2014, 'Niger and France reach impasse on uranium talks', www.euractiv.com/development-policy/negotiations-niger-france-areva-news-532604
9. Mark Tran, 10 Jan 2014, 'Niger uranium mining dispute a test case for use of African natural resources', www.theguardian.com/global-development/poverty-matters/2014/jan/10/niger-uranium-mining-dispute-african-natural-resources
10. 2 Feb 2014, 'Niger, Areva tussle over future of uranium mining', www.enca.com/africa/niger-areva-tussle-over-future-uranium-mining
11. Reuters, 19 Dec 2013, 'Areva-Niger talks to be extended up to 3 months □ sources', www.miningweekly.com/article/areva-niger-talks-to-be-extended-up-to-3-months---sources-2013-12-19
12. Gabrielle Hecht, 'An elemental force: Uranium production in Africa, and what it means to be nuclear', Bulletin of the Atomic Scientists 68(2) 22–33, 2012, www.academia.edu/3243363/An_elemental_force_Uranium_production_in_Africa_and_what_it_means_to_be_nuclear

More information:

- 'Uranium mining in Niger', Nuclear Monitor #765, 1 Aug 2013, www.wiseinternational.org/node/4018
- Prof. Gabrielle Hecht, 2012, 'Being Nuclear: Africans and the Global Uranium Trade', MIT Press, available from http://bookslive.co.za/bookfinder/ean/9780262017268

Low prices take toll on uranium industry in Africa

Paladin Energy: Australian-based Paladin Energy has sold a 25% stake in the Namibian Langer Heinrich uranium mine to the China National Nuclear Corporation for US$190 million (€140 m). Completion of the transaction is dependent on certain Chinese regulatory approvals. Paladin expects these approvals to be obtained by mid-2014.[1] The Paladin deal is the second foray of Chinese enterprises into Namibian uranium, after China General Nuclear acquired majority ownership of the Husab uranium mine in 2012.[2,3]

The Langer Heinrich sale will help Paladin meet its debts. "Paladin's out of the woods for the short to medium term. But longer term they need higher uranium prices to pay back their convertible note," said Simon Tonkin, an analyst at Patersons Securities.[4]

From April, Paladin plans to suspend production at its Kayelekera uranium mine in Malawi, "until the price of uranium recovers". A company announcement cites the "continuing depressed price for uranium oxide, which has been severely negatively impacted" since the March 2011 Fukushima disaster, as well as the "unsustainable cash demand to maintain the loss making" mining operation.[5]

The announcement notes that Kayelekera is one of "numerous uranium mines currently operating at or below break-even" and that Paladin's decision to place Kayelekera on care and maintenance "is the latest in a sequence of closures, production suspensions and deferrals of major planned greenfield and brownfield expansions in the uranium sector, including Paladin's decision in 2012 to suspend evaluation of a major Stage 4 expansion of the Langer Heinrich Mine in Namibia."[5]

Even with the sale of a 25% stake in Langer Heinrich, Citigroup's mining analysts calculate that Paladin will only have enough cash to cover a 2015 convertible bond repayment of US$300 million (€218m), but not the further US$274 million due in April 2017. The decision to place Kayelekera on care and maintenance may be "too little too late," said Citigroup analyst Clarke Wilkins.[13]

Paladin has taken a US$226.5 million (€165m) impairment on its Valhalla exploration assets in Queensland, Australia; and posted a net loss of US$255 million (€185m) for the June-December 2013 half-year, compared to a loss of US$193.5 million (€141m) for the corresponding period in 2012.[13]

And just when it seemed things couldn't get worse, Paladin reported that a truck carrying a container of uranium from Kayelekera overturned on February 17. The container fell loose and was punctured by a tree stump, and a "small quantity" of uranium oxide concentrate spilled out. Paladin said the uranium and the soil it came in touch with were removed and taken back to the tailings dam at the mine.[14]

Paladin was among the Australian stock market's 10 worst-performing stocks in the top 200 in 2013, finishing down 55% for the year.[6] The company's share-price is around one-tenth of its pre-Fukushima value. A July 2013 *mining.com* article said that "to put things lightly, management is overpaid", and suggested that management's focus may be "on its own best interests rather than the interests of all shareholders".[11]

Paladin's 2012 Annual Report stated: "The fall in uranium prices following Fukushima and the ever increasing capex and operating costs in the industry has stifled investment in new uranium projects and has adversely affected investor sentiment at the equity level. Explorers are in survival mode and cutting their spending to bare minimum, developers cannot raise the required capital for new projects and producers are deferring or cancelling growth projects while facing declining production from existing aging projects."[12]

Tanzania: Tanzania issued its first uranium mining licence in April 2013 to Mantra Tanzania, a subsidiary of Mantra Resources, but extraction from the Mkuju River project has been delayed due to low prices.[7,8]

Botswana: Botswana's Letlhakane project, developed by A-Cap Resources, was intended to start producing uranium annually from this year but operating costs have outstripped the market price.[7]

Zambia and Central African Republic: Low prices have caused a delay to a feasibility study of Zambia's Chirundu mine. Areva has postponed work on its Bakouma project in the Central African Republic for the same reason, and the country's serious conflict since has undermined the investment case further.[7]

Rio Tinto: Namibia's Rössing uranium mine is gradually resuming operations. The mine has been out of action following a leach tank failure late last year. Rössing Uranium Limited, 69% owned by Rio Tinto, announced that it expects processing plant operations to return to normal during the first quarter of 2014. Initial findings suggest that the December 3 failure of the leach tank - one of 12 at the mine - was due to localised external corrosion.[9]

Processing of ore at the Ranger uranium mine in the Northern Territory of Australia, operated by Rio Tinto-controlled Energy Resources of Australia (ERA), remains suspended following a spill of over one million litres of radioactive slurry from a leach tank in December (just days after a similar accident at Rio Tinto's Namibian mine). If the Ranger plant does not reopen by mid-2014, ERA will have to buy uranium on the market to supply its customers.[4] ERA reported a A$136 million (€89 m, US$121 m) loss for 2013 - an A$83 million improvement on the previous year.[10]

References:

1. 20 Jan 2014, 'Sale of Minority Interest in Langer Heinrich Mine, Namibia', http://ir.paladinenergy.com.au/Investor-Centre/?page=News---Announcements
2. WNN, 20 Jan 2014, www.world-nuclear-news.org/ENF-Chinese-investment-in-Langer-Heinrich-2001144.html
3. Felix Njini, 31 Jan 2014, 'Husab uranium project: Positioning Nam as major uranium producer', www.southerntimesafrica.com/articles/9389/Husab-uranium-project---Positioning-Nam-as-major-uranium-producer-----/
4. Umer Qazi, 20 Jan 2014, 'Top China nuclear firm rescues Paladin Namibia uranium mine', www.brecorder.com/top-news/109-world-top-news/153926-top-china-nuclear-firm-rescues-paladin-namibia-uranium-mine.html
5. Paladin Energy, 7 Feb 2014, 'Suspension of Production at Kayelekera Mine, Malawi', http://ir.paladinenergy.com.au/Investor-Centre/?page=News---Announcements
6. AAP, 17 Jan 2014, 'Paladin Energy shares surge after debt facility refinanced', www.heraldsun.com.au/business/paladin-energy-shares-surge-after-debt-facility-refinanced/story-fni0dcne-1226804328603
7. Adam Green, 21 Jan 2014, 'Low uranium prices take toll on African exploration', http://blogs.ft.com/beyond-brics/2014/01/21/low-uranium-prices-take-toll-on-african-exploration/
8. 16 Dec 2013, 'Uranium Hot Spots: South Africa, Niger, Namibia and Tanzania', http://uraniuminvestingnews.com/16902/uranium-hot-spots-south-africa-niger-namibia-and-tanzania.html
9. WNN, 20 Jan 2014, 'Rössing eases in to restart', www.world-nuclear-news.org/RS-Rossing-eases-in-to-restart-2001147.html
10. 31 Jan 2014, 'Ranger uranium mine operator ERA reports $136m loss for 2013 as toxic spill clean-up continues', www.abc.net.au/news/2014-01-31/era-reports-loss-ranger-uranium-mine-and-clean-up/5230572
11. Tommy Humphreys, 10 July 2013, 'Uranium outlook and Paladin Energy risk profile', www.mining.com/web/uranium-outlook-and-paladin-energy-risk-profile/
12. www.paladinenergy.com.au/getfile.aspx?Type=document&ID=11182&ObjectType=3&ObjectID=2815
13. Angela Macdonald-Smith, 14 Feb 2014, 'Paladin cash worries linger', www.smh.com.au/business/mining-and-resources/paladin-cash-worries-linger-20140214-32pyf.html
14. 17 Feb 2014, 'Product Shipment Incident near Kayelekera Mine, Malawi', http://ir.paladinenergy.com.au/Investor-Centre/?page=News---Announcements

US nuclear power industry heading off a cliff

Exelon Corporation is considering closing some of its US nuclear power plants because they have become unprofitable. Exelon operates 17 nuclear reactors at 10 sites and is the country's largest nuclear power generator. CEO Christopher Crane said "If we do not see a path to sustainable profits we will be obligated to shut units down to avoid long-term losses." He hinted that the Clinton plant in Illinois and the Quad Cities plant in Iowa face particular trouble.[1,2]

Speaking at a Platts energy conference, Crane blamed low electricity prices and "bad energy policy", i.e subsidies for renewable energy. As an *oilprice.com* article notes, the nuclear industry "is not really on firm ground when it rails against government support for renewable energy, having benefited from government largesse for years."[1]

David Brown, Exelon's vice president of federal affairs, told the Platts conference: "We're all coming together, racking our brains, saying what's out there, what can we do, whether it's market reform or raising awareness of the value of nuclear? The frustrating thing is there's no silver bullet; it's going to be an all-arrows-in-the-quiver response." Brown said losses at five of Exelon's nuclear plants (including Clinton and Quad Cities) have wiped out profits from the company's other nuclear plants.[3]

William Mohl, president of Entergy Wholesale Commodities, echoed Exelon's concerns at the Platts conference, saying "we're really headed off a cliff if we don't see some changes in overall market design."[3]

Five reactors are under construction in US – two in South Carolina, two in Georgia, and one in Tennessee – "with little prospect for more" according to oilprice.com.[1] Despite those reactor construction projects, nuclear is on a downwards path:

- closures and planned closures include Dominion's Kewaunee plant in Wisconsin; Entergy's Vermont Yankee plant; Exelon's Oyster Creek unit; Duke Energy's Crystal River reactor; and two reactors at Southern California Edison's San Onofre plant in California;[4]
- cancelled plans for new reactors include Calvert Cliffs 3, South Texas Nuclear Project 3 and 4, Bellefonte, and Levy County;[4] and
- numerous plans to uprate the power of operating reactors have been cancelled - last June World Nuclear News listed four cancelled uprate plans.[5]

Indiana typifies the pattern around the country: in early January, Republican Senator James Merritt introduced draft legislation to provide financial incentives to utilities to build nuclear plants, but in late January Merritt effectively withdrew the bill, saying construction of a nuclear plant is "probably more than a decade away" and that no utility or large energy user had shown interest.[6]

Tampa Bay Times business columnist Robert Trigaux explains the problems thus:

"Nuclear's biggest friend, the debt-ridden federal government, remains wary of offering extensive loan guarantees to an industry unable to control runaway nuclear plant construction costs. Wall Street, once the go-to place for financing big energy projects, won't touch nuclear plant financing in an energy market now dominated by cheaper and plentiful natural gas.

"Worst of all, some state legislatures empowered utility monopolies like Duke Energy in Florida to charge their own captive customers to pay in advance for proposed nuclear projects. The nuclear industry wants more states to adopt such rules. Now Duke's Florida customers are outraged. They are on the hook via higher electricity rates to pay more than $1.5 billion in advance fees for a once-proposed nuclear plant in Levy County that has now been shelved and will never produce a single watt of electricity. On top of that, the same customers will face $265 million in higher rates to cover a separate advance fee to cover costs tied to the shuttered Crystal River plant.

"That leaves the nuclear power industry's three top potential allies - government, bankers and consumers - unhappy. That is a public relations disaster."[7]

The Department of Energy is reviewing one scenario under which a third of the country's reactors would be shut down according to DoE assistant secretary for nuclear energy Pete Lyons. "This is a trend we are clearly very, very concerned about," Lyons told the Platts energy conference in early February.[7]

References:

1. Nick Cunningham, 9 Feb 2014, 'Wind and Gas Forcing Out Nuclear in Midwest', http://oilprice.com/Latest-Energy-News/World-News/Wind-and-Gas-Forcing-Out-Nuclear-in-Midwest.html
2. WNN, 10 Feb 2014, 'US plants suffer under challenging economy', www.world-nuclear-news.org/C-US-plants-suffer-under-challenging-economy-1002147.html
3. Hannah Northey, 6 Feb 2014, 'Nuclear giants urge market changes to thwart closures', www.eenews.net/stories/1059994177
4. Aug 2013, 'Entergy shutting down Vermont Yankee nuke: tenth down or never to be built in past year', www.l-a-k-e.org/blog/2013/08/entergy-shutting-down-vermont-yankee-nuke-tenth-down-or-never-to-be-built-in-past-year.html
5. WNN, 13 June 2013, 'Go-slow on new US capacity', www.world-nuclear-news.org/C_Go_slow_on_new_US_capacity_1306132.html
6. John Russell, 21 Jan 2014, 'Indiana legislation to promote nuclear power withdrawn', www.indystar.com/story/news/2014/01/21/indiana-legislation-to-promote-nuclear-power-withdrawn/4720181/
7. Robert Trigaux, 7 Feb 2014, 'Gasping nuclear industry in desperate need of a PR overhaul', www.tampabay.com/news/business/energy/gasping-nuclear-industry-in-desperate-need-of-a-pr-overhaul/2164673

Cameco threatens Australian national park

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When we think of National Parks in Australia we generally think of places of renewal and natural beauty where we can take the whole family to recharge and reconnect with nature - places that draw international visitors to our shores looking for a taste of the wild places that have made our state famous.

Yet Western Australia's largest National Park is current in the cross hairs of a Canadian company for a large scale uranium mining project. Right now the Canadian mining company Cameco is proposing to mine uranium in the Pilbara at Kintyre, in an area that has been excised from WA's biggest National Park – Karlamilyi (Rudall River).

The area that contains the Kintyre uranium deposit is one of the most unique and diverse ecosystems in the country, including the fate 28 endangered, vulnerable and priority species. The proposed mine site is nestled between two branches of the Yandagoodge creek, which feeds springs and lake systems throughout Karlamilyi National Park and provides water for the communities of Punmu and Parnngurr.

On top of the question of the appropriateness of placing a uranium mine in an area well recognised for its unique and fragile environmental assets, the equation becomes even more fraught when the track record of the proponent – Cameco Resources – is given closer inspection.

Cameco's track record overseas raises disturbing questions about the risks and potential impacts on this fragile desert ecosystem and the adequacy of the state systems that are meant to protect the people and the place. Cameco's operating uranium mines in Canada have been dogged by leaks, floods, contamination and unsafe work environments.[1]

Cameco has been through court over license breaches in the US[2], has been investigated for tax avoidance in Switzerland [3] and has had Chinese companies turn back their leaking uranium shipments.[4] Community division[5], lowering house values[6], community court actions[7] and secret deals with the US military[8] are all things that feature in reports about Cameco.

The company is also currently embroiled in a court action with the Canada Revenue Agency, which is seeking millions in unpaid tax between 2007 and 2013.[9] Which all begs the question - is this the kind of corporate track record to which we should be willing to open up our National Parks? Karlamilyi National Park should not be the testing ground to see if this company can operate safely or treat communities with respect without creating division.

Despite industry assurances and government promises the Australian uranium sector has a sorry track record of failed uranium mines, with leaks, spills and license breaches from exploration projects at Wiluna [10] and Yeelirrie [11] in WA to operating mines at Ranger [12] in the Northern Territory and Olympic Dam in South Australia.[13]

In fact there has never been single uranium mine rehabilitated successfully in Australia – Rum Jungle, Nabarlek, Mary Kathleen and more are all names associated with unresolved radioactive or acid mine drainage legacies.[14]

Giving a blank cheque to a foreign company to operate a dirty mine in one of WA's most special places is not smart politics or policy. It is a short term trade that would see a long term loss and an uncapped liability on the State and its tax-payers.

We all know from past experience both here and overseas that mining uranium is a risky business. Between the processing acids, heavy metals, radon gas, dust and radioactive mine waste there is a lot that can go wrong. This is sector facing strong opposition internationally with nuclear shut downs in Germany and Japan after the Fukushima disaster – a catastrophic natural and nuclear disaster fuelled by Australian uranium.

When you put this contaminated cocktail next to a National Park that is home to a network of ephemeral rivers and numerous endangered, vulnerable and priority species then the stakes get even higher. WA can - and must - do better than this.

References:

1. www.bloomberg.com/apps/news?pid=newsarchive&sid=aYNr8siTro.Q
2. www.canada.com/story.html?id=a00edc3f-cd99-4b60-bc2d-fdb3e1a73f3e
3. www.veritascorp.com/home/Accounting%20Alerts%20-%20Cameco%20Corp.%20April%202,%202013%20Veritas.pdf
4. www.cbc.ca/news/canada/saskatchewan/no-money-for-cameco-after-sale-of-ship-that-had-uranium-spill-1.1360155
5. http://sgnews.ca/2012/12/13/uranium-gag-order-in-pinehouse-sk/
6. www.northumberlandnews.com/community-story/3778518-port-hope-housing-sales-dip-while-population-rises/
7. www.thestarphoenix.com/business/Saskatchewan+magazine+sues+information+uranium+deal+with+village/9441778/story.html
8. www.ctvnews.ca/iraqi-stockpile-of-uranium-secretly-arrives-in-montreal-1.306809
9. http://www.huffingtonpost.ca/2013/09/25/cameco-taxes-switzerland_n_3984918.html
10. www.perthnow.com.au/business/high-radiation-levels-more-than-hundred-times-safe-level-at-wiluna-mine/story-e6frg2qc-1225895230599
11. http://archive.is/9Mbw5
12. www.environment.gov.au/resource/investigation-tailings-water-leak-ranger-uranium-mine
13. www.minerals.dmitre.sa.gov.au/mines__and__developing_projects/approved_mines/olympic_dam/olympic_dam_incident_summary_2003_-_2012
14. http://users.monash.edu.au/~gmudd/files/2008-UMH-V-Rum-Jungle.pdf

NUCLEAR NEWS

UK: DU's environmental persistence

Uranium particles formed from exploding DU munitions are highly persistent in the environment, scientists have found. They are still hazardous after 30 years in soils or dumps and even their corrosion products are durable minerals.

Two new studies from the UK have shed more light on the processes that impact on DU's environmental persistence. The studies were undertaken at the UK's two DU firing ranges, Kircudbright in Scotland, and Eskmeals in England.

The study in England found that uranium oxides particles were highly resistant to corrosion and as a result, 30 years after firing the particles would still present an inhalational hazard if resuspended. That these particles can survive for so long in the comparatively wet conditions of the UK and northern US suggest that particles in the arid conditions of Iraq may be even more long-lived.

The study in Scotland found that corrosion of DU is controlled in the environment by a number of factors that are not fully understood, and that laboratory experiments cannot truly replicate the conditions in real corrosion environments.

The International Coalition to Ban Uranium Weapons (ICBUW) said: "The findings support ICBUW's view that attempts by the UK and US government to downplay concerns based on the findings from a limited number of contaminated site assessments in the Balkans are not supported by the available science. ICBUW has long argued that the variability of conditions at different sites requires that each is individually assessed and the risks they may pose to civilians and the environment calculated. Following its assessments in the Balkans, the UN Environment Programme suggested that intact or fragmentary penetrators in soils may have completely corroded in 25 years. These new studies suggest that the actual picture may be far more complicated than originally assumed."

www.bandepleteduranium.org/en/new-studies-on-du-environment

www.theecologist.org/News/news_analysis/2261643/still_dangerous_after_30_years_uranium_particles_from_du_weapons.html

'Microanalytical X-ray Imaging of Depleted Uranium Speciation in Environmentally Aged Munitions Residues': http://pubs.acs.org/doi/abs/10.1021/es403938d

'The corrosion of depleted uranium in terrestrial and marine environments': www.ncbi.nlm.nih.gov/pubmed/24315120

UK: Court says government should revisit Litvinenko poisoning case

A February 11 ruling by the High Court of Justice in London requires British Home Secretary Theresa May to re-examine her justification for preventing an open investigation of the 2006 murder of Alexander Litvinenko. The former KGB officer died after drinking tea tainted with radioactive polonium-210. Last year, May blocked a coroner's request for a public inquiry.

"If she is to maintain her refusal [to hold an open inquiry], she will need better reasons than those given in the decision letter," Lord Justice Stephen Richards said in a statement for a three-judge panel.

"The case for setting up an immediate statutory inquiry as requested by the coroner is plainly a strong one," the three judges added.

The British Home Office indicated it is reviewing the court's finding.

An open investigation could implicate Russia in the death, creating potential for political and economic fallout. Last year, May said political considerations had played a role in her decision not to go forward with an open investigation. She added, though, that those factors were not decisive.

Marina Litvinenko, the KGB veteran's widow who initiated the push for an open inquiry, said she was happy to learn about the judges' decision: "This was the murder of a British citizen on the streets of London using radioactive poison. You would have thought that the government would want to get to the bottom of who was behind it."

http://uk.reuters.com/article/2014/02/11/uk-britain-litvinenko-idUKBREA1A15220140211

www.nti.org/gsn/article/court-rejects-british-case-against-open-investigation-litvinenko-death/

www.nti.org/gsn/article/politics-affected-decision-limit-probe-russian-dissidents-radiation-death-uk/

Drums being removed from the overturned truck on the A697 highway.

UK: Radioactive spill on highway

Radioactive material in an overturned truck leaked onto the A697 highway in Northumberland on January 21. About six of the 67 drums of naturally-occurring radioactive material leaked. The Environment Agency said the spilt material was viscous. The road was closed in both directions while the drums were removed. It appears that the truck veered off the road then overturned.

www.thejournal.co.uk/news/north-east-news/a697-northumberland-closed-after-lorry-6535605

www.bbc.co.uk/news/uk-england-tyne-25847558

Solar PV costs continue to fall

One of the most misunderstood aspects of the solar PV phenomenon is the idea that it has been that it has been driven entirely by surplus capacity from China, and little else. Between 2007 and 2012 it is estimated that solar manufacturing costs fell by between 70-80% - courtesy of the feed in tariffs that began in Germany and spread elsewhere, and the manufacturing boom that followed, particularly in China. But the cost fall was not simply a matter of capacity, it was also about efficiency – more powerful modules, less silicon, less metals, improved manufacturing processes and so on. And the fall is continuing. Greenpeace estimates that costs will fall by another 50% by 2020.

http://reneweconomy.com.au/2014/solar-pv-continues-shoot-cost-curve-42386

www.greenpeace.org/new-zealand/en/blog/subsidy-free-solar-takes-off-in-spain/blog/48113/

Argentina: Construction of small reactor underway

The pouring of first concrete has marked the official start of construction of Argentina's prototype CAREM-25, a domestically-designed and developed small modular reactor (SMR). A ceremony on 8 February marked the formal start of construction work at the reactor.

Norma Boero, chair of Argentina's National Atomic Energy Commission (CNEA), said: "Although there are other similar [SMR] reactor projects in the world, this is the first to start construction, which is a pride not only for the nuclear industry but for all Argentinians."

CAREM - the name is taken from Central ARgentina de Elementos Modulares - is a domestically-designed and developed 25 MWe small modular pressurised water reactor. The prototype of the design, CAREM-25, is being built at a site adjacent to the Atucha nuclear power plant in Lima, 110 kms north-west of Buenos Aires. Once the design is proven, a larger 100-200 MWe version of the reactor may be built in the northern province of Formosa.

According to the CNEA, the unit will cost ARS3.5 billion (US$446 million, €324 million), which equates to US$17.84 billion (€13.0 billion) / 1000 MWe.

www.world-nuclear-news.org/NN-Construction-of-CAREM-underway-1002144.html

US: Fire at nuclear waste dump site

A truck caught fire at the US Department of Energy's Waste Isolation Pilot Plant (WIPP) in New Mexico on February 5. The truck was hauling salt in an underground area and was not in the vicinity of nuclear waste. The fire extinguished itself after several hours. All underground personnel were evacuated to the surface. Six workers were treated in hospital for smoke inhalation and released several hours later.[1,2,3]

WIPP is the nation's first repository for the disposal of military long-lived transuranic radioactive waste (including plutonium) arising from research and production of nuclear weapons. WIPP's facilities include disposal rooms excavated in an ancient salt formation, almost one-half mile underground. Waste disposal began at WIPP in 1999.

There is some pressure for WIPP to be expanded to accept high-level nuclear waste from nuclear power plants.[4]

According to the Union of Concerned Scientists, half of US nuclear reactors do not comply with fire safety regulations, which were first put in place in 1980.[5] The US Nuclear Regulatory Commission's Fire Protection Steering Committee said in a 2008 briefing that: "Approximately one-half of the core damage risk at operating reactors results from accident sequences that initiate with fire events."[6] On 9 December 2013, an electrical transformer exploded in the switchyard at the Arkansas Nuclear One Unit 2 nuclear power station, causing a fire that lasted more than an hour before it was contained and extinguished.[9]

On the night of February 14, a monitor detected airborne radiation in an underground area at WIPP. Employees on the surface were instructed to shelter in place. There were no employees working underground at the time. At 5pm on February 15, a determination was made to allow non-essential employees to leave the site.[7]

The Department of Energy (DoE) said on February 16 that the source of the airborne radiation was still being investigated - and provided no further details in the following two days. DoE said no contamination was found on any equipment, personnel, or facilities, and that any possible release was minimised by the filtration system designed to filter any air leaving the WIPP repository.[7]

"They (air monitors) have alarmed in the past as a false positive because of malfunctions, or because of fluctuations in levels of radon (a naturally occurring radioactive gas)," DoE spokesperson Roger Nelson said. "But I believe it's safe to say we've never seen a level like we are seeing. We just don't know if it's a real event, but it looks like one."[8]

1. www.wipp.energy.gov/pr/2014/Event%20Release-4.pdf
2. www.channelnewsasia.com/news/world/fire-sparks-evacuation-at/983224.html
3. www.lcsun-news.com/las_cruces-news/ci_25066853/breaking-emergency-reported-at-waste-isolation-pilot-plant
4. www.nytimes.com/2014/02/10/science/earth/nuclear-waste-solution-seen-in-desert-salt-beds.html
5. www.ucsusa.org/assets/documents/nuclear_power/ucs-nrc-fire-regulations-5-2-13.pdf
6. www.nrc.gov/reading-rm/doc-collections/commission/tr/2008/20080717.pdf
7. www.wipp.energy.gov/pr/2014/2-16-14_Event%20Release-3.pdf
8. www.reuters.com/article/2014/02/16/us-radiation-leak-newmexico-idUSBREA1F06Y20140216
9. www.beyondnuclear.org/nuclear-reactors-whatsnew/2013/12/11/nrc-and-industry-downplay-significance-of-arkansas-nuclear-f.html

Cameco downgrades uranium expansion plans

Cameco, one of the world's biggest uranium miners, has cut its growth plans and warned that the "stagnant, over supplied short-term market" was not going to improve any time soon. Cameco had planned to increase uranium production by 50% over the next four years but now says it has "moved away from our production target of 36 million pounds by 2018".[1]

"Market challenges have persisted since early 2011 and we expect they will continue for the near to medium term," Cameco said, adding that buyers had no problem accessing uranium and their refusal to buy at current prices had created a "cordial stalemate" between buyers and sellers. "Utilities are well covered under long-term contracts for the time being and are not under pressure to buy. Similarly, existing suppliers appear reluctant to enter into meaningful contract volumes at current prices," the company said.[1]

Cameco says it expects its uranium exploration expenses will be about 35-40% lower in 2014 compared to last year due to "decreased activities in Australia" and "a general reorganization of our global exploration portfolio".[1]

"It's a depressed market at the moment," according to Stefan Ljubisavljevic, an analyst at Macquarie. "Demand growth is very sluggish and inventories are high." Nicolas Carter, senior vice-president at Ux Consulting Company, estimates that costs for close to half of global production are above the current price. However in a recent report Morgan Stanley said that the Paladin and Cameco cutbacks – when added to output reductions by other mining groups – are big enough to start rebalancing the market, and that the spot price of uranium may have "found a floor".[2]

1. www.cameco.com/media/news_releases/2014/?id=771
2. www.ft.com/intl/cms/s/0/ac75c104-93f4-11e3-bf0c-00144feab7de.html

US: fine and probation for former Indian Point manager

A former chemistry manager at a nuclear power facility was fined $500 and sentenced to 18 months' probation on January 16 for engaging in deliberate misconduct. Daniel Wilson pleaded guilty to felony charges of fabricating chemical test results regarding diesel fuel used to power emergency generators at the Indian Point nuclear power plant. He had worked at the plant from 1983 to 2012 and was the chemistry manager when the misconduct occurred.

The plant is required to shut down if particulate matter in the diesel fuel exceeds the Nuclear Regulatory Commission limit and cannot be corrected within seven days for primary tanks and within 30 days for its reserve tank. In three separate instances in 2011, fuel samples tested in excess of the NRC limit. Wilson entered fabricated results that were below the NRC limit so that Indian Point would not have to shut down.

www.powermag.com/former-nuclear-plant-supervisor-sentenced-for-falsifying-records/

Kazakhstan still largest uranium producer

Kazakh uranium production continued on an upward trend in 2013. The country retained its place as the world's leading uranium producer with over 38% of global output. According to year-end figures released by national atomic company Kazatomprom, national production was 22,500 tonnes of uranium (tU), up from 20,900 tU in 2012.

In 2012, Kazakhstan produced the world's largest amount of uranium — 36.5% of world supply, followed by Canada with 15% share and Australia with 12%.

Kazatomprom's own production was 12,600 tU in 2013 - about one-fifth of total world production. Of Kazakhstan's 17 mine projects, five are wholly owned by Kazatomprom and 12 are joint ventures with foreign equity holders. Almost all of the country's uranium operations employ in situ leach (ISL) mining.

Kazatomprom is the national atomic company set up in 1997 and owned by the Kazakh government. It controls all uranium exploration and mining as well as other nuclear-related activities, including imports and exports of nuclear materials.

Last year, Kazakhstan put a hold on all projects to increase uranium output following a slump in prices. "We've put the brakes on implementing uranium output expansions," said Vladimir Shkolnik, CEO of Kazatomprom. "The same goes for other elements of the nuclear-fuel cycle."

www.world-nuclear-news.org/ENF-Kazakhstan-tops-uranium-league-2701147.html

http://www.timesca.com/index.php/m-news-by-category/business-and-market-news/13053-kazakhstan-remains-the-worlds-largest-uranium-producer

Australia: Walkatjurra Walkabout – Walking for Country

Walkatjurra Walkabout is a celebration of Wangkatja country in Western Australia, a testament to the strength of the community who have fought to stop uranium mining at Yeelirrie for over 40 years, and a chance to come together to continue share our commitment to a sustainable future without nuclear. This year's Walkabout will take place from April 23 to May 26.

w: www.walkingforcountry.com
p: Marcus Atkinson 61 8 400 505 765
e: walk4country@gmail.com

Australia: Radioactive Exposure Tour

Each year, Friends of the Earth in Australia hosts a 'Radioactive Exposure Tour' or radtour. Travelling from Melbourne, this year's radtour will stop in Adelaide and Port Augusta, to meet some of the women involved in a successful campaign against a planned nuclear waste dump.

At Woomera we'll hear a history of the British atomic tests of the 1950s and 60s from nuclear veteran and whistleblower Avon Hudson. We'll travel through Kokatha and Arabunna country, visit the Olympic Dam uranium mine and spend time with Arabunna elder Uncle Kevin Buzzacott.

We'll witness sunset over Lake Eyre and the unique and fragile ecosystems of the Mound Springs (desert oases fed by the underlying Great Artesian Basin), which have been devastated by the colossal water usage of BHP Billiton's Olympic Dam uranium mine. Back on the Stuart Highway we'll abandon the bitumen to visit Yami Lester, a Yankunytjatjara man who was blinded by the British nuclear tests in the 1950s.

As we continue north to Alice Springs we'll stop by Pine Gap to consider the Australian government's complicity in the US war-machine and the outdated notion of "extended nuclear deterrence".

The radtour will travel all the way to Tennant Creek in the Northern Territory, to meet and support Aboriginal Traditional Owners resisting a national radioactive waste dump on their land at Muckaty. The strong fight against the waste dump has been successful for over seven years and in June 2014 their case will be heard in the Federal Court.

Along the way participants will get to experience affinity groups, desert camping, and vegetarian cooking ... not to mention some of the most stunning and ecologically significant environments in Australia!

International participants are welcome.

e: radexposuretour@gmail.com
f: https://www.facebook.com/events/260290220795029/?fref=ts
w: www.acecollective.org/radioactivetour.php

www.foe.org.au/anti-nuclear/issues/oz/radtour

US: Energy Department agrees to improve Hanford waste management

The US Department of Energy (DoE) has signed an Agreed Order to improve waste management practices at Hanford and better align those practices with the Washington Department of Ecology's (WDE) requirements to comply with state dangerous waste regulations. DoE agreed to a penalty of US$261,000 (€190,000).

WDE identified violations during two inspections in 2011 and 2012. The Agreed Order requires DoE to make a number of changes, including:

- More immediate notification to WDE when there are spills or other incidents.
- Prompt response to incidents when they happen.
- Better reporting on the cause of violations and the corrective actions taken to prevent future incidents.
- Changes in sampling and identifying the chemical nature of stored wastes.
- Proper management of waste containers.
- More frequent inspections covering more features of stored wastes and storage buildings.

www.keprtv.com/news/hanford/Energy-Department-agrees-to-improve-Hanford-waste-management-241883991.html

Fukushima: The Story of a Nuclear Disaster

Fukushima: The Story of a Nuclear Disaster is a definitive, scientific retelling of what happened at Fukushima. The book is authored by two Union of Concerned Scientists staff members, nuclear engineer Dave Lochbaum and physicist Edwin Lyman, and award-winning journalist Susan Stranahan.

The book draws on first-hand accounts, as well as technical records and media coverage, to recreate the events preceding, during, and after the March 2011 triple-disaster. The authors explain how the disaster happened and how it could have been averted, profiling the people who went to heroic lengths to try to take control of a runaway catastrophe.

The book provides a clear-eyed look at the Japanese regulatory regime that helped make the disaster all but inevitable, and makes a strong case that US oversight is plagued by the same complacent attitude and undue industry influence.

"Fukushima wasn't a 'Japanese' nuclear accident," said Lochbaum, a nuclear engineer who worked in the industry for 17 years before joining the Union of Concerned Scientists. "It was an accident that happened to occur in Japan. Japanese and U.S. regulators share the same mindset that severe, supposedly 'low probability' accidents are unlikely and therefore it is not worth the time and money to protect plants from them."

Fukushima: The Story of a Nuclear Disaster

New Press

US$27.95

http://thenewpress.com/index.php?option=com_title&task=view_title&metaproductid=1897

For a 20% discount from New Press, use the code: FukushimaBook

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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