# NUCLEAR MONITOR

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

wise
World Information Service on Energy
founded in 1978

NUCLEAR INFORMATION & RESOURCE SERVICE
www.nirs.org

JULY 9, 2010 | No. 713


## 2010 NUCLEAR-FREE FUTURE AWARDS

**Front-line anti-nuclear visionaries from Russia, Africa, France and the U.S. are to receive a unique, world leading award, and expose hidden truths about widespread human and environmental destruction by the nuclear industry.**

**(713.6065) Nuclear Free Future Award** - At its root, the use of nuclear energy violates human rights by devastating the lives and homelands of indigenous people around the world. Uranium mining and processing and its toxic waste products are and have for decades been the direct cause of radioactive contamination, and implicated in various cancers and other debilitating diseases; Chernobyl-style accidents aside. It's an unsustainable and unconscionable situation when only 2.5% of the world's total energy comes from nuclear sources. Yet few people understand or ever question where nuclear energy comes from.

The Nuclear-Free Future Awards will honor five 'non-nuclear' champions.
* The African Uranium Alliance: Visionaries from Niger, Tanzania, Namibia, Malawi, Cameroon and South Africa stand up and say No to uranium mining,
* Oleg Bodrov: A Russian scientist goes against the nuclear mainstream,
* Bruno Barrillot: one activist in France is the father of a nuclear testing victim compensation law,
* Martin Sheen: A noted Hollywood actor raises anti-nuclear consciousness,
* Henry Red Cloud: A bison farmer and promoter of solar energy. He is the fifth generation grandson of a famous Oglala-Lakota Chief Red Cloud, who, in 1870, was the first Native American to speak at the Great Hall of Cooper Union.

**A circle of history will close.**
Three laureates will receive US$10,000 (8,000 euro) each to carry on their efforts' and will tell their front-line stories to the audience in Cooper Union's Great Hall September 30th at 7 p.m. and to podcast listeners tuning in from around the world. Co-founder Claus Biegert says about the upcoming event: "We want and deserve a world that's safe and sustainable. The heroic people we recognize this and each year with our Award are spreading the true story and leading the way to this much wiser future. It's time to cut through the politics; take personal responsibility; and tell our leaders this nuclear state of affairs that sacrifices so many innocent lives and precious parts of our natural world is unacceptable."

Founded in 1998, and based in Munich, Germany, the Nuclear-Free Future Award (NFFA) provides vital recognition and financial and moral support for individuals, organizations and communities around the world working valiantly to achieve a peaceful, unharmful future free of nuclear energy, nuclear weapons and uranium mining. An independent, non-profit group, the NFFA works closely with The Alternative Nobel Prize among others, and has been called by Berlin newspaper taz "the most important antinuclear award in the world." Each year's laureates, from grass-roots activists to enlightened politicians, are selected by an international jury.
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## MONITORED THIS ISSUE:

# MORE AND MORE QUESTIONS ABOUT THE EPR

**On the risk of sounding like a broken record: the French nuclear flagship the EPR continues to be troubled with additional costs, delays and doubts. In France and Finland the EPR construction is further delayed and AREVA added 400 million to its provisions for the reactor under construction in Olkiluoto, resulting in a downgrading of the company's profitability.**

**(713.6066) Greenpeace International** - On 6 July 2010, the French newspaper Le Figaro posed three pressing questions about the EPR (European Pressurized-water Reactor): Is the EPR too complex? Is the EPR too expensive? Is the EPR exportable? In short the answers are: yes, the EPR is complicated to build, which makes construction expensive and the EPR difficult to sell in emerging markets. The newspaper states that EDF, the French utility building the EPR in Flamanville, France, is expected to announce a delay in construction of about 2 years. The construction started in 2007 and was originally scheduled to be finished within 4.5 years. According to an insider, the two-year delay is a low estimate, "which is essential to make public: all departments concerned within the group know that this major project is faced with numerous technical obstacles" [1].

The Flamanville story is following the same lines as Olkiluoto-3, the EPR under construction in Finland. In the beginning of June 2010, AREVA presented a new timetable for the completion of Olkiluoto-3, stating that "most of the works will be completed by the end of 2012" [2]. Since commissioning of the plant will be earliest six months after completion, operation would not start before June 2013. The total building time since start of construction in July 2005 has now doubled to more than 8 years.
A completion date of the end of 2012 is looking extremely optimistic. The most challenging phases of construction are still underway or to come, including the installation of heavy components, the design and installation of computer systems, and the final testing and licensing.

On top of that, in the case of Olkiluoto-3, the start-up time may be significantly longer than six months, especially as it is a first-of-a-kind project. The last pressurized water reactors (PWR) built in Europe, at the Temelin nuclear power plant in the Czech Republic, took over a year before the completed reactors were able to commercially operate at full output (in the early 2000s). The Temelin-1 reactor took even 18 months to start full commercial operation. Connecting major components, setting up cable connections (thousands of kilometers of cables were involved), debugging of digital control systems, and tuning up the reactor turbines all proved enormously difficult and time consuming.

## Finnish parliament votes for more nuclear.

On 1 July 2010, the parliament in Finland chose to ignore the majority of the Finnish people, who according to polls oppose new nuclear power, and voted in favor of a government decision to give two political permits for new nuclear reactors. This political permit opens the way for two nuclear companies TVO and Fennovoima to plan reactors, call for vendors, try to secure financing and later apply for construction permits. Actual new reactor projects are still far away. The biggest hurdle will be the investment decisions, expected in 2012. Both TVO and Fennovoima still have various reactor designs on the table.
The debate in the Finnish parliament was not about energy arguments. In a dirty political game the decision was influenced by behind the scenes discussions and special interest groups anticipating the upcoming national elections. Finland has no need for new reactors; energy efficiency measures in combination with available sustainable energy sources can easily cover the energy demand.

**Money troubles**
On 24 June, AREVA was forced to announce another 400 million Euro provision to cover the additional costs of building the Olkiluoto-3 reactor [3]. This provision is on top of 2.3 billion Euro provisions put aside in previous years and brings the current estimated cost overrun to 2.7 billion Euro. The initial cost of the project was 3.2 billion Euro, hence the total bill is now approximately 6 billion Euro. It is important to note that this 400 million Euro extra loss is assuming Olkiluoto-3 startup late 2012, while in reality this will not be before mid 2013.

While the rocketing costs of the Finnish EPR have dragged down AREVA's results for years, this is the first time that they have sent the company into the red. The company reported an operating loss for the first half of 2010. In 2009, AREVA's reported operating income was just 97 million Euro. The company's financial health suffers thanks to the Olkiluoto-3 project, while it struggles to build up its reserves for planned future investments. And most probably the latest provision for Olkiluoto-3 cost overruns will not be the last.

A few days after AREVA's provision announcement, Standard & Poor's downgraded the company to a 'BBB+' rating, citing continued weakened profitability [4]. The S&P credit analyst announced: "Depressed profitability at France-based nuclear services provider AREVA is being further strained by the recently announced additional provision of €400 million (US$491mn) for the OL-3 [Olkiluoto-3] Finnish reactor." Also AREVA's ongoing fight with EDF about the uranium enrichment plant Georges Besse in France is seen as a potential threat to the company's profitability. The long and short-term credit ratings on AREVA are lowered from 'A/A-1' to 'BBB+/A-2'. S&P expects AREVA's

profitability "will continue to be depressed over the next couple of years", and its operating performance will continue to be severely affected by cost overruns related to Olkiluoto-3.

**Sources:** [1] www.lefigaro.fr/societes/2010/07/05/04015-20100705ARTFIG00618-nucleaire-retards-a-repetition-pour-l-epr.php
[2] www.areva.com/EN/news-8422/olkiluoto-3-project-nuclear-operation-to-start-end-of-2012.html
[3] http://af.reuters.com/article/idAFLDE65M2EJ20100623
[4] www.proactiveinvestors.co.uk/companies/news/18234/sp-downgrades-areva-on-weakened-profitability-18234.html
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# CHERNOBYL RESTRICTIONS FOR SHEEP CONSUMPTION ENDING IN SCOTLAND; NOT IN WALES

**Nearly a quarter of a century after the nuclear reactor at Chernobyl in the Ukraine exploded and spewed radioactivity across the world, it has finally stopped making Scottish sheep too "hot" to eat. In Northern Ireland restrictions ended in 2000. In Wales however, the restrictions are far from over.**

**(713.6067) WISE Amsterdam** - For the first time since the 1986 Chernobyl accident, levels of radioactive contamination in sheep on all Scottish farms, 2300 kilometers to the west, dropped below safety limits, enabling the Food Standards Agency (FSA) to lift restrictions. Controls on the movement and sale of sheep have been in force since after the explosion in 1986. Peat and grass in upland areas of Scotland were polluted with radioactive caesium-137 released by the reactor, blown across Europe and brought to ground by rain. This grass was eaten and recycled by sheep, and has persisted in the environment far longer than originally anticipated. In 1987, the restrictions covered 73 farms across southwest and central Scotland.

In April 2009, there were still 3,000 sheep at five farms under restrictions. But now, according to an announcement from the FSA, there are none.
An FSA spokesperson said: "Over time, radioactivity levels have continued to decline, and, as of February 2010, only two areas in Scotland remained under restrictions. Of these, one area has been taken out of agricultural use, so is no longer being used to farm sheep, and the other area was removed from restrictions on 21 June 2010."

A maximum limit of 1,000 becquerels per kilogram (Bq/kg) of radiocaesium is applied to sheep meat affected by the accident to protect consumers. This limit was introduced in the UK in 1986 (after Chernobyl), based on advice from the European Commission's Article 31 group of experts.
Under powers provided in the Food and Environment Protection Act 1985 (FEPA) Emergency Orders have been used since 1986 to impose restrictions on the movement and sale of sheep exceeding the limit in certain parts of Cumbria, North Wales, Scotland and Northern Ireland. The Emergency Orders define geographical areas, often termed 'Restricted Areas', within which the controls must be followed. Under the FEPA Orders, sheep with levels of contamination above the limit are not allowed to enter the food chain. Initially these restricted areas were large, but have reduced substantially as levels of radioactivity have fallen, with all restrictions lifted in Northern Ireland in 2000.

When the disaster happened in April 1986, some 9,700 farms and more than four million sheep were under restriction across the UK after downpours rained radioactive material onto land across northern Europe.

Hundreds of Welsh farms continue to bear the brunt of UK sheep movement restrictions.
Glyn Roberts, vice-president of the Farmers' Union of Wales, said the continuing restrictions were an inconvenient but necessary evil. The farmer said: "I remember watching the disaster happen on the television but we never had any idea the rain falling on us in the days after would affect us as well. The disaster was so far away that we never thought it would have an impact in Wales and push some farms to the brink."
It was only days later, when the Government announced the ban on the sale and movement of sheep – that had grazed on plants grown in radioactive soil across large swathes of North Wales, Cumbria and Scotland – that it hit home.

In May (2010), 369 UK farms were still restricted in the way they were able to use land and rear sheep because of fallout. The vast majority of the restricted farms – 355 – are in Snowdonia, Wales, involving 180,000 of the 190,000 affected sheep. It is understood the restrictions could continue for many years to come.

**Sources:** Herald Scotland, 4 July 2010 / Wales online, 10 May 2010 / Food Standard Agency: http://www.food.gov.uk/science/surveillance/radiosurv/chernobyl/
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# HAS SWEDEN LEARNED TO LOVE NUCLEAR POWER?

**Outside Sweden, the decision to allow what the British call "new build" that was taken in the Swedish Parliament June 17 is widely thought to mean that an eminently "green" Sweden has accepted nuclear power as part of the recipe to "save the climate". Inside Sweden the implications are far less clear. Even the ruling coalition has two contradictory versions of what the decision means!**

**(713.6068) WISE Sweden** - For one thing, the decision was taken with a margin of only two votes. Had MPs been able to vote their conscience – the party whips were lashing on all sides – the Government's Bill may not have passed at all. The opposition has said that if they win the election this Fall, they will tear the decision up. So, talk of "Sweden" having changed "its" mind about nuclear is a very misleading generalization.

Nuclear Monitor 's editors have asked for an assessment of what has happened, what it means, and what is likely to happen when the dust has settled. Even the first part is complicated. Answers to the other two questions tend to depend on who you are talking to. All I can do is report different assessments

As an issue, nuclear power in Sweden continues to split both parties and coalitions rather than differentiate between them. Consequently, few political leaders can afford to be categorical. It is also important to understand that the parliamentary system seems to be tending toward a two-party system: the ruling Conservative-led 'Alliance' vs. the so-called 'Red-Green coalition' (see box '*Understanding Sweden*').

The two bills voted into law had three elements:
1. *The existing nuclear plant may be replaced by new reactors* – no more than ten in number, but each producing significantly more electricity – in the three communities where reactors currently operate. No new reactor can be put on line unless an existing reactor is permanently retired. Laws calling for total phase-out of Sweden's nuclear program in 2010 and a ban on planning and construction of new reactors have been scrapped.

## Understanding Sweden: Deep background

Nuclear energy has been a divisive political issue in Sweden from its first beginnings in the 1960s. But until the late 1970s Swedish energy policy was largely an internal matter within the ruling Social Democratic Party. From the 1950s into the 1970s, Sweden also had a secret defense agenda that included a nuclear bomb. But, in fact, the Social Democrats were divided on the issue of nuclear, and the shock wave following the 1979 partial meltdown at Three Mile Island in the USA, led to a decision to let the people, not the parties, decide the future of nuclear energy. Six of a planned 12 publicly financed reactors were nearing completion, but public opinion had clearly shifted away from nuclear.
A national referendum was held in 1980. It was a strange affair. The people could vote for one of three alternatives:.
Linje 1 (Conservatives): Continued reliance on nuclear energy. No limits.
Linje 2 (Social Democrats and Liberals): Continued expansion from 6 to 12 reactors, followed by a gradual phase-out of all 12, as renewable sources of energy became available.
Linje 3 (Center Party, Christian-Democrats, Left): No to nuclear: stop construction and decommission the existing 6 reactors as soon as possible. (The Green Party did not yet exist.)
The Yes-but-No alternative got most votes. Linje 1 got only 18%. There were dissidents in all parties; not even the Conservatives were totally unified.

Shortly after the referendum Parliament passed a law that envisaged a gradual phase-out of the nuclear program. All 12 reactors would be taken off line by 2010. Only two have been decommissioned so far.
Sadly, the main legacy of the referendum was a bitter polarization of opinion – which to some extent has dampened political interest in renewables as alternatives.

**Times change.** The political front lines on energy policy today are quite different from those in 1980. Today, Sweden is governed by a Conservative-led "Alliance" in which Center, Liberals and Christian-Democrats participate. A recent change of course on the part of the Center Party leadership made it possible for the Alliance to introduce the two Bills that were voted into law June 17. Many Center voters are still 'in shock'; how they choose to vote in this year's election may decide the fate of the Alliance.
The three Opposition parties -- Social Democrats, Greens and Left -- are running on a common platform that includes a call for phase-out of nuclear. Whereas the party leaders are agreed, the Social Democratic and Left parties have many dissidents, who are more worried about unemployment than 'sustainable energy solutions'. In Sweden there is, namely, a common belief that nuclear energy means cheap electricity, and cheap electricity means jobs. Finally, the fact remains that the Social Democrats were responsible for the failure to phase out nuclear in the twenty-odd years they ruled since 1980. Has the party changed its stripes?

2. The *insurance requirement* for licensed operators has quadrupled from 3 billion Swedish Krona to 12 billion SEK (US$1.6 billion or 1.2 billion euro). This part is to take effect August 1.
3. Owners of nuclear power reactors will have *unlimited financial liability* for the consequences of nuclear accidents. Sounds good, but there are limits -- more below.

A fourth point, a ban on public subsidies, direct or indirect, surfaced when the Parliamentary committee responded to a motion filed by Sven Bergström, Center Party (see below).

No commitment to renewables – described by the Minister for Energy on June 17 as "the most ambitious in the world" – was mentioned in the bills.

**How we got here**

The Alliance was able to win the last election (2006), thanks in part to a pledge not to embark on any new policy regarding nuclear energy. The purpose of this pledge, repeated in the Cabinet's program declaration, was to keep the Center Party's voter-base intact by neutralizing nuclear energy as an issue.

In February 2009 the Alliance parties reached an agreement, whereby phase-out would be abandoned and old reactors might be replaced with new. At the same time, a commitment to renewable energy sources would be written into Alliance energy policy. The agreement was possible thanks to a reversal of policy in the Center Party. They have traded their once firm opposition to nuclear power for Alliance support for renewables – which, critics say, would have been given, anyway. After all, even the most nuclear-friendly politician knows the value of 'greenwash'.

The government introduced its Bills on March 23 -- ironically, on the day of the thirtieth anniversary of the 1980 referendum. Swedish parliamentary procedure then gives the parties time to file motions on a Bill; the motions are referred to the relevant committee, which review the Bill in the light of the motions. The (possibly amended) Bill then is put to a vote.

Three motions were filed. The Alliance moved to adopt the Bills; the Red-Green coalition moved to reject them. The third motion was filed by Center Party MP Sven Bergström, who had declared his opposition to the new party line. He was ostensibly one of four dissidents among the Alliance parties' MPs. His demands:
1. The Government should postpone rescinding the current ban on new reactors until 2011. After all, the Alliance had pledged not to change energy policy during the current term of office.
2. The Government should be more specific about the agreed-on principle that "no subsidies, direct or indirect" will be extended to new nuclear reactors.
3. The Bill needs clarification on the question of liability. Power companies should, as in Germany, bear "unlimited liability" for any damage, including impaired effects, resulting from nuclear accidents that occur in their facilities.

The first two points were agreed to; the third, handled by another committee, took more time and hardly resulted in anything approaching the German law. Bergström declared his satisfaction and swung 'round to support the Bills.

He admits that his motion was drafted "in consultation with" the party leadership, and in a newspaper interview May 19 he related how some of his conscience-torn Center colleagues had come and congratulated him: "Now it will be easier for them to vote Yes," he said. In all fairness, Bergström may be credited with having revived the ban on public subsidies. Nonetheless, the prime purpose of the motion appears to have been to secure passage of the Bill and to pacify those Center voters who have trouble swallowing the new party line.

Bills 2009/2010:172 and 173 were put to the vote on June 17. Two Center dissidents followed their conscience and voted No. The Bills were passed with a margin of two votes. It is fair to say that the Bills voted into law June 17 are a new attempt by the Alliance parties to neutralize the issue in time for the election this coming September. But, is Center's voter-base still intact this time 'round?

**Bones of contention**

*Public subsidies*

The original agreement on energy policy among the Alliance parties included a ban on public financing of new reactors. The Bill put before the Parliament referred to that agreement, but did not actually include the ban among the amendments the new law would entail. This 'detail' resurfaced in the parliamentary committee's treatment of the above-mentioned motion filed by Sven Bergström. The committee writes: "*As the concept, 'subsidy' does not always have a precise definition, the Committee sees some value in a clarification by the Government of what is intended in this particular case. The Committee recommends that Parliament unequivocally state as its opinion, that public support to nuclear energy cannot be counted on.*" So voted the Parliament. The Committee, for its part, instructed the Government to clarify its position.

But, what exactly does "*cannot be counted on*" mean? How broad, how strong a ban is it? Does it mean (A) Under no circumstances will public funding ever be extended to nuclear power projects? (B) The present Government and Parliament will not spend public money on such projects? or (C) Any consortium that plans such a project will have to present an economic plan that covers all costs from other sources, but in the event of a financial emergency public funding might be made available?

Secondly, what is meant by "public support"? The current Finnish project at Olkiluoto offers a regular catalogue of kinds of subsidies, overt and covert. Has the Parliament voted to rule out credit guarantees? For example.

At this writing neither question has been answered. Moreover, most observers assume that the ruling would apply only to *Swedish* tax money, that the door remains open, should other governments wish to participate.

"*Unlimited liability*"

First of all, it should be noted that "unlimited liability", as used here, is a narrow legal term. I quote from the Bill (section 7.1, p 53): "*An unlimited liability*

*means ... only that the legislator has not set any fixed limit to the liability.*" The previous law relating to nuclear responsibility put a ceiling on the amount an actor would have to pay, the new law does not. Ergo liability is 'unlimited'.

The former law limited a company's actual liability to the amount of its insurance coverage; its assets were protected. The new law removes that protection. Bankruptcy due to a major accident is now possible – but unlikely, in the Government's view.

In keeping with the requirements of the Paris Convention public money will be used to compensate claim-holders who have not been able to receive compensation from the nuclear reactor owner (section 7.1, p 52). This is of particular importance in Sweden inasmuch as the law holds the reactor owner liable for damages. In Sweden reactor owners are subsidiaries of the power giants, and have very limited assets of their own. The Bill explicitly exempts the power companies from liability (section 7.1, p 54):"*That liability is unlimited does not mean that the owners of a reactor owner shall be held liable to pay out compensation for damage due to a radiological accident.*"

Here, most of the debate is due not to a lack of clarity in the Bill, but to a misunderstanding of the scope of the technical term. Still, there are questionable points. Should the power giants be protected from financial liability? It is, after all, their greed that made the owners force the operators at Barsebäck (now decommissioned) to disregard a faulty valve in the cooling system for months. The problem was detected during the season of peak demand, and the owner ordered continued production. The parent company pocketed the profits. Problems like this will continue as long as those who have a profit interest are held 'blameless'.

The Swedish Society for Nature Conservation urges that nuclear power companies be held fully liable for any damage their reactors cause. Nonetheless, the Bill is an improvement over the previous law. Greater liability will hopefully mean a sharper focus on safety issues, the SSNC concludes.

**What next?**

The new law limits the number of Swedish reactors to ten, but capacity might increase 3- to 4-fold in each. Will the new law actually result in ten new Swedish reactors? Will it result in any, at all?

Perhaps the only way to describe the outlook is to present a spectrum of comments as to the consequences of the vote. Let us start with the industry itself.

OKG, owner-operator of the three reactors at Oskarshamn, is already at the drawing boards. Their oldest reactor is ready for retirement, and the change in policy has been long awaited.

The Alliance has voiced two diametrically opposed assessments:
1. The Liberal Party is now Sweden's most nuclear-friendly party. Liberal spokesman Carl B. Hamilton sees the vote as a breakthrough long overdue. No longer will 'policy' stand in the way of technological development. Hamilton is highly critical of the arbitrary deadlines and priorities that have kept nuclear power in Sweden from developing as it has in other countries, like France. "Finally! The door stands open!" Glut is no problem, not when cables connect Sweden with the rest of Europe. Investors are sure to step forward; nuclear is a money-maker. The only clouds on Hamilton's horizon are interest rates. Unless interest rates remain low, financing may prove difficult.
2. All along, Center Party leadership (and MP Sven Bergström) has claimed that lifting the ban on 'new build' means nothing. The negative incentives that increased financial liability implies will only make nuclear even less attractive to investors. And where has nuclear energy ever been built without massive public subsidies? Just look at the Finnish reactor at Olkiluoto!

The Center Party is also hard-pressed to show environmental gains. The party has two key Cabinet posts: Industry and Energy. Both ministers stress that the Alliance has committed to public investments in renewable energy, notably, bio-fuels. Maud Olofsson, the party leader and Minister of Industry, goes so far as to say that Center's backing off on nuclear was necessary in order to break a decades-long deadlock and get that commitment from other Alliance parties. There are two problems here. The gains, especially in wind power, the Ministers point to were made before the party's about-face; the gains they expect were not included in the Bill, and the "most ambitious commitment in the world" has yet to see the light of day. Secondly, there is the problem of glut on the electricity market. How may it be expected to impact on industry's willingness to invest in in-house co-generation and energy efficiency? How will it affect the market for electricity from renewable sources?

Maria Wetterstrand, MP and spokesperson for the Greens, deplores what the party considers "the most far-reaching energy policy decision that the Parliament has ever taken. It can lead to a dependency on nuclear power for the next 100 years and will have consequences for 100,000 years" (Riksdagen, press release June 17).

Jonas Sjöstedt, former MEP for the Left, worries that continued dependence on nuclear energy will heighten pressures to start mining uranium in Sweden – which would have disastrous consequences for the environment. He also points out that any ban on subsidies can easily be circumvented (http://jonassjostedt.se/7p=1789).

The Red-Green Opposition have declared that if they win the election they will tear up the June 17 decision and reinstate the ban: "Nuclear is a dangerous technology. It should be phased-out successively -- at a pace consonant with high employment, welfare and the ability of renewables to meet Sweden's energy needs" (Riksdagen, press release May 27).

There has been some discussion in Danish environmental circles of the impact overproduction of electricity in Sweden may have on Danish wind power. The key factor is whether or not glut leads to falling prices. This may not

be the case, inasmuch as Sweden plans to produce for the European market and has no reason to give any discounts.

**To sum up...**
The most uncertain factor here in Sweden is the outcome of the September election. As things stand today public sympathies are fairly evenly divided between the two blocs. But, two of the Alliance parties are dangerously close to the 4% threshold that qualifies parties for representation in Parliament. One of the two is Center. If either of the parties sinks under the threshold, the Red-Green coalition will most likely win.

Does the new policy mean that Swedish nuclear is on the rebound? Yes and no. Yes: The phase-out has been abandoned, but then de facto the deadline has been abandoned for many years. At the turn of the century, who could expect all eleven of the remaining reactors to be taken off line by 2010? One might have hoped for more than just one (Barsebäck 2 in 2002), but all eleven?

No: Sweden is divided on nuclear power. Center has shown where its loyalties lie. Voters who don't like nuclear power can only vote Red or Green this coming September. On the other hand, just how the Red-Green coalition will perform once in office, is hardly a sure thing.

**Source and contact:** Charly Hultén at WISE Sweden

# KINGS CLIFFE AND THE LOW-LEVEL WASTE CRISIS IN U.K

**Kings Cliffe is a beautiful village, built of the gold-colored local stone typical north Northamptonshire in the English East Midlands. It has a population of 2000, including agricultural workers and also professionals who can commute to the rapidly expanding city of Peterborough. The village is about the same distance - 10-20 km - from two market towns Stamford and Oundle and the industrial town of Corby, which up to 1979 was a major center for steel making. North Northants, however, has joined West Cumbria (in the English Lake District) as epicenters for a struggle over nuclear waste in Britain.**

**(713.6069) East Midlands CND** - Concern centers on the 'East Northants Resource Center', a curiously named landfill site on the outskirts of Kings Cliffe already certified to receive hazardous waste. It is owned and run by Augean plc, which has seven treatment and recycling centers and over two hundred employees nationally but no record of handling nuclear material. The group offers 'to help you to dispose of your waste safely', using 'commercial and compliance led solutions in a complex, legislation driven market'. It asserts that 'best practice is considered normal practice'.

In July 2009, it applied to the planning authority, Northamptonshire County Council, for permission to receive 250,000 tons of low-level nuclear waste each year. Since 2007, companies are permitted to use landfill sites for the dumping of 'low level' nuclear waste (with radioactive content of not more than 4GBq/t (4 Giga-becquerel per ton –1000kg) of alpha radiation and not more than 12 GBq/t of beta/gamma radioactivity) and 'very low level nuclear waste' (complexly defined in relation to volume and permitted amounts of tritium and carbon-14 especially).
Apart from the local authority, they must also obtain permission from the Environmental Agency, the regulative body under the 1993 Radioactive Substances Act. In practice once permission is given, on the basis of a radiological and environmental assessment by the company itself, the system is largely 'self-regulating'.

Up until now, low-level waste has been held temporarily where it is produced or transported to the low-level depository at Drigg, Cumbria. Drigg has now almost reached full capacity, and consignments of waste are being refused there. Yet large amounts of low (and high and intermediate) waste will be produced from the decommissioning of the first generations of nuclear power stations and an alternative to Drigg is also urgently required by industrial, medical and military producers of waste. There is therefore a desperate need to persuade local populations to receive large amounts of irradiated cement, steel and organic materials, containing different radio-nuclides, each with different half-lives and posing rather different environmental dangers.

The waste crisis is accompanied by conflict over the building of up to 10 new nuclear power stations. The Blair and Brown governments, closely allied to the nuclear industries, speeded up the privatization of the nuclear cycle and energy supply. Nuclear was promoted as 'solution' to climate change and energy security. The new Conservative/Liberal-Democrat coalition government is less keen on nuclear. Indeed the Liberal Democrats probably benefitted electorally from their anti-nuclear stance in the May election. Contradictions within the government are being handled by reassurances to the nuclear companies and fierce warnings that there will be 'no subsidies'. Since paying for the massive costs of decommissioning and waste storage is the key element in subsidies, struggles like those in Kings Cliffe and West Cumbria are critical. If legacy waste can be stored only by spreading it across the country, what will happen to waste from an expanded nuclear industry? There is also pressure on the receiving companies to decrease the costs of storage.

Kings Cliffe is notable too because of the villagers' model campaign against Augean's plans. They have explicitly set local anxieties within the context of national and European policies and the current scientific debates, citing for instance the principle of 'proximity to source' and the dangers of transporting waste across large distances. They use the contemporary media of Facebook, websites, e-mail lists and power-point presentations, as well as old-fashioned access to local media, pressure on local politicians, placards in village windows, street demos and public meetings in village halls. A pantomime horse recently showed the frailty of Augean's security measures by frolicking in and around the dump. The decisive meeting of the Northamptonshire Planning Committee in March 2010 was attended by many citizens, with demonstrations outside and about 20 local people speaking against the proposal. Support for Waste Watchers also came from 'expert' groups, especially Peterborough Friends of the Earth (FoE) and the East Midlands Campaign For Nuclear Disarmament (CND). Even so, most commentators were surprised when the planning committee, consisting mainly of Conservative and Liberal Democrat councilors, voted unanimously to refuse Augean planning permission.

The hearing showed that the company was cutting its costs. Its technical specifications fell far behind 'best practice': no exclusion of water, plastic linings and bags, rather than concrete casing and metal drums, inadequate security and no solution to the build up of 'leachate' or radioactive water. The very rational local fear is that minute radioactive particles of different radio-nuclides will enter the atmosphere, food and ground water around the site, with effects on the local populations that will persist for aeons beyond the reach of monitoring or regulation.

The company is appealing the March decision to refuse permission. The appeal will be heard by a single Inspector in October 2010 but the government Minister responsible – who is or was a anti-nuclear Liberal-Democrat – has announced that the decision will be 'called in' – that is made the subject of a national political decision.

**Sources** include: www.augeanplc.com / The Guardian, 15 March 2010 / www.no2nuclearpower.org.uk / www.kingscliffewastewatchers.co.uk
**Contact:** Kings Cliffe Waste Watchers, Web: www.kingscliffewastewatchers.co.uk

# NATIONAL U.S. GRASSROOTS SUMMIT ON RADWASTE POLICY

**On July 5, a group of seasoned anti-nuclear activists supported by an intergenerational community "crossed the line" in Oak Ridge in protest of the ramping up of nuclear weapons production the US. The 60th Anniversary year of the destruction of Hiroshima and Nagasaki is also the 30th anniversary of the Ploughshares 8 where faith activists walked into a General Electric facility and used hammers to literally "beat the swords" – the nose cone of a nuclear weapon – to ploughshares. Some three dozen peace activists were arrested at the Y-12 nuclear weapons plant**

**(713.6070) NIRS** - The group of activists was celebrated at a weekend gathering in Tennessee along with two US based antinuclear support groups – Nukewatch based in Wisconsin and the publication The Nuclear Resister based in Arizona – both founded in 1980 and celebrating their 30 year mark as well. "Resistance for a Nuclear Free Future" drew more than 200 participants and as is typical for US anti-nuclear gatherings today was dominated by the over-60 crowd with a handful in the 40 – 60 range, joyfully laced with a contingent of youth, primarily from the growing "Think Outside the Bomb" network (see: http://www.thinkoutsidethebomb.org/ ).

While there was new information shared, the primary focus of the event was celebration of the long history of nuclear resistance activism in the US and in particular the staff of Nukewatch, The Nuclear Resister and the ongoing work of the Oak Ridge Environmental Peace Alliance (OREPA) focused on Y-12, the one site of continuous industrial-scale nuclear weapons production in the US, in Oak Ridge.

One month before, another strategic gathering of activists met in Chicago: the National Grassroots Summit on Radioactive Waste Policy. A section of the event, devoted to education was entitled "A People's History of Radioactive Waste" the balance of the Summit was peer-to-peer working groups with either a geographic or issue focus with a total of 26 peer-to-peer sessions held over three days. More than 90 people participated from 26 states resulting in seven regional working groups.

The purpose of the Summit was to initiate national-scope networking, coordination and collaboration within the US anti-nuclear and nuclear-focused communities in the wake of "destabilization" of national nuclear waste policy thanks to President Obama's intent to cancel the Yucca dump.

Since the panel appointed by Energy Secretary Chu to formulate "post-Yucca" waste policy – (a still hoped for outcome as the question of whether Obama and the Department of Energy have the authority to cancel Yucca Mountain; a question likely to go all the way to the US Supreme Court -see box) does not have a single grassroots advocate or even nuclear critic, the Summit was called in part to form a national platform to watch-dog this group. The Blue Ribbon Commission on America's Nuclear Future (official name!) is almost exclusively nuclear industry operatives – including John Rowe, head of Exelon the largest US nuclear utility and former Senate Energy Committee Chair, Pete Domenici (R-NM retired), and the head of the trade union that

would get many construction jobs.

A key function of the Summit was to reaffirm that commitment that we are one community – that we share one "backyard" and that we will stand together rather than allowing the nuclear industry to "play" us against each other. One outcome of the Summit is renewed commitment to regional collaboration and networking for community-based education, engagement and action to stop any of the pro-industry proposals that the BRC is likely to endorse. Topping the list of these bad options is reprocessing which would be a reversal of nearly 40 years of prohibition of commercial plutonium separation in the US.

Reprocessing and "centralized interim storage" of irradiated fuel (currently nearly all of this most radioactive waste is stored on the reactor site where it was generated) are somewhat interchangeable. A reprocessing site would offer a centralized location where waste would likely be stored prior to processing – and likewise, a centralized storage site might "invite" a reprocessing plant at a later date. Thus one of the strongest outcomes of the Summit was an affirmation towards the implementation of the Principles for Safeguarding Radioactive Waste at Reactors(*1). The core of this plan is to ensure that over-full fuel pools are emptied (except the hottest waste) and that dry containers are made more secure by being spread out, surrounded by earth barriers to reduce likelihood of attack, and fitted with real-time monitors. The Principles explicitly oppose making more radioactive waste and also oppose reprocessing the existing waste. This statement is the strongest consensus in the US anti-nuclear energy activist community and is supported by 283 organizations across 50 states. Two days of education and coordinated action to elevate the Principles are being planned. Hopefully international in scope, likely dates are September 29, anniversary of the terrible radioactive waste storage tank explosion in 1957 at Kyshtim and again in April on the 25th anniversary of the Chernobyl devastation.

The Summit was cosponsored by Beyond Nuclear, Clean, Guacamole Fund, Loyola Student Environmental Alliance (the event was located at Loyola University), Nevada Nuclear Waste Task Force  Nuclear Energy Information Service, and Nuclear Information and Resource Service.

(*1) The Principles for Safeguarding Radioactive Waste at Reactors can be found at http://brc.gov/pdfFiles/May2010_Meeting/Attachment%203_HOSS%20PRINCIPLES-1.pdf

**Source and contact:** Mary Olson at NIRS

## Fight over Yucca Mountain continues.

The Obama Administration announced last year it would pursue other alternatives to the Yucca Mountain repository for the countries' high level waste. In March of this year, the Department of Energy (DOE) formally moved to withdraw its application to construct the facility by filing the request with the atomic licensing board. The three-member Atomic Safety and Licensing Board ruled on June 29 that the Nuclear Waste Policy Act of 1982 does not give the Energy secretary the discretion to substitute his policy for the one established by Congress in the act. "Unless Congress directs otherwise, DOE may not single-handedly derail the legislated decision-making process by withdrawing the Application," said the board. The act requires a decision by the Nuclear Regulatory Commission on the merits of the construction permit, added the board.
A DOE spokesperson said in a statement, "The Department remains confident that we have the legal authority to withdraw the application for the Yucca Mountain repository. We believe the administrative board's decision is wrong and anticipate that the Nuclear Regulatory Commission will reverse that decision."
**www.legaltimes.com, 2 July 2010**

# IN BRIEF

**The IPPNW World Congress in Basel, Switzerland,  (August 25 – August 30, 2010) to also talk about nuclear power.**
Nuclear weapons and disarmament are still hitting media headlines. The signing of the new START (Strategic Arms Reduction Treaty) was an important step towards the reduction of global nuclear arsenals. European governments are pushing for a withdrawal of US nuclear weapons from European NATO member countries. Leading politicians of several countries are calling for active and far-reaching reductions in the numbers of nuclear weapons in the interests of world security. It was hoped for that the Review Conference of the Non-Proliferation Treaty (NPT) in May in New York would bring further concrete measures. And although this did not happen the 'Atomic Scientists' decided to set back the Doomsday Clock one minute – from 5 minutes to 6 minutes to midnight.
On the other hand, some countries want to keep the prestige of being a nuclear power and some are becoming greatly interested in acquiring such power. Thousands of nuclear missiles still exist – decades after the end of the Cold War – on high alert, ready to be launched at a moment's notice. Added to this, the interest of powerful companies in the military-industrial complex to continue building nuclear missiles is strongly influential. These companies put forward persuasive arguments for retaining the status quo through the use of intense political lobbying.
"Global Zero" is the desire of many millions of people and is also the vision of  the International Physicians for the Prevention of Nuclear War (IPPNW). Join them in sharing this vision in August at the 19th IPPNW World Congress in Basel, Switzerland. Traditionally the IPPNW only talks about nuclear weapons. This time their pre-conference programme also touches upon the

issue of nuclear energy. Take this opportunity to discuss with them the important role ”civil” nuclear energy plays in increasing proliferation risks.
**Check the programme at http://www.ippnw2010.org/**

**Italy: Regions have no say in siting nuclear reactors**. On June 30, Italy's highest court rejected an appeal by 10 Italian regions to have a say on the location of any nuclear power plants built.
Last July, the right wing majority in the Parliament adopted a law that gives extra power to the government in order to choose sites for new nuclear plants and provides the use of military forces to make its realization possible. On September 30, with the support of environmental organizations, 10 of 20 regions contested that law asking the intervention of the Constitutional Court. According to the regions the law violates the Italian Constitution by giving the government the power to decide without the consensus of local institutions. The June 30 ruling by the Constitutional Court effectively means the central government will have the final say on the site of the plants.
Nuclear power was abandoned in Italy nearly 25 years ago after a referendum in 1987. Enel and France's EDF would like to start building four nuclear power stations in Italy in 2013. Public opinion in Italy has been generally hostile to nuclear energy and local authorities had demanded a say in their approval.
**Reuters, 23 June 2010 / Nuclear Monitor 702**

**After N-Korean 'nuclear breakthrough': xenon levels, eight times higher.** Abnormal radiation was detected near the inter-Korean border days after North Korea claimed to have achieved a nuclear technology breakthrough, South Korea's Science Ministry said June 21. It failed to find the cause of the radiation but ruled out a possible underground nuclear test by North Korea, because there is no evidence of a strong earthquake that must follow an atomic explosion.
On May 12, North Korea claimed its scientists succeeded in creating a nuclear fusion reaction - a technology also necessary to manufacture a hydrogen bomb. South Korean experts doubted the North actually made such a breakthrough. On May 15, however, the atmospheric concentration of xenon - an inert gas released after a nuclear explosion or radioactive leakage from a nuclear power plant - on the South Korean side of the inter-Korean border was found to be eight times higher than normal. Nuclear fusion as cause for the Xenon-measurement is very unlikely (to say the least). To start with: the alledged fusion breakthrough supposedly took place in mid-April and the half-lives of its radioisotopes are counted in hours or days. So a measurement almost a month later is very unlike. But most important: a fusion reaction doesn’t produce fission products. Radioactive Xe isotopes, besides from a weapons test, can also be produced from operating a fission reactor with cracked fuel rods or from fission occurring in cooling water from released fuel. So possibly the higher levels could have been from built up Xe within a reactor containment vessel from an accident. A Science Ministry official said the wind was blowing from north to south when the xenon was detected and said it could have come from Russia or China, not necessarily from North Korea.
**The Associated Press, 21 June 2010 / Armscontrolwonk.com, 21 June 2010**

**Nuclear projects in Baltic Region**. On June 16, antinuclear activists with protest banners greeted IAEA head Y.Amano and Lithuanian Prime Minister A. Kubilius during their participation in the Roundtable discussion on "Regional nuclear energy projects" in Vilnius, Lithuania. Activists called to cancel development of the three nuclear energy projects in the Baltic region and to switch investments and cooperation to renewables and energy efficiency. Ostrovec nuclear power plant (Belarus), Baltic npp (Russia, Kaliningrad region) and the Visaginas nuclear power plant (Lithuania) are primary targets for the criticism of environmentalists from Lithuania, Belarus and Russia. All these planned nuclear power plants face similar problems: safety, environmental, radioactive waste management, fake plans for investment.
Later activists took part in the roundtable discussion as observers. Main issue there
was that each country was convincing others how important their nuclear project is for
the country and how good for the region. Lithuania was raising doubts about various aspects of Belarussian and Kaliningrad nuclear projects, promoting its own as "more transparent and safer".
**Email: Lina Vainius, 17 June 2010**

**U.K.: Waste costs 'not acceptable' for industry**. The nuclear industry has been heavily lobbying to change proposed charges for managing wastes from nuclear reactors. Papers released under Freedom of Information show how the French company EDF pressed the previous government to change the proposed 'high fixed cost' for managing wastes and the timetable for handing the management of wastes to the Nuclear Decommissioning Authority. The previous government made significant changes to the way it initially proposed charging companies for managing their wastes. It also agreed that responsibility for wastes should pass to the NDA after 60 years instead of the original 110 years. This would reduce the financial liabilities and costs for companies.
EDF told the government the original proposals were "non-acceptable" and made it uneconomic to develop new reactors.
**N-Base Briefing 665, 9 June 2010**

## WISE/NIRS NUCLEAR MONITOR

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

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

Receiving the WISE/NIRS Nuclear Monitor

US and Canada based readers should contact NIRS for details of how to receive the Nuclear Monitor (address see page 11). Others receive the Nuclear Monitor through WISE Amsterdam.
For individuals and NGOs we ask a minimum annual donation of 100 Euros (50 Euros for the email version). Institutions and industry should contact us for details of subscription prices.

## WISE AMSTERDAM/NIRS

**ISSN:** 1570-4629



Editorial team: Dirk Bannink and Peer de Rijk

With contributions from: WISE Amsterdam, East Midlands CND, Greenpeace International, NFFA, NIRS, WISE Sweden and Laka Foundation.

Next issue of the Nuclear Monitor (#714) will be mailed out on August 20, after a short summer break.

The "Elfi Gmachl Foundation for a Nuclear-free Future" / PLAGE-Salzburg supports the Nuclear Monitor financially.
See: http://www.plage.cc (not available in English (yet))

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