

# Nuc...*brief & link*

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NFCC Nuclear Fuel Cycle Consulting

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**United Kingdom: The National Decommissioning Authority NDA has published an assessment of the issues associated with the non-restart and restart options for the THORP plant at Sellafield.** The conclusions: There are significant cost implications in a decision **not to restart** THORP, driven by the commercial implications of existing BE and overseas LWR contracts. These costs are estimated to be in the order of several hundred million pounds. These costs would have to be met by the NDA and would be likely to prejudice the cleanup program. A number of mandatory regulatory, BNGSL and NDA **requirements must be met to enable a restart** to be considered. Separately from the considerations of potentially restarting THORP, NDA is planning to launch a **comprehensive long term spent fuel management review** in April 06 which will look at all the options for UK spent fuel including reprocessing, ongoing wet storage, dry storage in new purpose built stores and dry cask storage. **The future role of THORP in managing spent fuel will be considered as part of this review.** Assessment: [http://www.nda.gov.uk/documents/assessment\\_of\\_issues\\_associated\\_with\\_thorp\\_non-restart\\_and\\_restart\\_options.pdf](http://www.nda.gov.uk/documents/assessment_of_issues_associated_with_thorp_non-restart_and_restart_options.pdf)

**United Kingdom: The National Decommissioning Authority has published an update on the performance of the Sellafield MOX Plant.** The plant manufactures fuel from plutonium, separated from spent fuel in the Thorp reprocessing facility, and natural and depleted uranium. The SMP plant is continuing active commissioning and is in the early stages of ramp up; **as such the manufacturing processes are not yet mature.** It is producing fuel of a good quality with early production fuel performing well in reactor. For SMP to generate a positive economic impact, customer contracts must obviously be secured and delivered and to do this a ramp up of production capacity must be achieved over time with an ultimate target of around 40 t HM/yr. Ongoing assessments will determine the ramp up rates required. SMP update: [http://www.nda.gov.uk/News--SMP\\_Update\\_\(1403\).aspx?pg=1403](http://www.nda.gov.uk/News--SMP_Update_(1403).aspx?pg=1403)

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## ***NUCLEAR POLICY***

**The Canadian Nuclear Safety Commission (CNSC) released an information document entitled *Licensing Process for New Nuclear Power Plants in Canada.*** The document is the precursor to a series of regulatory documents which will be developed over the next few years and responds to

requests for guidance from governments, CNSC licensees and stakeholders on the regulatory requirements and process for licensing such facilities. Press release: [http://www.nuclearsafety.gc.ca/eng/medi\\_a/news/news\\_release.cfm?news\\_release\\_id=222](http://www.nuclearsafety.gc.ca/eng/medi_a/news/news_release.cfm?news_release_id=222) . The **documents** itself are at: [http://www.nuclearsafety.gc.ca/eng/regulatory\\_information/other/licensing\\_process.cfm](http://www.nuclearsafety.gc.ca/eng/regulatory_information/other/licensing_process.cfm). Canada's nuclear regulator does

**not have enough specialists, a problem that could delay the approval of new nuclear power plants, said Linda Keen, chief executive of the CNSC.** A growing industry and an aging work force are resulting in difficulty finding engineers and experts in fields such as **fuel physics**. "The CNSC is already experiencing difficulties in hiring staff, which could delay projects. Without more qualified people, operators will have to wait, timelines will suffer," she told a meeting of the Canadian Nuclear Association. News:  
[http://ca.today.reuters.com/news/newsArticle.aspx?type=domesticNews&storyID=2006-02-23T201820Z\\_01\\_N23225247\\_RTRIDS\\_T\\_0\\_CANADA-ENERGY-CANADA-NUCLEAR-COL.XML](http://ca.today.reuters.com/news/newsArticle.aspx?type=domesticNews&storyID=2006-02-23T201820Z_01_N23225247_RTRIDS_T_0_CANADA-ENERGY-CANADA-NUCLEAR-COL.XML)

The Nuclear Energy Institute (NEI) has published a report on the status and outlook for nuclear energy in the U.S. **The outlook for the U.S. nuclear power industry, both short-term and long-term, continues to improve. The nuclear fleet has benefited from consolidation.** Ownership and operating responsibility has shifted to large generating companies with nuclear power as a core business. The 10 largest nuclear operating companies in the United States now operate 70 of the 103 nuclear reactors. **Virtually all U.S. nuclear plants are expected to renew their 40-year operating licenses for an additional 20 years.** Since 2000, the Nuclear Regulatory Commission has approved renewal of the operating licenses for 39 nuclear units. To date, the owners of approximately three-quarters of the nuclear fleet have decided to pursue license renewal, and more are expected to follow. Concerning spent fuel and waste management NEI states:

"Although the government's delay in moving used nuclear fuel from power plant sites represents a major source of frustration, the nuclear industry is coping well with the delay by **expanding on-site storage of used nuclear fuel. It is likely; however, that additional legislation will be required to set this program back on track.** The sources of delay continue to be political, administrative and institutional. From a technical standpoint, continuing scientific investigation shows that Yucca Mountain remains a suitable site for long-term storage and disposal of used nuclear fuel. **Report:**  
[http://www.nei.org/documents/Status\\_Report\\_Outlook.pdf](http://www.nei.org/documents/Status_Report_Outlook.pdf)

**France:** The Minister for Environment, Nelly Olin has reported to the Council of Ministers about the **creation of a High Authority for Nuclear Safety**. Press release (French) and more links from:  
[http://www.asn.gouv.fr/data/information/08\\_2006\\_HASN.asp](http://www.asn.gouv.fr/data/information/08_2006_HASN.asp)

### *REACTORS, NPPs, UTILITIES*

**EDF has published its consolidated annual results 2005.** The analysts' **presentation** is at (click presentation):  
<http://www.edf.com/20407i/Homecom/Press.html>

**Germany: In conjunction with its announced takeover offer for Endesa, E.ON disclosed preliminary, unaudited results for the 2005 financial year.** E.ON grew sales by 21 percent, from EUR46.7 billion to EUR56.4 billion. **Results:**  
<http://www.eon.com/en/presse/news-show.do?id=7427>

**Australia: ANSTO has commenced cold commissioning of its new research reactor, OPAL.** This involves testing all reactor systems and equipment without fuel being loaded. During cold commissioning the reactor's designers, will check that all systems operate and perform as expected. ANSTO will then provide the Australian Radiation Protection and Nuclear Safety Agency with detailed results. Consideration of those results will be one factor in ARPANSA's decision as to whether it issues an operating license. [http://www.ansto.gov.au/info/press/2006/Cold\\_commissioning.pdf](http://www.ansto.gov.au/info/press/2006/Cold_commissioning.pdf)

### **NUCLEAR INDUSTRY**

The Nuclear Regulatory Commission is proposing **revisions to its regulations dealing with the licensing and approval of new nuclear power plants**, and will hold a workshop to discuss the proposal. The requirements are outlined in a proposed rule to clarify the interrelationships of NRC reactor licensing regulations. **Press release:** <http://www.nrc.gov/reading-rm/doc-collections/news/2006/06-030.html>

**General Atomics of San Diego, CA will provide a pre-conceptual design for a next-generation high-temperature test reactor** in Andrews County, Texas, under a teaming agreement announced today by GA and The University of Texas System, including The University of Texas - Permian Basin of Odessa, Texas. The proposed test reactor, known as the High Temperature Teaching and Test Reactor (HT3R), would be based on the next-generation high temperature helium-cooled reactor developed by General

Atomics. **Press release:** [http://www.ga.com/news.php?subaction=showfull&id=1140707586&archive=&start\\_from=&ucat=](http://www.ga.com/news.php?subaction=showfull&id=1140707586&archive=&start_from=&ucat=)

### **TRANSPORT**

**United Kingdom: The Health and Safety Executive issued a reminder to companies working with radiation** on the importance of protection control measures, including basic monitoring. The reminder follows the conclusion of a case brought jointly by HSE and the Department for Transport against specialist contractor, AEA Technology plc. At Leeds Crown Court, the Oxfordshire-based company was fined a total of £250,000 and ordered to pay £151,323 prosecution costs. The company had previously pleaded guilty to criminal charges under health and safety and road transport law, of exposing employees and subcontractors to potentially very high risks from radiation. **Reminder:** <http://www.hse.gov.uk/press/2006/e06017.htm>

### **RECYCLING, MOX**

**France: CEA has published new research results about the recycling of nuclear fuel:** Les procédés de séparation poussée des actinides (neptunium, américium et curium) ont tous été testés avec succès par les équipes du centre CEA de Marcoule, sur une dizaine de kilos de combustible usé. **Cette échelle permet d'envisager leur développement industriel futur.** <http://www.cea.fr/fr/actualites/articles.asp?id=723> The report *Séparation poussée et transmutation, comportement*

à long terme des déchets vitrifiés: 15 ans d'avancées scientifiques is at [http://www.cea.fr/fr/presse/dossiers/Separation Transmutation 15ans Recherche.pdf](http://www.cea.fr/fr/presse/dossiers/Separation_Transmutation_15ans_Recherche.pdf)

## **STORAGE AND WASTE**

**The NRC has issued a license to Private Fuel Storage, LLC, to construct and operate an independent spent nuclear fuel storage facility** in Skull Valley, Utah. Although the license, issued Feb. 21, is effective immediately, it does not authorize PFS to begin immediate construction of the facility. Rather, it conditions construction authorization on the company first arranging for adequate funding. In addition, PFS must obtain necessary approvals from other agencies, including the Bureau of Land Management, the Bureau of Indian Affairs, and the Surface Transportation Board. **The license is effective for a period of 20 years. Press release:** <http://www.nrc.gov/reading-rm/doc-collections/news/2006/06-028.html>

**UKAEA has reconsidered its choice of location for the disposal of low-level radioactive waste from decommissioning Dounreay.** A better location that uses part of the existing Dounreay site and an area immediately beside the boundary fence will now be put forward for formal consultation for the disposal of wastes that arise during the clean-up and demolition of the former fast reactor research site. More important is that the new area is further away from the nearest home. **Release:** [http://www.ukaea.org.uk/news/2006/23\\_02\\_06.html](http://www.ukaea.org.uk/news/2006/23_02_06.html)

## **ORGANIZATIONS, PEOPLE**

United Kingdom: The Prime Minister has approved the appointment of a new **Director General for the Department of Trade and Industry's Energy Group: Willy Rickett** will take up the post from 6 March. Curriculum vitae: <http://www.gnn.gov.uk/environment/detail.asp?ReleaseID=188172&NewsAreaID=2&NavigatedFromDepartment=False>

## **MISCELLANEOUS**

**NRC has published the report *Assessment of Seismic Analysis Methodologies for Deeply Embedded Nuclear Power Plant Structures.*** NRC has sponsored a research program at Brookhaven National Laboratory on deeply embedded and/or buried (DEB) structures. The overall objective of this research was to investigate the applicability of existing NRC review guidance, seismic design practice, and soil-structure interaction (SSI) computer codes to DEB structures, and to identify areas for improvement. **Report:** <http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr6896/>

Medicine: Atomic Energy of Canada Limited (AECL) has successfully completed mediation with MDS Inc. and its subsidiary MDS Nordion on issues related to the **construction, commissioning and operation of the MAPLE reactors and associated New Processing Facility (NPF)** in Chalk River, Ontario. Collectively, these facilities are called the Dedicated Isotope Facilities (DIF). The resolution includes a 40-year isotope supply agreement between AECL and MDS Nordion. **Press release:**

<http://www.aecl.ca/index.asp?layid=55&csid=168&csid1=163&menuid=48>

*AND FINALLY THIS*

**Nuclear decommissioning apprenticeship:** Dounreay is raising the standard of Britain's first modern

apprenticeship in nuclear decommissioning. The site is combining the best elements of its ground-breaking scheme with those of its traditional engineering training programs to create a new modern apprenticeship called engineering decommissioning. **Release:** [http://www.ukaea.org.uk/news/2006/21\\_02\\_06.html](http://www.ukaea.org.uk/news/2006/21_02_06.html)

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