

# Nuc...*brief & link*

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NFCC Nuclear Fuel Cycle Consulting

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**U.S. NRC is preparing to issue a license to Private Fuel Storage LLC.** The agency has provided PFS a draft of the license and has requested comments from PFS within seven days regarding any errors or omissions. After that review is complete, the NRC will issue the final license. PFS, a consortium of utility companies, plans to store up to **44,000 tons of spent nuclear fuel from commercial nuclear power plants in dry casks** on land leased from the Skull Valley Band of Goshute Indians, as interim storage before final disposal in an underground repository. Press release: <http://www.nrc.gov/reading-rm/doc-collections/news/2006/06-024.html>

Text of the *Joint French-Russian Statement on Using Nuclear Energy* (adopted at French Prime Minister's visit to Russia, February 14 – in French):

[http://www.diplomatie.gouv.fr/fr/actions-france\\_830/desarmement\\_4852/france-non-proliferation-armes-destruction-massive\\_4857/regime-non-proliferation-nucleaire\\_4859/declaration-franco-russe-sur-les-questions-nucleaires-14-fevrier-2006\\_30694.html](http://www.diplomatie.gouv.fr/fr/actions-france_830/desarmement_4852/france-non-proliferation-armes-destruction-massive_4857/regime-non-proliferation-nucleaire_4859/declaration-franco-russe-sur-les-questions-nucleaires-14-fevrier-2006_30694.html)

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## *NUCLEAR POLICY*

**NRC's Chairman Nils J. Diaz has outlined NRC's approach to new NPP licensing:** "To date, 11 potential combined license (COL) applications have been publicly announced, distributed among the 3 major reactor vendors now competing for the U.S. marketplace. In order to effectively review multiple COL applications in parallel, the staff is now preparing to **implement a design-centered approach for NRC's reviews** of COL applications. This approach involves the use, for each issue, of one review and one position for multiple applications. It could also be called the "one-for-all" approach." Complete **statement:** <http://www.nrc.gov/reading-rm/doc-collections/commission/speeches/2006/s-06-002.html>

U.S. Secretary of Energy Samuel **Bodman made an effort to persuade the American 'nuclear community' of the administration's Global Nuclear Energy Partnership.** At Platt's Nuclear Conference in Washington DC he said: "Right now, the nuclear material we dispose of from 'once-through' reactors still retains up to 90% of its energy. This is an **enormous amount of nuclear waste that we... well, waste!** You've heard the expression, 'Don't hide your light under a bushel.' By the same token, I don't see why we should go through so much effort to bury so much valuable nuclear fuel under a mountain - if there is a better way. Processing spent uranium fuel for use in advanced reactors will allow us to extract much more energy from the same amount of

nuclear material—while also vastly reducing both the volume and the radiotoxicity of the waste that ultimately requires disposal. This means that rather than requiring another five or six—or ten—**Yucca Mountains** over the coming decades to meet our nuclear disposal needs, we will just need one site. At the same time, because the process will consume—rather than separate—plutonium, **proliferation risks will be significantly reduced**. There are currently 200 metric tons of separated plutonium, produced by other nations' civilian nuclear power plants, stored at various sites around the world. Putting this material back into reactors as fuel will greatly reduce the risk that it might be stolen or seized for destructive purposes. Finally, the **partnership arrangement between fuel-cycle and reactor-only states** envisioned by GNEP will help supply the world with clean electrical power by offering non-fuel-cycle nations commercially competitive and reliable access to nuclear fuel, in exchange for their commitment to forgo the development of enrichment and recycling technologies." Bodman's complete **speech**:  
<http://www.doe.gov/news/3184.htm>

**Great Britain:** Alan Duncan, the shadow trade and industry secretary has indicated that the Conservatives may end their traditional support for nuclear power, as he launched the party's energy review. He said the **Tories under David Cameron now have "no fixed opinion about nuclear energy"**. News:  
[http://www.politics.co.uk/party-politics/conservative-party/tories-move-away-from-nuclear-power-\\$15155497.htm](http://www.politics.co.uk/party-politics/conservative-party/tories-move-away-from-nuclear-power-$15155497.htm)

## **URANIUM**

**Canada:** Following a hearing the Canadian Nuclear Safety Commission (CNSC) announced its approval of guidelines for an environmental assessment of a proposal to **increase the production capacity at Cameco Corporation's uranium refinery** in Blind River, Ontario. **Press release:**  
[http://www.nuclearsafety.gc.ca/eng/medi-a/news/news\\_release.cfm?news\\_release\\_id=221](http://www.nuclearsafety.gc.ca/eng/medi-a/news/news_release.cfm?news_release_id=221)

## **NUCLEAR FUEL**

**Russia: The 1000th alternative design fuel assembly (TVSA) for VVER-1000 reactors was manufactured at JSC MSZ. The assembly will be delivered to Khmelnytsky NPP (Ukraine).** Presently, the TVSA fuel runs more than 60 % of VVER-1000 reactors (16 power units) worldwide. This type of fuel is used in three countries – Russia, Ukraine and Bulgaria. At present JSC MSZ is manufacturing this type of assembly for Units No.1, 2 and 3 of Kalinin NPP; for Unit No. 4 of Rovno NPP; for Units No. 1 and 2 of Khmelnytsky NPP. **Release:**  
<http://www.tvel.ru/en/press/news/index.php?id4=75>

## **REACTORS, NPPs, UTILITIES**

U.S. NRC has published a report ***Emerging Technologies in Instrumentation and Controls: An Update***. It summarizes advances in eight instrumentation and control technology focus areas that have applications in **nuclear power plant digital upgrades as well as in new plants**. It is the second in a series of planned update reports in

an NRC-sponsored Emerging Technologies study. This study is designed to provide “heads-up” information that will make the NRC better prepared to make regulatory decisions in these areas. Specifically this report focuses on advances in **sensors (e.g., temperature, neutron and thermal power sensors)** and their potential regulatory impact. **Report** available: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr6888/>

### ***NUCLEAR INDUSTRY***

Japan's industry regulator **METI is investigating Toshiba**, following an admission by the integrated electronics group that it had provided **misleading data on equipment at two of its nuclear power plants**. METI is concerned that Toshiba, which built the nuclear power plants for Tokyo Electric Power (Tepco), failed to report that it had tampered with data provided to Tepco on equipment used at a second nuclear power plant, even after admitting to having falsified data at one plant. <http://news.ft.com/cms/s/496dff12-9cff-11da-8762-0000779e2340.html>

### ***RECYCLING, MOX***

**Japan Atomic Energy Agency (JAEA) has published a 'tentative translation' about the plutonium-use plan** for research and development. Tokai Reprocessing Plant (TRP) will reprocess 31 tons of spent fuel in FY 2006. TRP will recover about 0.2 ton of fissile plutonium. The plutonium will be processed into fuel in the MOX Fabrication Facility next to TRP, and

will be used in Experimental Fast Reactor “JOYO” and Prototype Fast Breeder Reactor “MONJU” as fuel for research and development of fast breeder reactor technology.

<http://www.jaea.go.jp/english/02/press2005/p06020101/index.html>

**Japan:** The town of Genkai in Saga Prefecture decided to **accept a Kyushu Electric Power Co. plan to use MOX fuel elements** at the No. 3 reactor of its Genkai NPP. Kyushu Electric applied for a license in May 2004.

<http://www.tmcnet.com/usubmit/2006/02/13/1365466.htm>

### ***STORAGE AND WASTE***

**Ukraine:** Representatives of ministries, departments and project organizations of Energoatom together with the members of Ukrainian parliament discussed the **project of the nuclear waste storage for four Ukrainian nuclear stations**. Energoatom initiated the meeting.

Energoatom initiated the meeting. According to Energoatom calculations, the total sum of expenses on construction and exploitation of the storage in Ukraine will make \$520 million; the current price for Russian storage makes \$2 milliard for prices of 2005. News: <http://en.for-ua.com/news/2006/02/13/155039.html>

**Japan:** A fire blazed for two and a half hours during an experiment at a nuclear energy facility in central Japan. No one was hurt in the fire at the **nuclear waste disposal facility** of the Japan Atomic Energy Agency in **Tokaimura**, a nuclear hub located 110 kms northeast of Tokyo, agency spokesman Satoshi Waku said.

<http://www.forbes.com/home/feeds/afx/2006/02/13/afx2520606.html>

## MISCELLANEOUS

The Department of Energy announced a new **research effort aimed at maximizing U.S. oil and natural gas production while sequestering significant quantities of carbon dioxide (CO2)**. Injecting an oil reservoir with CO2—the same gas that gives soda pop its fizz—thins crude oil left behind and moves it to producing wells. As the fastest-growing technique for enhanced oil recovery (EOR), CO2 "flooding" now accounts for 4 percent of U.S.'s oil production. Flooding a natural gas reservoir with CO2 moves previously bypassed natural gas to producing wells by pressurizing and/or displacing it—although this enhanced gas recovery (EGR) technique is not widely used. <http://www.fossil.energy.gov/news/techl>

[ines/2006/06008-EOR\\_Sequestration\\_Initiative.html](http://www.fossil.energy.gov/news/techl/ines/2006/06008-EOR_Sequestration_Initiative.html)

## AND FINALLY THIS

World: The **world population is expected to grow by 2.6 billion by 2050. Worldwide energy consumption is in turn anticipated to increase by some 50 % in the next 20 years.**

Against this backdrop, **RWE presented its 2005 World Energy Report**. The company report focuses on the long-term supply of energy resources such as coal, oil, natural gas, uranium and renewable energies. Summary and **download**: <http://www.rwe.com/generator.aspx/templateId=renderPage/id=76864?pmid=4000973>

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