

## Proposed new uranium/nuclear projects that could directly affect Michigan

Revised Dec. 8<sup>th</sup>, 2008 by Kay Cumbow for the Conservation Committee, with additional information by Rita Jack

### Proposed new reactors - Michigan

**Fermi 3** – Application filed in Federal Register in September 2008. NRC has accepted the application for docketing and review. It will tentatively be posted for a 60-day public comment period in the Federal Register near the end of December or early January. There are 17,000 pages to review. The reactor design has yet to be approved. For current Nuclear Regulatory Commission status/documents/public meetings etc. concerning the proposed Fermi 3 reactor, visit: <http://www.nrc.gov/reactors/new-reactors/col/fermi.html> - For details on the Economic Simplified Boiling Water Reactor (ESBWR), the General Electric boiling water reactor proposed for Fermi 3, and not yet certified by the NRC, go to: <http://www.nrc.gov/reactors/new-reactors/design-cert/esbwr.html>

**Potential Future Reactors:** DTE also approached the Greenwood Township Board in St. Clair County about building a new nuclear reactor several months' back. The township board was not in favor, and DTE has since indicated they may build a coal plant instead, but have not decided. They had postponed any decision on a new plant until after the elections. Also, Federal representative Fred Upton has stated that he sees no reason not to build at least another reactor at Cook and Palisades.

**Proposed new reactors on Lake Huron - Canada** - Bruce Power is proposing building 4 new reactors (in addition to the 8 current reactors) at Kincardine, Ontario, on the shores of Lake Huron. A 6 month comment period on the EIS began November 4<sup>th</sup>, 2008. There will also be a joint panel hearing process after that. The joint panel includes the Canadian Nuclear Safety Commission for the first time, which is unprecedented with nuclear projects, and raises questions about the process. The Ministry of Environment is supposed to be completely independent when making these decisions. More details about the EIS process for proposed reactors at the Bruce can be found at the Canadian Nuclear Safety Commission's New Nuclear Projects website: <http://www.nuclearsafety.gc.ca/eng/readingroom/newbuilds/>

### Nuclear Waste Dumps

**Michigan** – with the Barnwell dump in South Carolina closing, Michigan's reactors are left without a dumpsite for their class "B" and "C" level wastes. At this time, Michigan reactors are storing these wastes onsite, but this will present problems in time, especially for any decommissioning reactors.

**Ontario Power Generation** has proposed a Deep Geological Repository (commonly called the Deep Underground Dump - DUD) beneath the shores of Lake Huron at the Western Waste Management Facility (WWMF), adjacent to the Bruce Nuclear Generating Station. Both are on a spit that sticks out into Lake Huron. This proposed dump would be for so-called "low" and "intermediate" level radioactive wastes for 20 Ontario reactors. A big concern is that this dump could in the future become the dump for all of Canada's wastes, including irradiated fuel, despite the industry's claim that it will not. Also, wastes that are placed in deep geological repositories may become irretrievable if there is sufficient leakage or problems at the underground site. Those leaks could then reach groundwater or Lake Huron, with obvious contamination problems. The public comment for Draft Guidelines for the EIS for the DUD ended in June, and the EIS will not be published until 2011, allowing the industry to do preliminary studies underground. More details about the EIS process for the proposed deep underground dump at the Western Waste Management Facility can be found at the Canadian Nuclear Safety Commission's New Nuclear Projects website: <http://www.nuclearsafety.gc.ca/eng/readingroom/newbuilds/>

### Uranium Exploration / Future Mining

**Michigan** has at least two sites in the U.P. where companies are prospecting for uranium. The law referred to as the Part 632 Sulfide Mining Law is actually the Part 632 Non-Ferrous Metallic Mineral Mining Law, and therefore "covers" many aspects of uranium mining. Some specific activities and aspects of uranium extraction that are missing from consideration within the Part 632 law include transportation, its obvious extremely long term impact problem, the fact that improperly disposed wastes cause human cancer. No uranium mining has ever been done without harm to water, land, air, and humans. Legal research is required to identify what is needed to properly and

safely regulate uranium exploration and mining, or, given that Michigan is surrounded by the Great Lakes, an outright ban. For more information, see: [Save the Wild U.P.](#) (This section provided by Rita Jack, Sierra Club.)

**Ontario** – Uranium mining is again proposed in Northern Ontario, in the Lake Huron watershed near Elliot Lake and Serpent River area, an area with huge amounts of uranium tailings still standing and leaching into Serpent River, which drains into Lake Huron. The Blind River (uranium) Refinery and incinerator are on the shores of Lake Huron.

### **Global Nuclear Energy Partnership (GNEP)**

Both the U.S. and Canada have joined the GNEP, an international organization comprised currently of 25 member nations. The GNEP would allow and encourage partner countries to build nuclear reactors throughout the world, in exchange for allowing only a few countries (including the U.S.) to reprocess their irradiated fuel. The premise behind this is that this so-called "recycling" of irradiated fuel would limit non-proliferation, while reducing the need for storage of lethal high-level wastes. In reality, reprocessing creates at least 20% more radioactive wastes (Union of Concerned Scientists), subjects workers and communities to greater contamination, and spreads the chance of permanent contamination worldwide through transport accidents or incidents.

If approved and funded in the U.S., the GNEP will have enormous ramifications for the Great Lakes area and the entire nation. Taxpayers will fund this expensive and dangerous project in the U.S. The U.S. will violate our non-proliferation treaties, as there is no accurate way to keep track at all times of some of the fissile materials used during reprocessing. It is easy to "lose" some, on purpose or accidentally - neither one being good. This will also militarize our highways and the Great Lakes to some extent, as irradiated fuel and the reprocessed fuel would be shipped on our highways. Several shipments would actually be barged on the Great Lakes on their way to the nation's reprocessing center or centers. All shipments would need protection from would-be terrorists. This has been done with little media. Only a few hearings are being held nationwide - the only one in the Great Lakes region was held in Chicago Dec. 4<sup>th</sup>. U.S. residents can send comments in by December 16<sup>th</sup>.

GNEP/Dept. of Energy (DOE) resources: <http://www.gnep.gov/> and: [http://www.gnep.energy.gov/pdfs/GNEP\\_PEIS.pdf](http://www.gnep.energy.gov/pdfs/GNEP_PEIS.pdf) Also, here is one of many resources for the public in opposition to GNEP: Nuclear Energy Information Service: <http://www.neis.org/Campaigns/GNEP/index.shtml>

### **Radiological standards being set in Ontario and re-set in the U.S.**

Ontario is looking at setting air quality standards for uranium and uranium products, for the first time. Consultation meetings are being held in Ontario, and then further comments ensuing from the material at those meetings will be due Friday, January 16, 2009. A formal comment period will come later on in 2009. Comments can be sent to: [sdb-ebr.moe@ontario.ca](mailto:sdb-ebr.moe@ontario.ca)

or to: Gail Brown, Air Standards Development Officer, Standards Development Branch, Ontario Ministry of the Environment, 40 St. Clair Avenue West, 7th Floor, Toronto ON M4V 1M2, (416) 327-5772 phone

### **U.S. -NRC is redefining emission and effluent standards - Comments due by 12-30-2008**

For the entire notice, please go to: <http://edocket.access.gpo.gov/2008/E8-26217.htm>

The draft regulatory guide (DG), titled, "Measuring, Evaluating, and Reporting Radioactive Materials in Liquid and Gaseous Effluents and Solid Wastes," is temporarily identified by its task number, DG-1186, which should be mentioned in all related correspondence. DG-1186, which is proposed Revision 2 of Regulatory Guide 1.21, describes a method that the staff of the NRC considers acceptable for use in measuring, evaluating, and reporting on radioactivity in effluent discharges and in solid radioactive waste shipments. The regulatory guide also provides guidance on determining and reporting the public dose from nuclear power plant operations....

Comments are due December 3, 2008 and can be mailed to: Directives, and Editing Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001  
Comments can be emailed to: [nrcprep.resource@nrc.gov](mailto:nrcprep.resource@nrc.gov).

Requests for technical information about DG-1186 may be directed to Steve Garry at (301) 415-2766 or e-mail to Steve.Garry@nrc.gov.

**U.S. - NRC Revising Regulatory Guide "Environmental Monitoring for Nuclear Power Plants"  
Comment period ends January 9, 2009**

For the entire notice, please go to: <http://edocket.access.gpo/2008/E8-26708.htm>

The draft regulatory guide (DG), titled, "Environmental Monitoring for Nuclear Power Plants," is temporarily identified by its task number, DG-4013, which should be mentioned in all related correspondence.

DG-4013, which is proposed Revision 2 of Regulatory Guide 4.1, describes a method that the staff of the NRC considers acceptable for use in establishing and conducting baseline environmental monitoring at nuclear power plants. To meet this objective, the guide describes programs for preoperational and operational environmental monitoring, including both onsite and offsite environmental monitoring. The guide also describes how information obtained in the environmental monitoring program can be used to document information on residual radioactivity that may be useful during decommissioning....

Comments are due January 9, 2009 and may be mailed to: Rulemaking, Directives, and Editing Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001  
Comments may be emailed to: [nrcprep.resource@nrc.gov](mailto:nrcprep.resource@nrc.gov).

Requests for technical information about DG-4013 may be directed to Steve Garry at (301) 415-2766 or e-mail to Steve.Garry@nrc.gov.

**EPA's plans to gut radiological standards for drinking water**

This fall, Committee to Bridge the Gap discovered USEPA had plans to gut U.S. radiological standards for drinking water. See: <http://www.committeetobridgethegap.org/>

Snip from above website: "A detailed report by Committee to Bridge the Gap reveals, radionuclide by radionuclide, the astronomical concentrations of radioactive contamination in drinking water proposed, which are orders of magnitude higher than EPA's longstanding drinking water limits."

**Michigan in process of becoming an NRC "Agreement State"**

Michigan is also in process of becoming an NRC "agreement state". This is undoubtedly good upfront for the state financially, as the state will now get the fees that the NRC receives. This process should be monitored closely, however. For example, agreement states cannot make stricter standards for radioactive materials than the NRC allows. More research and close monitoring are needed. Contact Thor Strong, Radiological Protection Section, Michigan Department of Environmental Quality, 517-241-1252, "Thor Strong" <[StrongT@michigan.gov](mailto:StrongT@michigan.gov)> to request being placed on the email notification list for this process. This process has a dedicated webpage: ([www.michigan.gov/agreementstate](http://www.michigan.gov/agreementstate))

Michigan also has 4 other aging commercial reactors with serious problems: Palisades at South Haven, the 2 Cook plants at Bridgman, and Fermi 2 at Monroe. All reactors keep their irradiated fuel onsite. Plans exist to barge irradiated fuel from the decommissioned Big Rock Point reactor on Lake Michigan. Big Rock Point was given "greenfield status" in spite of documented groundwater contamination, as well as unprecedented amounts of radioactive contaminants released over its lifetime –well over 3 million curies of radioactive fission and activation gases, as well as radioactive effluents. There has been no independent testing. - Additionally, this summer, in an attempt at cleanup of Fermi 1, which experienced a meltdown in 1966, the liquid sodium burst into flame, and cleanup efforts had to be stopped.

Currently, irradiated fuel for the Bruce reactors is kept onsite that is currently kept aboveground or just beneath the ground at the site

**Other Resources: NGO Websites on nuclear power and uranium mining - There are *many more* great NGO websites. Please check links!**

#### **Canada:**

Bruce Centre for Energy Research and Information - <http://www.friendsofbruce.ca/>

Campaign for Nuclear Phaseout/Sortir du Nucleaire – <http://www.cnp.ca/main/>

The Canadian Coalition for Nuclear Responsibility/ Regroupement pour la surveillance du nucleaire - [www.ccnr.org/](http://www.ccnr.org/)

Energy Probe - <http://energyprobe.org/>

Greenpeace Canada - <http://www.greenpeace.org/canada/>

Lake Ontario Waterkeeper - <http://www.waterkeeper.ca/>

Mining Watch Canada - <http://www.miningwatch.ca/>

Northwatch – <http://www.northwatch.org>

Northwatch's Nuclear Waste page: <http://www.nukewaste.ca/>

Sierra Club of/du Canada – <http://www.sierraclub.ca/national/index.html>

#### **U.S.:**

Alliance for Nuclear Accountability - <http://www.ananuclear.org/>

Beyond Nuclear - <http://www.beyondnuclear.org>

Citizens Awareness Network; <http://nukebusters.org/>

Institute for Energy and Environmental Research - <http://www.ieer.org/>

Nuclear Energy and Information Service - <http://www.neis.org/>

Nuclear Information and Resource Service - <http://www.nirs.org/>

The Nunnglow Website - <http://www.nunnglow.com/>

The Radiation and Public Health Project - <http://www.radiation.org/>

The Sierra Club: - <http://www.sierraclub.org/>

Southwest Research and Information Center- <http://www.sric.org/>

Union of Concerned Scientists – <http://www.ucsusa.org/>

#### **Other NGO sites:**

Indigenous Environmental Network - <http://www.ienearth.org/>

The Sustainable Energy & Anti-Uranium Service (Australia) - <http://www.sea-us.org.au/>

WISE - World Information Service on Energy – <http://www.antenna.nl/wise/>

#### **Industry sites 1) Canada 2) U.S.**

1) Ontario Power Generation - <http://www.opg.com/index.asp>

OPG's webpage on **How Waste is Managed** (includes information on the Western Waste Management Facility, adjacent to the Bruce nuclear stations) - <http://www.opg.com/power/nuclear/waste/facilities.asp/>

Bruce Power – <http://www.brucepower.com/>

Cameco Corporation: (uranium mining, partner in Bruce Power) <http://www.cameco.com/>

2) American Independent Power's Cook plant website: <http://www.cookinfo.com/cookplant.htm>

Detroit Edison (DTE) - <http://www.dteenergy.com/>

Entergy's Palisades nuclear plant webpage: [http://www.entergy-nuclear.com/plant\\_information/palisades.aspx](http://www.entergy-nuclear.com/plant_information/palisades.aspx)