

2010

Beyond Nuclear Annual Report



Linda

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BEYOND NUCLEAR 12-MONTH REPORT JANUARY – DECEMBER 2010

The Nuclear Retreat



Beyond Nuclear is actively engaged in opposing the mislabeled and increasingly dubious “nuclear renaissance” with a new Web page tracking the Nuclear Retreat – a more accurate representation of reality in the nuclear power sector worldwide. New construction remains an aspiration in the U.S. with only one site approved with an \$8 billion federal loan guarantee – at Vogtle in Georgia. The “quiet renaissance” is in fact occurring in the relicensing sector as the U.S. Nuclear Regulatory Commission rubber-stamps approval for continued operation of some of the country’s most aged, dangerous and embrittled reactors. Beyond Nuclear has taken on the license renewal fight at several sites including Seabrook, NH, Vermont Yankee, VT, Oyster Creek, NJ and Davis-Besse, OH and looks to expand to Grand Gulf, MS in 2011.

Stop Relicensing Campaign

(a) Seabrook



Beyond Nuclear is intervening in the license renewal application made by Seabrook owners, Florida Power and Light (aka NextEra). Next Era filed for a 20-year extension 20 years before the current license expires. In November, Paul Gunter, Director of Reactor Oversight at Beyond Nuclear (*pictured left*), testified before the Atomic Safety and Licensing Board, making the case that NextEra had failed to comply with the National Environmental Policy Act (NEPA) by omitting any evaluation of the potential of offshore windpower to deliver all needed

additional electricity for the region without the need for continued nuclear energy. In addition, Beyond Nuclear is party to a Petition for Rulemaking that would prohibit license renewal applications from omitting such evaluations under NEPA. A decision on the wind contention is expected in late January 2011.

(b) Vermont Yankee



Beyond Nuclear continues to work with state and federal legislators, impacted communities and organizations and the broader public in Vermont, New Hampshire and Massachusetts to oppose the relicensing of the Vermont Yankee nuclear power plant now slated for closure in 2012 by the legislative decision of the State of Vermont. In 2010 Beyond Nuclear staff made several trips to Vermont, testifying before the Vermont State House and Senate energy committees, collaborating with and assisting local groups and

doing press outreach work. In April 2010, the Vermont State Senate voted not to extend the license of Vermont Yankee beyond its March 2012 expiration date, noting that the continued operation of the plant is not in the best interest of the state. In July, Beyond Nuclear convened a

forum in Conway, NH to share the insights of the impending Vermont victory with New Hampshire organizers for strategic planning to further oppose license renewals in New England. Beyond Nuclear also created a short, tongue-in-cheek video – *Reactor For Sale* – about the many problems with Vermont Yankee that *should* prevent its continued operation rather than sale and relicensing.

(c) Oyster Creek



Paul Gunter continues to work closely with impacted communities around the Oyster Creek nuclear power plant in Lacey Township, New Jersey in a federal appeal of the NRC license extension decision in April 2010 as currently filed before the 3rd Federal Circuit Court of Appeal in Philadelphia, PA. He wrote and filed the original contention while working at Nuclear Information and Resource Services (NIRS) and is now working with attorney Richard Webster, and the appealing parties

(Nuclear Information and Resources Services, GRAMMES, Jersey Shore Nuclear Watch, NJ Sierra Club, NJ Environmental Federation, and Environment New Jersey.)

(d) Davis-Besse



Beyond Nuclear has intervened against the license-extension of the Davis-Besse reactor in Ohio, whose corroded and embrittled condition led to a near meltdown in 2001. Kevin Kamps filed contentions based on similar violations of NEPA, again making the case for windpower as an alternative to extended use of nuclear energy. The contentions were filed on December 2010 with no decision expected for several weeks into 2011.

Stop New Construction and Federal Loan Guarantees

(a) Calvert Cliffs, MD



Beyond Nuclear is a co-intervenor against a proposed third reactor at the Calvert Cliffs, Maryland site. The third reactor was originally proposed as a joint venture UniStar , but the U.S. partner, Constellation, withdrew from the project in October 2010 due to the high cost of financing the project, (estimated at between \$10 billion and \$15 billion), leaving its French partner, Électricité de France (EdF) as sole owner. Beyond Nuclear submitted a joint contention along with Nuclear Information and Resource Service, Public Citizen and the Maryland Citizens' Alliance for Renewable Energy Solutions, challenging (ADD HERE). In January 2011,

the NRC licensing board ruled that the French owned nuclear utility must additionally submit a more thorough and scientifically accurate environmental evaluation of the benefits of building offshore wind power farms instead of the new atomic power plant.

(b) Fermi, IL



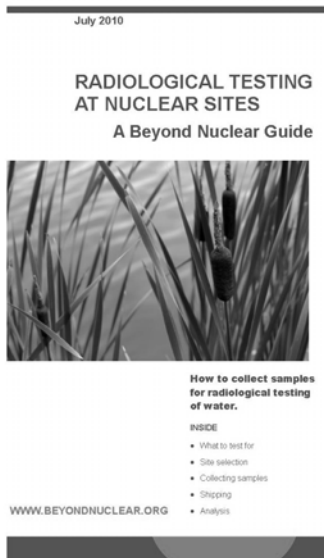
Kevin Kamps, the Radioactive Waste Watchdog at Beyond Nuclear, helped to lead the coalition challenging the new Fermi 3 reactor proposal in Monroe, MI – this includes the NRC licensing proceeding intervention, Beyond Nuclear and its partners were successful in getting five contention admitted for hearing, among the most of any new reactor licensing proceeding in the U.S. Kevin also watchdogs the NRC’s approval process for the GE-Hitachi ESBWR design – Fermi 3 is the last proposed ESBWR in the U.S.

Federal Loan Guarantees and Capitol Hill



In 2010, Beyond Nuclear’s Kevin Kamps devoted much of his time in helping lead coalition efforts on Capitol Hill to prevent passage of federal loan guarantees for the construction of new nuclear plants. These efforts were successful to date and will continue with the new Congress in 2011. Among Kevin’s regular activities were: Weekly environmental coalition meetings; weekly drops on Capitol Hill; lobby visits with strategic offices on the Hill, especially on the Senate side; activating grassroots anti-nuclear activists in key congressional districts; research on key developments loan guarantee program; maintaining the Beyond Nuclear website sections on these issues; writing fact sheets and weekly alerts/updates for the Beyond Nuclear email Bulletin; media work around these issues including a televised debate on C-SPAN debate with NEI’s top lobbyist Alex Flint.

Radiological Testing Program



Largely in response to uncontrolled and unmonitored radioactive releases to groundwater from inaccessible buried pipes, Beyond Nuclear developed a radiological testing program in order to sample and analyze groundwater and drinking water around nuclear power plants. Beyond Nuclear produced a simple handbook for citizens, “Radiological Testing at Nuclear Sites: A Beyond Nuclear Guide, How to collect samples for radiological testing of water.” The radiological testing program emerged in response to the need expressed by citizens to conduct independent and verifiable testing of potential radiological contamination. Beyond Nuclear is working with the testing laboratory of the Commission for Independent Research and Information on Radioactivity (CRIIRAD) in Valence, France.

To date, one set of samples and a control was sent to CRIIRAD and analyzed for tritium present in groundwater and well water on a residence close to the Braidwood nuclear power plant in Illinois which

leaked tritium for 10 years. Negligible amounts of tritium were found. The purpose of the program is to provide scientifically-reliable information for residences living around nuclear plants so that they may learn the level of radiological contamination of their water supplies.

The sampling program was expanded late in 2010 to incorporate a partnership with the Government Accountability Project (GAP) and Hanford Challenge that will conduct “hot particle” dust sampling at several nuclear weapons sites.

In 2011 the program will expand to multiple sites and will include a sophisticated weather pattern analysis to be produced by meteorologist, Dr. Sam Miller, to allow Beyond Nuclear and activists in the field, to better select locations where tritium contamination will be present.

Radioactive Waste

(a) Bird-dogging the Department of Energy’s (DOE) Blue Ribbon Commission

Kevin Kamps both watchdogged and testified before the DOE’s Blue Ribbon Commission on America’s Nuclear Future – attending their meetings, commenting on their process and content, and organizing resistance to a likely bad final report. Kevin represented a coalition of 168 national and grassroots groups across the U.S. working on this issue on a panel at the November full commission meeting in Washington, DC. The Commission’s final report is due in early 2012. In the context of the Commission’s likely decision to recommend reprocessing, Kevin continued to disseminate Beyond Nuclear’s comprehensive pamphlet on the detriments of reprocessing, a copy of which is enclosed.

(b) Hardened On-Site Storage

As an original author of a comprehensive document advocating for hardened on-site storage of radioactive waste at reactors sites, Kevin Kamps helped lead the effort to update and promote the Principles for Safeguarding Nuclear Waste at Reactors (hardened on-site storage), now endorsed by over 170 groups nationwide. The statement urges decision makers, including Energy Secretary Chu’s blue ribbon commission on radioactive waste, to require hardened on-site storage (HOSS) for high-level radioactive waste stored at nuclear power plants across the U.S. The Statement also expresses adamant opposition to the dirty, dangerous, and expensive extraction of plutonium (reprocessing) from irradiated nuclear fuel.

(c) Other Activities

Kevin Kamps served on the planning committee for the Chicago grassroots radioactive waste gathering of 100 key activists from across the country in early June 2010. Kevin also wrote the report that served as the basis for a major press event on March 24th that revealed the Bush administration’s rushed and secretive signing of 21 new reactor high-level radioactive waste disposal contracts during its last weeks in office. The event garnered nearly 50 media hits.

Kevin was invited on a two-week speaking tour across Japan to present on the risks of irradiated nuclear fuel storage in pools (specifically, examples of pools leaking radioactivity in the U.S.); he also presented to the League of Women Voters of Ocean County, NJ about the risks of the radioactive wastes stored at Oyster Creek Nuclear Power Plant.



Kevin (pictured right at an earlier protest) also serves on the board of Don’t Waste Michigan and on the Nuclear-Free/Green Energy Task Force of Great Lakes United. He was active in the successful lobbying efforts to prevent the shipment of irradiated reactor steam generators on the Great Lakes.

For the Beyond Nuclear work on the nuclear power-nuclear weapons connection, Kevin serves as the bridge

between Beyond Nuclear and Alliance for Nuclear Accountability, of which Beyond Nuclear is a member, helping lead lobby teams during DC Days, speaking at the DC Days press conference, and attending spring and fall strategy meetings.

Kevin is also working with Stephanie Cooke, author of “In Mortal Hands: A Cautionary History of the Nuclear Age,” holding author book talks in Washington, DC, Vermont, and New Hampshire, and Baltimore, MD. Kevin, and Beyond Nuclear’s Radiation and Health Specialist, Cindy Folkers, are also working with Dr. Janette Sherman to defend and promote the book she edited, written by Alexei Yablokov and Vassily Nesterenko, on the health and environmental impacts of Chernobyl.

Cancer Study Around Nuclear Power Plants



After the Nuclear Regulatory Commission (NRC) announced a new cancer study to be conducted around U.S. nuclear plants, Beyond Nuclear immediately took the lead in monitoring panelist selection. The NRC awarded oversight of the study to the National Academy of Sciences (NAS) after Beyond Nuclear led opposition to their original, highly conflicted selection of the Oak Ridge National Laboratory. In May, after a challenge by Beyond Nuclear, Dr. Richard Meserve, formerly commission chair of the NRC who has ties to the nuclear industry, recused himself from the study. Beyond Nuclear submitted names of recommended experts for the study, encouraged others to do so, and helped to organize reactor communities to be aware of the study and ensure their inclusion in it. Work is on-going and the panel was announced in January, 2011 with a 20-day deadline to challenge nominees. Concerns for children’s health, in particular, already abounded after the Three Mile Island accident, as pictured above in the historic photo by Robert Del Tredici, taken during a public meeting after the Pennsylvania reactor meltdown.

Operating Reactor Issues

(a) Lack of Adequate Fire Protection Programs

Paul Gunter continued his work monitoring the electrical systems for the safe shutdown of the majority of US reactors which remain vulnerable to a significant fire that might occur by accident or by sabotage. The nuclear industry has effectively stonewalled NRC corrective action programs and enforcement policy over three decades. Under this project, Beyond Nuclear continues to work with members of Congress to investigate the NRC oversight of fire protection issues and the agency’s alternative compliance strategies for continued non-compliance. This effort includes continued work with Congressman Edward Markey (D/MA) through the GAO audit of NRC fire protection programs.

Beyond Nuclear continues to work in coordination with North Carolina Waste Awareness and Reduction Network (NCWARN), the Union of Concerned Scientists and the office of Congressman David Price (D/NC) through the Government Accountability Office to expose the mis-prioritization of federal efforts to restore “compliance” over reasonably restoring effective fire protection programs that assure the safe shutdown of reactors in the event of fire through effective, rated and inspected fire protection features such as workable fire barriers.

Producers from the PBS program, *Frontline* have now contacted Paul regarding this issue. Paul has also been working on this story for several years with an investigative reporter from *ProPublica*.

(b) Unsafe Operating Systems



Buried Pipes: Beyond Nuclear’s Paul Gunter authored a landmark and detailed report “Leak First, Fix Later” in April 2010 to launch a challenge to the lack of NRC oversight and enforcement to prevent ongoing the uncontrolled and unmonitored releases of radioactive effluent from unmaintained inaccessible buried pipes. As much as 18 miles of inaccessible pipe composing 30 to 50 different systems that carry radioactive water and gaseous effluent can be buried beneath a single reactor site. Beyond Nuclear has engaged NRC in two public meetings of the NRC Groundwater Contamination Task Force that was convened following two of the more controversial leaks at Oyster Creek and Vermont Yankee. The GAO is currently engaged in an

investigation initiated through Congress including Congressman Markey (MA), Welch (VT) and Smith (NJ). Beyond Nuclear is scheduled to be interviewed by GAO auditors and a copy of “Leak First Fix Later” has been provided.

Beyond Nuclear continues to advocate for and demand that the NRC and industry make all inaccessible buried pipe systems accessible by bringing them to the surface and placed in containment vaults. Such pipe systems would then provide that the piping system would be in compliance with General Design Criteria 60 and 64 so that these systems carrying radioactive water and gas could be monitored, inspected, maintained and in the event of a leak contained.

Buried electrical cables: The safe routine operation and reliable emergency actions rely upon miles and miles of inaccessible electrical cable buried beneath a typical nuclear power plant site. Much of this electrical cable for the power, control, instrumentation and monitoring of safety-related equipment is not being monitored, inspected and maintained to assure reliable operations. Even more worrisome, an unknown quantity of these inaccessible electrical systems is not qualified for environmental conditions including corrosive conditions created by soil and submersion in water.

Beyond Nuclear is participating in NRC / industry meetings and forums and is to track and document efforts that impact the current operating license basis at reactors and potentially license renewal challenges such as being proposed for the Seabrook nuclear power plant.

Inaccessible and uninspected large safety-related systems: Many large components at nuclear power plants are largely inaccessible and present significant challenges to industry inspection and maintenance programs. As a result, the intended safety margins that nuclear power plants are credited are not reliable or in fact may not exist at all. Beyond Nuclear’s

Reactor Oversight Project continues to draw attention to the lack of NRC and industry efforts to prioritize inspection and maintenance over a production agenda. Beyond Nuclear is working to monitor, document and expose the deterioration of large and inaccessible concrete containment structures and steel containment liners and a similar effort by industry and the NRC to gloss over the safety risks and associated hazards of diminishing margins of safety resulting from cracking and corrosion as well as voids in these large structures intended for the final line of defense from a nuclear accident or act of sabotage.

Beyond Nuclear continues to work with communities around reactors such as Beaver Valley in Pennsylvania where containment liner corrosion discovered on the interior of the reactor liner with the appearance under a paint bubble was documented to have begun on the inaccessible exterior wall of the liner and continued through wall. The large majority of the steel liner containment remains uninspected to date as the result of industry and NRC “risky informed” inspection procedures. Very little work is being done to apply this discovery to other reactors of similar design.

Environmental Disasters and Impacts on Operating Reactors



Following the Deep Horizon offshore oil rig explosion and spill in the Gulf of Mexico, Beyond Nuclear began the monitoring of the contamination of the Gulf waters with subsurface oil and entrained methane gas and the potential impact on nuclear power plants in Gulf that rely upon once through cooling systems that take in billions of gallons each day of potentially contaminated water and the risk associated with their continued operation. Beyond Nuclear and Three Mile Island Alert challenged the NRC and the US Coast Guard in writing to provide assurance that one particularly vulnerable plant, Crystal River, would be able to monitor against the entrainment of subsurface oil and methane gas plumes to assure it would be unaffected when it was scheduled to resume operation in September 2010 from a steam generator replacement and containment repairs associated with extensive cracking. To date, Crystal River remains indefinitely closed without explanation as to extended delay.

More broadly, Beyond Nuclear sounded the alarm about the lax nature of the NRC, comparing it to the similarly delinquent Minerals Management Services, found partially culpable for the Deep Horizon disaster. Beyond Nuclear pointed out the unimaginable consequences for lives, jobs and the environment and the economy of such an accident occurring that released deadly and long-lasting radiation across a wide area.

NRC Reanalysis of Accident Consequences and Emergency Planning

Beyond Nuclear continues to track NRC and industry plans to revise their estimates of a radiological accident in context of emergency planning requirements around nuclear power plants. NRC is basing its recalculations of radiological releases, source term and potential exposure consequences under their new research program entitled “State-Of-the-Art-Reactor-Consequence-Analysis” or SOARCA.

<http://www.nrc.gov/about-nrc/regulatory/research/soar/overview.html> . SOARCA is intended to re-evaluate and replace the controversial Calculations of Reactor Accident Consequence (CRAC2) report

(1990) which estimated the health and economic consequences of a nuclear accident that ran into the tens of thousands of early cancer fatalities and hundreds of billions of dollars.

To date, the NRC has refused to make public any insights into the reanalysis of the estimates for offsite radiological impacts from a severe accident but there is growing concern that the real aim of the research project is to significantly shrink the existing 10-mile evacuation and sheltering planning zones as well as the 50 mile emergency ingestion pathway zone for existing and new reactors licensing and relicensing alike.

The Reactor Oversight Project has prepared an extensive compendium of emergency planning studies in preparation of a new fact sheet and brochure to publicly inform communities and counter efforts to trivialize the risks of a catastrophic release from a nuclear accident or act of sabotage.

Once Through Cooling Systems and the Endangered Species Act



Following on the release of the landmark 2001 report, *Licensed to Kill*, jointly authored by Paul and Linda Gunter, both now at Beyond Nuclear, work has continued to expand and update the report. The report revealed how the operation reactors using the highly water-consumptive once- cooling system routinely damaged, destroyed and killed marine plants and wildlife including endangered species.

Beyond Nuclear continues to pressure the NRC and the National Marine Fisheries Service for the release of a revised Biological Opinion as required under the Endangered Species Act (ESA) for Florida's St. Lucie nuclear power plant which is now nearly six years in the making for the taking of endangered sea turtles and another protected species of fish. St. Lucie has refused to provide for a design and installation of an extruder device over its once through cooling system which takes in more than three billion gallons of Atlantic water per day as well as the entrainment and impingement of hundreds of sea turtles where currently 2% are allowed to die under the existing and dated permit.

Beyond Nuclear continues to work in coordination with local efforts in New Jersey to legislatively require the installation of cooling towers for the Oyster Creek nuclear power plant which is currently in violation of its Incidental Take Limit as specified and surpassed in the ESA Biological Opinion for the protection of endangered sea turtles.

Colleagues around the world continue to use *Licensed to Kill* in order to oppose newly-planned reactors on their coastlines. Activists around Bantamsklip (poster pictured) in South Africa, are using the report to elucidate their concerns about potential impacts to migratory marine species such as whales which could be harmed by the installation of a coastal reactor there. Activists in India opposing the giant new Areva nuclear plant on the Jaitapur coast have also made use of the report in arguments against the plant and its likely damaging impact on marine species.

International Work



Beyond Nuclear maintains networking relationships with activists around the world and staff members occasionally travel overseas to conferences, on speaking tours and to strengthen and broaden our alliances. As referenced earlier, Kevin Kamps was invited on a speaking tour of Japan and also travels frequently to Ontario, Canada, where he is engaged in efforts to block new reactor construction on the Ontario shore of Lake Ontario, just east of Toronto at Darlington nuclear power plant. In the past year, new relationships have developed

with activists in Germany, India, Niger and Australia. Work continued on our campaign to expose the myths about the French nuclear program, often misleadingly held up in the U.S. as a positive example to be followed, conveniently overlooking the many problems and failures.

Linda Gunter traveled to Basel, Switzerland at the end of August to participate in the Nuclear-Free Future Awards pre-Congress event on human rights and the nuclear sector and then the IPPNW World Congress of the International Physicians for the Prevention of Nuclear War where she made a presentation in a workshop on the nuclear power-nuclear weapons connection. Collaborative opportunities were forged at the IPPNW conference

In October, Linda presented an award at the Nuclear-Free Future Awards in New York to Bruno Barrillot, (pictured top) who championed the rights of Polynesians, North Africans and French veterans affected by the French atomic testing.

Work continues to debunk the many myths surrounding the French nuclear program that continues to be held up by nuclear proponents as a success story, far from the truth. Our publications and fact sheets, combined with web updates, bulletin items and regular networking with French anti-nuclear activists keeps Beyond Nuclear in the forefront of this issue.

Publications and New Media



Linda designed the radiological testing handbook and collaborated with Paul on content. Linda also worked with staff to revise and reprint the Costs pamphlet; and revised and expanded the French pamphlet which was reprinted. This is also being used by French activists in Europe as they need material in English. A new *Thunderbird*, our periodical newsletter that largely focuses on the human rights aspects of the uranium fuel chain, was published summer.

Beyond Nuclear maintained a strong presence on Facebook and on YouTube where there is a dedicated Beyond Nuclear Channel. A video tribute piece to Howard Zinn (temporarily removed from minor re-editing) achieved more than 3,000 views.

NUCLEAR POLICY RESEARCH INSTITUTE D/B/A BEYOND NUCLEAR
STATEMENTS OF FINANCIAL POSITION
JUNE 30, 2010 AND 2009

	2010	-	2009
ASSETS			
Cash	\$ 68,000		\$ 64,462
Contributions Receivable	150,000		150,000
Other Assets	1,845		1,845
Property and Equipment - Net	5,114		4,035
TOTAL ASSETS	\$ 224,959		\$ 220,342
 LIABILITIES AND NET ASSETS			
Liabilities			
Amounts Held for Others	\$ 59,400		\$ -
Net Assets			
Unrestricted	165,559		220,342
TOTAL LIABILITIES AND NET ASSETS	\$ 224,959		\$ 220,342

