

OPSMPEm Resource

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Cc: Hardy, Sally
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"Hardy, Sally" <Sally.Hardy@nrc.gov>
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Welcome Message from the Chairman

posted on Mon, 31 Jan 2011 07:30:54 +0000



Welcome to the new NRC Blog. We are excited about using this new communications tool and hope it will increase our collaboration and interaction with the public. The blog is intended to serve as a vehicle for informing, explaining and clarifying the actions, roles and responsibilities of the NRC, raising awareness about our agency and its mission, and – most importantly – giving us an opportunity to hear from you. Staff from throughout the NRC will be posting regularly on the blog, addressing a variety of topics. Just to be clear, the blog is not replacing our usual modes of communicating with and getting feedback from the public. Instead, it is an additional way of communicating with you. We will continue to rely on public meetings, *Federal Register* notices and traditional media to convey official information. We hope you will comment on our posts and on the comments of others. Please be sure to read the Blog Guidelines before doing so. Comments are moderated and we will review them and get them up as quickly as possible during regular business hours. If you have questions, issues or concerns about nuclear safety or security, contracting with the NRC, or working at our agency, please use the links below to find more information: Allegations: <http://www.nrc.gov/about-nrc/regulatory/allegations/safety-concern.html>. Doing business with the NRC: <http://www.nrc.gov/about-nrc/contracting.html>. Job opportunities with the NRC: <http://www.nrc.gov/about-nrc/employment.html>. Welcome again to the new NRC Blog. We hope this is the beginning of a lively and engaging dialogue. Gregory Jaczko Chairman, NRC

Comments

comment #18 posted on 2011-01-31 22:23:21 by Tom Clements

I am willing to be convinced that this communication method will actually serve the public and not just become another tool for the nuclear industry to co-opt NRC decision making. Meanwhile, thanks to the NRC staff for affirming that conceptual "small modular reactors" being pursued at DOE sites will have to obtain NRC licenses. See January 19 news release at: "Firm Plans to Pursue Experimental Nuclear Reactors without Required Licenses" - <http://www.foe.org/firms-plan-pursue-experimental-nuclear-reactors-without-required-licenses>

comment #17 posted on 2011-01-31 21:48:15 by Mike Mulligan

You told me about this site a few months ago that it was coming, and I welcome it today. A site like this could be very beneficial. It is going to need a test drive? Mike

comment #20 posted on 2011-01-31 23:07:25 by Steve Quinn

Thanks for the opportunity to have access to this blog. First i would publicly like to go on record and say that of all the federal entities I have ever dealt with, I believe the NRC to be one of the few federal agencies I could put faith in. I think the NRC is a trusted, faithful and good regulator. But speaking as a plant operator, vice president and senior nuclear officer a tough demanding regulator. I think it should be used as a model for agencies overseeing the banking and investment communities. I believe that the BP disaster could have been prevented with effective oversight as could much of the financial problems we have had. That being said, i believe that politics should have no place in the agency. Proper use, availability and safety of nuclear power is required. To that end the cessation of licensing activities of Yucca Mountain is unacceptable and a breach of public trust. The environmental impact of 40-50 long term repositories at the existing nuclear sites has never been examined in its fullness. Monies collected from rate payers has been wasted and our soldiers continue and will continue to die trying to keep the oil flowing. We need a comprehensive and complete energy policy and effective, safe, cost efficient nuclear power is needed. We need energy independence. You are obligated to give it to us. Get it done!!!!

comment #22 posted on 2011-02-01 04:04:30 by James E. Foster

Interesting blog. I hope the NRC will respond to blog comments with definitive (not vague) and truthful answers. If so, it may no longer be called the "UNCLEAR REGULATORY COMMISSION."

comment #23 posted on 2011-02-01 12:50:43 by M. Srinivasan

As a staff of the NRC, I welcome this new website. It gives me an opportunity to interact with the public, their opinions, etc. in an informal manner. The formal way of interaction through public meetings provides a great opportunity, but is limited to those meetings only. Interaction with the public through this blog, in an informal manner, is an additional welcome opportunity to articulate how we

contribute to agency's mission of protecting the public and the environment. I look forward to fruitful engagement with the public.

comment #24 posted on 2011-02-01 14:05:35 by Mary McCormick

I'm very excited that students will have the opportunity to listen in (and possibly chime in) early in their careers and get a feel for what's going on in the nuclear industry. Maybe it will inspire a new wave of interest, ideas, and interactivity that would not have occurred otherwise? Really great!

comment #25 posted on 2011-02-01 14:43:45 by Tammy Dawn Marstiller-Weringo

I do receive other communications from you, which I do enjoy being kept up to date. However, I do think this is an excellent idea. Thank you for sharing and keep up the good work.

comment #26 posted on 2011-02-01 15:23:18 by steamshovel2002

I am still not clear on the archiving of all our comments on the NRC blog, you close comments after 30 days...but will our comments stay on the blog for posterity? I like looking up and researching old comments...so I favor not deleting anything. How about, I have issues with spelling and phraseology, do we have an editing function? The search feature, will it be a title or a full word search? As a person I have no confidentiality or anonymity issues.

comment #27 posted on 2011-02-01 16:04:40 in response to comment #20 by Moderator

Thank you for your comments. The NRC strives to be a fair and firm regulator and a regulatory model. However, we feel it important to clarify what the NRC's role is in terms of charting energy policy in this country. The NRC has no role in setting policy on energy use in this country or spent fuel disposal. Setting such policy is the responsibility of the White House, Congress and the Department of Energy. The decision to cancel the Yucca Mountain Project was made by the White House and the Department of Energy, not the NRC. As for long-term storage of spent fuel, the NRC has examined the safety performance of pools and casks, and is confident that the fuel can be stored safely at reactor sites for at least 60 years beyond the licensed life of the reactor. We will have more to say on this "waste confidence" determination in a future blog post. Finally, we want to emphasize: The NRC is neither pro-nuclear nor anti-nuclear in stance. What we are is pro-safety and security. We will discuss how we accomplish that task in future blog posts.

comment #30 posted on 2011-02-01 17:21:06 in response to comment #27 by Jane Swanson, Mothers for Peace

I will confine this comment to one sentence of the "moderator": "As for long-term storage of spent fuel, the NRC has examined the safety performance of pools and casks, and is confident that the fuel can be stored safely at reactor sites for at least 60 years beyond the licensed life of the reactor." The problem, of course, is that there is no way to assure that the spent fuel can be kept out of the biosphere for the remaining 250,000 (or more) years that it will be dangerous. The fact that the NRC thinks planning ahead 60 years is adequate is proof that the agency has blinders on, and is indeed promoting the industry at the expense of the safety of all life forms.

comment #31 posted on 2011-02-01 17:53:26 in response to comment #27 by Andrew Williams

Although the NRC should not and does not legally have a role in setting policy on energy use or spent fuel disposal, it has nevertheless muscled out a political position on the Yucca Mountain Project. The NRC's own Atomic Safety Licensing Board unanimously rejected the U.S. Department of Energy's Yucca Mountain project license withdrawal request in accordance with the Nuclear Waste Policy Act. Despite this, NRC chairman Gregory Jaczko ordered the agency's review of the Yucca Mountain license application stopped. The full NRC commission is now ruling on this issue. In what took the ASLB 39 days to decide, the NRC commission is still deciding and has been doing so for over 200 days. This blog has supposedly been created to increase the NRC's functioning as a transparent branch of government, however Chairman Jaczko's decisions have been anything but transparent.

comment #32 posted on 2011-02-01 18:25:11 in response to comment #26 by Moderator

All comments will be archived along with the original post. Neither comments nor posts will be deleted. However, comments will only be accepted for each post for 30 days. Generally speaking, we are not editing comments except for occasionally removing content that does not adhere to the comment guidelines. We'll indicate when we've done that. As for the search feature on the sidebar, it is full text search on blog posts and static page content, such as the comment guidelines. Users can enter a word, a combination of words or a phrase in the search field as search criteria.

comment #36 posted on 2011-02-01 14:20:31 by Kathryn Barnes

I hope that you will take into consideration the full scope of the comments you receive and not censor them.

comment #37 posted on 2011-02-01 15:56:28 in response to comment #27 by Billy

How do we know the White House and DOE made the decision since there is no Record of Decision? Can buildings make decisions? I think you meant to say that President Obama and Secretary Chu made the decision. The decision to cancel Yucca Mountain licensing review at the NRC was made by Chairman Jaczko without consulting the other NRC Commissioners. Since he consulted his

lawyers and CFO and not the other Commissioners, it is clear that he did in fact act unilaterally.

comment #38 posted on 2011-02-01 17:59:22 by Robert Hargraves

I advocate advanced nuclear power such as the liquid fluoride thorium reactor. Today the NRC deals with LWRs. Perhaps you could write two posts on NRC concepts that might be helpful to advanced concepts like LFTR, PB-AHTR, etc. I'm specifically interested in the concept of "licensing by demonstration", and also "technology neutral" regulation.

comment #40 posted on 2011-02-02 08:32:23 in response to comment #27 by Steve Quinn

Thanks for your reply, yet i believe that the safety of the public is best served by a single repository. Knowing in advance that all nuclear fuel would be stored on each nuclear site in forever, changes the original environmental impact of all facilities. When a licensee takes action the NRC governs inappropriate they take action. Why is that not true when the government takes adverse action?

comment #43 posted on 2011-02-02 16:04:40 by W. Don Seaborg

I welcome this opportunity to engage a well respected federal agency on topics that are vital to our nation's future, yet naturally controversial. Healthy, open debate based on science and objective evidence is always good. That being said I think the NRC Chairman is risking the excellent reputation of his organization, by allowing even the perception of politics entering into NRC's decisions regarding the Yucca Mountain Project to continue to exist. Notwithstanding the moderator's rebuttal to Mr. Quinn's earlier observations in this regard I think many, if not most, informed observers would disagree. While I believe the vast majority of the rank and file and senior management of the NRC is truly committed to fair and open technical decision processes, claiming that the Chair is likewise committed is not credible, in my view. As they say in some parts of the country, "that dog won't hunt".

comment #73 posted on 2011-02-07 17:19:05 by Len Skoblar

I welcome the spirit behind NRC's blog initiative but find it totally contrary to the manner in which Chairman Jaczko has dispositioned the Yucca Mountain LA. His action does damage to the agency's reputation, which is unfortunate given the stellar reputation image the agency has worked so hard to earn over the years.

comment #89 posted on 2011-02-11 03:13:58 by Business IT Service

Hello I am so delighted I found your blog, I really found you by mistake, while I was looking on Search Engine for something else, This message are obviously from your personal experience. It's a authentic and fantastic for anyone. I will remain awhile for your message. Really I am impressed with your message content. Keep up the great work. I will bookmark your blog and have my friends check up here often. I am quite sure they will learn lots of new stuff here than anybody else . I respect you from the core of the heart.

Which NRC Data Would Be Most Valuable to You In Open Format?

posted on Wed, 02 Feb 2011 21:32:06 +0000



For many years, the NRC has been recognized for proactively making large amounts of data and information available to the public through its [website](#) and the [Agencywide Documents Access and Management System \(ADAMS\)](#). But until recently, this data has been available primarily on HTML web pages or embedded within PDF documents. As a result of President Obama's Open Government Initiative, the NRC, along with other federal agencies, has begun to make more of its data available in open formats that are machine readable. The use of open formats makes it easier for members of the public to access, use, and combine the data for their own purposes. Until now, the NRC staff has selected datasets for publication based on institutional knowledge and other information such as the most popular pages on our website. As a result of these efforts, the agency has published more than 20 datasets that we believe are of high value to the public. You can see these datasets at our [Open Government page](#) and at [data.gov](#). Some of the datasets have generated a large number of downloads while others have not. You can get the

download statistics on our [Open Government page](#) (click on NRC High-Value Data-Set Metrics). As you can see from the last column of this spreadsheet, the average monthly downloads currently range from 11 to 94, with the Nuclear Power Reactor Status Report scoring highest. In the future, the NRC would like to publish datasets based on your input and interests. With that in mind, our question to you is this: Which datasets would be most valuable to you? Publishing takes resources. By expressing your views, you can help the NRC direct those resources towards publishing the data-sets with the most value to the public. Please provide your answers in the comments section of this post. We look forward to getting your input!

Francine F. Goldberg

Co-chair, NRC Open Government Advisory Group

Comments

comment #132 posted on 2011-02-17 11:54:54 by Mike Mulligan

Why even write anything under this heading when the NRC moves it to the waste basket open comments assuming your too stupid to know where you want it. I thought the deal was they were going e-mail you if they had a issue with your comment...a misunderstanding...or a chance to let you fix it. I say again, it is not about moving the known recorded data and information around so it is better understood...it is fundamentally about the quality and detail of the information they give us.

comment #130 posted on 2011-02-17 09:26:48 in response to comment #70 by Mike Feehan

You may request older documents found on ADAMs that are in microfilm format only. Last week I needed a copy of NUREG/Cr-5164. I emailed my request and received a free paper copy delivered to me in less than 5 days. You can contact the Public Documents Room Staff from the ADAMs web-site.

comment #200 posted on 2011-02-25 05:05:29 by Janny's Wallpapers

I was actually a bit confused by all this, but thanks for taking the time to explain anyway. It was quite well written :)

comment #44 posted on 2011-02-02 16:51:53 by Charles Bell

I would like to see an RSS news feed for NRC news events and U.S. nuclear plant events. It would be nice to separate the rad health events from the nuclear plant events. An RSS feed reader like Google Reader makes keeping up with everything so much easier than having to go to a web site manually and looking for what has changed. You have the info available now to do it. Just one more step to do RSS feed(s). Thanks for listening. I know NRC tries very hard to provide info and does an excellent job.

comment #49 posted on 2011-02-04 14:16:38 by Alan

I have tried to prowl data.gov before, and as someone interested in nuclear power data I was relatively disappointed. I'm very happy to now see attention being paid to this. Looking so far at the data you put up, capacity factors over time and startup date, etc all constitutes information I already had access to. That said, if I were to need this data I would prefer your format in Excel and the clean organization. I have already used this exact resource before: <http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/PowerReactorStatusForLast365Days.txt> It gives power status for each reactor, for each day, and archives give it as far back as maybe 10 years, I don't remember exactly. Please please please upgrade the quality and format of this data. Fundamental information like capacity factor is available through the IAEA and PRIS database, but data demands for research are always increasing and **daily and hourly** data are of increasingly high value. The French electric power industry is standard setting for data availability. http://clients.rte-france.com/lang/an/clients_distributeurs/vie/prod/realisation_production.jsp They provide generation, prices, and all imaginable related data for many time scales along with a small set of visualization tools. Citizens in France can very easily and very thoroughly answer the question "what is my local nuclear power plant doing", and their efforts are commendable. By hosting power status of reactors, the NRC has established themselves as the gatekeeper of the most comprehensive data on daily operation of our nuclear fleet and with the structure of our power industry you are the only ones with the breadth to provide the level of data I'm interested in. The Japanese company Tepco also has some good data interfaces for the plants which I think are of great value to the public: <http://www.tepco.co.jp/kk-np/monitoring/mp-j.html> Here are some things I am interested in having (for general reference): hourly/daily reactor power hourly/daily generation or implied heat rates coolant reservoir temp (intake/outtake) coolant volume intake real-time coolant reservoir level site radiation monitor real-time readings radioactive effluent (or any discharge) radiation monitor readings I hope this is helpful. My focus is specific to certain areas, as is true to everyone interested in your data. But I just want to say that a clear format making all of the above data available for the US nuclear fleet would be unique in the world and would improve the reputation of NRC oversight. Obviously, these are all extra-mile kind of things, but offering it anyway provides additional value and piece of mind to the public. On top of that, it opens up all kinds of possibilities that we can't think of ourselves.

comment #64 posted on 2011-02-06 14:47:41 by Billy

SER, Volume 3

comment #70 posted on 2011-02-07 15:22:44 by gmax137

I'd like to see more of the older documents available for download (as pdf files). I'm very interested in things that happened long ago and most of the documents are available only in microfilm.

comment #123 posted on 2011-02-16 09:37:51 in response to comment #49 by Moderator

Thank you for taking the time to send your suggestions. We require licensees to provide effluent reports annually. These reports can be found at <http://www.nrc.gov/reactors/operating/ops-experience/tritium/plant-info.html> . However, there are no regulatory requirements for licensees to submit the other data you're seeking, and we don't foresee expanding NRC reporting requirements in a way that would address your request. We should note that licensees are required to make reports if any regulatory limits are exceeded. Francine Goldberg

comment #96 posted on 2011-02-11 15:53:31 in response to comment #44 by Moderator

The NRC maintains a list-serve system with a number of lists the public can subscribe to, including News Releases. You can sign up

on our Subscribe to E-mail Notices page here: <http://www.nrc.gov/public-involve/listserver.html> to receive all News Releases or just those concerning licensed facilities in certain regions or geographical areas. At this time, we do not offer a subscription service to Event Reports, but we agree that it would be good to have one. We are looking into it based on your suggestion. We also agree that RSS feeds would be a good way to go and we are planning to implement them at a future date as part of a larger redesign of our public website. Francine F. Goldberg Co-chair, NRC Open Government Advisory Group

comment #134 posted on 2011-02-17 14:29:08 in response to comment #132 by Alan

I've been happy with the turnaround for comment approval here. Additionally, I foresee legit reasons this blog in particular would have a comment approval step - although I do not mean to imply your rejected comment fits this. That said, you should always record the comments you're making for personal reference anyway, I have never seen a blog that gives notifications when a comment is not approved (although I would appreciate it myself). It is dangerous for a blog owner to not approve comments, some other bloggers I know will later post their unapproved comment on their blog and tell the world that it was not approved. This is your best recourse if you think your opinion was unfairly judged.

comment #87 posted on 2011-02-09 11:20:55 in response to comment #70 by Moderator

We agree that it would be good to have more of our older information in an electronic format that could be viewed online. These older records are stored offsite in paper form. When NRC staff members require the older records for their work, we recall them from storage and digitize them. We're currently storing about 50,000 cubic feet of paper records offsite, a subset of which is the original paper from which the microfiche was made. While we would like to do more, at this time, given current resources, we are able to digitize only about 200 cubic feet of records per year. Francine F. Goldberg Co-chair, NRC Open Government Advisory Group

comment #125 posted on 2011-02-16 12:04:09 by Charles Bell

For the person inquiring about capacity factor data, they should refer to the NEI web site <http://nei.org> and specifically http://nei.org/resourcesandstats/nuclear_statistics/usnuclearpowerplants/ where electric generation and other statistics are maintained for U.S. nuclear power plants.

comment #103 posted on 2011-02-12 21:26:45 by Hiren M. Sanklebaum

I wanted to show appreciation for this excellent post!! I am absolutely getting just about every little bit of it I have you bookmarked to view new stuff you publish

Meeting the Challenge of Regulating New Reactors

posted on Mon, 07 Feb 2011 19:42:26 +0000

As many of you are aware, the much-anticipated and often-written about global surge in interest in nuclear power is underway. Our agency is in the midst of this surge to safely meet the substantial challenge that many industry experts expect to continue in 2011 and well beyond. In fact, we are actively reviewing 12 combined license applications that, if approved, could result in the construction and operation of up to 20 new reactors. A map of projected locations for new reactors can be found here: <http://www.nrc.gov/reactors/new-reactors/col/new-reactor-map.html>. To meet this growing interest in commercial nuclear power, in 2006 the agency created the Office of New Reactors, or in agency-speak, "NRO." Located at NRC headquarters, near Washington, D.C., we work closely with a new agency inspection organization in our Region II Office in Atlanta, GA. This structure ensures that we are fully equipped and ready to address the renewed interest in nuclear energy. Our mission is to serve the public by ensuring the safe, secure and environmentally responsible use of nuclear power in meeting the nation's future energy needs. However, as federal regulators, it is important to point out that we are not advocates for or against commercial nuclear power. Our responsibilities in this new office are divided into three subprograms or areas of focus – New Reactor Licensing, Construction Oversight and Advanced Reactors. In addition, we are active in the international area, including significant participation in the Multinational Design Evaluation Program. This program develops innovative ways to leverage the resources and knowledge of international regulatory authorities to review new reactor power plant designs. Please look for more detail on each of these areas in future posts. In the meantime, if you have any questions about new reactors, please let us know in the comments to this post.

Bob Jasinski

Senior New Reactors Communications Specialist

Comments

comment #127 posted on 2011-02-16 13:41:30 in response to comment #72 by Moderator

The NRC does not promote specific designs or technologies but instead performs safety and licensing reviews for reactors developed by companies, the Department of Energy or other reactor designers. The Department of Energy is doing some research and development in the area of molten-salt cooled reactors (e.g., the Small Modular Advanced High Temperature Reactor), but the projects are not yet to the point where the NRC is involved in the review of the designs. If a technology appears destined for commercial applications in the foreseeable future, the NRC will engage designers in pre-application discussions and develop the needed regulations and guidance to support the review process (much as we are currently doing for small and medium-sized reactors using light water and gas-cooled reactor technologies). Bob Jasinski

comment #72 posted on 2011-02-07 16:08:22 by Rod Clemetson

I hope the NRC is prepared to include a whole new paradigm of reactor designs, i.e., molten salt reactors (MSR's) in the regulatory structure. Please consider the following question ... Do you suppose the United States should be paying attention to this development? The People's Republic of China has initiated a research and development project in thorium molten-salt reactor technology. This plan was announced at the Chinese Academy of Sciences (CAS) annual conference on Tuesday, January 25, 2011. An article in the Wenhui News followed on Wednesday. Chinese researchers also announced this development on the Energy from Thorium Discussion Forum. Led by Dr. Jiang Mianheng, a graduate of Drexel University in electrical engineering, the thorium MSR effort aims not only to develop the technology but also to secure intellectual property (patent) rights to its implementation. This is a clear and important endorsement of the benefits of Thorium Fueled Molten Salt Reactors (TFMSR's) namely: -- Excellent nuclear and passive safety features -- Nearly 100% proliferation resistant -- One-onethousandth (.001) as much long-life nuclear waste production -- Excellent efficiency as a result of achieving nearly 100% fuel burn-up -- Overall economics (no high-pressure containment vessel required) that offer the prospect of being competitive with coal.

comment #76 posted on 2011-02-08 07:43:50 by Tom Clements

One measure of whether or not if there is real interest in new reactors is how many "limited work authorizations" (LWAs) the NRC has OKed and at what sites work is actually taking place under a LWA. I am aware of site clearing taking place under LWAs at only two sites. How many LWAs does the NRC say it has allowed?

comment #86 posted on 2011-02-09 11:01:10 in response to comment #76 by Moderator

There is only one applicant, Southern Nuclear Operating Company (Southern), that has received an LWA. Southern requested an LWA with its Early Site Permit application for the Vogtle site in Georgia. NRC issued the ESP with an LWA in August 2009. Southern is currently working under that LWA and has requested an additional LWA. There are no other requests for LWAs currently pending. In addition to LWAs, based on the revised definition of construction in 10 CFR 50.10(a), applicants can perform certain site clearing (pre-construction) activities without a license from the NRC. Currently, pre-construction activities are being performed at the Summer site in South Carolina.

comment #115 posted on 2011-02-15 09:35:52 by Wanda

The licensing Process A letter to Senators and Congressman: Have you ever had your life torn apart by a corporation? Have you ever had your dream home destroyed by a company that qualifies for "above the law" because they are backed by our federal government? Senator, let me tell you I have. After searching for a wonderful piece of property to build our dream home and doing so ourselves from the ground up, Exelon destroyed our dream. By leaking millions of gallons of low level radioactive waste for years and covering it up, they destroyed the neighborhood, ruined property values, and much more. I won't bore you with all the details. Suffice it to say the financial and emotional damage is not over six years beyond the announcement. Your insistence that the Nuclear Regulatory Commission speed up the process for allowing new plants is unacceptable. Why don't you build one in your mother's back yard if you think it's so safe? The Nuclear Regulatory Commission is the ONLY venue we the people have to follow due process to make sure this industry is safe. We have regulations that were put in place by the Atomic Energy Act and they are good regulations. Yet Congress has removed some of their authority to regulate. The hearing process takes into consideration all of the stakeholders which includes the general public and not just those who have the ability to contribute large amounts of cash to campaign funds. Quit trying to remove the few teeth the NRC has. Already, they have become more of a lap dog for the industry rather than a watch dog for the public. The oversight process and the hearing process are needed and demanded by the public. Technology needs to be safe. We are still in the baby stages of nuclear power and we haven't solved many issues. As the plants are aging and the piping systems as well as other parts are deteriorating, we need to put SAFETY first. Not a time frame. If you had lost your dream home to this industry, or your health, or found your risk for cancer had been increased because it was in your back yard perhaps then you would encourage the NRC to make these decisions a little more complete.

comment #117 posted on 2011-02-15 14:36:22 by Toby

I'm interested to see the response to Rod's question.

NRC Talks Virginia Mining

posted on Wed, 09 Feb 2011 16:18:57 +0000

The launch of the NRC Blog prompted a number of interesting comments on issues the NRC faces each day. Here's one: *I live in Virginia and I would like to comment that a Canadian mining company is attempting to overturn a 1982 moratorium which makes it illegal to mine or mill uranium in Virginia. What seems to be overlooked is the separation of mining & milling uranium from the rest of what I call "the nuclear cycle"! The fact is that mining uranium has never been conducted in an area with as dense population, or with as much rainfall (42 – 45 inches annually). They have decided that we should be an experiment, and they have allies who have vested interests in this industry. We do not want to be guinea pigs in anyone's experiment. I would like to solicit the opinion of the NRC on this most important issue. Uranium recovery – as we refer to the extraction and milling of uranium ore – is a complex regulatory subject covered by many federal and state laws dating all the way back to the Mining Act of 1872. The NRC's authority stems from the Atomic Energy Act of 1954, which gives the agency*

jurisdiction over uranium once its physical or chemical properties are altered for eventual use in the nuclear fuel cycle. As a result, the NRC does not regulate uranium mines – the conventional shafts or surface (strip) mines – but it does license and regulate uranium mills, the related facilities that process the ore into uranium oxide, or “yellowcake.” There is another type of uranium recovery, called in situ recovery (ISR), which injects a solution into the ground to extract uranium from the rock; the resulting uranium solution is then pumped to the surface for processing. The NRC licenses and regulates ISR facilities because the uranium processing begins underground. (We do not call these facilities “mines,” but everybody else does.) Now, to Virginia: One of the nation’s larger uranium deposits happens to be in southern Virginia. Uranium prices have soared in recent years, and a company called Virginia Uranium has expressed interest in mining the deposit. The state has commissioned the National Academy of Sciences to study whether mining is feasible and safe given the environmental challenges cited by our commenter. If the project proceeds, it would involve conventional mining, which means the Commonwealth of Virginia and other federal agencies – not the NRC – would regulate the mine itself. However, the company will need to apply to the NRC for a license to construct and operate the mill. The mill would have to meet the tough requirements in NRC regulations (10 CFR 40, Appendix A) to protect the public and the environment from the mill’s operations and waste. Given this regulatory picture, the NRC has no opinion to express on the Virginia mining project at this time. If and when the company submits a license application for a mill, the NRC will examine it thoroughly for technical safety and environmental impacts. The planned mill must meet NRC’s regulatory requirements for safe operation and protection of the public health and the environment, before it can receive an NRC license. To correct one mistake in the original comment: According to Virginia Uranium, it is not a Canadian company but is owned by 31 land owners residing near the deposit. Information on the proposed project may be found in the NRC’s online [ADAMS](#) document database by searching for accession numbers ML081610623 and ML081630110. An NRC slide presentation to the National Academy of Sciences regarding conventional milling is at: ML110320309. And for more information on the NRC’s regulation of uranium recovery, including applications under review for new facilities out West, see our newly revised, updated and expanded Uranium Recovery Web page at <http://www.nrc.gov/materials/uranium-recovery.html>.

Dave McIntyre
Public Affairs Officer

Comments

comment #109 posted on 2011-02-13 21:21:52 by chat

That is very good comment you shared. Thank you so much that for you shared those things with us. I'm wishing you to carry on with your achievements. All the best.

comment #281 posted on 2011-03-10 08:24:21 by

This is good information. I found your website very interesting.

NRC- It's Not the Nuclear Reactor Commission

posted on Fri, 11 Feb 2011 14:15:49 +0000



Before I came to NRC, I thought the agency was set up just to make sure that 100 or so U.S. reactors operated safely. While that remains one of the agency’s most important missions, there is so much more that we do. For example, the office in which I work regulates 3,000 users of radioactive material and oversees 37 states that regulate about 20,000 other users of this material. Most people know about nuclear medicine, where radioactive materials are used in diagnosing and treating illness. But many may not know that radioactive materials are also used in devices such as the gauges that measure moisture density in highway construction or in analytical equipment that makes sure airplanes don’t have structural defects. Radioactive material is used in a number of different applications (commercial, academic, and medical) with a broad range of societal benefits. In my office, we make sure the people who use the material do so in a safe and responsible manner, and that they have the material properly controlled to protect it from being stolen or lost. We also make sure our licensees – those we license to use radioactive materials -- are aware of their environmental responsibilities and we work to ensure sites where these materials have been used are decommissioned properly. Our regional staff of license reviewers and inspectors, and their counterparts in the states, work closely with the licensees and with other key stakeholders to monitor performance. We track when things go wrong, what we call “events,” and make decisions on what steps need to be taken based on the safety significance of those events. We ask various parts of the industry if our regulations make sense and whether or not they are effective; but we also provide members of the public with similar opportunities to express their comments. We typically use the Federal Register to post these public comment notices, but you may see future blogs highlight this, too. My office has a broad range of regulatory responsibilities. I look forward to highlighting some of our issues and challenges in future posts. If you would like me to focus on one particular aspect of nuclear materials, waste management, decommissioning, or uranium recovery activities, just let me know in the comment section below.

George Deegan
Senior Program Analyst (Nuclear Materials/Waste Management)

Comments

comment #128 posted on 2011-02-17 05:02:38 by Greg

Thanks a lot for sharing the process George! I've always been curious about the internal workings and the way a team deals with the complicated system of a nuclear reactor. Great insight! Greg

comment #97 posted on 2011-02-11 17:39:17 by Richard Hogan

Keep it up, informative works in a large forum.

Are We Writing in Plain English?

posted on Tue, 15 Feb 2011 15:14:48 +0000



Does the NRC use too much jargon? Is it hard to figure out what some of our publications are trying to say? Those aren't rhetorical questions; we really want to know—preferably with some specific examples. Writing in plain English is a long-standing goal of the NRC. But we are currently renewing our efforts to communicate clearly in response to a new law passed by Congress. Since many of our regulatory functions are highly technical, there will always be some NRC documents that use a lot of technical and scientific terminology. Congress recognizes this and directs agencies to “focus on documents Americans are most likely to encounter” and write “in a way that meets the needs of the intended audience.” So we will be making an extra effort to use plain writing in the documents most often read by the general public, such as: • Performance Assessments (For both reactors and fuel cycle facilities) • Inspection Reports • Environmental Impact Statements • Significant Enforcement Actions • Meeting Notices If you have specific suggestions for items that are hard to understand, or that need to be written more plainly, please let us know in the comments to this post.

Glenn Ellmers

Communication Specialist

Comments

comment #126 posted on 2011-02-16 12:47:51 by Moderator

Your point is well taken. We make an effort to give the public as much advance notice of our public meetings as possible. Sometimes that means documents that will be made available in ADAMS have not been posted there yet. If they have been posted, we try to include the ADAMS ML number for convenience. Glenn Ellmer

comment #162 posted on 2011-02-21 00:15:08 in response to comment #142 by Jane Swanson, Mothers for Peace

I agree with Len. The first time a term is used in a given document it should be spelled out in full and the acronym should follow in parentheses. Although the NRC website does list acronyms, they are alarmingly numerous and seem to multiply faster than rabbits. It is cumbersome to have to look them up.

comment #142 posted on 2011-02-18 16:07:21 by Len

A major advance would occur with severe restrictions on the use of acronyms. Acronyms are a hindrance to clarity as they can be easily misinterpreted or misunderstood. The fact that the different reactor designers often use different acronyms for similar systems only adds to the confusion. Acronyms be gone.

comment #204 posted on 2011-02-25 11:52:07 in response to comment #162 by Moderator

We realize acronyms can make documents difficult to read and they are one of the things our working group will be looking at as we try to improve the readability of NRC documents. Glenn Ellmers

comment #116 posted on 2011-02-15 11:21:59 by Jane Swanson, Mothers for Peace

I have noticed an improvement in the clarity of the inspection reports for Diablo Canyon over the past couple of years. There is now a summary of the most important findings at the beginning. This enables the lay reader to get the lay of the land and to decide which parts of the full report to read in detail. Notifications of meetings from OPA would be improved if the exact ML# of all relevant documents were included at the bottom of the notice. Using as an example No. IV-11-006, it would save me a lot of time and frustration if there were something like this: " The agenda and reports to be considered for this meeting may be found at <http://www.nrc.gov/reading-rm/doc-collections/aslbp/2011/> by clicking on *****. Alternatively, see ML 88888888 and ML 444444", which will be posted 5 working days before the meeting date." You get the idea. Don't make us go on a scavenger hunt. And no fair posting the reports to be discussed during or after the PUBLIC MEETING. If we can't see the content in advance, we can not be ready to fully understand nor to offer useful comments.

NRC's Upcoming Regulatory Conference Expected to Draw 3,000 Attendees

posted on Wed, 16 Feb 2011 15:45:39 +0000



The NRC's annual [Regulatory Information Conference](#), known as the RIC, is coming up on March 8-10. This important conference is co-sponsored by the two NRC offices responsible for regulating nuclear reactors and overseeing research activities. The conference provides a great opportunity for the NRC to discuss and share information on our regulatory, research and other activities in an informal environment. The RIC is the largest regulatory conference of its kind attracting participants from around the globe. This year we expect more than 3,000 attendees from as many as 30 countries. This is our 23rd RIC and although some things are predictable, every conference is slightly different. This year we have 42 technical sessions and 29 technical poster and tabletop presentations that cover a wide range of topics related to operating reactors, new and advanced reactors, fuel cycle facilities, nuclear security, safety research, and safety culture. Even at the NRC, not everyone realizes how early planning begins. More than 400 people are involved in the RIC start planning the next year's conference the minute the last one ends. The NRC dedicates a lot of time and attention to this conference because it presents an invaluable opportunity to learn and share information and work together to ensure safe and secure regulation in the nuclear industry. The conference is free and open to the public but you must register! [Online registration](#) is available on the RIC website until Feb 22. On-site registration will be available on March 7 from 4:00 p.m. to 6:00 p.m. at the Registration Service Desk on the hotel's lower level. The Registration Service Desk also opens on Tuesday and Wednesday at 7:00 a.m. and Thursday at 7:30 a.m. Following the RIC you can access copies of presentations, speaker and panelist biographies, audio recordings of the technical sessions, and video copies of the plenary sessions through the [NRC website](#).

Christine Steger

Communications Analyst (Office of Nuclear Reactor Regulation)

Amy Bonaccorso

Senior Communications Specialist (Office of Research)

Comments

A Level of Confidence

posted on Thu, 17 Feb 2011 16:45:18 +0000

The Commission's recent update to the [Waste Confidence Decision and Rule](#), published December 23 in the *Federal Register*, has been in the news lately. Many of the reports have misstated or misunderstood the meaning of the update and how it affects nuclear power plants. This post will provide a short history of Waste Confidence, a summary of the changes and a brief response to some of the most common misconceptions. Waste Confidence generally refers to two documents: the Waste Confidence Decision and a corresponding Rule. The Decision provides the basis for the Rule and includes a number of generic safety and environmental findings. The Rule is a generic finding by the NRC that there will not be significant environmental impacts from storing spent fuel after a nuclear power plant's operating license expires. (The term "generic" here means that it is not site specific.) Waste Confidence stems from two federal court cases that set out the NRC's obligations for safely storing and disposing of spent nuclear fuel and other high-level waste under the Atomic Energy Act (AEA) and the National Environmental Policy Act (NEPA). The AEA requires the NRC to establish standards governing the civilian use of nuclear material and facilities; NEPA directs federal agencies to evaluate the environmental impacts of major federal actions, such as licensing a nuclear power plant. The 1984 Waste Confidence Decision included five findings that evaluated the technical feasibility of a repository and the long-term safety and feasibility of storing spent fuel. These findings satisfied the decisions in the cases mentioned above and formed the basis for the Waste Confidence Rule. The Waste Confidence Decision and Rule have been amended twice since 1984. The most recent revision removed a date when a repository would be expected to be available for long-term disposal of spent fuel and evaluated the environmental effects of "at least 60 years" of spent fuel storage after the end of a reactor's license. A common misconception is that the update authorizes the continued licensing of nuclear power plants and the long-term storage of spent fuel. Rather, the update looks at only a small part of the NEPA analysis that needs to be completed before the Commission can decide on an application for a new nuclear power plant or spent fuel storage facility. Any licensing decision issued by the Commission must be based on a comprehensive NEPA analysis, and the update alone is not sufficient to meet this obligation. Another common misconception is that the NRC has approved extended storage of spent fuel at reactor sites for the next 100 years or so. The update says the NRC has made a generic finding that the spent fuel can be stored safely for at least 60 years, if necessary. This generic finding is needed to respond to the NRC's legal obligations under the AEA and NEPA and does not make any site-specific findings or authorize storage at any specific location. Individual sites would still need to apply for approval to construct and operate storage facilities. I hope that this helps provide some background on the Waste Confidence update and its history. I look forward to responding to your comments and questions on this complicated issue.

Tison Campbell

NRC Attorney

Comments

comment #131 posted on 2011-02-17 11:46:39 by Moderator

Some additional information: The court cases that led to Waste Confidence are *NRDC v. NRC*, 582 F.2d 166 (2d Cir. 1978) and *State*

of Minnesota v. NRC, 602 F.2d 412 (1979). The 1984 Waste Confidence Decision was published in the Federal Register at 49 Fed. Reg. 34658; August 31, 1984. Citations for the 1990 revision are 55 Fed. Reg. 38472 and 38474, September 18, 1990; the latest revision is 75 Fed. Reg. 81032 and 81037, December 23, 2010. Tison Campbell

comment #173 posted on 2011-02-22 16:08:16 in response to comment #135 by Moderator

Thank you for your comment. We've passed your suggestion along to the team working on the possible long-term update to the WC decision and rule discussed in the Commission's September 15 SRM (<http://www.nrc.gov/reading-rm/doc-collections/commission/srm/meet/2010/m20100915.pdf>). Please be aware that this suggestion will not be considered as a formal comment on the long-term update; nor will the staff catalogue, track, and respond to the comment. If a proposed rule and draft environmental impact statement are issued, the staff will accept and respond to comments as part of the process to develop a final rule and final environmental impact statement. Tison Campbell

comment #133 posted on 2011-02-17 13:47:50 by Moderator

Moderator Note: This unsigned comment was moved here from another post. The NRC's most recent Waste Confidence Decision seemed to be wishful thinking in the light of the termination of Yucca Mountain licensing efforts. Today's lawsuit filed in the DC Circuit by NY, VT, and CT reinforces my view on this matter. Text of the request for review follows: UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT _____x THE STATE OF NEW YORK, THE STATE OF VERMONT, and THE STATE OF CONNECTICUT, Petitioners, -against- No. 11-_____-ag UNITED STATES NUCLEAR REGULATORY COMMISSION, and UNITED STATES OF AMERICA, Respondents. _____x PETITION FOR JUDICIAL REVIEW OF ADMINISTRATIVE AGENCY ACTION Pursuant to § 189 of the Atomic Energy Act, 42 U.S.C. § 2239, 28 U.S.C. §§ 2341-2344; the Administrative Procedure Act, 5 U.S.C. § 551 et seq.; and Rule 15 of the Federal Rules of Appellate Procedure, the petitioners, the State of New York, by its attorney, Eric T. Schneiderman, Attorney General of the State of New York; the State of Vermont, by its attorney, William H. Sorrell, Attorney General of the State of Vermont; and the State of Connecticut, by its attorney, George Jepsen, Attorney General of the State of Connecticut, hereby petition this Court for review of the United States Nuclear Regulatory Commission's ("NRC") Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation rule ("Temporary Storage Rule") and affiliated Waste Confidence Decision Update, both issued December 23, 2010. See 75 Fed. Reg. 80132 (Dec. 23, 2010); 75 Fed. Reg. 80137 (Dec. 23, 2010) (both attached to this petition). The NRC acted arbitrarily, abused its discretion, and violated the National Environmental Policy Act, the Administrative Procedure Act, the Atomic Energy Act, the Commission's policies and regulations, the Council on Environmental Quality's regulations, and other applicable laws and regulations in promulgating these rules and findings. The State of New York, jointly with the State of Vermont and the Commonwealth of Massachusetts, and the State of Connecticut, through their respective Attorneys General, submitted extensive comments on both the draft Temporary Storage Rule and the draft Waste Confidence Decision Update in February 2009. The State of New York also submitted supplemental comments on February 9, 2010. As the NRC published notice of these rules in the Federal Register on December 23, 2010, this filing is within the Hobbs Act's 60-day statute of limitations and is timely. 28 U.S.C. § 2344. Venue is appropriate within the D.C. Circuit pursuant to 28 U.S.C. § 2343. Therefore, the States of New York, Vermont, and Connecticut respectfully request that this Court review the NRC's Temporary Storage Rule and Waste Confidence Decision Update, vacate both, and remand the matter to the NRC for further analysis and the preparation and issuance of an environmental impact statement, and grant any other relief that the Court may deem just and appropriate. Dated: February 14, 2011 New York, New York ERIC T. SCHNEIDERMAN ATTORNEY GENERAL BY: _____/s _____ MONICA WAGNER Assistant Solicitor General JANICE A. DEAN JOHN J. SIPOS Assistant Attorneys General Office of the Attorney General For the State of New York 120 Broadway New York, New York 10271 Tel. (212) 416-6351 E-mail: monica.wagner@ag.ny.gov mailto:monica.wagner@ag.ny.gov WILLIAM H. SORRELL ATTORNEY GENERAL BY: _____/s _____ THEA SCHWARTZ KYLE H. LANDIS-MARINELLO Assistant Attorneys General State of Vermont Office of the Attorney General 109 State Street Montpelier, Vermont 05609-1001 Tel. (802) 828-3186 Email: tschwartz@atg.state.vt.us mailto:tschwartz@atg.state.vt.us GEORGE JEPSEN ATTORNEY GENERAL BY: _____/s _____ ROBERT SNOOK Assistant Attorney General 55 Elm Street P.O. Box 120 Hartford, CT 06106 Tel. (860) 808-5020 robert.snook@ct.gov mailto:robert.snook@ct.gov ATTACHMENT U.S. Nuclear Regulatory Commission Consideration of Environmental Impacts of Temporary Storage of Spent Fuel After Cessation of Reactor Operation rule and Waste Confidence Decision Update issued December 23, 2010 75 Fed. Reg. 80132-37 (Dec. 23, 2010); 75 Fed. Reg. 80137-76 (Dec. 23, 2010)

comment #135 posted on 2011-02-17 16:51:01 by John Randall

The term "Waste Confidence" should be replaced by "High-Level Radioactive Waste Confidence" because HLW is what it's about. Low-level radioactive waste, uranium recovery waste, and decommissioning waste are not covered by "Waste Confidence." There is real disposal going on with these waste types. For them, "when necessary" is now. HLW disposal has always been something that is going to happen.

comment #136 posted on 2011-02-17 20:02:43 by Tom Gurdziel

Where would I be able to find (read) more information about what the NRC considered, (and what they did not), when they made a not-site-specific finding that the "spent fuel" can be stored safely for at least 60 years? For instance, is "spent fuel" only undamaged spent fuel or does it include leakers, or worse? Thank you, Tom Gurdziel

comment #144 posted on 2011-02-18 18:21:04 by Len Skoblar

Mr. Campbell, could you, with equal clarity, explain why Chairman's Jazcko's actions with respect to DOE's Yucca Mountain License Application meets the NWPAA? It seems to me that he has brought politics into the NRC in a big, big, possibly fatal way. How can the commissioner disrespect the ASLB and the NWPAA in the manner he has.....with apparent impunity? Where is the justice here?

comment #201 posted on 2011-02-25 09:06:26 in response to comment #144 by Frank

Mr. Skolbar, I Agree with you completely. Thank you for expressing yourself so well and asking your questions. It is a shame we have this guy as Chairman. He really is a liability waiting to happen. God forbid that we should have amjor incident, and expect him to lead the country through it.

comment #171 posted on 2011-02-22 16:04:55 in response to comment #158 by Moderator

An FEIS that cannot, for whatever reason, rely on the generic finding of no significant impact in the Waste Confidence Rule could instead include a site-specific discussion of the post-licensed life storage of spent nuclear fuel and high-level waste at that specific reactor. By including this analysis in the FEIS instead of relying on the generic finding in the WC rule the NRC would still satisfy its NEPA obligations. You're correct that the 100 years of storage notion comes from the 40-year operating license term followed by the 60 years considered in the WC Decision and Rule; including a 20-year relicensing term would increase the maximum storage considered to about 120 years. Tison Campbell

comment #172 posted on 2011-02-22 16:06:09 in response to comment #136 by Moderator

The Federal Register Notice for the Waste Confidence Rule provides a partial list of the documents the NRC relied on. The Notice for the Rule also references the Waste Confidence decision, which serves as the regulatory basis and Environmental Assessment for the Rule. The Federal Register Notice for the Waste Confidence Decision provides a comprehensive list of the documents that provide the basis for the Rule and Decision. Most of the documents referenced in the Decision and Rule can be found through ADAMS or on the NRC's public website. Spent Fuel in this context includes intact fuel with defects (such as leakers), damaged fuel, and even fuel debris/ruble. Damaged fuel and fuel debris traditionally requires additional confinement and criticality safety controls during dry storage (such as canning of individual fuel assemblies). The NRC Standard Review plan for Dry Cask Storage System (NUREG-1536 Rev. 1) provides additional information on damaged fuel definitions and regulatory acceptance criteria for safe storage (see glossary and Section 8). Ref: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1536/r1/sr1536r1.pdf>. Tison Campbell

comment #158 posted on 2011-02-20 11:18:24 by Aging Nuke

Many thanks to Tison Campbell, NRC staff attorney, for posting a summary of the Waste Confidence Decisions and Rule-makings, and also for providing the applicable Federal Register references. Part of Tison's summary reads, "...the update looks at only a small part of the NEPA analysis that needs to be completed before the Commission can decide on an application for a new nuclear power plant or spent fuel storage facility. Any licensing decision issued by the Commission must be based on a comprehensive NEPA analysis, and the update alone is not sufficient to meet this obligation." Isn't the converse also true, that if an FEIS for a nuclear power plant could not rely on the generic Waste Confidence Decisions and rule-makings, then such an FEIS would be incomplete in that it could not address the spent fuel disposition and disposal issues. In such a case, it would seem that NRC would not be able to make the necessary environmental impact findings that would be needed to support the issuance of a reactor license. Shifting subjects, it seems that the "100 years" storage notion stems from the nominal 40-year operating license term, followed by 60 years of on-site storage. Considering a 20-year licensing extension extends the total storage time to about 120 years.

Improving Regulation at the NRC

posted on Tue, 22 Feb 2011 15:01:48 +0000

Last month, President Obama issued [Executive Order 13653, "Improving Regulation and Regulatory Review."](#) While this executive order does not apply to independent regulatory agencies such as the NRC, you may be interested to learn that the NRC put in place many of these improvements long before the order was issued. For instance, the order encourages agencies issuing proposed rules "to afford the public a meaningful opportunity to comment through the Internet" for "at least 60 days." The NRC already offers opportunities to comment on proposed rules through e-mail and the website <http://www.regulations.gov/>. (All of NRC's rulemaking dockets are accessible [here](#).) The NRC usually gives the public 75 days to comment on proposed rules. In addition, the order encourages agencies to consider the costs and benefits of regulatory actions. To the extent it is allowed under the Atomic Energy Act, the NRC does this for new or modified requirements for certain regulated facilities as part of its "backfitting" analyses. We consider whether the costs of modifying facilities to comply with new requirements are justified by a substantial increase in the protection of public health and safety or the common defense and security. We should point out that cost is not considered if we decide the modifications are absolutely necessary to keep the public safe and secure. The order also says that agencies should adopt specific performance objectives, rather than specifying the actions that must be adopted. The NRC already does this through its performance-based regulations. In performance-based regulation, the agency sets the goal, but lets those regulated decide how to accomplish that goal. The White House also issued a memorandum accompanying the order that directs agencies to "develop plans for making information concerning their regulatory compliance and enforcement activities accessible, downloadable, and searchable online." The NRC already provides access to this kind of information through www.nrc.gov and our [public ADAMS system](#). In fact, the [NRC website](#) provides the daily Status Report, Event Notifications, a Safety Performance Summary, inspection reports, enforcement actions, press releases, and public meeting information for each plant. Recently, the NRC also created an [Open Government website](#), which provides links to high-value data sets and other information that may be of interest to you.

Sean Croston
NRC Attorney

Comments

comment #177 posted on 2011-02-22 19:37:46 by Mike Mulligan

The NRC confuses following the regulations and procedures, and doing good. Just because the NRC is following the regulations doesn't mean the NRC is serving the ends of our greater good and nation. It gets you to the point of the NRC's malicious compliance with legislators intent and the militant enforcement of the rules for the benefit of the corporations.

comment #175 posted on 2011-02-22 18:24:34 by Len Skoblar

The White House left out of its directive "to make sure that politics, not science, dictate licensing decisions." The NRC already does that too, given Chairman Jaczko's nonsense with respect to the Yucca Mountain license application.

Not just a place to work, but The Best Place to Work in the Federal Government

posted on Thu, 24 Feb 2011 13:56:20 +0000



When I graduated from college, I immediately began looking for a private sector job. I didn't consider pursuing a government position even though my father and four of my uncles worked for various agencies or departments. Maybe my reluctance was because I saw my father work incredibly long hours and I thought NO WAY! But after 10 years of long hours in a private sector job with little job security, I was back in the job market. This time, I focused on the federal government and was pleased to get hired. After eight years at that job, I was ready for another change. I was fortunate enough to be recruited by the NRC. When I started at the NRC it had just been rated The Best Place to Work in the Federal Government for 2007. I soon found out why. The NRC offers great [work life benefits](#) with flexible work schedules, telework opportunities, an on-site health care center and even day care for those with children! I didn't quite understand what being No. 1 meant but here at the NRC it's taken very seriously. NRC employees are surveyed annually about leadership management, performance, talent management and job satisfaction. If the NRC has a low score in one or more of these areas, the NRC takes measures to improve so that employees know they are being heard. The top leaders at the NRC believe the satisfaction of their employees directly supports the mission of the agency and the ability to meet the public's expectations. So the efforts are not just for the employees, but for everyone the NRC serves. The NRC must be doing something right. We've now been ranked No. 1 for the third time in a row! It's a great feeling to say you work at the best place in the federal government and know that as an employee, you helped make it happen. For more details: [The Best Places to Work rankings](#)

Kim English

Recruitment Program Manager

Comments

comment #208 posted on 2011-02-25 22:53:02 by Len Skoblar

Take the same poll in a year's time and the results will be markedly different if Jaczko continues to allow politics to control NRC decision-making.

When Foreign Countries Want to Buy into U.S. Nuclear Power Plants – What Then?

posted on Mon, 28 Feb 2011 15:31:59 +0000

The United States has historically struggled to balance its commitment to economic openness and foreign investment with national security concerns. For example, U.S. national policy makers have worked to make sure sensitive military and defense technology and production remain with American companies. After 9/11, concerns grew that foreign ownership of U.S. infrastructure could increase our vulnerability to terrorist attacks. One example is the heated debate triggered by the 2006 purchase of a company that ran U.S. ports by the United Arab Emirates-owned company Dubai Ports World. (Dubai Ports eventually sold its interests to a U.S. company.) More recently, globalization of the nuclear industry and the weak U.S. economy have attracted significant levels of foreign investment in the U.S. nuclear industry. The

Atomic Energy Act prohibits the NRC from issuing a license to any entity that the Commission believes is “owned, controlled or dominated by an alien, a foreign corporation or foreign government.” Broadly speaking, the foreign ownership prohibition protects the “common defense and security” of the United States, even though this may prevent some nations from participating in U.S. nuclear joint ventures. However, the NRC can permit foreign investment in nuclear power reactors if certain conditions are met. What are these conditions? The licensee must submit a plan that describes how it will mitigate foreign control issues. For example, the licensee could exclude foreign board directors from nuclear safety and security decisions or establish “Nuclear Advisory Committees” made up of U.S. citizens to oversee safety and security practices. For any proposed foreign joint venture, the NRC staff reviews many aspects of the proposed corporate structures of the owners, including parent companies and subsidiaries, financial arrangements, operating agreements, voting requirements, and decision-making authorities. The staff can impose license conditions specific to the situation. Foreign investment will continue to play a critical part in the U.S. nuclear industry. Through effective staff review and implementation of effective mitigation measures, the NRC can continue to protect the common defense and security regardless of ownership.

Anneliese Simmons

Nuclear Reactor Financial Analyst

Comments

comment #244 posted on 2011-03-01 06:53:38 by Len Skoblar

Actually, I think the time has come to end this dance. Energy is a strategic commodity...period. Our country's very survival depends upon it. So let us dispense with the distraction (and risk) that "foreign investment" brings to the dance. The US government should subsidize indigenous energy production in all its manifestations and forms to eliminate the need for foreign investment. That would be tax dollars well spent. And NRC could then bring even more focus and resources to its primary mission....nuclear safety.

comment #553 posted on 2011-03-29 08:58:14 in response to comment #520 by Len Skoblar

If I'm being honest, I think we may be pushing our luck with nuclear power plant life extensions and extended power uprates. Each of these programs will likely reduce the safety margin inherent in these machines. And I think that the Fukushima experience is telling us that "beyond design basis" events are feasible. I think it is time to rethink our national energy strategy with all cards on the table; all options open.

comment #520 posted on 2011-03-24 13:26:48 in response to comment #244 by Greg YUhas

Len, your comment is worthy of serious consideration when you consider the long term impact of equivalent consumption of fossil fuels. However, it can't be business as usual, we must optimize risk and seriously consider replacement of reactors that have exceeded their design base lifetime. Consider them as the 1972 VW bug vs a 2011 Toyota or Chevy for safety and reliability. We also need to readdress fusion and in particular the heavy ion beam approach. Civilization simply can't move forward without taking some risk. Greg

How the NRC Works with Native American Tribal Governments

posted on Wed, 02 Mar 2011 14:21:46 +0000



My office, the Office of Federal and State Materials and Environmental Management Programs, oversees NRC's intergovernmental activities. When you hear the word, “intergovernmental,” you might think it refers to interactions with state or other federal agencies. We do that, but it's only part of the story. We also have discussions and meetings with members of Native American tribal governments. We seek to inform Native American communities of the nature of NRC's regulatory activities, and learn of tribal needs and concerns about our work. The NRC routinely interacts with tribes on such issues as uranium milling and nuclear reactor licensing, nuclear waste storage and transportation of nuclear materials. The NRC is committed to its government-to-government relationships with tribes. Over the past year, the NRC has developed a protocol to help the agency work with tribal governments, and to increase NRC's awareness of tribal participation in the regulatory process. This has helped to educate NRC about Native American culture and historical

relations between the federal government and the tribes. Our staff has enhanced its ability to work with tribal governments by taking courses in such areas as tribal consultation, environmental policy and historic preservation. We have also made efforts to increase general outreach to tribes and to respond to specific requests. In addition, we maintain a working relationship with the National Congress of American Indians in Washington, DC. This group represents the needs and interests of all 565 federally recognized tribes. Our staff is now working on regulations that would require Native American tribes to be notified of reactor fuel shipments that may be transported across tribal reservation lands. We've corresponded directly with all 565 tribes and asked for comments on the proposed regulation. Additional information about this rulemaking can be found at <http://www.regulations.gov> by searching under Docket ID NRC-1999-0005. NRC's tribal outreach is part of a broader federal effort to communicate more closely with the tribes. In this way, we hope we are getting to know one another a bit better. If you'd like to know more about this activity, please contact Rich Turtill at Richard.Turtill@nrc.gov.

George Deegan

Senior Program Analyst (Nuclear Materials/Waste Management)

Comments

An Open Forum Now Available

posted on Thu, 03 Mar 2011 21:03:45 +0000



The NRC welcomes comments on the topics we're blogging about. But we realize there are other topics you might want to talk about. This post serves as the Open Forum section of the NRC Blog. You may post comments here on any topic relevant to the role and mission of the NRC. Comments here are still moderated and must adhere to the Comment Guidelines. If we determine a comment on another post is more appropriate here, we'll move it over. This post will stay open for comments and not be subject to the 30-day comment period of other posts. You can always find this post by clicking on the Open Forum category on the side bar.

Holly Harrington

NRC Blog Moderator

Comments

comment #282 posted on 2011-03-10 12:22:26 by Peter Van der Does

Thank you for the opportunity to comment. In a few days the NRC will likely give Vermont Yankee another license period. This is the same plant which has had a cooling tower collapse, a two story transformer fire, unaccounted for missing fuel rods, cracks in the steam dryer and Tritium, Cobalt 60 and Zinc 55 found in the groundwater test wells nearby and I won't repeat the earlier post about Strontium 90 in the fish in the nearby river. In a recent NRC report (2009?) the estimate for a severe accident was every 1 million hours of man-operations. That works out to every 114 years. I suppose "severe accident" is a euphemism for a meltdown. Great research guys! The 4 partial meltdowns we've had in the US were all within 15 years of starting operations: Simi Valley, Idaho SL-1, Enrico Fermi and TMI. Your Radioprotection Health Officer, a nice woman who I've met, would be interested to know that a health study was done and the 6 towns surrounding Vermont Yankee were found to have a slightly higher incidence of Leukemia in comparison with the rest of the county. Please forward this comment to your chairman. Thanks.

comment #203 posted on 2011-02-25 10:27:15 in response to comment #95 by Moderator

It's not clear what reviews or reports you're referring to, but here are some links that might be helpful: How the NRC reviews new plant designs: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/new-nuc-plant-des-bg.html> How the NRC reviews new reactor applications: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0298/> How the NRC reviews reactor license renewals: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0291/> Moderator

comment #286 posted on 2011-03-11 10:32:12 by Dan

Is the NRC staff following the recent news from the earthquake in Japan? Can you post some reliable technical information regarding the impact of the earthquake on Japanese nuclear facilities? What is the significance of the evacuations that have been ordered due to "failure of backup generators"?

comment #71 posted on 2011-02-07 16:01:35 in response to comment #69 by Moderator

You can learn more about the NRC's license renewal process for existing nuclear power plants here: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/license-renewal-bg.html>.

comment #51 posted on 2011-02-04 16:15:57 by Moderator

Thank you for the opportunity to speak out. The NRC allowed Vermont Yankee to forgo the ASME 10 year welds exam scheduled for 2010 and replace it with their own welds exam while Vermont Yankee has had the same internal radioactive leaks due to old welds in the same area two years running?!? The Connecticut river now has Strontium 90 found in the fish in proximity to the

Vermont Yankee nuclear power plant. Strontium 90 which the EPA says on their website causes Leukemia and bone cancer. Strontium 90 which has a half-life of 27.8 years and was produced at Vermont Yankee as effluents in 2002, 2003 and 2004. We can collectively thank the NRC for contributing to the health of the American people. Peter Van der Does Moderator: This comment has been moved here from a different post.

comment #52 posted on 2011-02-04 16:17:30 by Moderator

When will the NRC be releasing SER, Volume 3? What is the rationale for holding it up and how does this support the commission's commitment to openness and transparency? Frank Moderator: This comment has been moved here from a different post.

comment #53 posted on 2011-02-04 16:18:47 by Moderator

I am concerned about the aging nuclear reactors in the US. Recently there have been multiple incidents — scrams — that indicate less than secure conditions. I believe the public is being kept in the dark about the danger they are in because of the lack of repairs and continued use of aging nuclear reactors. I would like to see them all shut down, and replaced by solar and wind systems. Kathryn Barnes Moderator: This comment has been moved here from a different post.

comment #54 posted on 2011-02-04 16:20:13 by Moderator

The NRC Chairman's recent actions regarding suspension of Yucca Mountain staff review of the license application is a disgrace to the NRC as an agency. If one person, chairman or not, can stop a licensing proceeding the stability of the NRC licensing process is undermined. NRC's only job should be nuclear safety — not political favoritism. Not allowing the Commission vote on the Yucca Mountain CAB ruling is nothing short of a coverup. So much for openness in government. Joe Ziegler Moderator: This comment has been moved here from a different post.

comment #55 posted on 2011-02-04 16:26:52 by Moderator

Public Participation Wondering if you will make this a separate NRC blog issue? (The point I make, is public participation fun for the NRC, they don't take it as a serious business. NRC "having fun" over Vermont Yankee 2.206 So I am on the phone bridge this morning Feb 3, 2011 at 9am, I identify myself to the mechanical voice message system, then I am just kind of waiting around in silence on the phone waiting for them to push the button to join the conference. I assume there are people on the voice bridge, and then there are NRC officials in one or more rooms on a speaker phone device. All of a sudden I hear a click, I hear the snippet "and have a little fun", then I hear the talking of all the NRC officials, then the "welcome to this is a 2.206 petition...". All the background chatter of the officials stops...then we are off to the races with the 2.206 processes. From this point on everything is recorded in the NRC ops center and it is transcribed for addition into the public record. They do the introduction, then they give me the microphone so to speak. I say I got to get this down on the record. I just heard a snippet of "and have a little fun" when I first came into the meeting, when I was connected to the phone bridge...what did you mean by this? It was a male voice talking to a female. I am thinking two NRC officials were talking about outside activities, but you never can tell what is behind it. I said to myself too, they just might be talking about having a little fun with me in the meeting. The chairman of the petition board pops up explaining on my phone, "I was introducing a new NRC official to the petition board and I was telling her to have a little fun as she participates and listens to your review board" concerning tritium and root cause analyze issues at Vermont Yankee. I want to force a shutdown of VY and remove the licenses of all the Entergy nuclear plants, or at least get peoples attention... Can you imagine a 2.206 petition meeting chairman indoctrinating a new NRC official into the petition process by saying have a little fun with it. Are they all laughing and making faces behind my back as I am stuttering and fumbling my way through my speech. Are they laughing and having a little fun over us all? Mike Mulligan Moderator: This comment has been moved here from a different post.

comment #56 posted on 2011-02-04 19:15:15 by James E. Foster

Since at least 1982, NRC Office of Investigations (OI) personnel at grade levels of GS-12 - 14, and GS-15 have been misclassified as series 1811, "Criminal Investigator." To be classified in this series, an individual must meet most of the "frontline law enforcement" factors, and have them largely constitute the position duties: 1. Perform investigations (long-term, complicated reviews); 2. Investigate individuals suspected of or convicted of violating criminal laws of the United States (employing agency must have criminal investigation authority); 3. Have the authority to carry weapons; 4. Have the authority to arrest, seize evidence, give Miranda warnings, and execute search warrants; 5. Have a "rigorous" position which includes unusual physical hazards due to frequent contacts with criminals and suspected criminals, working for long periods without a break, and being in on-call status 24 hours a day. For LEO retirement credit, one must show that the primary duties of the position are the investigation, apprehension, and detention of criminals or suspects. The most important factors, are: 1) frequently pursuing or detaining criminals; 2) an early mandatory retirement age; 3) a youthful maximum entry age; 4) the job is physically demanding requiring a youthful workforce; and 5) exposure to hazard or danger. The factors (above) may also be considered as appropriate. OI duties and authorities do not match these criteria, especially since NRC lacks statutory authority for performing criminal investigations. They lack arrest responsibilities, agency authority to carry firearms or other weapons, do not perform undercover work, do not execute search or seizure warrants, do not give Miranda warnings, and are not exposed to hazardous conditions nor inclement weather. Most work takes place in an office setting, and is not "rigorous." OI investigations do not involve felonies, but violations of the regulations contained in 10 Code of Federal Regulations (Energy). None of their work is "frontline law enforcement work, entailing unusual physical demands and hazards." In March 2007, the Director of OI admitted that OI personnel have never performed a single arrest. When OI was created, a proposed desk audit of investigative positions to determine the correct job classification was cancelled. OI personnel have indicated that "NRC is the best-

kept secret on the 1811 circuit!” Letters from the NRC to the Civil Service Commission or Office of Personnel Management (OPM) regarding 1811 classifications and law enforcement retirement contained vague, erroneous, or misleading and false information. These letters indicated high percentages of criminal investigations, or investigations involving “matters of potential criminality covering a wide spectrum of violations.” The position of “Investigation Specialist,” later “Investigator,” began with the Atomic Energy Commission (AEC). These positions were series 1810, located in the Division of Compliance, and the investigation reports issued were titled “Compliance Investigations.” These positions were clearly originally established to conduct civil investigations to determine compliance with the regulations found in 10 Code of Federal Regulations (Energy). OI investigative personnel actually perform the duties and responsibilities of the series 1801 or 1810 classifications, and meet the 1801 or 1810 position classification guidelines and qualification requirements. Personnel classified in series 1801 or 1810 do not receive early retirement nor availability premium pay. The 1801 series guide, for example, specifically speaks to positions where investigations relate to violations of regulations and criminal matters are referred to another agency for criminal investigation. The result of the misclassification is that the NRC has unnecessarily paid OI investigators early retirement and premium pay (Administratively Uncontrollable Overtime [AUO] or “availability pay” of 25% of their salary), amounting to hundreds of thousands of dollars per year, and totaling millions of dollars during the period 1982-2010. The 25% availability pay is included in the OI investigators’ basic pay, and therefore raises the “high three” salary years utilized to determine retirement pay. Also, a more beneficial percentage is used to calculate retirement benefits. A very conservative analysis indicates that the overpayments greatly exceed \$700,000 per year (the effect on Thrift Savings Plan agency contributions and retirement benefits of an additional 25% during an employee’s “high three” years was not calculated). OI Investigations largely consist of interviews with a court reporter present, and document reviews. Between 7% - 30% of the cases are referred to the Department of Justice (DOJ) for prosecutorial review, but very few are accepted for further investigation, and even fewer result in convictions. In extremely rare cases, the OI investigator may provide assistance to the DOJ in its review or investigation, and may provide testimony in court or before a Grand Jury. In vanishingly rare cases, the investigator may assist in obtaining and executing a search warrant (accompanying the primary law enforcement officers), or collecting physical evidence. A chronology of events indicates that NRC senior management was well aware that NRC did not have the authority to conduct criminal investigations, had not given such authority to OI, and that OI did not perform criminal investigations. In the early years, OI did not even directly interface with the DOJ, but passed their investigations to the Office of Inspector and Auditor for referral to DOJ. Of central importance is a memorandum dated October 15, 1982 in which the NRC Deputy General Counsel advised that, lacking statutory authority, NRC personnel should not conduct criminal investigations under any circumstances. Subsequently, numerous submittals were made to OPM, claiming that all OI investigations were criminal investigations. Perhaps as importantly, on April 9, 1984, the full NRC Commission received a Briefing on Criminal versus Civil Investigations. A draft document giving OI the authority to conduct criminal investigations was discussed, with the Commission strongly objecting to and directing removal of the term “conduct” and substitution of the word “assist.” Quotes: “we believe that the Commission – and OGC has taken this position in the past – that the Commission does not have independent authority to conduct criminal investigations.” “Yes, our policy is to first serve our civil purpose and then help DOJ.” This briefing led to a commission paper used as guidance in negotiating a Memorandum of Understanding with the Department of Justice.

comment #57 posted on 2011-02-05 01:08:01 by Andrew Williams

An issue which the NRC very much needs to address is the matter of the Yucca Mountain Nuclear Waste Repository. NRC Chairman Gregory Jaczko’s actions regarding this matter have been extremely disturbing. Last year, the NRC’s Atomic Safety and Licensing Board ruled that the Energy Department does not have the authority to withdraw its application to build the Yucca Mountain site. This decision is now appealed to the full NRC commission of which Gregory Jaczko is the chairman. In what took the ASLB 39 days to decide, the NRC commission is still deciding and has been doing so for over 200 days. It is quite obvious to everyone involved as well as the public that the decision is being delayed for political reasons. Of five NRC commissioners, two oppose Yucca mountain (Jaczko and Magwood), two support Yucca mountain (Ostendorff and Svinicki), and one recused himself from voting (Apostolakis). If the decision on whether to uphold the ASLB decision was made now, the vote would end in a tie meaning the ASLB decision would stand. This scenario is obviously untenable to Gregory Jaczko so he has delayed the commission’s vote for over 200 days. It is worth noting, at this point, that George Apostolakis, the commissioner who recused himself from voting on this issue, did so because he earlier worked on the DOE license application for the Yucca project. Ironically, Gregory Jaczko, who was senate majority leader Harry Reid’s science advisor and who helped Reid frame arguments against Yucca mountain, has NOT recused himself. In this blatantly political action, Jaczko has made it clear that he will use any means at his disposal to stop Yucca Mountain from going forward. Jaczko has already delayed a commission ruling for over 200 days and I have no doubt that he will delay further. In fact, I believe he will delay the decision until William Ostendorff’s term as NRC commissioner expires in June of this year. This will give him free reign to decide the matter how he wishes. Gregory Jaczko has turned the once apolitical Nuclear Regulatory Commission into a political tool for Harry Reid to exert control over America’s nuclear policy. He refuses to allow a vote to occur to decide the fate of the Yucca Repository until he can control the outcome. The NRC has lost credibility and will continue to lose credibility in the eyes of the American people until a decision is made by the commission. Gregory Jaczko is delaying a legal proceeding for political gain and should resign immediately from his position, as he has lost the confidence of the public. I also find it abhorrent that on this blog an NRC moderator said “The decision to cancel the Yucca Mountain Project was made by the White House and the Department of Energy, not the NRC.” The decision on whether or not to cancel Yucca Mountain is still in review! Furthermore, the NRC ultimately WILL decide on whether or not the project will go forward or not based on the commission’s ruling.

comment #58 posted on 2011-02-05 08:06:49 by Tom Clements

The NRC has a regulatory role related to DOE’s program seeking utilities to use weapons-grade plutonium fuel (MOX) in commercial nuclear reactors. After Duke Energy withdrew from a failed test of MOX fuel in 2008, DOE was left with no utilities which even had interest in MOX. Now, DOE has turned to the TVA and Energy Northwest (Richland, WA), and is attempting to convince them to

use weapons-grade MOX, which has never been used on a commercial scale and never even tested in a BWR. But any use in BWRs or PWRs will need a full three cycles of testing, licensed by the NRC, to see if "batch" use of MOX can be licensed by the NRC. As DOE, Energy Northwest (EN) and TVA, which has a MOU with EN (see that in documents linked below) failed to provide information to the public about the interest in MOX by EN, that has been done by Friends of the Earth, in the public interest: "Secret Plan Exposed to Use Surplus Weapons Plutonium in Washington State Nuclear Reactor" - see: <http://www.foe.org/secret-plan-exposed-use-surplus-weapons-plutonium-washington-state-nuclear-reactor>

comment #61 posted on 2011-02-05 09:43:01 by Rod Clemetson

Part Two ==> China has grand plans to build enough nuclear power plants to supply 200 gigawatts by 2030, and do it with a modified (Gen-III) Westinghouse AP 1000 design. Now they've included TFMSR's in the plans, which may eliminate the need for the much more expensive Westinghouse LWR's. Their nuclear capacity is already replacing coal-fired plants amounting to 60 gigawatts since 2006. China has 13 nuclear plants in operation today, another 25 under construction, and 200+ more on the drawing boards. They aren't waiting around to sign any pollution reduction treaties, they're just *DOING* it! Now they're siezing the fantastic opportunity to leap straight ahead to Gen-IV designs, such as TFMSR and Liquid Fluoride Thorium Reactors (LFTR's). Please google "Energy From Thorium" and "Thorium Energy Alliance". I promise you'll be amazed. By the way, the United States is preparing to destroy (i.e., down-blend and bury) one thousand kilograms of Uranium 233 (currently classified as toxic nuclear waste). U233 can be used to produce many beneficial medical and industrial isotopes, and is an ideal "starter" fuel for TFMSR's. It's going to cost several hundred million dollars to destroy this valuable stockpile of U233. The United States could proceed with the destruction plans -- which would make the Chinese TFMSR success more difficult -- or, we could develop our own TFMSR program and beat the Chinese to the patent office. The latter notion gets my vote. So here's a new challenge for the NRC: adopt and adapt regulations to take into account the concept of liquid fueled reactors that can operate at atmospheric pressure and passively shut down in an emergency. The SCRAM process for a liquid fuel reactor will manually or automatically drain the molten core into holding tanks where the fuel solidifies and traps all the radioactive materials. What a concept!

comment #66 posted on 2011-02-07 09:09:06 in response to comment #55 by Mike Mulligan

This is my test drive of the new car. If this is the new NRC...it is something? This transparency is powerful stuff...having people see events in their near immediacy....having people all see the information at the same time, or at least letting people see indiveguals interpretation of events, not just the bureaucrats' and licensee interpretation of events. ...It is transformational. Congratulations to the NRC!

comment #67 posted on 2011-02-07 12:08:23 by Moderator

I have read that the American military has more freedom as do research labs. If the military wanted to start developing their own Generation 4 reactor is there any reason they need to consult with the NRC? Moderator: This comment has been moved here from a different post.

comment #68 posted on 2011-02-07 12:11:53 in response to comment #67 by Moderator

The NRC has jurisdiction over all civilian (e.g., non-weapon) uses of nuclear materials in the United States. For example, the NRC regulates a research reactor operated by the Armed Forces Radiobiology Research Institute, while Congress has directed DOE to seek NRC licensing for the Next-Generation Nuclear Plant, a Generation IV project. The White House can designate specific facilities as being under the self-regulation of either the Department of Energy or the Department of Defense. DOE self-regulates a few of its own research reactors under this authority. The NRC, DOE and DOD have been discussing other small modular reactor concepts, some meeting the Generation IV definition. Both DOE and DOD have indicated they will seek NRC licensing for any small modular reactor projects at their respective facilities.

comment #69 posted on 2011-02-07 14:18:48 by Raphael

I remember seeing "The China Syndrome" as a kid and it kind of freaked me out. I have always wondered how realistic was that movie in terms of what Jack Lemmon's character was freaked out about. Forty years later and I do not recall any big snafus, which makes me wonder about the comment above regarding nuclear infrastructure as "aging". Any insights on this? [Raphael](#)

comment #74 posted on 2011-02-07 22:13:44 in response to comment #54 by Billy

since you did not include my earlier post it is obvious you are censoring posts you don't like. NRC is living a culture of corruption. Jaczko must go.

comment #79 posted on 2011-02-08 15:54:16 in response to comment #74 by Moderator

Posts that do not adhere to our Comment Guidelines cannot be posted. The full guidelines are available here: <http://public-blog.nrc-gateway.gov/nrc-public-blog-guidelines/> .

comment #99 posted on 2011-02-11 18:35:19 by A concerned citizen

I have been told by NRC staff that Chairman Jaczko has been directing the staff to take various policy positions in papers being sent to the Commission either for information or for a vote. Recent examples would be the paper on Yucca Mountain and the paper on Waste Confidence which is close to being delivered to the Commission. If this allegation is true, it is quite disturbing. Openness demands that the public know what the professional staff's views are before the Commission acts. If the staff's views are modified by the Chairman before policy papers are delivered, how will the public ever know the staff's real views?

comment #95 posted on 2011-02-11 15:50:37 by Moderator

I would like to know more about your review process. Many people are confused about the long periods of time that are invested in providing a report on requests. For instance is there a research team that needs to study the technology being reviewed? Is there a consultation with the professionals about their processes? Your role is a complex one to understand so any information that can explain why some reports can take years and not just months. Moderator: This comment has been moved here from a different post.

comment #196 posted on 2011-02-24 21:25:31 by Hamilton

I think it an important step in the right direction to put up this blog site. Collaboration and Communication is essential for projects of the magnitude as energy. Energy project affect everyone and everyone should know how things are going. Thanks.

comment #85 posted on 2011-02-09 10:41:26 in response to comment #66 by Mike Mulligan

Official Transcript of Proceedings NUCLEAR REGULATORY COMMISSION Title: 10 CFR 2.206 Petition Review Board RE Vermont Yankee Thursday, February 3, 2011 CHAIRMAN QUAY: At this point I would like to turn it over to Mr. Mulligan. Mr. Mulligan: Hello. I've got to get this on the record. When you first pushed the button when I came on the phone, I heard a snippet of information and the snippet of information was, "Let's have a little fun." What was that about? CHAIRMAN QUAY: That was me. I was welcoming a new Board member. She hasn't been here before and I said, "This will be fun for you." The reason I said that is it's a new experience. It's an experience which all of us need to have is interacting and learning how to interact with the public. MR. MULLIGAN: Who is this? CHAIRMAN QUAY: This is Ted Quay. MR. MULLIGAN: Okay. CHAIRMAN QUAY: Okay? MR. MULLIGAN: Thank you

comment #88 posted on 2011-02-09 11:22:20 by Moderator

As of recent, the NRC is becoming more dependant on industry's ghost stories, basically unsubstantiation stories and events dressed up as fact. They and the industry are increasingly representing a filament or fragments of the facts, partial and incomplete evidence and truth in documents and testimony. The examples I would give is the engineering, design, licensing bases and UFAR of the VY AOG piping radiological containment system. A developing problem is a factual understanding of the technical meaning of environmental LLD...the standards of how long a sample stays in a scintillation counter that gives us a LLD...what is the minimum level of detection of tritium and what constitutes a indication of a radioactive leak? Don't give me it is 2000 picocuries per liter... Vermont establishes it at 670 to 700 picocuries. Has the NRC in their deeds and actions...in their hearts... been gaming the first emergent indication of a radiological leak at the nuclear plants? We are getting a lot engineering ghost stories out of the agency recently...the facts are so thin it is like translucent ghost and just fragments of the truth floating all around us. There was a lot of ghost floating around in the part 26 commissioner meeting yesterday, did you see them...in LERs, the ROP and the inspection reports...its like Halloween all time and all year long. The NRC is just becoming a "not facts" based agency! Mike Mulligan Moderator: This comment has been moved here from a different post.

comment #104 posted on 2011-02-13 00:49:53 by Kaye Swain

Thank you for a very informative article, along with interesting comments. It is rather disconcerting to consider all these issues with old and newer reactors, particularly for those of us caring for elderly parents who live far from us but near an older reactor. One more issue for those of us in the Sandwich Generation to have to take into consideration. I appreciate this website to keep us updated and informed.

comment #270 posted on 2011-03-07 18:23:05 by AMA Nation

Its great NCR have this open forum. And it's a good way of communication with the agency through people concerns.

comment #287 posted on 2011-03-11 12:47:51 in response to comment #286 by Moderator

Yes, the NRC is following the impact of the earthquake in Japan and the resulting tsunami. Please see our latest blog post outlining NRC actions. However, we cannot speak for the Japanese government on their actions nor on the specifics of their plants. Holly Harrington Blog Moderator

comment #264 posted on 2011-03-05 05:13:49 by Paul Christopher Anzalone

Howdy from Missouri! Just would like to post that NRC.GOV is my home page on my personal home computer. That's all. Sincerely, Paul Christopher Anzalone

comment #391 posted on 2011-03-16 17:49:41 by mapsurfer

OK, I wonder who's bright idea it was to build a nuclear plant on a subduction plate. Even if we survived this catastrophe, what happens down the road when this planet gets into the ring of fire? We might not have a planet left to talk about. Hillary Clinton said on CNN that we didn't have the foresight to see this catastrophe, but I disagree with that.

comment #403 posted on 2011-03-16 21:23:01 by Art

I've done several searches via your NUREG page and the ADAMS interface for NUREG 0408 and other documents applicable to the Mark I containment and Mark I containment short and long term programs from the 1970s and 1980s. Why are these not available?

Easy Searching for Licensee Event Reports

posted on Fri, 04 Mar 2011 14:09:56 +0000



Licensee Event Reports – LERs – for nuclear power plants licensed by NRC can now be easily searched through [Data.gov](http://www.data.gov). NRC has required nuclear power plants to submit LERs since 1980, and about 52,000 of these reports have been submitted since then. In addition to finding them on the [NRC website](http://www.nrc.gov), you can now search for these reports based on a variety of criteria including date of occurrence, nuclear power plant name, plant operating mode, reactor type, regional location and keywords. Licensees are required to submit these event reports to the NRC when conditions occur in a nuclear power plant that are beyond its technical specifications (i.e., those conditions approved for the plant to operate). For example, if a required safety barrier was discovered to not function properly, this would trigger the need for an LER. A complete description of LER reportable events can be found in 10 CFR 50.73 at: <http://www.nrc.gov/reading-rm/doc-collections/cfr/part050/part050-0073.html>. Once an LER is submitted, NRC staff review it to understand and confirm the licensee's assessment of the situation. NRC staff experts also determine whether the licensee's resolution of the issue continues to maintain adequate levels of safety and protection of the public. [Data.gov](http://www.data.gov) is a website initiated as part of the White House's Open Government initiative. It helps give the public greater access to data generated by the federal government. Hosted by the General Services Administration, [Data.gov](http://www.data.gov) is a repository of government data that ranges from crime statistics by neighborhood to the best towns in which to find a job.

Amy Bonaccorso

Senior Communications Specialist

Comments

comment #271 posted on 2011-03-07 18:41:29 by AMA Nation

"Nuclear power plants are not the only ones with LERs in the system. Fuel Facilities have similar requirements and submit the same reports." I think they just have to limit with Nuclear, does make any sense?

comment #261 posted on 2011-03-04 12:41:12 by Mike

Nuclear power plants are not the only ones with LERs in the system. Fuel Facilities have similar requirements and submit the same reports.

What Do You Mean, NRC International Programs?

posted on Tue, 08 Mar 2011 16:23:39 +0000



The NRC is responsible for regulating domestic nuclear facilities and materials. So why does the agency have an Office of International Programs? One reason is that we are tasked with licensing the import and export of nuclear materials. Keeping careful track of where nuclear materials are going to, and coming from, is an essential part of U.S. nonproliferation activities. Put simply, the NRC's licensing activities help keep nuclear materials out of the hands of malicious actors so that people can benefit as much as possible from these materials' many peaceful uses. But the NRC's international activities extend far beyond licensing. The United States has the largest nuclear power program in the world, and its nuclear regulatory program is one of the longest-established and most experienced. Because of this, a lot of countries seek out our expertise. Some countries have well-established programs of their own. Here, we share ideas on a variety of technical matters: what are we doing, how are we doing it and what can we be doing better? Other countries are exploring the possibility of adding nuclear power to their energy mix or seeking to strengthen their ability to control radioactive sources. When we

work with these countries, our expertise can help them build a regulatory structure. In some cases, the NRC has helped countries create a regulatory program from the ground up. Since the goal of these actions is strengthening nuclear safety and security worldwide, successes on that front, even small ones, are extremely gratifying. The NRC also has a lot to learn from its foreign counterparts. The U.S. hasn't built a nuclear power plant in several decades, but France, Finland, China, India, Russia, Japan, Korea and others have done so. As the U.S.

potentially looks to expand its nuclear fleet in the future, we're not only looking to recruit and train new experts in this country, but also working closely with our counterparts overseas to learn from their more recent experiences. This is especially important because multiple countries will likely use the same nuclear reactor designs, which means the NRC and its fellow regulators will be licensing and regulating the same things. It's very important that we learn from one another. It will help us do our job better by finding common approaches to tackle common issues, rather than reinventing the wheel in every hemisphere. To accomplish our goals, the NRC Commissioners and technical staff travel around the world to meet with representatives from other countries, as well as multilateral organizations like the [International Atomic Energy Agency](#) in Vienna and the [Nuclear Energy Agency](#) in Paris. We also welcome a lot of visitors to the NRC, at our headquarters and regional offices. Our agency derives great benefit from our international work. The staff of the Office of International Programs is proud to represent the NRC - its expertise, its values, and its quest to learn more - on a global level.

Eric Stahl

International Programs staffer

Comments

comment #285 posted on 2011-03-11 08:43:21 in response to comment #280 by Moderator

The NRC is very involved in nonproliferation activities and works with other federal agencies in this area. For more information on what the NRC is doing, please see: <http://www.nrc.gov/about-nrc/ip/intl-safeguards.html>. Eric Stahl

comment #280 posted on 2011-03-10 04:29:55 by nishanth

so what action have you taken against nuclear proliferates .. just nothing so what is the need for this

Easier, More Comprehensive Search Available on NRC Website

posted on Thu, 10 Mar 2011 14:20:27 +0000

Ever since the NRC introduced the [Agencywide Documents Access and Management System](#) (ADAMS), the improvement most often requested has been the ability to easily search everything that's publicly available from one simple search string. We heard you. And now you can retrieve documents, news, and other information from the NRC's entire [public web site](#), including the documents in ADAMS, with a single search. Providing this simplified search is one of many things we are doing as part of our [Open Government Plan](#) to increase transparency, participation, and collaboration. To use this new search capability, you simply enter one or more words in the "Google Custom Search" box located in the upper-right corner of each NRC Web page, and click the Search button. Your search results will include not just Web pages but also relevant documents in the large collection of more than 665,000 publicly available ADAMS documents. Also included in the search are more than 2 million bibliographic citations (some with abstracts and full text) from the older Public Legacy Library collection. [Search Help](#) is located at the top of your NRC Search Results page to help you search effectively. In addition, the NRC has also introduced new versions of both the simple and [advanced search options](#) dedicated solely to ADAMS documents. Particularly valuable for advanced searching, the new ADAMS search tool lets you refine your search selections to include or omit ADAMS documents containing specific words or phrases or matching specific properties (author, document type, docket/license number, date ranges, etc.). If you have questions about any of the new search features or you need help to develop an effective search, the reference librarians in our [Public Document Room](#) are available to assist. We hope you find the new search capabilities easier to use and we welcome your feedback via comments to this post.

Margie Janney

Deputy Director, Information and Records Services Division

Comments

NRC Monitoring Earthquake and Tsunami

posted on Fri, 11 Mar 2011 17:15:52 +0000

NRC Chairman Gregory Jaczko, other top officials and nuclear experts at the NRC headquarters office and the Incident Response Center in our regional office in Texas are closely monitoring the aftermath of the Japanese earthquake and subsequent tsunami. Chairman Jaczko said this: "The NRC resident inspectors who work at the Diablo Canyon Power Plant in San Luis Obispo, Calif., are at the plant and working closely with plant personnel as they take appropriate precautions." Although not in a location that would likely be directly impacted by a possible tsunami, the NRC is also monitoring the San Onofre nuclear power plant, the Humboldt Bay spent fuel storage site and NRC-regulated nuclear materials sites in Hawaii and Alaska. All the sites tell the NRC they are prepared for possible tsunami effects. The nuclear power plant at Diablo Canyon, operated by Pacific Gas and Electric Co., did declare an "unusual event," this morning -- a designated based on NRC event classification requirements. The plant operators report that the facility is stable. And the plant is well protected against tsunami conditions as required by NRC regulations. In fact, all nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. More information about seismic protections at nuclear power plants can be found here: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html>.

Eliot Brenner

Office of Public Affairs Director

Comments

comment #294 posted on 2011-03-12 09:12:44 in response to comment #290 by Moderator

The NRC will continue to post information on its actions related to the Japanese earthquake and tsunami here and at www.nrc.gov. Other good sources of information on federal government actions are: www.fema.gov, www.whitehouse.gov and www.state.gov.

comment #289 posted on 2011-03-11 16:15:27 by Josh

This is good to know. We are in Portland, Oregon and we have an office in Lincoln City (which is closed today). With the old Trojan plant so close, we are always concerned when earthquake or tsunami warnings are issued. Thanks for this.

comment #290 posted on 2011-03-11 22:19:30 by Mike

I wish the NRC would provide expertise to the news organizations about what is happening or potentially happening with the nuclear power plants impacted by the Japan 8.9 earthquake. Some these so called "experts" (Rudy Giuliani on FOXNews in one case was explaining that radiation is affected by the wind) have no clue what they are talking about. Communication is needed but it needs to be accurate.

NRC Offers Condolences to Japan

posted on Fri, 11 Mar 2011 21:59:23 +0000

NRC Chairman Gregory Jaczko offered his condolences to all those in Japan affected by the tragic earthquake and tsunami today and stated that the agency "is ready to provide whatever assistance we can to our Japanese counterparts should there be a specific request." The NRC continues to monitor events and coordinate with other federal agencies. The declaration of an "unusual event" at the Diablo Canyon Power Plant in California due to a tsunami risk remains in effect and the NRC's regional office in Texas continues to monitor the situation. More information on the status of the Japanese nuclear power plants is available through the [website of the International Atomic Energy Agency](#), an arm of the United Nations. The NRC will continue to provide information about its actions here and on the NRC website, as appropriate. Please note, we will not be posting comments to our blog that speculate about the nuclear power plant emergency in Japan.

Eliot Brenner

Office of Public Affairs Director

Comments

comment #291 posted on 2011-03-12 00:41:17 by Patricia

Is it possible to get an NRC reaction to the press statements that the US flew "coolant" to the Japanese reactors?

comment #295 posted on 2011-03-12 10:15:29 by Eddie

There are press reports of the building exploding 'around' the Fukushima plant leaving only the steel liner of the reactor building. What is that all about? What is the cause? Really confusing information in the press which was one of the Kemeny Commission report findings on TMI. I wish the NRC would set up news and information site on the actual happenings as the UCS are already out there with propaganda on why nuclear power is unsafe. You folks at the NGC have the most credibility...

comment #293 posted on 2011-03-12 09:11:11 in response to comment #291 by Moderator

According to press reports, a spokeswoman for the State Department yesterday clarified that such a delivery did not occur.

comment #307 posted on 2011-03-13 15:29:21 in response to comment #295 by Moderator

We believe there is some inaccurate and misleading information in press reports; however the NRC is not in a position to fact-check these reports. We do encourage folks to consult credible government sources of information in addition to press reports.

NRC in Communication with Japanese Regulators

posted on Sat, 12 Mar 2011 17:08:59 +0000

The Nuclear Regulatory Commission continues to monitor the unfolding developments in Japan in the aftermath of Friday's earthquake/tsunami and problems at a nuclear power complex. It is a serious and very fluid situation that is being watched by a variety of government agencies who can provide assistance. The NRC is prepared to provide reactor experts should a request be made. In our communications with the Japanese government both the NRC and other elements of the U.S. government have offered our condolences to the Japanese people over the tragedy that has occurred. The NRC's Rockville, Md., headquarters Operations Center is operating on an around-the-clock basis. The NRC is not in a position to confirm reports that come from Japan on a minute by minute basis and it would be

irresponsible of the agency to speculate on a crisis unfolding half a world away. We will provide information we consider pertinent domestically when necessary. Nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside areas with extensive seismic activity are designed for safety in the event of such a natural disaster. The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the historical data's limited accuracy. In other words, U.S. nuclear power plants are designed to be safe based on historical data from the area's maximum credible earthquake. One of the items we have been asked about is how does a boiling water reactor operate. For background information on generic operations at a [boiling water reactor](#), including an [animated graphic](#), visit the NRC's website at www.nrc.gov.

Eliot Brenner

Office of Public Affairs Director

Comments

comment #301 posted on 2011-03-13 10:34:41 by Scott Brooks

There has been reports on radiation levels by the media that has described levels of radiation. However, I have not seen the data that shows the actual radiation levels using any type of unit of measurements. Nor has there been information on radiation levels in respect to location. Who is responsible to show this information, since it seems that this is the important information and it bypasses any subjectivity on radiation levels.

comment #303 posted on 2011-03-13 13:15:15 by Carl Paperiello

Thanks for the nice BWR diagrams. I also used your search line to get an NRC reactor concepts manual. As a former NRC staffer, I find myself explaining this event to neighbors and people at church. I would classify this event as INES-5 not 4. Site doses appear to be somewhat higher than I recall from TMI and I do not recall seeing Cs-137. Also, from the reports I am seeing, I am not sure if the secondary containment building, the reactor building, was really damaged or just the blow out panels went. Good luck and my prayers to those working this situation and the Japanese.

comment #297 posted on 2011-03-12 21:09:00 in response to comment #296 by Moderator

The NRC has been in contact with IAEA throughout the events and earthquake aftermath in Japan. Via IAEA communication, NRC has received information and reports from Japan. IAEA and Japan are exchanging information and it is up to them to develop INES information and communicate it to the public.

comment #299 posted on 2011-03-12 23:47:03 in response to comment #297 by Greg Yuhas

Thanks, you must have been successful; IAEA is now reporting it as a INES-4.

comment #304 posted on 2011-03-13 13:38:17 by Chuck Hoffheiser

This may be an absolutely crazy and unworkable idea, but given the seriousness of the reactor situation in Japan, I'll offer it to the experts trying to cool off and shut down the reactors. If it has any merit, and if someone at NRC is monitoring this blog today, perhaps you could transmit my idea to the NRC experts in Japan. Could we outfit helicopters with the fire-fighting water carrying devices often used in wildfires in the US? Is there any way these "water-helicopters" could be used to slowly release water into the reactor containment structures? Various reports say Japanese crews are pumping seawater into the structures, and maybe this is a way to supplement the amount of water and add it more quickly. Additionally, if there are any mid-air refueling Air Force planes close-by, could they be filled with water rather than jet fuel, then used for the same purpose? Naturally, the crews would have to be outfitted with complete radiation protection, and that might make this idea unworkable. And the aircraft could be contaminated with radiation, making them unuseable for a long time, another reason this idea isn't workable. Thanks for keeping us informed. (Personal information removed by moderator)

comment #296 posted on 2011-03-12 14:45:23 by Greg Yuhas

The amount of miss-information being provided by media experts is of concern. What is NRC doing to encourage the IAEA to explain the situation at Japan's reactors in the context of the International Nuclear and Radiological Event Scale (INES)?

comment #305 posted on 2011-03-13 15:23:41 in response to comment #304 by Moderator

The NRC is willing to offer our advice and guidance to the Japanese authorities and we stand by ready to assist should that be requested.

comment #306 posted on 2011-03-13 15:27:52 in response to comment #301 by Moderator

This situation is an ongoing crisis for the Japanese authorities, who have primary responsibility for handling it. Importantly, though, all available information at this time indicates that no harmful levels of radiation from the damaged Japanese nuclear plants is expected to reach the U.S.

comment #312 posted on 2011-03-13 16:21:18 in response to comment #305 by Chuck Hoffheiser

Thnaks for the response. Keep up the good work of keeping us informed.

comment #314 posted on 2011-03-13 19:39:56 in response to comment #306 by Scott Brooks

Thank you for the quick response. Is the information that you are referencing about radiation levels available to the general public? If so, where or how can others locate this information?

Where to Get Accurate Information on the Japanese Situation

posted on Sat, 12 Mar 2011 19:57:11 +0000

Two NRC officials with expertise in boiling water nuclear reactors have deployed to Japan as part of a U.S. International Agency for International Development (USAID) team. USAID is the federal government agency primarily responsible for providing assistance to countries recovering from disaster. Even with "boots on the ground" in Japan it's not appropriate for us to provide information on the status of that country's nuclear power plants. Check back to this blog or www.nrc.gov for updates on what actions we're taking. Other good sources of information are: USAID -- <http://www.usaid.gov/> U.S. Dept. of State -- <http://www.state.gov/> FEMA -- www.fema.gov White House -- www.whitehouse.gov Nuclear Energy Institute --- www.nei.org International Atomic Energy Agency -- www.iaea.org/press/ For those calling to offer your advice or guidance on how this situation should be handled, rest assured that some of the most expert people in this field in the world work for the NRC and we are here to help if asked.

Eliot Brenner

Public Affairs Director

Comments

comment #298 posted on 2011-03-12 21:29:08 by Linda Gunter

Eliot can you let us know the names of the two BWR experts on their way to Japan? Many thanks. They are not named in the news stories.

comment #311 posted on 2011-03-13 15:34:53 in response to comment #298 by Moderator

We have not made their names public.

comment #381 posted on 2011-03-16 11:24:01 by April Gerstung

I was grateful to receive from the Office of Public Affairs a list of other sources to contact for information on the tragic event in Japan however, I must confess I'm verklempt as to why the list includes government agencies except for the Nuclear Energy Institute. According to their mission statement: "The Nuclear Energy Institute (NEI) is the policy organization of the nuclear energy and technologies industry and participates in both the national and global policy-making process." If you are going to present them as a source for additional contact information, then I think that in all fairness you also need to include other non-governmental nuclear organizations.

How Can You Help?

posted on Sat, 12 Mar 2011 23:28:53 +0000

The NRC is getting questions from people who want to know how they can help the Japanese people affected by the earthquake and tsunami. The U.S. Agency for International Development (USAID) is encouraging those who wish to help Japanese residents to do so with cash donations to reputable organizations working in the affected areas. USAID is directing individuals to www.interaction.org for a list of non-



governmental organizations that are responding to humanitarian needs. In addition, the American Red Cross has established operations to receive donations through text message. Individuals can contribute by texting "redcross" to 90999."

Eliot Brenner

Public Affairs Director

Photo: NRC staff work in the agency's HQ Operations Center in the days following the Japanese event.

Comments

comment #302 posted on 2011-03-13 12:18:47 by Carl Paperiello

I think the dose rate value on Page A14 of the Sunday Washington Post is wrong. They give a site dose rate of 1,015 millisieverts/hour. Based on what I got from the web last night it should be about 1,000 microsieverts. This later value is more consistent with what NEI currently reports as 128 millirem/hour. The Post value is equivalent to 101 Rem/hour.

comment #300 posted on 2011-03-13 04:29:24 by Jade Hawks

Great Job in Japan. My community is organizing a meeting to discuss both local concerns of Fall Out Risks here in the US West Coast and how we can support the Japanese. Can you give us information on who is monitoring the US West Coast for dangerous environmental radiation levels and how we may contact that entity? We are in a region with NO US atomic energy plants and have no preparedness for nuclear accidents - What agency should we contact to acquire protective equipment and supplies? Thank you for the links to humanitarian aid. Jade Hawks, Families Unite Network

comment #308 posted on 2011-03-13 15:30:37 in response to comment #302 by Moderator

We believe there is a lot of inaccurate and misleading information in press reports; however the NRC is not in a position to fact-check these reports. We do encourage folks to consult credible government sources of information in addition to press reports.

comment #319 posted on 2011-03-14 02:21:19 in response to comment #308 by

I work as an EO at a plant similar to the Japanese plant affected by this incident. Even as a lowly EO, the mainstream media's report are almost hilarious in their inadequacy. They are incredibly inaccurate and incomplete in my opinion. My thoughts go out to the people of Japan and especially the workers at and people living around the Fukushima Dai-ichi power plant.

comment #309 posted on 2011-03-13 15:31:06 in response to comment #300 by Moderator

See our latest blog post. In short – no, we do not believe the U.S. West Coast (or any part of the U.S.) will receive harmful amounts of radiation from the nuclear power plants in Japan.

comment #396 posted on 2011-03-16 19:07:43 by jasonbuddy

Now that the 4 nuclear reactors in Japan are in danger, is nuclear meltdown closer to possibility? Now a second Nuclear disaster will happen. Hope that we humans will learn from these mistakes. It is time to stop using this kind of power source before it devastate our one and only planet earth.

Available Information Points to No Radiation Risk to U.S. From Damaged Japanese Plants

posted on Sun, 13 Mar 2011 19:19:36 +0000

We are working with other U.S. government agencies to monitor the situation in Japan -- and to monitor for radioactive releases and to be prepared to predict their path. Fortunately, all the available information at this time indicates weather conditions have taken the small releases from the Fukushima reactors out to sea away from the population. And, importantly, given the thousands of miles between Japan and us -- including Hawaii, Alaska, the U.S. territories and the U.S. West Coast -- we are not expecting to experience any harmful levels of radioactivity here. We would like to repeat -- we are not expecting to experience any harmful levels of radioactivity here. As expected, we are getting a lot of questions from people who are seeking information about developments at Japanese reactors. We understand the need for information, but we are not able to comment on the situation. It is an ongoing crisis for the Japanese and they have primary responsibility for handling it and communicating about it. But please stay tuned to this blog for the latest information we can provide. Thank you for reading our blog. Remember to look at yesterday's post about how you can help Japan in this crisis with donations.

Eliot Brenner

Public Affairs Director

Comments

comment #340 posted on 2011-03-14 18:16:10 by

NRC is a government agency and this is as about as accurate information as you'll get. This web site recommended by USGS through their press room

comment #341 posted on 2011-03-14 19:27:52 in response to comment #330 by Moderator

For details on the biological effects of radiation, please read our backgrounder here: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/bio-effects-radiation.html>

comment #334 posted on 2011-03-14 16:30:19 in response to comment #330 by Lee

Thanks for your reply. Can you clarify what "harmful levels" mean. Thank you.

comment #335 posted on 2011-03-14 16:43:30 in response to comment #331 by Keith

Thanks for reassuring me harmful radiation will not reach the United States, however my wife is very worried and if there was some kind of monitor I could get for her that might ease her mind it would be helpful. Thanks.

comment #338 posted on 2011-03-14 17:59:53 in response to comment #318 by Teri

I live in Washington DC, and on my local news tonight, there was a piece about nuclear fallout. They recommended iodine tablets for anyone at risk for exposure. I'm reading up on whether or not this is a safe preventative for myself.

comment #332 posted on 2011-03-14 16:20:22 in response to comment #325 by Moderator

Chairman Jaczko gave a briefing to the media today at the White House. As soon as we have a transcript, we'll post a link. The Chairman is also scheduled to testify before the House Subcommittee on Energy and Power and Subcommittee on Environment and the Economy on Wednesday morning, so look for coverage then.

comment #328 posted on 2011-03-14 16:11:26 by Lee

Can you give us updates on whether the west coast of the U.S. (ie., California and Oregon) will be affected by the radioactive releases that are happening in Japan? It seems the radiation levels are higher than it was on March 13th and I don't know if the wind patterns have changed. Other websites have shown that radioactive particles would have arrived on the west coast of California and Oregon by March 14th - today. Thank you.

comment #331 posted on 2011-03-14 16:19:19 in response to comment #318 by Moderator

The type and design of the Japanese reactors and the way events have unfolded give us confidence in saying radiation at harmful levels will not reach the U.S.

comment #330 posted on 2011-03-14 16:18:11 in response to comment #328 by Moderator

The type and design of the Japanese reactors and the way events have unfolded give us confidence in saying radiation at harmful levels will not reach the U.S. There is a lot of erroneous information in the media and online about this event and its ramifications. One plume model in particular is especially egregious and totally bogus. We urge you to continue to seek information from credible sources, including the NRC and other federal agencies.

comment #313 posted on 2011-03-13 19:09:28 by Ken Williamson

So, just how far offshore is the US Navy's fleet?

comment #316 posted on 2011-03-13 20:33:04 in response to comment #313 by Moderator

The NRC would not be the source for information on the location of U.S. Navy ships.

comment #318 posted on 2011-03-13 22:09:19 by Keith

In the aftermath of the Japanese disaster, if I was worried about nuclear radiation, what personal monitoring devices are available? I see things listed on websites with prices ranging from about \$20 to \$500. Is there something simple and hopefully inexpensive I can buy to be reassured of not being exposed to dangerous amounts of radiation? Thanks in advance for your reply.

comment #321 posted on 2011-03-14 02:34:41 by Concerned Alaskan

Actually, the information in NRC Press Release 11-046 is factually incorrect. It is not "thousands of miles" from Japan to the US. For example, the great circle distance for KUH-ATU (Kushiro, Japan - Attu, Alaska) is 1492 miles, ie less than 1.5 thousand (not thousands) miles. For a body whose specialty is nuclear physics, getting the distance between two points on a sphere incorrect is a little concerning. What am I missing?

comment #324 posted on 2011-03-14 11:06:14 by GVM

It would be a great service to the nation and the nuclear community if NRC could hold regular press conferences giving reliable information to the public. Anti-nuclear propaganda has been hogging the media since, to defame nuclear power and more than anything create unwanted fear among the public. I have only seen non-nuclear, non-scientific, dooms-day psychos showing up on popular TV news channels and trying to talk as though they were nuclear subject matter experts scaring the public. I strongly think that the defense of nuclear power and its safety culture lies evenly distributed between the community and NRC.

comment #325 posted on 2011-03-14 11:34:34 by Dee Swanhuysen

NRC is totally responsible to regularly update US citizens about the possible effects on the west coast (and eastward from there) of our country from the crippled Japanese nukes. We know which way the wind blows and it blows from Japan to our west coast and beyond. We need regular updates. To see that you haven't updated us since yesterday is horrible. And to read that you don't intend to provide your countryfolk with the frequent info they need to remain as calm as possible, and as effective as possible if we do need to take precaution or other actions, is even worse.

comment #348 posted on 2011-03-14 23:38:41 by TJW

Can we (the Pacific Coast) be given advice as to what actions to take if a full meltdown occurs? I understand models predict a seven day delay, however three reactors have been leaking radiation for a number of days now - and it looks as if reactor #2 can undergo a full meltdown at any time. Should we, in that case, evacuate the Pacific Coast/Stay indoors/Take KI? Thank you for any information you can provide. -Worried Californian

comment #355 posted on 2011-03-15 07:46:04 by Richard Scott

Radioactivity from Japan On the radio this morning (3/15) it was reported that the "experts" (not sure if they are from the NRC) say that there is no chance that radioactive particles would carry over from Japan to Hawaii and the U.S. Mainland. However, remember the Japanese balloon bombs launched during WWII? They were sent up from Japan and rode the jet stream over to the U.S. Mainland. Are we forgetting something here??

comment #360 posted on 2011-03-15 12:49:49 in response to comment #331 by RW

It has been said that there are open holes in the nuclear reactor 4. So how can you say the "design of the Japanese reactors and the way events have unfolded give us confidence in saying radiation at harmful levels will not reach the U.S." They say radiation levels are 10 times usual in Tokyo right now. "Confidence"? Would you breath that air? Radiation polluted wind streams are blowing from Japan to the westcoast. Your statements seem ingenuous and aimed to stifle fears instead of reporting the truth. Malarkey.

comment #363 posted on 2011-03-15 14:47:39 by steve burris

What I have pieced together is the backup generators kicked in after the earthquake in Japan. When the wave of water hit the nuclear facility it knocked out the generators which were running the pumps to cool down the reactors. Typically the generators are in buildings protected from the environment. The tanks are outside either above or below ground. All fuel tanks are vented to the atmosphere so pressure does not build up. The vents can allow water into the tanks. Since water is heavier than oil, it sinks to the bottom displacing the oil. Once enough water reaches the pick up line, the generator will suck in water immediately killing the engine. Pick up lines are plumbed several inches off the bottom so the entire inventory can be utilized. The problem with this is it is located in the worse place for fuel quality. If a floating suction line was used in the tanks, then the fuel would be delivered from the middle of the tank. This would provide the cleanest fuel available from the tank. It would also provide more time to react to a breach since several feet of fuel takes longer to displace than several inches. The airline industry requires floating suction in their tanks. It might be a good lesson to require floating suction at critical facilities as well.

comment #383 posted on 2011-03-16 14:29:56 in response to comment #348 by Worries in SF Bay Area

Given the risk of full meltdown and the 7 day direct wind patterns from Japan to northern California, an expert please post Plume computer data models and radiation exposure calculations similar to the 50 mile calculation posted for northern Japan. Even if these turn out to be low, it would be useful to have transparency on this issue.

comment #384 posted on 2011-03-16 14:42:22 by Worries in SF Bay Area

PLEASE DON'T HIDE OR MINIMIZE EXPOSURE LEVEL ESTIMATES FOR WEST COAST!! I have 3 children under 6 years old and I can send them to live with family in Minnesota if you give our family notice and don't hide information. Given the documented leaks and the current risk of full meltdown in at least one reactor, as well as the scientifically known 7 day direct wind patterns from Japan to Northern California, can a NRC scientist please post the official Plume computer data models showing wind patterns and calculated atmospheric dispersion with full radiation exposure calculations? Please do this similarly to the NRC for advisory to US Citizens living in northern Japan, WITH SPECIFIC EXPOSURE ESTIMATES. Even if these are low, it would be useful to have transparency on this issue. Also, could the NRC please create a credible peer reviewed site with Plume models and exposure estimates so that other credible scientists from major government agencies and universities can comment with full public transparency?

comment #387 posted on 2011-03-16 17:03:32 in response to comment #338 by duxx

Teri, There are side effects from KI pills. You should not take them unless indicated by a Doctor or responsible public official (i.e. NRC, FEMA, etc.). There are too many "chicken littles" getting air time by claiming the situation to be worse than it is. Besides, why exhaust a source of medications that may be needed by the Japanese people themselves?

comment #388 posted on 2011-03-16 17:09:42 in response to comment #316 by duxx

Moderator, I am a retired Nuclear Design Engineer and spent almost two decades on the Emergency Response team at the power station where I last worked. I am highly desirous to find out the unfiltered news/bulletins coming from plant Fukushima. The news channels distort or otherwise bungle the factoids they put on air. Is there a reliable news source that I may access from my home computer? INPO and WANO are useless in this regards.

comment #398 posted on 2011-03-16 19:31:31 in response to comment #384 by Marc Valdez

I was thinking along the same lines. If I take those northern Japanese plume results and simply extrapolate them across the Pacific, I get a dose of $3.6e-148$ rem, which is negligible. But extrapolations are notoriously-unreliable, and that presumes nothing worse happens at the plant. <http://marcvaldez.blogspot.com/2011/03/idle-fukushima-calculations.html>

comment #436 posted on 2011-03-18 09:17:24 by Jill

How about the radiation risk to Taiwan?? Will you report the levels of radioactivity in Taiwan or other country? Cause I think some goverment will hide the information or minimize the exposure level to people. So if you can report the newest situation of the radiation, it would be very useful for us. Thank you!

comment #510 posted on 2011-03-23 18:24:34 in response to comment #486 by Daniel

Thank you, Lee! You expressed exactly what is going on in my head an in that of millions of Americans too, I am sure. I would like to add that I am expecting much more for my tax dollars: Several US government agencies are equipped with the latest detection and imaging technologies. I would like to see some of the hard data transpire to the public, i.e., the size and shape of the plumes, their exact chemical composition at different levels above the sea, the fallout on the West Coast after all this rain, etc. Even if fission products like iodine-129 or cesium-135 might be present at extremely low concentrations in the air, we should not underestimate the capacity of certain organs - such as the thyroid gland - to accumulate and concentrate these isotopes on a daily basis, over weeks and months.... We do not know how the situation in Japan is going to evolve; it seems therefore reasonable to ask hospitals to start monitoring the radioactivity of thyroid glands in patients? But, most importantly, the public deserves to be informed properly. Words are not enough at this point.

comment #486 posted on 2011-03-20 00:14:56 by Lee

I agree with Worries in SF Area mom. Full transparency would be very much appreciated now. It seems that the news media, government agencies, etc. are downplaying the amount of radiation that has reached California. Downplaying and not giving specific information. For instance, with the research that I've been doing (I'm just a non-academic), it seems that the Comprehensive Test Ban Treaty Organization (CTBTO), an arm of the United Nations, was able to detect radioactive materials in Sacramento a couple of days ago, when none of the California monitors, set up by government and special interest agencies, were able to detect the radioactive isotopes. What I've been able to find is that CTBTO has detection instruments with a detection level of 1 part per billion, where all the other agencies are using instruments with detection levels of one part per million. Is this the case? Also, what happened to the plume and where is it now? Is it still in California or did it move to other parts of Western United States? I can't find any updated information on the plume anymore. Another question: Shouldn't there be another plume heading our way? And if so, when and what is the projected route? The plume California received the past few days was from the first days of Japan's nuclear crisis. Last Thursday, March 18, PST, is when radiation levels spiked to the highest levels so far, per CNN reports. So, isn't it another watch and wait in another 5-7 days from last Thursday? Last question: Everyone (doctors, scientists, government officials, etc.) are saying that the radiation levels in California have not spiked and we should not be concerned because we are exposed to radiation everyday. But are the radioactive isotopes that we are being exposed to have the same effect as what we are exposed to daily (via the sun, cosmic radiation, etc?), It seems to me that they are markedly different isotopes and humans were not meant to be exposed to them. Please clarify. Everyone is treating the exposure to all these isotopes the same. I understand the amounts are miniscule, but I would like more detailed information. Thank you very much.

U.S. Nuclear Plants are Designed for Severe Natural Hazards

posted on Sun, 13 Mar 2011 22:29:23 +0000

We've gotten some questions about how U.S. nuclear power plants would fare when faced with severe natural hazards. To answer: NRC's rigorous safety regulations ensure that U.S. nuclear facilities are designed to withstand tsunamis, earthquakes and other hazards. In addition to those plants in recognized earthquake zones, the NRC has been working with several agencies to assess recent seismic research for the central and eastern part of the country. That work continues to indicate U.S. plants will remain safe. For more information on U.S. nuclear

power plants and earthquakes, read our backgrounder on the subject here: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html>

Eliot Brenner
Public Affairs Director

Comments

comment #336 posted on 2011-03-14 17:13:40 in response to comment #322 by Andrea Jenetta

Because the Main Stream Media is more interested in hyperbole than reality? I've read hundreds of articles on Fukushima in the aftermath of the TSUNAMI and 99% quote "experts" who are what I consider employees of the antinuclear industry. I know the IAEA, Nuclear Energy Institute, World Nuclear Association, etc. was answering the phone over the weekend. A motivated reporter would have made the call.

comment #326 posted on 2011-03-14 14:04:30 by oth

Could you consider adding delicious.com to your "sharethis" please, you currently are facilitating only: Facebook, Twitter, Digg, stumledupon and reddit Thanks in advance

comment #345 posted on 2011-03-14 21:15:49 in response to comment #320 by Moderator

The NRC is satisfied that Diablo Canyon meets all applicable seismic requirements, which are based on a detailed assessment of the faults and possible earthquake activity in the area.

comment #333 posted on 2011-03-14 16:22:30 in response to comment #329 by christian moritz

Its great the NRC gave a briefing today. But this past weekend was the critical time. Does the NRC have a rapid response team for the media?

comment #344 posted on 2011-03-14 19:37:52 in response to comment #336 by Anthony Esquivel

Exactly. Over the weekend as I was watching the "experts/politicians" I kept saying to myself, in response, "thats false".. "wrong".. "are you nuts"... "who is this guy?" ... "easy there cowboy"... "what are you talking about"..etc etc. And then it dawned on me: what is going on here? One puppet after another that comes across the screen, why am I finding myself saying this?. The NEI, IAEA and NRC shoud take immediate charge to implement a new PR policy and get in front of these buffoons for the next week, refute and correct them and quell the intellectual dishonesty being spread. And then quietly go away again. This is an all out assault on our industry.

comment #329 posted on 2011-03-14 16:16:37 in response to comment #322 by Moderator

Chairman Jaczko gave a briefing to the media today at the White House. As soon as we have a transcript, we'll post a link. The Chairman is also scheduled to testify before the House Subcommittee on Energy and Power and Subcommittee on Environment and the Economy on Wednesday morning, so look for coverage then.

comment #501 posted on 2011-03-22 17:39:17 by Walter Prout

Sooner, rather than later, I believe that were all going to face that those human beings who "Sacrifice" their lives to prevent a Nuclear Meltdown are going to say " What's the use in preventing such a disaster to begin with when we continue to let this happen" ! So called 3 letter agency's and Technical Wiz Kids who claimed to be EXPERTS, are just that, EXPERTS in nothing except Greed and Corruption ! The same types who say Nuclear Energy is Clean and Safe are the same ones WHO don't work in those plants and make far more then the sacrificial lambs who operate them.

comment #342 posted on 2011-03-14 19:31:30 in response to comment #329 by Moderator

The NRC's Office of Public Affairs has been part of the NRC's 24-hour response since the event begn. Please see the press releases and blog posts for more information.

comment #343 posted on 2011-03-14 19:34:05 in response to comment #326 by Moderator

We will look into that.

comment #320 posted on 2011-03-14 02:33:56 by TG

I was reading about Diablo Canyon today and how the seismic supports were built in the mirror image of their proper positions. Does this pose any sort of threat or problem?

comment #322 posted on 2011-03-14 07:32:20 by Mark Orr

While watching the major news channels for information on the Japanese power plants this weekend I saw and heard from an MIT professor, nuclear experts from Friends of the Earth, The National Environmental Defense Council, The Union of Concerned Scientists, and World Wildlife Federation, along with "knowledgeable politicians" such as Rudy Giuliani and Joe Lieberman. I did not see anyone from the NRC. In this age of endless news on multiple television and cable channels, why does the NRC not have a few knowledgeable individuals willing and authorized to sit in front a television camera and answer questions on the safety of nuclear power in the United States? Issuing carefully worded press releases carries little weight in today's visual society. The NRC does not have to be an advocate of nuclear power to be a spokesperson for nuclear safety and the safety of US nuclear plants.

comment #350 posted on 2011-03-15 01:50:09 by Walter Prout

I would like to ask a few questions here if I may. 1. Why are Nuclear generating plants built in areas that are considered "Somewhat Inappropriate" and "Unsafe" then Coal plants ? I don't seem to understand why we don't build Nuclear Plants in areas like the desert, away from earthquake zones and populated areas, is there some reason why we can't justify the cost of stringing up those power lines from coal plants ? 2. While I do understand that the NRC has sent experts to Japan, why is it that since the major powers who utilize Nuclear power do not come together and form an INTERNATIONAL agency and dispatch said teams without the country's request for assistance ? Why wait for that country's request when it should be considered Automatic to begin with?

comment #351 posted on 2011-03-15 02:03:56 in response to comment #322 by Walter Prout

@ Mark Orr, I understand your question and although am no expert but I think it's a case of " Who is going to Believe whom ! " Correct me if am wrong here but I think I understand that the NRC does not engage in MEDIA interaction without substantial proof. With so much Disinformation and Misinformation being put out by the MEDIA, it would be very hard to say who is telling the truth to begin with. I news media says 1 thing and then another news site says another and it goes on and on until the normal average individual is so confused, he really has a hard time in believing anything that's being said. Classic case of everyone screaming out " The Sky is falling, The Sky is falling ! "

comment #365 posted on 2011-03-15 15:11:15 in response to comment #359 by Moderator

Please understand that the NRC does not have regulatory authority or responsibility for nuclear power plants outside of this country. The location of their plants are a decision by the Japanese officials.

comment #366 posted on 2011-03-15 15:18:18 in response to comment #350 by Moderator

The International Atomic Energy Agency is "the world's center of cooperation in the nuclear field. It was set up as the world's 'Atoms for Peace' organization in 1957 within the United Nations family. The Agency works with its Member States and multiple partners worldwide to promote safe, secure and peaceful nuclear technologies." You can learn more about the agency and its efforts related to the Japanese nuclear emergency at www.iaea.org.

comment #359 posted on 2011-03-15 09:57:41 by Renee

Why are these plants built so close to population? Why are they not built out in the middle of nowhere?

comment #377 posted on 2011-03-16 02:37:17 in response to comment #365 by Walter Prout

Excuse me Mr. Moderator, but your answer leaves me and others in doubt as to what is the real function of the NRC to begin with ! You state that the NRC does not have regulatory authority nor responsibility for power plants outside the United States , I find that hard to believe , since your agency has sent teams of so-called experts to JAPAN for what ? What exactly is the team's mission ? To Point fingers and place blame ! If you really want to have the public see you doing your assigned job, START building the NUCLEAR POWER PLANTS in areas of Low-Probability of Mother Nature's intervention, NOT in EARTH QUAKE FAULT AREAS !!!!

comment #441 posted on 2011-03-18 13:44:34 by Diesel

The Chairman's, the Commssioners', and the EDO;s response is too weak. They all knew about extended damage mitigation since 2007. WANO leaders should resign too, because all signatories to the Nuclear Proliferation Treaty should have prepared for this by developing assets, ready to deploy. They all need to immediately resign and get someone who actually worked at a plant with a license in charge.

comment #412 posted on 2011-03-17 07:06:13 by Aladár Stólmár

A few of us, nuclear engineers were, are fighting for lifetime for the consideration of real processes in the reactor severe accidents. As I formulated in a comment to US NRC: Consideration of the zirconium-steam reaction and the ignition and intense firestorm in nuclear reactor fuel rods is well overdue. Reevaluating the evidence provided by the TMI-2 reactor accident, Chernobyl-4 reactor accident, and Paks Unit 2 fuel washing incident, with consideration of this intense fiery process, will bring us closer to an ultimately

safe nuclear power plant design. <http://pbadupws.nrc.gov/docs/ML1033/ML103340250.pdf> Also, I called two years ago for a review: If the hydrogen which is generated in the reactor core from the reaction of the steam (coolant) with the zirconium alloy (or other low neutron absorbing metal cladding and other fuel bundle elements) explodes inside the building surrounding the reactor, this detonation still will not cause a break of the pressure boundary of the containment. Thirty years after the TMI-2 accident and 23 years after the Chernobyl disaster, I feel obligated to formulate this guideline in order to protect the public from further irradiation from the use of nuclear power. The Chernobyl type reactors (RBMK), which are still operating, have to be shut down immediately because they do not satisfy this guideline. Other nuclear reactors operating and future designs shall be reviewed for compliance to this key requirement and the result of such review shall be defining for their future. <http://aladar-mychernobyl.blogspot.com/> Returning to the comment to US NRC <http://pbadupws.nrc.gov/docs/ML1033/ML103340250.pdf> : „It is a much overdue duty of NRC and IAEA to evaluate the evidence provided by the TMI-2 accident, Chernobyl-4 accident, Paks-2 incident, and related experiments. Evaluating this evidence, one can see that the ignition of the zirconium fire in the steam occurs at a local temperature of the fuel cladding of around 1000-1200°C, [[and that a self-feeding with steam due to the precipitation of eroded fuel pellets and zirconia reaction product from the hydrogen stream into the water pool, causes intense evaporation.]] There are insignificant differences in the progression of the firestorms that occurred in the TMI-2 reactor severe accident, Paks washing vessel incident, and Chernobyl-4 reactor accident; the later defined only by the amount of zirconium available for the reaction. At the mean time, there are significant similarities in the processes leading to the ignition of the firestorm. In all three of the compared cases, it took several hours of ill-fated actions or in-actions of the operators to cause the ignition condition. Also, there are similarities in the end result of the firestorm; namely, that the extent of the fuel damage is much less than it was predicted from any other severe fuel damage causing scenarios, introduced for explanations. Therefore the fraction of released fission products is significantly less than was anticipated from the fuel melting or a so called "steam explosion" scenario. Also, the fiery steam-zirconium reaction results in a much higher than anticipated (from any other scenarios) rate of Hydrogen production, which in turn requires a review of containment designs.” I hope You will find useful this information for the background of the Fukushima Daiichi plant recent events.

comment #418 posted on 2011-03-17 10:16:14 in response to comment #343 by

Thank you so much for the speedy action in adding delicious to the list, and allowing members of the public to share information from your blog with others more easily. Now if delicious could only be added to your main site, it would make it possible for me to share this <http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050.pdf> with others as well... Thank you.

comment #446 posted on 2011-03-18 18:41:13 by L Read

I understand that there are 23 reactors like the Japan plant that have same design that failed. These have the reactor pools unprotected above ground level, not to mention some in earthquake prone areas. Due to the failure of the Japan Fukushima Daiichi plant nuclear reactors because of power & pumping failure backup systems, I propose the following for all of America's existing reactors: A mobile generating power supply with accompanying fuel trucks & mobile pump system each on large flatbed trucks ready to deploy at any nuclear site within 24 hours for all existing plants in the U.S. This could provide emergency short term cooling and prevent the catastrophic release of radiation as we have seen in Japan. Watching the slow motion, on the fly, last ditch effort to control a meltdown is unbelievable. We have the technical ability and know how now to prevent this here (or anywhere in the world). This should never have happened. The NRC and federal, state and local officials should demand full backup protection of all our nations reactors which would include an emergency mobile backup power and pumping system.

comment #499 posted on 2011-03-21 19:46:02 by Ako

To achieve optimum safety, nuclear plants in the western world operate using a 'defence-in-depth' approach, with multiple safety systems supplementing the natural features of the reactor core. Key aspects of the approach are: * high-quality design & construction, * equipment which prevents operational disturbances or human failures and errors developing into problems, * comprehensive monitoring and regular testing to detect equipment or operator failures, * redundant and diverse systems to control damage to the fuel and prevent significant radioactive releases, * provision to confine the effects of severe fuel damage (or any other problem) to the plant itself.

NRC Chairman Addresses Media Today

posted on Mon, 14 Mar 2011 20:10:53 +0000

The NRC Chairman Gregory Jaczko was at the White House today to brief the media there on the NRC response to the Japanese nuclear emergency. We will supply a link to the transcript as soon as we get it. New information: Here is the link to the transcript: <http://www.whitehouse.gov/the-press-office/2011/03/14/press-briefing-press-secretary-jay-carney-nuclear-regulatory-commission-> But in part, he said that the type and design of the Japanese reactors and the way events have unfolded give us confidence in saying radiation at harmful levels will not reach the U.S. He also said that we believe the protective steps the Japanese are taking are comparable to ones we would use here and that we advise Americans in Japan to follow the guidance of Japanese officials. In other news, the Japanese government has formally asked for assistance from the United States as it continues to respond to nuclear power plant cooling issues triggered by an earthquake and tsunami on March 11. The NRC is assembling a team to send over in response to the request for help. As we've said before, we already have two boiling-water experts from the NRC in Tokyo as part of an USAID team. The NRC will continue monitoring the Japanese reactor events via its Headquarters Operations Center in Rockville, Md., on a 24-hour-a-day basis for the foreseeable future. Finally, there is a lot of erroneous information in the media and online about this event and its ramifications. One plume model in particular is especially egregious and totally bogus. We urge you to continue to seek information from credible sources, including the NRC and other

federal agencies.
Eliot Brenner
Public Affairs Director

Comments

comment #339 posted on 2011-03-14 18:09:14 by Concerned

I understand that officials want to be careful about what is said regarding this disaster in order to keep the public from panicking, but I'm put off by the "creative wording". To me, "radiation at harmful levels will not reach the U.S", doesn't mean radiation isn't coming. Can we get some answers about what WILL come to the U.S. without the "creative wording"?

NRC Sends Eight More Experts to Tokyo

posted on Tue, 15 Mar 2011 01:27:44 +0000

Eight more experts from the NRC are being sent to Japan to help that country respond to its nuclear emergency. They join two other NRC staff who were dispatched Saturday. All NRC staff members are acting as part of a U.S. Agency for International Development assistance team, and are being sent at the request of the Japanese government. The additional team members include more reactor experts, international affairs professional staffers, and a senior manager from one of the NRC's four region offices. They come from NRC headquarters and regional offices in King of Prussia, Pa., and Atlanta, Ga. The team will do whatever is necessary to understand the status of safely shutting down the affected Japanese reactors; better understand the potential impact on people and the environment; and, if asked, provide technical advice and support through the U.S. ambassador. The team is led by Charles A. Casto, deputy regional administrator of the NRC's Center of Construction Inspection, and members will be in communication with the Japanese regulator, the U.S. Embassy, NRC headquarters, and other government stakeholders as appropriate. We'll keep you up to date on their experiences. They are expected to arrive Wednesday, Japanese time.

Eliot Brenner
Public Affairs Director

Comments

comment #349 posted on 2011-03-15 00:05:43 by maureen e. stevenson

Please put the time on your reports. A date is fine, but that has a range of 24 hours, much too long to be current on Japan.

comment #364 posted on 2011-03-15 15:09:39 in response to comment #361 by Moderator

Chairman Jaczko gave a press briefing at the White House on Monday. There is a link to the transcript on www.whitehouse.gov. Look for media coverage of the Chairman testifying before Congress on Wednesday morning.

comment #357 posted on 2011-03-15 07:51:09 by RRN

Thanks for providing accurate information here. You stated "Finally, there is a lot of erroneous information in the media and online about this event and its ramifications. One plume model in particular is especially egregious and totally bogus. We urge you to continue to seek information from credible sources, including the NRC and other federal agencies." Please provide accurate information to let the public know about the actual level of exposure. More accurate plume models and/or updates on monitoring in regions of concern (NW coast) would be of value. It would be helpful to express them both in mSieveerts and also in comparison to common experience (like a chest X-ray, body CT scan, or a trans-Atlantic plane flight).

comment #361 posted on 2011-03-15 12:55:12 by Noah Hensley

To whom it may concern (the whole of NRC), While sending experts to Tokyo is great for international partnerships, but who is the media getting their information from? I'm a supporter of nuclear energy as a step towards energy independence and a temporary source until better renewable energy becomes available. I'm certainly not an expert, but I do have a BS in physics and have always been interested in nuclear energy and understand the basic principles. Most people however, hate physics and don't understand nuclear power, yet they still feel free to argue against it. I would urge whoever reads this at the NRC (if you are reading these comments) to step up into the limelight, your country needs you, and not just at press conferences. NRC employees and experts should be the ones on Larry King Live and sharing information with FOXNEWS, ABC, NBC, and CNN. The media is having a hayday with your livelihood, get out there and defend it. At least 90% (completely made-up, but in my experience this is a conservative estimate) of Americans are generally uninformed when it comes to radiation and nuclear power. In fact, I doubt most americans even know that the NRC exists. If someone doesn't step into the media limelight, nuclear power will be cut much sooner than it should be. I believe it should be your job to educate the American people, as well as the US and state congresses; otherwise who will do it (pundits, politicians, and others who know nothing about nuclear power)? Please, give Larry King a call...

comment #362 posted on 2011-03-15 13:31:51 by Brian McCormick

According to your blog, the plume that is going around on the internet is totally bogus. Is there one that isn't, say from NOAA, the National Weather Service or FEMA? Also, I don't know much about the fallout from one of these nuke releases. Is it a gas or a particulate? Can it be transported in the jet stream like volcanic ash? If it is like a fine particulate, what happens if a particle is inhaled?

comment #371 posted on 2011-03-15 18:21:27 in response to comment #361 by Michelle

Well said and agreed. One press conference isn't going to cut it. I understand that the Chairman cannot counteract every news article with inaccuracies and omissions, but this is the time to try and calm the fears and irrational notions out there.

comment #526 posted on 2011-03-24 22:16:56 by Nick

As a restaurant owner in Portland Oregon its good to know that we are assisting in the response to this crisis.

NRC Analysis Supports Japanese Protective Actions

posted on Tue, 15 Mar 2011 19:07:29 +0000

Overnight, NRC analysts continued their review of radiation data related to the damaged Japanese nuclear reactors. The analysts continue to conclude the steps recommended by Japanese authorities parallel those the United States would suggest in a similar situation. The Japanese authorities yesterday recommended evacuation to 20 kilometers around the affected reactors and said that people who live out to 30 kilometers should shelter in place (stay inside). Those recommendations parallel the protective actions this country would suggest should dose limits reach 1 rem to the entire body and 5 rem for the thyroid, an organ particularly susceptible to radiation uptake. A rem is a measure of radiation dose. The average American is exposed to approximately 620 millirems, or 0.62 rem, of radiation each year from natural and manmade sources.

Eliot Bremner

Public Affairs Director

Comments

comment #369 posted on 2011-03-15 17:47:44 by JoAnne Nadell

As stated, the recommendations for max radiation exposure is 1rem for the whole body and 5rem for the thyroid for the general public annually. The news media keeps tossing around numbers in "millisieverts/hour?" How do these two numbers compare? There are lots of statistics and no real explanation of what these numbers mean and the general public is completely confused. Does the amount of radiation decrease as the distance from the source increases?

comment #372 posted on 2011-03-15 18:36:54 by Greg Yuhas

Thank you for the above post; it has both fact and value. I encourage you take the next step and publish the results of your dose projections based on complete fuel melt and containment failure at Fukushima-Daiichi Unit 2, for the current evacuation and sheltering boundaries and at the West Coast of the U.S. Please be clear in how you phrase your results. For example, if the entire fission product inventory of Unit 2 was released during the explosion, the dose to a person located at 30 kilometers from the reactor for the entire next year would be "x" total effective dose equivalent and "y" committed dose equivalent to a child's thyroid. That same scenario would result in doses of "X" and "Y" to the maximally exposed person living on the West Coast of the U.S. You should also put the values in the context of the normal exposure of average person in the US from naturally occurring radioactive materials. Thanks

comment #375 posted on 2011-03-15 23:08:31 in response to comment #372 by Californian

Agreed ... but it doesn't look like they're willing to do that - or give recommendations based upon what to do if a full meltdown were to occur. I don't want to evacuate California, but I also don't want to die here. We haven't received an OUNCE of information as to what kind of threat a full meltdown would pose to the West Coast. All we keep hearing are "Currently, there are no threats to the Pacific Coast." Or, "The Pacific Coast is under no danger, as long as there is no full meltdown." Well what if there were a full meltdown? It is looking like a very, very real possibility. I think we have the right to know what potential dangers we face.

comment #379 posted on 2011-03-16 10:53:40 by Sarah

The values being reported in the media are in micro or millisieverts... Can you please describe average annual doses in those values versus R and mR? And it would be helpful if future dose discussion could be in mSv, too. Thanks!

comment #380 posted on 2011-03-16 10:54:13 by Gerald Killian

Re: "Those recommendations parallel the protective actions this country would suggest should dose limits reach 1 rem to the entire body and 5 rem for the thyroid, an organ particularly susceptible to radiation uptake." Your post should be clear about where dose rates are measured! At the reactor, at the plant boundary, or in the public domain near the site boundary. The media who does

virtually no research of the facts has a habit of running with these numbers into the household of the public!

comment #382 posted on 2011-03-16 13:10:38 by EFB

Here we are, full meltdown of multiple reactors looming, and we have YET To receive ANY information on what risks a full meltdown would pose to the Pacific Coast. Can we please have some information regarding the subject?

comment #394 posted on 2011-03-16 18:59:15 in response to comment #382 by Moderator

The NRC has said and continues to say that we do not expect unsafe levels of radiation to reach the U.S.

comment #395 posted on 2011-03-16 18:59:41 in response to comment #379 by Moderator

Most of the world uses the international standard for units (SI) which is why Japanese and IAEA press releases use Sieverts to report the dose to the public. The US does not use the SI system and instead uses rem as the measure of dose to the public. To compare the dose units, 100 mrem is equal to 1 mSv (this is similar to 1 yard equaling .914 meter (SI unit)). Therefore, the average annual dose that a person in the US receives is 620 mrem which is equal to 6.2 mSv.

comment #399 posted on 2011-03-16 19:43:28 in response to comment #369 by duxx

Ms. Nadell Does the amount of radiation decrease as the distance from the source increases? Yes. Protection from radiation depends on time, distance and shielding. Time (stay time) interacts with the millisieverts/hour. Distance from the source impacts the dose rate/hour, much as stepping away from a heat source reduces the heat effects. Shielding (lead, masonry, water) lowers dose rate. There is a discussion above that explains sieverts/ REM conversion.

comment #400 posted on 2011-03-16 19:54:32 in response to comment #382 by duxx

EFB Virtually all fission products are heavier than air. The chances of a particle being transported for thousands of miles by normal winds is incredibly small. "Fallout" from atmospheric atomic tests were large because the clouds were sent into the atmosphere by a nuclear blast. Normal trade winds simply don't have the power to deliver these particles for thousands of miles.

comment #407 posted on 2011-03-16 23:26:03 by Charles R Jones

It is not realistic to ask about what will happen if you have a full or complete meltdown, especially if you are asking about impacts on the US West Coast. Consider that the fully damaged Chernobyl plant explosion in 1986 (not just a melt down) contaminated everything for a few hundred miles at most, resulting in lots of issues that you have in mind. In that case, there was really no containment at all, and the problem was driven by improper actions of the operators as well as a bad reactor design. In Japan, while you did get hydrogen explosions (I wonder about the hydrogen recombiner systems), the main issue driving things is simply removing what reactor operators call "decay heat" from the core as it continues to shut down. That will result in core melting if uncovered, releasing lots of curies of radioactive fission products into the atmosphere if we assume that the containment is now gone or otherwise ineffective. The situation could get worse if the Japanese are not able to keep water over the core such that the fuel melts and causes a critical mass to form. This is why it is useful to put neutron absorbing material such as boron into the core area to keep criticality as unlikely as possible. Commercial nuclear plants use borated water to suppress criticality so that they can load in more fuel, so many in the industry understand borated water, and boron products are a favorite since each boron atom can absorb or capture multiple neutrons. The key to arresting the issues here might be in the form of boron used. Boron silicate sand-like materials could help suppress reactivity but might not allow cooling if they are just dumped into the core area. I personally would prefer the use of a couple of tons (maybe ten tons) of the boron loaded Raschig rings used by the Department of Energy for controlling Plutonium residue reactivity, described at <http://www.ora.gov/ptp/collection/miscellaneous/raschigrings.htm> but the only place I ever say those myself was at the DOE Rocky Flats Plant, which has been decommissioned. If we could find those at other DOE facilities, dumping a lot of those into the damaged Japanese reactors would help control reactivity as well as allow continued heat removal, even if by natural circulation. The problem with such "bright ideas" is that they have no place to go. The people who have to deal with blog inputs may not have much background or knowledge on the issue, else they would be over there on the "expert" team. I was the team coordinator for DOE's "expert" team at the Rocky Flats Plant back in 1989 when we had to do a Criticality Safety Assessment, so I learned about boron impregnated Raschig rings at that time. We resolved all the technical issues, but the "whistleblower" that we proved to be right (raised a safety issue) died penniless because DOE would not reimburse his court costs, much less award him for avoiding a criticality accident. The point of that is we really can not trust institutions in Government to be able to react properly outside their rice bowls. Regulators are able to regulate, not fix. Nevertheless, this could all be an academic discussion if the Japanese are successful in getting electric power back to their reactors.

comment #434 posted on 2011-03-17 21:13:44 in response to comment #369 by Keith

JoAnne, those recommendations (1rem/5rem) are for total dose, not dose rate. 1 Sievert equals 100 rem. 1 mSv (milliSievert) equals 100 millirem (or mR, mrad). In the English system, the Roentgen, rad, and rem are essentially equivalent units (for most types of radiation). In the SI system, everything is a factor of 100 larger. Yes the dose will of course decrease with distance, as with any form of radiative energy (light, etc.). Direct radiation drops by the inverse square law ($1/d^2$). Radioactivity distributed by the atmosphere (fallout) also decreases with distance, but is a matter of dispersal. Here's a simple analogy: the further you are from a fire, (a) the

lower the temperature from the radiative energy (heat), and (b) the less ash and smoke you will get on you.

Message from U.S. to U.S. Citizens in Japan

posted on Wed, 16 Mar 2011 19:49:10 +0000

Under the guidelines for public safety that would be used in the United States under similar circumstances, the NRC believes it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate. In making protective action recommendations, the NRC takes into account a variety of factors that include weather, wind direction and speed, and the status of the problem at the reactors. Here is a link to results of two sets of computer calculations used to support the NRC recommendations: http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050_Attchmt.pdf. In other news, the U.S. Embassy continues to update American citizens as the situation develops. U.S. citizens in need of emergency assistance should send an e-mail to JapanEmergencyUSC@state.gov with detailed information about their location and contact information.

Eliot Brenner

Public Affairs Director

Comments

comment #393 posted on 2011-03-16 18:27:39 by Eddie

I know that we have excellent people at the Commission. The recent events in Japan really need the Commission to be far more proactive in communicating with the public particularly US Citizens in Japan. The mis-information on news networks is despicable. If there was a lesson learned from TMI, it is to have lots of information and spokespeople to interpret it for the public. None of this is happening within our government. There are links below for EPA, The White House, The DOE, etc. But much information on these sites is negligible, dated to non-existent as well as on this site. The lack of information needs rapid corrective action. This site could be a great place to do the following: 1). Have dosimetric isopleths displayed around the plant with known rad levels as well as at distances to Tokyo and information on nuclides; this can be updated hourly with some explanatory information on dose/ biological effects as well as simple graphics; 2). Basic physical descriptions of what is going on at the plant and options being taken by TEPCO and/or GOJ as well as timelines; 3). Some 'what if' scenarios and likelihood; 4). Specific Protective Actions at distances to Tokyo and why.

comment #402 posted on 2011-03-16 20:32:28 by Damon Bryson

What is the basis for this hypothetical release? The projections show lots of high dose numbers, but what are the assumptions of the calculation? I find it extremely hard to believe that these numbers are even remotely credible.

comment #405 posted on 2011-03-16 22:01:15 by Greg Yuhas

Excellent post by NRC. Thanks for providing a link to your calculations. Recognizing that dose projections models may have a wide variation in results, did you include the decay time from scram to the time of apparent release from Unit 2? The decay may have been about 24 hours or more. Thanks again, NRC is doing a better job of communicating.

comment #409 posted on 2011-03-17 00:59:03 by Graham Wilson

The computer model information is quite informative and detailed but by itself it is hard to interpret by a professional scientist without further clarifying information. It has not been made clear whether these constitute worst case estimates or are based on current condition estimates. In my field, I expect to see estimates of systematic uncertainties and confidence levels and a description of model parameters that have been varied. I conclude from the figures that there is a scenario in which a 50 mile evacuation zone is more than justified under current US regulations, but the information tells me little about the likelihood of such a scenario or on the range of possibilities, and the predicted doses at distances beyond 50 miles.

comment #411 posted on 2011-03-17 06:44:01 by Peter Lago

Given that there currently is a map, showing incorrect Fallout dispersion areas circulating around the internet. I call on the NRC to show the American public an accurate map of dispersion, one that factors in real time weather readings, in order that the public be able to employ educated and appropriate reactions.

comment #413 posted on 2011-03-17 07:22:12 by Jim

Hello. Could you please explain why the dose values listed in the pdf for the one reactor site are generally greater than the dose values for the four reactor site? I plotted them here...

http://groups.yahoo.com/group/Know_Nukes/attachments/folder/1723901577/item/1862364145/view Also, what are the exposure time periods used. I see it says four days of groundshine? Thank you.

comment #414 posted on 2011-03-17 08:14:32 by Randy

Without the underlying assumptions, the source term used for the calculations these values do not provide a great deal of information. What assumptions were made and what was the resulting source term used for the the calculations?

comment #415 posted on 2011-03-17 08:23:23 by Cathy

The technical chart that you have posted to confirm that citizens should evacuate within the 50 mile zone is VERY confusing. Could you clarify for the layman? Thank you.

comment #416 posted on 2011-03-17 09:13:41 in response to comment #393 by Elias abdelkerim

I agree with the comment. I understand that it is highly sensitive situation for the NRC to provide information about another county reactor. I visited your site several times to find basic information and found several reports that helped me explain to my children and friends what could be going on. The NRC can do a better job by providing more information to the public as it becomes available from Japan (at least translated). You have to tailor it to balance the objectives of knowing while maintaining sovereignty and accuracy.

comment #417 posted on 2011-03-17 09:19:32 in response to comment #393 by Sam

I have wondered why some fellow conservatives want to get rid of the DOE. Now I tend to agree - they don't really do anything! They are the ones who should be providing spokespeople with balanced insight, rather than NRC. The NRC is an "independent, regulatory body" and, as such, is much more sensitive to issues of political correctness. DOE should take the lead, gathering information from NRC and demonstrating that they have a grasp of the technical and human issues that confront the nation and globe.

comment #419 posted on 2011-03-17 10:50:54 in response to comment #393 by Bill

Agreed! It is the responsibility of our nuclear industries and oversight bodies here in the US to communicate and educate in a situation such as this. People fear what they don't understand and the lack of communication at a level that someone not in the industry can understand is simply validating the voice of the anti-nuclear special interest groups which is biased at best.

comment #421 posted on 2011-03-17 12:19:50 by Karen

In a webcast with investors this week a South Carolina utility official assured investment analysts that there would be no way that anyone could challenge the construction of a new nuclear plant in S.C. through the NRC...even though the NRC hearing is not expected to take place until the fall of this year. How can this be the case? In light of what we are witnessing...how can the NRC not allow the public to weigh in and possibly force reconsideration of new nuclear plant construction? Reportedly, SC already has more nuclear power than any other state (per capita) and we're the nation's nuclear dumping ground for "low level" nuclear waste. How can the NRC process be a done deal for this plant - so much so that the utility CEO (see transcript below) can say without any doubt whatsoever that nothing will affect the outcome of the NRC hearing next autumn? (Transcript from March 15 Webcast - <http://www.scana.com/NR/rdonlyres/148C562C-2028-4AB1-8645-FE5D653FD360/0/NuclearUpdate03152011.pdf>) Ashar Khan - Visium - Analyst I just wanted to check, Kevin, can you tell us if somebody starts a legal suit or something to stop or review all of this? What could happen? Do they have any power to delay some of these new plants? Kevin Marsh - SCANA - President, COO I certainly couldn't give you accurate speculation on what the legal community would end up with if they tried to file some sort of a suit. But we believe we have followed all of the rules and regulations and we have been through numerous reviews. We're scheduled to go through the hearing at the NRC once they are ready to go through that process. We have no intervention approved in those hearings. But I think we have done everything we know to do to prepare for that process. If someone were to try to step in that in some sort of legal maneuver, we would certainly respond to that, but I just could not speculate today on how that might come. I don't know which form it might come in or how we would respond. I'm certain that we would respond, I think the industry would respond based on the schedule we've had and the number of reviews and evaluations we've had for these new plant designs to this point. Ashar Khan - Visium - Analyst Okay. So I guess their best chance would be at the NRC hearing, right? The NRC hearings are to occur what? In the fall, am I right? Kevin Marsh - SCANA - President, COO The Commission will have to set that date once they get the final environmental impact statement and the final safety evaluation report, but there has been -- we've already set the tone of those hearings so that there's no intervention that has been approved in those hearings. Ashar Khan - Visium - Analyst Okay. So they have already decided who could participate in those hearings? So it is too late? Kevin Marsh - SCANA - President, COO That's correct. Those hearings are uncontested.

comment #423 posted on 2011-03-17 13:18:20 by Don

While I appreciate the calculations provided to support the PAG, I wish there was more information given regarding the assumptions used to derive these doses. Information such as the assumed source term in Ci/s along with an assumed release height and release duration would be helpful. In the absence of this information it is difficult to determine if these dose calculations are credible or entirely unrealistic. As presented they seem unnecessarily alarming and of little technical value.

comment #427 posted on 2011-03-17 15:16:21 by Steve Lauritano

I am sitting at my house in the U.S.A. looking at the issues you are facing with your powerplants. I see that you are using the helicopters to try and cool down the spent rods. My question or comment is this: You have pumpers on site to use the water cannons.

Why dont you use the Helicopters to place a rigid temporary pipe much like a candy cane into the affected area. I am sure your fire pumpers could pump water up to a certain head. Once you have a constant supply of cooling water, you can refocus your efforts to containing the other issues. I know nothing about nuclear powerplants but I do understand the fundamentals of plumbing. Pull from the ocean with a suction line. supply to the candycane side of pipe via supply side of fire pumper. All you will need to do is make sure you don't run out of fuel for the pumper. I know this is a simple thought from a simple person but sometimes people can over engineer something without seeking the obvious. Steve

comment #428 posted on 2011-03-17 16:51:05 by nancy beaudet

What about air travel between Asia and US? On my Seattle to Taiwan flight, we seemed to travel down the spine of Japan, but I did not look at the map that carefully. If significant radiation is release, will air travel be impacted? Should I leave for home ASAP? Could you please provide altitude info in your plume modeling? I agree with the above comment. I saw the link to the NRC from the CDC WEB page and am disappointed there isn't more here. I am in Vietnam on work travel and have been seeking reliable info. The NRC should step up as the authority! I have found the information you have provided as VERY helpful. Now is your hour to shine! Thank you

comment #431 posted on 2011-03-17 17:39:10 by David P.

With respect to the calculations, what exactly is meant by maximum dose? Are doses for locations in the ocean excluded? I am trying to make sense why many of the dose values seem to drop off by a factor of about 2 for every ten miles for one set of calculations and seem to level off after about 10 miles for the other. My guess it has something to do with differences in the forecast meteorological conditions. Is it possible to provide any more insight as to what was assumed for these two hypothetical release scenarios? For example, what would be the duration for these release scenarios?

comment #432 posted on 2011-03-17 20:25:59 by Worries in SF Bay Area

PLEASE DON'T HIDE OR MINIMIZE EXPOSURE LEVEL ESTIMATES FOR WEST COAST!! I have 3 children under 6 years old and I can send them to live with family in Minnesota if you give our family notice and don't hide information. Given the documented leaks and the current risk of full meltdown in at least one reactor, as well as the scientifically known 7 day direct wind patterns from Japan to Northern California, can a NRC scientist please post the official Plume computer data models showing wind patterns and calculated atmospheric dispersion with full radation exposure calculations? Please do this using the same, clear language and data as the NRC Advisory to US Citizens living in Japan, WITH SPECIFIC EXPOSURE ESTIMATES. Even if these are low, it would be useful to have transparency on this issue. Also, could the NRC please create a credible peer reviewed site with Plume models and exposure estimates so that other credible scientists from major government agencies and universities can comment with full public transparency?

comment #433 posted on 2011-03-17 21:03:28 in response to comment #393 by Keith

I also would like to comment on the NRC's information. While I don't share the previous poster's expectations, I think the NRC is doing a disservice to the public by posting the hypothetical dose evaluations they've made without a shred of information as to what the assumptions were that they were based on. I'm a radiation protection professional and have worked at nuclear plants similar to these. I understand that under the circumstances, expecting to have isodose maps around the sites is a pipe dream (it would put people at risk and tie up critical resources for no good reason). The situation is dynamic, stressful, dangerous and uncertain. Also, the infrastructure with which to mount serious environmental monitoring efforts does not exist, and these measurements are not a priority. The priority is to get electricity to these plants and get the cooling stabilized. But, the NRC took the time to sit down and do dose modeling for some release scenarios. They have provided the results of the modeling but have told us nothing about the assumptions of releases under which they were produced. In effect, they did give us an answer to a "what if" scenario, but they didn't tell us what the scenario was. These numbers are pretty scary when there's no context to put them in. Please, NRC, explain the INPUT that generated your output.

comment #599 posted on 2011-04-01 17:46:56 by Nick

I can understand the evacuation within the 50 mile radius, but for people on the west coast of the U.S. to get excited seems a bit of an overreaction.

Catching Up on the NRC Blog

posted on Fri, 18 Mar 2011 17:48:05 +0000

First, let me thank everyone who has been visiting this blog and leaving comments. We appreciate your interest. I apologize for the lack of a post on Thursday and the delay in getting comments posted. Speaking of comments, we are not posting comments that are suggestions for how the Japanese authorities should be responding to their emergency. The NRC is not responsible for responding to that accident and it's not appropriate for us to serve as a forum for suggestions – both helpful and impractical. You may have noticed that we are not replying to many of your comments. This is simply a factor of workload and staffing. We are doing the best we can to continue to communicate the NRC actions related to the Japanese emergency – and NRC actions related to the nuclear power plants in the U.S. To that end, Chairman Jaczko

testified before Congress on Wednesday. A transcript is available here: <http://www.nrc.gov/about-nrc/organization/commission/commissioner-jaczko/0317nrc-transcript-jaczko.pdf>. A video is also posted here: <http://www.energycommerce.house.gov/hearings/hearingdetail.aspx?NewsID=8329>.

Eliot Brenner

Public Affairs Director

Comments

comment #457 posted on 2011-03-19 12:24:13 by

What is the harm in having idea's get posted even if the NRC doesnt use them directly? If this blog is read by someone in Japan who is in a position to influence activities, maybe it will spark an idea that could be useful. Reading all of the news its hard for the lay person to tell fact from fiction. However, it does not appear that there is a good solution to resolving this problem or they would be acting on it. If the people that are trying to resolve the issues in Japan dont have good answers right now, couldnt posting this information have a a potential benefit to thier brainstorming efforts? Most of the idea's posted may not be practical or usable, but what if there were one that has some potential?

Don't Believe Everything You Read

posted on Fri, 18 Mar 2011 19:20:51 +0000

Many news reports during this chaotic week have questioned the safety of U.S. nuclear power plants in the wake of the terrible events in Japan. These reports raise questions about the design of reactor containments and spent fuel pools, and of course whether our plants would be able to withstand an earthquake and tsunami like the ones that devastated Japan. Nuclear power is a complicated, technical subject, and we naturally try to simplify it to make it understandable to the general public. Sometimes, however, simplification leads to misunderstanding, and misunderstanding causes fear. One example was a so-called "investigative report" on MSNBC.com that ranked nuclear power plants according to their "vulnerability" to major earthquakes. The reporter concluded that the Indian Point plant, 24 miles north of New York City, was "the most vulnerable" in the nation. Instant headlines. You may have heard a local news report that your neighborhood nuclear plant ranked "on the NRC's Top Ten List" of the plants most likely to tumble in a temblor. Let's be clear: The NRC does not rank nuclear power plants according to their vulnerability to earthquakes. This "ranking" was developed by the MSNBC.com reporter using partial information and we believe an even more partial understanding of how we evaluate plants for seismic risk. Each plant is evaluated individually according to the geology of its site, not by a "one-size-fits-all" model – therefore such rankings or comparisons are highly misleading. We are also frequently asked whether Plant A can withstand a quake of magnitude X. The reporters always want a yes-or-no answer, but again, it's not that simple. Nuclear plants are designed to withstand a certain level of "ground shaking," to use a technical term. But the way the ground shakes in an earthquake is a factor of the magnitude and the distance from the epicenter, among other things. So we can't give a simple answer to such a simple question. Each plant is built to the circumstances that exist at its location – including earthquakes, floods and tsunamis. For example, at nuclear plants along the Atlantic and Gulf Coasts, the greatest water threat is hurricane storm surge, not a tsunami. Moreover, there is only one fault, near the northwest U.S. coast, that is similar to the subduction fault in Japan, and there are no nuclear plants nearby. The closest coastal plant to that fault is well-protected against tsunami. Over the last few years, the NRC has reassessed nuclear plants in the central and eastern United States for their vulnerability to earthquakes, using new seismic data developed by geologists. The study's preliminary work has shown that some plants might have stronger ground motions than originally thought, although still within the plants' safety margins. These plants will do more research once more detailed analytical models are available later this year. This is a complex issue that does not always lend itself to simple yes and no answers. Bottom line: the NRC does not rank plants on seismic risk. Plants in this country continue to operate safely and securely.

Eliot Brenner

Public Affairs Director

Comments

comment #445 posted on 2011-03-18 16:22:53 by

"Each plant is built to the circumstances that exist at its location – including earthquakes, floods and tsunamis." Not True. After the plant at Diablo Canyon was built, an earthquake fault was discovered; therefore that fault was NOT known and NOT considered in the design of Diablo Canyon Plant.

comment #449 posted on 2011-03-18 20:54:43 by Eddie

Good post Eric....I am sick of the sensational journalism as well. I have a feeling that that there are several technical people on this site. If possible, are there links you would be willing to share on rad levels, plant conditions, even pictures etc. Also, I agree with the others posting in other blogs below that you need to give some basic assumptions on the dose calcs in one of your postings. God bless all of you....

comment #498 posted on 2011-03-21 16:35:24 by Bill Dedman

Don't be misled by NRC's non-denial denial. NRC hasn't said our numbers are wrong. I checked my interpretation with NRC Public Affairs. No challenge from NRC has arrived after publication. After all, they're NRC's numbers. What NRC is saying is that it doesn't

do rankings. That's right. We did, from NRC's data. If the NRC was publishing the American League East standings, it would list them alphabetically. (That's OK with me; the Yankees would be last.) You can see for yourself in the NRC report that: -- NRC says the risk of quakes in the central and eastern states is higher than previously thought. -- It still thinks plants are safe. -- but their margin of safety is reduced. -- and some plants are now near the point where they should be re-examined, and perhaps retrofitted. -- and the technical staff says this should now move from being a research issue to a regulatory issue. -- and it has made its best estimates of the frequency (chance, odds) of an earthquake that would cause core damage to a plant, and those are in Appendix D, last column on the right. The links are at the bottom of the article. http://www.msnbc.msn.com/id/42103936/ns/world_news-asiapacific/

comment #456 posted on 2011-03-19 10:20:28 by Beth Deahl

Thank you, NRC, for this straightforward response. It is important that you clarify information, or misinformation, that appears in the media.

comment #459 posted on 2011-03-19 15:39:44 by Mike Mulligan

Palisades and others have had a significant reduction of the effectiveness of boron inside their fuel racks...40 to 50% reduction of effectiveness...would that make it more complicated in the USA to fight a similar failure of the fuel pool?

Keeping you Updated on U.S. Seismic Standards

posted on Sat, 19 Mar 2011 17:25:51 +0000

In the aftermath of what's happened in Japan, we understand you're asking about how U.S. nuclear plants are prepared for these sorts of events. Our technical experts in seismic events have taken time from their response efforts to answer almost two dozen of your most frequent questions.

We've posted that information on the NRC website here: <http://www.nrc.gov/japan/faqs-related-to-japan.pdf>. We're working to keep that list as current as possible.

The bottom line remains the same – U.S. reactors are designed to safely ride out the strongest earthquakes at their sites, based on scientific review of at least 10,000 years of the geologic record at every site. Reactors on coastal sites are designed to withstand tsunami, hurricane storm surges and other flooding.

Comments

comment #500 posted on 2011-03-22 00:12:31 by Greg Yuhas

On March 21, 2011, The California Senate Select Committee on Earthquake and Disaster Preparedness held hearings on the impact and lessons learned from the disaster in Japan. Southern California Edison (SONGS) and Pacific Gas and Electric (Diablo Canyon) made presentations and responded to questioning by Chair Corbett and members of the Committee. Numerous safety related issues were raised and the Commission's licensing process was impugned. Why wasn't NRC represented at this important meeting? .

comment #493 posted on 2011-03-20 13:25:23 by Greg Yuhas

Thanks for the link describing the implications of the earthquake in Japan on US nuclear power plants. It might also be helpful if you described the emergency preparedness and response requirements imposed on operators of US nuclear power plants and how local, state and federal organizations fit into the response.

comment #494 posted on 2011-03-20 20:56:08 by Keith

Hello, could you please speak to these two questions? 1. Have the plants at Fukushima undergone the containment design modifications that were required of US plants in the 1970s and 1980s? Specifically, did these plants incorporate the hardened containment vents implemented in the US? Weren't the hardened vents designed specifically to prevent reactor building hydrogen explosions like the ones that occurred at Fukushima? 2. Where can we find the basis for the dose projections that NRC calculated and posted at http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-050_Atchmt.pdf? These dose projections are of little or no use without understanding what the input assumptions were (what percentage of the fission product inventory is assumed to be lost, etc.?).

comment #496 posted on 2011-03-20 22:46:07 by Adam Gripper

I feel that the NRC should revise their current mission statement to include a commitment to keeping the American public informed of current events relevant to the nuclear community, both domestic and abroad. I believe the future of nuclear power and medicine lies heavily on the perception of the American public. The American public cannot be expected to make rational decisions based solely on an inflammatory and uninformed media. The NRC currently does a good job providing this kind of information in situations such as the reactor accident at Fukushima, but the commission currently has no commitment to this provision. By adding this commitment to the mission statement, the NRC can track, report on, and improve the effectiveness of meeting this inherent

responsibility.

New Postings on NRC.Gov

posted on Tue, 22 Mar 2011 17:28:44 +0000

I wanted to draw attention to some important information just released on the NRC website related to our response efforts and the Japanese nuclear emergency. A transcript for the public commission meeting held yesterday has been posted. The meeting included an overview of NRC actions related to the Japanese emergency and the possible short- and long-term activities for the NRC. The transcript can be found here: <http://www.nrc.gov/reading-rm/doc-collections/commission/recent/2011/>. And the slides from the meeting are located here: <http://www.nrc.gov/reading-rm/doc-collections/commission/slides/2011/20110321/staff-slides-03212011-meeting-rev1.pdf>. Chairman Jaczko gave opening remarks at the meeting. He said, in part, "We have a responsibility to the American people to undertake a systematic and methodical review of the safety of our own domestic nuclear facilities, in light of the natural disaster and the resulting nuclear emergency in Japan. Beginning to examine all available information is an essential part of our effort to analyze the event and understand its impact on Japan and implications for the United States. Our focus is always on keeping plants and radioactive materials in this country safe and secure." A copy of his full opening remarks can be found here: <http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-054.pdf> We've also pulled together important documents and links related to the Japanese nuclear emergency onto one location on our home page. That page is available from the home page or directly here: <http://www.nrc.gov/japan/japan-info.html>

Eliot Brenner

Public Affairs Director

Comments

comment #502 posted on 2011-03-22 22:51:13 by jim hardy

as a retired plant engineer i am of course glued to this event. sure would be a comfort if there were a source out there for honest appraisal based on fact not speculation. The TV reporters all want to be Herb Morrison at Hindenburg. i read the plant status sheets here: <http://www.jaif.or.jp/english/> several times a day and can tell things are bad but not Chernobyl. yet. Would you consider posting some photographs and plant survey results to show there are not pieces of fuel rods scattered across the landscape? I have done my best to be a voice of reason at this blog <http://tickerforum.org/akcs-www> and a lot of other folks with industry experience are trying to spread calm as well. but reports of releases on order of 10^{18} http://www.zamg.ac.at/docs/aktuell/Japan2011-03-22_1500_E.pdf and phrases "50% of Chernobyl" are difficult for me to grapple with. Thanks for reading this far, old jim hardy retired from Turkey Point ps on market-ticker blog referenced above i'm analog i think you'd find it interesting to see main street's reaction. i read minutes of your 21 march briefing. Somebody someplace knows what is in the plume and from that they know whether Spent Fuel Pits have experienced a re-criticality and whether that was the orange flash in the TV shots of Tuesday's explosion. Somebody knows if those gaping holes in side of building with rebar hanging out are ends of the spent fuel pit. Look at "de-shaken fukushima video" on youtube. It's scaring people and rightly so. If i can be of help to you please advise. I have thirty years experience in a PWR plant as I&C engineer, and i was the plant's very first Shift Technical Advisor. thanks again, old jim himself you could check with Don Jernigan for a reference on me.

All About EPZs

posted on Tue, 22 Mar 2011 18:45:57 +0000

Whether by virtue of regular testing of sirens, mailings about emergency plans or possibly the receipt of potassium iodide (KI) pills, there are frequent reminders for those who live within a 10-mile radius of a U.S. nuclear power plant of the need to be ready should a significant event occur at the facility. This area is known as the 10-mile Emergency Planning Zone (EPZ), and it is well established in federal regulations as the focal point of preparing for a severe accident at a reactor. Some confusion has cropped up in the media and elsewhere recently regarding the size of EPZs in the wake of developments involving the Fukushima Daiichi reactors and spent fuel pools in Japan. The source of this confusion appears to stem from the NRC advisory on March 16th for American citizens who were within 50 miles of the plant to evacuate: <http://pbadupws.nrc.gov/docs/ML1108/ML110800133.pdf>. The advisory to evacuate to 50 miles was based on calculations done by NRC experts indicating releases from the three hobbled Japanese reactors and two fuel pools could – and a key word here is could – possibly exceed conservatively set safe radiation-exposure limits for the public. This advisory was made using limited data and conservative assumptions. On its face, this recommendation seems to be at odds with the size used for American EPZs. In fact, it was consistent with the same kind of approach that would be used in the United States should a comparable, although extremely unlikely, event take place here. In November 1976, a federal task force was formed to look at salient emergency planning issues for U.S. nuclear power plants. Out of that comprehensive evaluation came a recommendation that a 10-mile-radius EPZ would assure that "prompt and effective actions can be taken to protect the public in the event of an accident" at a plant. This was based on research showing the most significant impacts of an accident would be expected in the immediate vicinity of a plant and therefore any initial protective actions, such as evacuations or sheltering in place, should be focused there. Put another way, the projected radiation levels would not be expected to exceed EPA protective action dose guidelines (1 rem to the body or 5 rem to the thyroid) beyond 10 miles under most accident scenarios. That does not mean the protective actions could not expand beyond the 10-mile radius. Rather, emergency planners have always known such actions could be necessary if the situation warranted it. Indeed, U.S. nuclear power plants are required to consider and drill for the possibility of radiation releases that could have impacts up to 50 miles away, in addition to the required biennial exercises conducted in the vicinity of each nuclear power plant to assess implementation of the emergency plan within the 10-mile EPZ. Once every six years, each plant takes part in an exercise graded by the NRC and FEMA to demonstrate how it would handle such an event. As the document [NUREG 0654/FEMA-REP-1](#) on emergency planning

states "In a particular emergency, protective actions might well be restricted to a small part of the planning zone. On the other hand, for the worst possible accidents, protective actions would need to be taken outside the planning zones." (This joint document is the basis for emergency planning around nuclear power plants and adds background to our regulations found in [10CFR 50.47](#).) The Japanese have been confronted with extremely challenging circumstances wrought by a record earthquake followed by a massive tsunami. As the NRC carefully monitored developments there, the agency used the best information available to it to make a protective action recommendation to the U.S. Embassy in Tokyo for Americans within 50 miles of the six-reactor Japanese site, which was experiencing problems in four reactors and two spent fuel pools. Were a similar accident to occur in the U.S., the response would be guided by the same considerations. But it is worth noting the United States has no nuclear complexes of this size. Once the salient facts regarding the events at Fukushima Daiichi are made clear to the NRC, it intends to assess its own regulations and practices for any pertinent lessons learned that can be applied here. This will include an assessment of current emergency planning guidance and policy. As the NRC carefully monitored developments there, the agency used the best information available to it to make a protective action recommendation. More information on emergency planning for U.S. nuclear power plants is available on the NRC website at: <http://www.nrc.gov/about-nrc/emerg-preparedness.html> . Eliot Brenner
Public Affairs Director

Comments

comment #512 posted on 2011-03-23 20:42:29 by Stuart Garrie

Why is no data being posted as to the amount of radioactive iodide, cesium, strontium, and the particularly dangerous plutonium being detected in various areas of the U.S. where the plumes are passing over? Data such as below or above normal amount in air, ground, water, etc.? Is it true that one, one millionth of a grain of plutonium when inhaled can lead to lung cancer?

comment #516 posted on 2011-03-24 10:27:18 by Rob Brinkman

The article above as the following statement "U.S. nuclear power plants are required to consider and drill for the possibility of radiation releases that could have impacts up to 50 miles away" Yesterday residents of Tokyo were warned about Iodine 131 contamination of the public water supply. Tokyo is some 125+ miles from the Fukushima Dai-ichi complex. This seems to indicate that impacts can extend well beyond 50 miles. I understand that the levels are minimal so far and that it is primarily a concern to very young children, but even though I have no children it is obvious to me that when the health and safety of young children is impacted it impacts much of the rest of the population, their families. My concern is for large population centers near nuclear plants such as Indian Point. I understand that the Shoreham plant was never granted an operational license due to the inability to effectively evacuate the high numbers of people on Long Island and nearby NY city. Should the wisdom of operating the Indian Point nuclear plant so close to NY city not be re-evaluated at least as to extraordinary preparedness to deal with emergency situations?

comment #521 posted on 2011-03-24 13:34:52 by Laurie

I was wondering when the specialists are going to address the cumulative affects of these so-called, miniscule levels of radiation that we are seeing in the NW and other parts of the U.S.? If we are breathing them in every day, they are accumulating in our children even faster. This can not be harmless when all is said and done. How can no one be addressing this?

comment #522 posted on 2011-03-24 13:38:45 by Greg YUhas

Excellent post. The dose projections based on plant conditions are, by necessity very conservative however, real time monitoring and meteorology are being used to refine the dose projections. What are the results of plume monitoring in terms of the extent of core damage and of the cumulative dose to the maximally exposed member of the Japanese public? Has the U.S. Department of Energy provided the results of its monitoring activities to the NRC? What are the results?

Latest NRC Actions Related to Ongoing Events in Japan

posted on Thu, 24 Mar 2011 20:04:31 +0000

The NRC Commissioners voted this week to direct the staff to launch a review of U.S. nuclear power plant safety – as a direct result of the Japanese nuclear power emergency. The review will include a task force that will do both a short-term and long-term analysis of lessons learned. The review will be public when it's completed. The task force doing the reports includes current senior managers at the NRC and former NRC experts with relevant experience. The Chairman and Commissioners set very short deadlines for the task force. They want formal updates on the short-term effort in 30, 60 and 90 days. (Already NRC senior technical staff briefed the Commission on Monday about efforts so far. A [transcript](#) of that briefing is online. And the Commission wants the taskforce to start long-term evaluation within 90 days and should have a report on recommendations within six months of beginning that evaluation. We'll post more information on the results of the taskforce both here on the blog and at www.nrc.gov . In a decision also related to events in Japan, the Commission revised its schedule for meetings and briefings to remain focused on the agency's response to events in Japan. A revised Commission meeting schedule will be posted shortly on the NRC website here: <http://www.nrc.gov/public-involve/public-meetings/schedule.html>. In other news, the IG report released today is focused on a subset of defects -- manufacturing defects. Both utilities and NRC inspectors have processes for identifying and reporting manufacturing defects. The fundamental issue identified by the report is administrative and pertains to how these defects are reported. The NRC has a variety of other regulations that effectively encompass reporting all defects, and the NRC continues to conclude plants are operating safely. The NRC will look at the IG report to see if our reporting systems can be further strengthened.

Eliot Brenner

Public Affairs Director

Comments

comment #532 posted on 2011-03-25 14:03:10 by Judy C

Has the NRC gotten any feedback from Hawaii as to radiation levels in water and air? I need to know. JC

comment #535 posted on 2011-03-25 17:05:24 in response to comment #532 by Moderator

The EPA has a press release on this subject:

<http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/3724de8571e1b03f8525785c00041a7a!OpenDocument>

comment #536 posted on 2011-03-25 18:05:55 by Hoodia, P

I think anything that helps us get a better understanding of what may face our Nuclear Power Generation capability in the future is a good thing. We do need to learn from our mistakes each time. Thanks

comment #587 posted on 2011-03-31 10:28:16 by Elizabeth Oseid

Interesting information. After reading the transcript from the above link, I feel that the potential from the spent fuel pools is not given adequate attention. It is a bit deceiving to say that all you need to do is keep water in the pool. Given that earthquakes of sufficient magnitude can drain entire lakes, it is entirely possible from my standpoint that any spent fuel pool can become cracked and drain to the extent that all the pumping power in the world will not keep the pool full. One worries about the potential for core damage, certainly, but the spent fuel, especially given the rather large amounts that are stored - we don't have an answer for permanent storage as far as I have heard - this is a rather unfortunate risk and one that I would like very much to see addressed. I do not believe that the general public is aware of just how much fuel is stored on site at each and every nuclear power plant, nor of the potential danger that it represents. I'd be interested to hear your thoughts on this.

Ongoing NRC Activities

posted on Mon, 28 Mar 2011 17:43:29 +0000

As the Japan nuclear emergency continues into its third week, the NRC continues both to monitor the important events taking place across the Pacific and continue pursuing our ongoing responsibilities. The NRC's headquarters-based Operations Center continues to be staffed 24 hours a day with experts in nuclear reactors and protective measures, among others. NRC staffers who are part of a team in Japan continue to provide whatever assistance is requested, with some members of the team returning to the U.S. and fresh experts joining the team. Today, NRC Chairman Jaczko arrived in Tokyo for a meeting with senior Japanese government and TEPCO officials. Afterwards, the Embassy in Tokyo issued a statement in which Jaczko said: "Our nuclear experts are working closely with their Japanese counterparts, and we both continue to share expert analysis as we move forward to address this challenge. I reconfirmed in my meetings that we are prepared to provide any assistance we can in the days to come. The unprecedented challenge before us remains serious and our best experts remain fully engaged to help Japan address the situation." Meanwhile, the NRC issued its final supplemental environmental impact statement for a limited work authorization and the combined licenses for the proposed Vogtle Units 3 and 4 reactors. The [press release](#) can be found online. And later this week, NRC staff will meet with representatives of the nuclear power industry to discuss issues with buried and underground piping at nuclear power plants. The public can participate through an audio bridge. The [meeting notice](#) is available online. For the past two weeks the focus of this blog has been exclusively on Japan-related issues. Tomorrow, we're transitioning back to our regular official bloggers, who will resume writing about the many different things this agency does. I will write about Japan-related activities when it's warranted. Come back this week for posts on an award we received for our support of minority engineers and a word from the NRC historian.

Eliot Bremner

Public Affairs Director

Comments

comment #608 posted on 2011-04-03 13:44:54 in response to comment #559 by Aging Nuke

I agree with Haverly. While the NRC does not regulate Japanese reactors, nor does it have direct access to Japanese plant information, particularly as translated into English, it seems to me that the NRC has an implicit obligation to the American public to provide relevant facts, updates and a reasonable perspective on the accident progression. The NRC staff has a contingent of BWR experts in Japan and has the Emergency Operations Center staffed 24/7. You can be assured that these staffers are providing the EDO and the Commission with updates. Why not provide such information to the public?

comment #613 posted on 2011-04-03 20:23:18 by jim hardy

Mr Haverly has a point. you might remember last week i left you a note that the chlorine 38 and neutron reports would soon be noticed by the public and cause alarm. well here's the first wave. <http://vimeo.com/21881702> old jim

comment #559 posted on 2011-03-29 19:19:19 by Haverley

In my opinion, NRC Public Affairs has done an extremely poor job related to the ongoing nuclear crisis in Japan. As for the NRC as a whole, what has it done? Two weeks ago we learned NRC was sending a team to Japan, but since then... barely any news or perspective from the NRC, and certainly nothing of substance. The USNRC should have seized as much of a leadership role as possible in this disaster. Instead, the disaster has only worsened as days go by, and the silence from NRC is deafening. This "Japan Info" page has not been updated in a week! <http://nrc.gov/japan/japan-info.html> This catastrophe obviously has international ramifications of all sorts – health, economic, environmental, humanitarian and more. With our short attention spans, it seems that people regard the Japan nuclear crisis as "yesterday's news." Well, it isn't – it's today's news and, sadly, tomorrow's news. Where is NRC? What is NRC doing? What is NRC so silent? Why doesn't NRC provide an ongoing technical assessment that would be readily understandable by the layman and useless for global nuclear organizations? The NRC had an opportunity -- and an obligation, as the world's largest and most lavishly funded nuclear regulator -- to step up to the plate on this Japanese catastrophe and it has failed. For shame! BTW, this useless quote from Commission Jazcko doesn't count: "Our nuclear experts are working closely with their Japanese counterparts, and we both continue to share expert analysis as we move forward to address this challenge. I reconfirmed in my meetings that we are prepared to provide any assistance we can in the days to come. The unprecedented challenge before us remains serious and our best experts remain fully engaged to help Japan address the situation."

The NRC Gets Kudos for Diversity

posted on Tue, 29 Mar 2011 17:47:52 +0000

The NRC is getting recognition for its diverse workforce. Readers of *Minority Engineer Magazine* have ranked the NRC as 5th on this year's list of top government agencies. *Minority Engineer Magazine*, first published in 1979, is distributed nationwide to engineering, computer-science and information-technology students and professionals who are Black, Hispanic, Native American, and Asian American. Every year, more than 56,000 readers vote for the U.S. companies they'd most like to work for or believe are progressive in hiring minority engineers. The NRC is aggressive in seeking out qualified minority employees in all its job categories, and our workforce reflects this focus on diversity. The agency's workforce is 38 percent female and 62 percent male. Ethnic and racial demographics are African-American—13 percent; Asian Pacific American—7 percent; Hispanic—3 percent; Native American--less than 1 percent; and white—77 percent. We are proud that the readers of this magazine recognize our efforts. More information about working at the NRC can be found here: <http://www.nrc.gov/about-nrc/employment.html>

Kimberly English

Recruitment Program Manager

Comments

Why Does The NRC Have an Official Historian?

posted on Thu, 31 Mar 2011 16:10:36 +0000



[caption id="attachment_1171" align="alignright" width="233" caption="Historical photo"]

[/caption]

As the relatively new historian for the NRC, I am interested in blogging so I can talk directly with the public about the history of nuclear power regulation. In this first post, I'll introduce you to the agency's history program, give a little of my background, and offer my plans for future posts. Established in 1977, the NRC's history program is almost as old as the agency itself. Many federal agencies employ historians for a variety of archival and public outreach tasks, but the NRC set itself apart by committing its historians primarily to research and writing accurate, scholarly histories of the agency and its predecessor, the Atomic Energy Commission. To meet the standards of the history profession, the Commission made it clear early on that its historians were to "be free to express scholarly opinions." It is a commitment that has worked well. Under my predecessor, J. Samuel Walker, the history program produced numerous well-regarded articles and five books, including a widely popular account of the [Three Mile Island accident](#). The NRC historian also provides historical background for reports, responds to Commissioner, staff, and public inquiries, and is available for public presentations on agency history. Although new to the

position, I'm not new to history or nuclear power. After receiving my B.S. in mechanical engineering, I tested nuclear reactors on submarines for General Dynamics in Groton, Connecticut, and worked as an engineer at the Davis-Besse Nuclear Power Station near Toledo, Ohio. My career then took a different, but not unrelated, professional direction. I earned a Ph.D. in U.S. history from the University of California, Berkeley in 1995. To understand the citizens protesting outside of the power plant fence, I wrote my first book on the history of the antinuclear movement, *Critical Masses: Opposition to Nuclear Power in California, 1958-1978* (University of Wisconsin Press, 1997). Before coming to the NRC, I was a history professor and wrote on the history of nuclear power and environmental issues. I am currently researching the history of the AEC and NRC in the 1970s. In future blog posts, I'll mark the anniversaries of key agency events, discuss material from my ongoing research, and respond to reader inquiries. Let me know if you have a topic you'd like me to address by commenting on this post.

Tom Wellock
NRC Historian

Comments

comment #589 posted on 2011-03-31 16:35:55 by duxx

Mr Wellock So glad to see a historian working to help educate the public. The current hysteria is largely due to the perceived hocus pocus regarding radiation and its effects on the public. Just today I witnessed an "expert" on a cable news channel who did not understand the concept of a half-life (he said I-131 disappeared in about a week). I recommend that you compose an essay on what the average citizen needs to know about radiation. It should feature the pico, nano, micro, milli uses in measuring dose, explaining dose rate, dose, curies, etc. so that interested parties can see from certain headlines just how serious OR how insignificant measured values are.

comment #598 posted on 2011-04-01 16:38:50 by Charles Bell

DOE/ES-003/1 History of the Atomic Energy Commission, July 1983, Alice Buck <http://www.atomictraveler.com/HistoryofAEC.pdf>

comment #596 posted on 2011-04-01 12:54:13 by Greg Yuhas

As history begins to repeat itself, i.e. "NRC is in bed with the industry", I hope you will take the opportunity to publicize the lessons learned that created the NRC and the actions taken by the agency to ensure its independence and objectivity. Our present model is all about Profit, Pressure and Pain (PPP). The nuclear power industry is driven by profit; without it, it should not exist unless the public believes the environmental and national security value provided by nuclear energy deserves its support through government subsidies. It is not the role of NRC to publicize or support this position. The public can advocate for nuclear power and pressure its elected representatives to support or prohibit its use. However, it is the role of NRC to ensure that the level of risk established but the public is achieved by those it grants a license to design, construct and operate nuclear power plants. NRC through its inspection and enforcement process must provide sufficient pain to offset the power of profit and guarantee the level of risk, considered acceptable by the public, is maintained. This is where the NRC Historian can help. I hope in your writing you take the opportunity to describe both good and bad examples where the NRC has taken action to implement the public's expectation of risk management.

comment #597 posted on 2011-04-01 15:36:16 by Charles Bell

I recognize Jimmy and Rossalyn Carter wearing booties in this photo. He was president when I was in the U.S. Navy. I remember being at sea the the TMI-2 accident occurred and getting a briefing and never saw the live news on the event. I recall having a question on one of the weekly exams while I was at navy nuclear prototype in 1976-77 which required an essay response to describe the sequence of events that would happen if no manual actions were taken and a certain valve in the secondary side failed leading to the Steam Generators going dry. So we knew and understood what the consequences were but we were never able to simulate it like we can now. Its a world of difference at a commercial power plant. It would be very difficult for anyone starting out in nuclear power today to appreciate what has been improved the decade after TMI-2. I believe the man on the left is Ken McCoy who was the plant Manager at Grand Gulf when I started work there in late 1980.

comment #605 posted on 2011-04-02 13:48:46 by Aaron Adams

I think educating Americans on the history of the Nuclear Regulatory Committee is extremely important, so people really understand the benefits and dangers of nuclear power, especially following the nuclear power issues that have occurred in Japan following the earth quake and tsunamis. Many people are afraid, so educating them is the best way to alleviate fear.

comment #606 posted on 2011-04-02 14:26:13 by Joe Rebholtz

With the increased use of mag-lev and linear motors (like in roller coaster type rides), it would be interesting to see that technology used for a mass driver to launch nuclear waste to the Sun, or at least give a big boost to that, or shuttle-type orbital insertion launches. Would save lots of fuel, and enable much smaller craft/larger payloads.

comment #588 posted on 2011-03-31 12:42:53 by Rod Grebb

The DOE has a good publication on the history of the AEC which goes into the formation of the NRC and DOE. It is DOE/ES-003/1 History of the Atomic Energy Commission, July 1983, Alice Buck.

