

## OPSMPEm Resource

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**From:** West, Stephanie  
**Sent:** Tuesday, July 02, 2013 12:51 PM  
**To:** OPSMNPEm Resource; OPSMPEm Resource  
**Subject:** blog archive for May-June 2013  
**Attachments:** May-June2013\_BlogArchive.pdf

OPA

NRC

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"OPSMNPEm Resource" <OPSMNPEm.Resource@nrc.gov>  
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# U.S. NRC Blog

Archive file prepared by NRC

## When Problems Are a Sign of Success

posted on Wed, 01 May 2013 19:12:19 +0000

*Chris Allen*

*Project Manager*

*Division of Spent Fuel Storage and Transportation*

Can a problem show that our regulatory system works? If you don't think so, read on. Two weeks ago, the NRC published an "[information notice](#)" about moisture causing problems for dry spent fuel storage casks. Information notices are one way the NRC communicates formally with licensees. We send these notices when we want all licensees to be aware of a particular problem found with just one or only a handful of licensed facilities or equipment so they can prevent similar problems. [caption id="attachment\_4049" align="alignleft" width="300"]



Spent fuel dry casks[caption] The problem in this case centers on [dry spent fuel storage casks](#) that store used nuclear fuel after it's been cooled for several years in spent fuel pools. The NRC reviews the designs of these casks to make sure they will safely cool the fuel and contain the radiation it emits. In this case, two different sites using two different storage designs had unanticipated problems on the outside of the system caused by moisture. The structural integrity of the systems was never compromised and the radiation levels at both sites remained very low. The first problem dates to 2007 at a facility in Idaho that stores spent fuel debris from the damaged Three Mile Island reactor. The system uses thick concrete for shielding and protection from earthquakes and other natural forces. The operator saw that cracks in the concrete—originally thought to be cosmetic and trivial—were spreading. The licensee's evaluation found water had entered bolt holes on top of the casks, froze, thawed and cracked the concrete. The evaluation also identified repairs, ways to prevent more water from getting in and a program for monitoring cracking. The second problem, at the Peach Bottom reactor site in Pennsylvania, was identified on October 11, 2010, when an alarm sounded. That alarm was designed to be an early warning that the helium inside might be leaking. On examination, the licensee found rust beneath a metal weather cover and moisture around the bolts holding the cask lid in place. An outer lid seal was leaking more helium than the NRC license allowed. An inner seal kept the spent fuel and radioactivity confined inside the cask. From the time these issues were discovered, we made information available through licensee event reports, NRC inspection reports, letters and other communications with licensees. Our licensees and some trade publications that follow NRC activities closely knew of the issues. The licensees talked with one another as well at industry-wide workshops and conferences. And our inspectors, who also talk with one another, always look for evidence that dry storage casks are in good condition. So how does this mean the process worked? Alarms like the one at Peach Bottom and follow-up evaluations like the one in Idaho are examples of the monitoring and periodic examinations that the NRC requires all cask users to perform. These provide warnings long before a problem could develop that might affect public health and safety or the environment. We also require periodic examinations of dry storage casks so any potential issues can be identified early. The NRC stayed up-to-date as the licensees learned more about the cause of their problems, how to prevent such problems in the future, and how to fix the problems on their existing systems. In this case, the NRC took the extra step of issuing the information notice even though communication between the NRC and licensees as well as among licensees meant that, when the information notice came out last week, it was actually "old news."

### Comments

comment #96347 posted on 2013-05-03 09:27:36 by Moderator in response to comment #95576

The cask used at Peach Bottom has helium filling the space between an inner and outer seal. The licensee's troubleshooting and evaluation of the root cause, which were observed by NRC inspectors, showed that only the outer seal leaked. Chris Allen

comment #96045 posted on 2013-05-02 15:00:21 by richard123456columbia in response to comment #96023

Then for thousands of years as we have waist over 60 years old already and no wear to permanently put it. How many years will they have to monitor the ground water and land. In Ontario Canada wells 100 miles away can not use there well water, nuclear plants ship water to them. How many more are in same boat?

comment #95576 posted on 2013-05-01 17:03:06 by Fred Stender

Any type of depression in the top of any storage container which is outside in a potentially freezing environment is a hands down NO BRAINER problem, and this should never have happened, even at the design stage. This shows a failure of the whole process out of the gate, not "high fives" for fixing it. If helium is exiting the outer seal, it means the inner seal is also breached. Why was this not addressed?

comment #95629 posted on 2013-05-01 23:30:14 by richard123456columbia

How many years will they need to do inspections on the casks?

comment #96023 posted on 2013-05-02 14:38:46 by Moderator in response to comment #95629

Inspections are required at dry spent fuel storage facilities for as long as spent fuel is stored there. Chris Allen

comment #96266 posted on 2013-05-03 01:35:55 by Fred Stender in response to comment #95940

Aloha Jeff, you are probably correct...once you are pinned in a corner at one of the many of the branches of the rabbit hole, you would regret being led bit by bit to the corner. But I am all for learning, if there is something I am misunderstanding, please point it out. Like maybe there is an acceptable limit for inner seal leakage, THATS why there is a second seal. Then I will wonder about the testing frequency, AND the solution in the event of a dual breached seal, and whether that solution needs to yet be designed and approved, or whether it is cut and dry and just a matter of money.

comment #95940 posted on 2013-05-02 11:56:16 by Jeff Walther in response to comment #95576

Fred Stender is a regular anti-nuclear, and no answer you give will satisfy him. Responding is worthwhile for the sake of lurkers, but there's no point in trying to satisfy the questions which will follow. Edited slightly by the moderator

## Writing in Plain English—An Ongoing Challenge

posted on Mon, 06 May 2013 18:35:32 +0000

*Glenn Ellmers*  
*Senior Communications Specialist*

The NRC's technical experts are highly educated individuals with a lot of expertise in their fields. But getting them to speak in plain English can be a challenge. That can be a problem because the public needs to be able to easily read and understand the reports these experts produce -- explaining everything from whether a particular nuclear power plant is safe to what steps the NRC is requiring to make sure potential safety issues are addressed. There is even a law—the [Plain Writing Act of 2010](#)—that requires government documents read by the public to



be written in plain language, to the greatest degree possible. (This subject also happens to be a personal cause of NRC Chairman Allison Macfarlane.) The difficulty is that the nuclear facilities we regulate are, well ... complicated! A power plant, for instance, may have many different types of pipes, valves, switches, gauges and electrical controls. Each of these parts must have a specific name that identifies where it fits in the whole. All of which leads to a plain language pitfall that grammar experts called "noun/adjective clusters." Here's an example from a recent NRC document: "a through-wall leak was identified in the body of a Reactor Core Isolation Cooling System Steam Supply Inboard Isolation Bypass Warmup Valve." That's a lot to swallow! One solution is to drop any non-essential terms, and then use prepositions and other connecting words to break things up. So, "an isolation bypass warm-up valve for steam supply to Reactor Core Isolation Cooling," would be a bit easier to follow. That's still accurate but a bit less overwhelming. And, depending on the audience, it may be the better choice. To comply with the Plain Writing Act—and to improve the clarity of our communications more generally—the NRC's Executive Director of Operations has instructed the staff to include plain language summaries for technical documents that the public follows (mainly inspection reports, significant enforcement actions, and generic communications to NRC license-holders). A new memo reminding staff to use plain language will be issued later this month. And our human resources staff have created no less than five different training courses (some lasting two full

days) to improve the staff's plain writing skills. Our Office of Public Affairs is also working to enhance the readability of many of our publications – including the [Information Digest](#) – by reducing the grade level needed to easily read the material. We are not 100 percent there yet, but the NRC recognizes the importance of helping the public understand our documents, and we continue to take steps to improve in this area.

### Comments

comment #97910 posted on 2013-05-06 19:18:29 by CaptD

A MUCH more needed update is a plain language search box on the NRC website so that documents are not hidden in several layers of NRC "speak"... If a high school student cannot find a particular meeting webcast or a document relating to a reactor in their State,

then the NRC system (ADAM) is a failure at public access! + Every webcast should have a contact number that the public can call and speak to a human being if they have issues with listening and/or asking question during the webcast. Having an "operator" controlling the questions that is not available to answer callers questions is unacceptable!

comment #98450 posted on 2013-05-08 08:50:53 by Moderator in response to comment #97910

Since the issues you bring up are not in my area of responsibility, I asked others for answers. From our web team: At the top of each page at our website, you will find a simple search feature that is powered by the same technology that is found at google.com. It is a quick, efficient way to find both Web pages and ADAMS documents that match your search word or phrase. Glenn Ellmers

comment #98144 posted on 2013-05-07 12:26:33 by Dan Williamson in response to comment #98044

Wait a minute....that's an acronym! You have to spell that out.

comment #98174 posted on 2013-05-07 14:44:49 by Anonymous

Sorry, acronyms are here to stay so you might as well get used to them. Do you open a chemistry text and complain that they talk in code (H, He, Li, Be, ... U)? People working in the field think and speak using the jargon and the acronyms, their use actually improves the communication rather than hinder it.

comment #98190 posted on 2013-05-07 16:11:14 by Moderator in response to comment #97843

Reducing the use of acronyms -- when we can -- is one way we're trying to enhance the readability of our documents for the public. Some acronyms may help readability, as pointed out, but only if they are commonly known. Glenn Ellmers

comment #98077 posted on 2013-05-07 09:27:23 by Len Skoblar in response to comment #98037

Nothing, absolutely nothing, is gained with acronyms in these modern times. But communication can be lost or misinterpreted. And clear communication = safety. And surely you will not be "writing it out" anyway. If anything, key in the acronym and then do a search and replace. Everyone wins, including the poor public who we are supposed to be able to follow this stuff.

comment #98044 posted on 2013-05-07 08:08:40 by Anonymous in response to comment #97843

ROFLMAO !

comment #98037 posted on 2013-05-07 07:51:55 by Dan Williamson in response to comment #97843

As long as an acronym is spelled out at its first usage, that is commonly acceptable. Surely there is no need to write out "Reactor Core Isolation Cooling System" or "Primary Containment Isolation Valve" at every instance such a reference is made within the same document.

comment #98583 posted on 2013-05-08 13:59:18 by Len Skoblar in response to comment #98190

I wish you nothing but success. Acronyms are OK as long as they are well known and understood to a broad audience. Also on Figures and Tables where space is limited and a legend can be provided. Yucca Mountain had 8000 acronyms - Yikes! I put a CR in the system titled "Lost in Translation" to challenge the use of acronyms: "The LAAO requires the LA to describe the WP in accordance with the WP and the WP for the LA. The WP is not made of LA in LA, but is relieved via LA, and evaluated by the LA, and described in the LA. The WP does not have a LA. The LAAO dictates the contents of the LAAO, LAAC and LAATL." Now, what did I say?

comment #98231 posted on 2013-05-07 20:13:34 by Hyeonil Kim

We should be reminded that the very public are those who pay for and use nuclear power plants. And they are our members of family, neighborhood, society, and nation.

comment #97843 posted on 2013-05-06 14:43:40 by Len Skoblar

Any chance that the plain language initiative will ring the death knell for acronyms? I've come to hate acronyms because they are so over used.

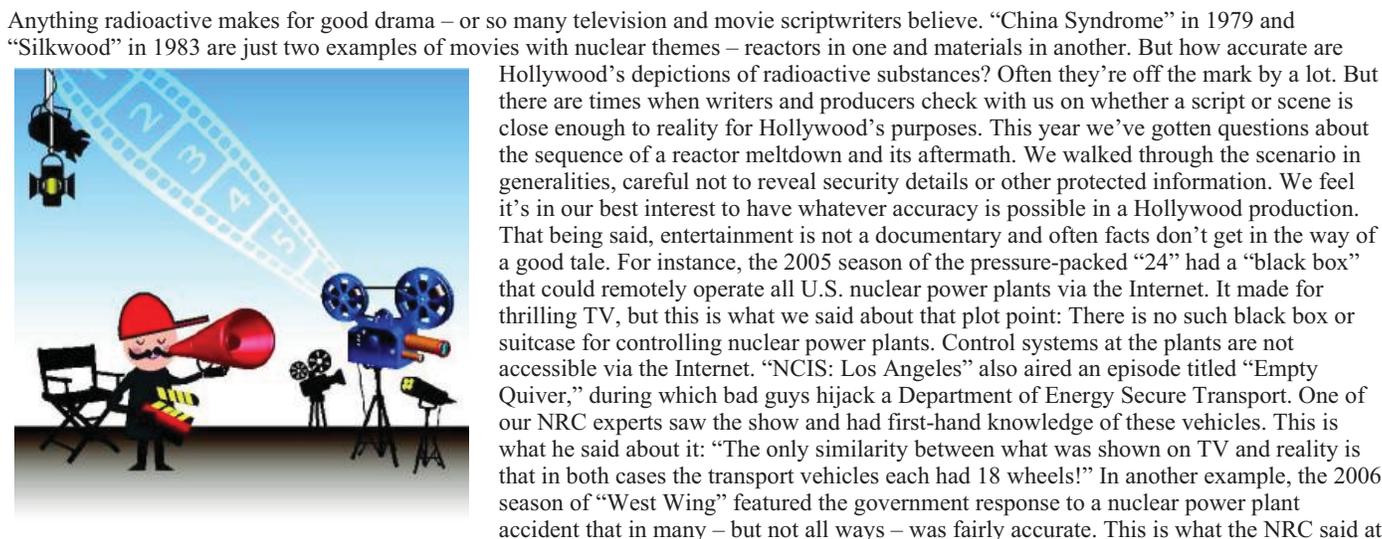
comment #98963 posted on 2013-05-09 03:34:00 by rullyirawan77

NRC technical experts should also learn grammar, good! all NRC staff should use plain language for technical documents. I hope all the staff keep the spirit, [learning grammar](#) is not as complicated as making reactor nukilir he .. he .. keep the spirit!

## When “Nuclear” is the Star of Stage and Screen

posted on Wed, 08 May 2013 20:38:26 +0000

*Scott Burnell*  
Public Affairs Officer



Anything radioactive makes for good drama – or so many television and movie scriptwriters believe. “China Syndrome” in 1979 and “Silkwood” in 1983 are just two examples of movies with nuclear themes – reactors in one and materials in another. But how accurate are Hollywood’s depictions of radioactive substances? Often they’re off the mark by a lot. But there are times when writers and producers check with us on whether a script or scene is close enough to reality for Hollywood’s purposes. This year we’ve gotten questions about the sequence of a reactor meltdown and its aftermath. We walked through the scenario in generalities, careful not to reveal security details or other protected information. We feel it’s in our best interest to have whatever accuracy is possible in a Hollywood production. That being said, entertainment is not a documentary and often facts don’t get in the way of a good tale. For instance, the 2005 season of the pressure-packed “24” had a “black box” that could remotely operate all U.S. nuclear power plants via the Internet. It made for thrilling TV, but this is what we said about that plot point: There is no such black box or suitcase for controlling nuclear power plants. Control systems at the plants are not accessible via the Internet. “NCIS: Los Angeles” also aired an episode titled “Empty Quiver,” during which bad guys hijack a Department of Energy Secure Transport. One of our NRC experts saw the show and had first-hand knowledge of these vehicles. This is what he said about it: “The only similarity between what was shown on TV and reality is that in both cases the transport vehicles each had 18 wheels!” In another example, the 2006 season of “West Wing” featured the government response to a nuclear power plant accident that in many – but not all ways – was fairly accurate. This is what the NRC said at the time: The NRC understands the writers’ literary license in assigning roles and responsibilities to various characters in the show, but the NRC would be the federal coordinating agency in any event involving a nuclear power plant. So what’s the bottom line? When the plot synopsis reads “nuclear,” feel free to enjoy it, but don’t confuse fiction with fact.

### Comments

comment #98962 posted on 2013-05-09 03:09:04 by Rully irawan

Most developed countries experiencing an energy crisis that use radioactive substances such as for nuclear power plants, but the effect is very dangerous radioactive reactor meltdowns as happened in Japan. So nuclear energy is not friendly to the earth. Events in the movie just for the sake of entertainment, its fact more powerful than the nuclear effects of the film with the nuclear theme.

comment #99738 posted on 2013-05-10 13:30:31 by aşk ve sevgi

thank you bro.

comment #100970 posted on 2013-05-13 08:41:24 by Dan Williamson in response to comment #98962

There's just no arguing with that.

comment #102679 posted on 2013-05-16 04:24:56 by satedo

thank you @@

## Emergency Preparedness on a Smaller Scale: Research Reactors

posted on Fri, 10 May 2013 18:08:24 +0000

*Michael Norris*  
Reactor Licensing Team Leader  
Emergency Preparedness Division

When you think of the NRC’s role in [emergency preparedness](#), nuclear power plants probably come first to mind. While we certainly pay a lot of attention to commercial reactors, we also oversee emergency plans for plants that make nuclear fuel, permanently shut down plants and sites that store spent power plant fuel.

Yet another area of emergency preparedness we oversee involves [research and test reactors](#).

These “non-power” reactors don’t generate electricity, but they contribute to almost every

field of science. These small facilities play important roles in research, testing and education on college campuses, and at government agencies across the country.

The NRC requires research and test reactors to maintain the same sort of emergency plans that large commercial reactors do. The NRC requires that these plans include, among other things, how to assess and classify abnormal events, how to respond to events, and how to establish planning zones for environmental monitoring and protective actions if needed.

The plans are very simple for research and test reactors since they are relatively small compared to a commercial nuclear power reactor. In fact, the largest NRC-regulated research reactor is about 75 times smaller than the smallest commercial reactor. Research and test reactor planning zones range in size from the building the reactor sits in to only about a half-mile radius around the facility – much smaller than the 10-mile emergency zone for power reactors.

Research and test reactors are required to train personnel and hold emergency preparedness exercises, and the NRC routinely inspects the plans to make sure they meet our requirements.

Should anything ever occur at these small non-power reactors, the NRC makes sure the facility staff know what to do and how to react to make sure people living or working or attending school in the area are safe, and that the environment is not impacted. It's just another facet of what the NRC does on a large scale every day.

### Comments

comment #99800 posted on 2013-05-10 17:00:07 by Richard Perry

The big problem is that the NRC has no way of penalizing the owners and operators when they refuse to do what the NRC wants done. The NRC has become a paper tiger the way the industry set it up to be. Most of the officials at NRC are ex nuclear workers that are hyped up for their industry, to succeed at almost all cost, that it will some day be as good as they dream it could be.

## Decoding the NRC's Acronym Soup

posted on Thu, 30 May 2013 19:26:23 +0000

*Eliot Brenner*  
Director, Office of Public Affairs



A recent post talked about writing in plain language, and as one commenter pointed out, one of the stumbling blocks to that goal is often acronyms. Acronyms aren't new. According to historians, acronyms and initialisms were used in ancient Rome. Today, some initialisms are so accepted they stand alone without the definition: CEO, FBI, FAQ. And some have turned into actual words we accept – such as radar and scuba. And then there are the many abbreviations of science -- such as LET and NR – and of regulation: such as CFR, AEA. Together these strings of capital letters make up the perfect storm that is the NRC acronym soup. To some, acronyms make perfect sense. But they can interfere with public understanding of NRC documents. Case in point: In the SRM, the EDO directed SFST to update its SRP and eliminate the ISGs related to ISFSI or DSS SARs and COCs, without regard to whether FSME prepares an EA or an EIS to comply with NEPA. Our 139-page [guide](#) to NRC abbreviations does help. And it's especially helpful for those usages with multiple meanings. Did you know that PDA – in addition to the slang usage for a public display of affection – also stands for pre-docketed application, preliminary design acceptance and preliminary design authorization? But the guide, as helpful as it is, still doesn't capture some of the newer usages: JLD (Japan Lessons-Learned Directorate) or SMR (small modular reactor). (By the way, we're in the process of updating this guide.) Despite a plain language initiative that is gaining traction within the agency, and the venues, such as this blog, that are something of an acronym-free zone, the pesky strings of capital letters still pop up and still hinder our communication. While we try to reduce their use, let us know if there's an acronym or initialism you see often and don't understand. We'll find the answer for you, and we'll work to stop using it so much. By the way, LET is linear energy transfer, NT is neutron transmitter, CFR is Code of Federal Regulations and AEA is Atomic Energy Act.

## Comments

comment #112253 posted on 2013-06-03 21:15:14 by CaptD in response to comment #110599

Many think SMR stands for: "GOLDEN FLEECE AWARD" GOES TO DEPARTMENT OF ENERGY FOR FEDERAL SPENDING ON SMALL MODULAR REACTORS  
[http://www.taxpayer.net/images/uploads/downloads/Golden\\_Fleece\\_SMR\\_Press\\_Release\\_FINAL\\_w\\_logo.pdf](http://www.taxpayer.net/images/uploads/downloads/Golden_Fleece_SMR_Press_Release_FINAL_w_logo.pdf)

comment #112256 posted on 2013-06-03 21:21:42 by CaptD

With modern computers, any high school educated person should be able to access files in ADAM by inputing regular search words and have the desired item "found", anything less is a requirement that everyone use the 130+ page official NRC "dictionary". If the NRC really wants to be accessible to the majority of americans, then it not them must make it happen by making it easy to communicate! Notice the GUIDE does not even have MELTDOWN listed... Very troubling especially after all that learned from Fukushima! Also the Guide needs a search bar to make using it much easier!

comment #112258 posted on 2013-06-03 21:23:19 by CaptD in response to comment #110851

Yes, I agree; it just makes sense and also allows all those that read NRC documents to do so without using the 130+ page guide.

comment #110654 posted on 2013-05-30 17:49:54 by Sandy Smith

Containment vessel (CNV) appears to be missing from the guide as well.

comment #110647 posted on 2013-05-30 16:54:11 by

Definitely heading in the right direction !!

comment #110632 posted on 2013-05-30 16:20:11 by Hester, Thomas J

I enjoy the NRC blog. One comment: "...SMR (small modular reaction)." SMR is used for "small modular reactor." Thomas J. Hester Project Director – Nuclear MidAmerican Energy Company 666 Grand Avenue, Suite 500 Des Moines, Iowa 50329-2580 515 252 6453

comment #110624 posted on 2013-05-30 15:58:54 by Kevin McLernon

Eliot is no Jazmeister!! Decode this!

comment #110604 posted on 2013-05-30 15:33:54 by Moderator in response to comment #110597

Reactor. Thanks for keeping us on our toes! Eliot Brenner

comment #110601 posted on 2013-05-30 15:31:23 by Steven Dolley

The guide to NRC acronyms is very useful, but it was last updated 15 years ago. Given the many changes in agency regulation since then -- notably Part 52 reviews of new power reactors and the reactor oversight process, both of which are acronym minefields -- a new edition would be greatly appreciated.

comment #110599 posted on 2013-05-30 15:30:45 by Paine, Christopher

And "SMR" is "small modular reactor."

comment #110597 posted on 2013-05-30 15:28:21 by

Does SMR stand for small modular reaction or small modular reactor?

comment #110841 posted on 2013-05-31 06:34:42 by Len Skoblar

Right on!

comment #110851 posted on 2013-05-31 07:13:21 by Mary Mendiola, PDR (Public Document Room)

In our office, the practice is to spell out any acronyms the first time we use them in a written document.

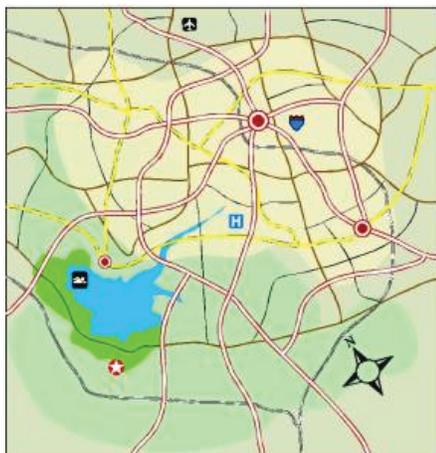
## Updating Nuclear Materials Transportation Regulations

posted on Thu, 16 May 2013 13:06:50 +0000

*Jessica Umaña*

*Project Manager, Division of Spent Fuel Storage and Transportation*

The idea of transporting nuclear materials can make people nervous. It's easy to imagine worst-case accidents on the highway or involving a train. But stringent safety requirements, as well as coordination among federal agencies, international regulators, and state and local officials, help to ensure these shipments are made safely. This structure provides many layers of safety. From time to time, the requirements are updated to address new information. The International Atomic Energy Agency (IAEA) and U.S. Department of Transportation recently updated their requirements. The NRC is now amending ours to reflect those updates, as well as to make some [changes](#) we feel are needed based on recent experience. You can read the [Federal Register notice](#) on the proposed rule. While the rules are being updated, the fact



remains that nuclear materials are transported safely all the time. By far the majority of shipments involve small quantities of nuclear materials. Millions of these shipments are made each year and arrive at their destination without incident. Occasionally, the carrier might be involved in a traffic accident. But in decades of transporting nuclear materials, there has never been an accident that resulted in a radioactive release. Smaller shipments must be made in compliance with DOT regulations for shipping hazardous materials. The greater the potential risk of the contents, the more stringent DOT's packaging requirements are. The DOT regulations limit how much radioactivity can be transported in each package. That way, no transport accident involving these small shipments would pose a serious health threat. But what about larger amounts of radioactive materials? What about spent nuclear fuel? In addition to having to meet DOT requirements, more radioactive cargo such as spent fuel must meet NRC regulations for nuclear materials packaging and transport in [10 CFR Part 71](#). These regulations include very detailed requirements for shipping under normal conditions, as well as stringent tests to show the packages can withstand severe accidents. These are the regulations we are updating now. If you would like to learn more about the transportation of spent fuel and radioactive materials, see our newly updated [backgrounder](#).

### Comments

comment #104443 posted on 2013-05-19 20:51:16 by Axel Singh

Interesting article.

comment #104633 posted on 2013-05-20 09:24:23 by Ménage in response to comment #104443

Yes, and backgrounder article is also interesting: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/transport-spenfuel-radiomats-bg.html>

## When Gauges Go Missing ... UPDATED

posted on Tue, 14 May 2013 17:23:25 +0000

*Neil Sheehan*

*Public Affairs Officer, Region I*

It's easy to imagine the sense of distress that must have washed over a portable nuclear gauge user one recent morning when he realized the device he had stowed in the back of his truck was missing. The gauge had apparently tumbled from his vehicle as he drove along a road near Martinsburg, W.Va. Despite the gauge user's prompt retracing of his steps, the device was nowhere to be found and, as of today, has not yet been retrieved. While the search goes on, some perspective is in order regarding the use of such gauges, which contain sealed sources of radioactive materials and are designed to take measurements of soil density at construction and other work sites. The reality is the loss of these portable gauges is an infrequent occurrence and that is due, in large part, to the requirements developed over time to avoid that from happening. Indeed, NRC and Agreement State regulations clearly spell out the precautions gauge operators must take when the devices are not in use. ([Agreement States](#) are those that have signed an agreement with the NRC to regulate nuclear materials used within their borders for which the NRC would otherwise be responsible.) For one thing, there is a security requirement that a minimum of two independent physical controls must be utilized to prevent unauthorized removal of a gauge when it is not under direct control and surveillance of company personnel. For another, there must be constant surveillance of a gauge when it is in an unrestricted area. When violations of these requirements occur in non-Agreement States, the NRC will consider whether enforcement action is warranted. Agreement States will do the same in their jurisdictions. What's more, the NRC and Agreement States conduct typically unannounced periodic inspections of gauge owners to discern whether security and other requirements are being properly followed. Provided the sealed source remains inside the shielded gauge, it should not pose a threat to the person or persons who have it in their possession. Nevertheless, the device needs to be back in the hands of personnel qualified to handle such material as soon as possible. In a post-9/11 world, the NRC takes very seriously the security of radioactive materials, from nuclear fuel used in power reactors to small amounts of radioactive material housed in portable gauges transported on pick-up trucks. 05/17/2013 - Updated: *There is now a happy post-script to the case of portable nuclear gauge that went*

missing earlier this month in West Virginia. On May 3, a Pennsylvania firm doing work in the Mountain State reported to the NRC that a gauge had fallen off one of its trucks and could not be located. The NRC issued a press release on May 6 advising the public to be on the lookout for the device. The Pennsylvania Department of Environmental Protection (DEP) put out its own release regarding the missing gauge on May 14, based on the fact that its owner, Valley Quarries, is headquartered in Chambersburg, Pa., and is licensed by the state. A break occurred on May 15 when a Maryland resident contacted the DEP to say he had spotted the gauge along a roadside near Martinsburg, W.Va., and placed it in his trunk after deciding it must be something important. It apparently remained there until being handed over to the DEP and, in turn, to Valley Quarries. The good news is that a preliminary evaluation has found the gauge was apparently not damaged. A service provider for Valley Quarries will confirm that is the case. In the meantime, the NRC's inspection of the loss of the gauge is still in progress. As part of that review, the NRC and DEP teamed up for an inspection at the company's headquarters late last week to evaluate safety and security protocols used by the firm with respect to its portable nuclear gauges. When the NRC's inspection is completed, the results will be made available to the public.

#### Comments

comment #101743 posted on 2013-05-14 14:45:21 by

In addition to regulatory requirements, the circumstances under which a gauge or other radioactive material goes missing may require notification and involvement of state and/or federal law enforcement.

comment #102610 posted on 2013-05-15 23:11:09 by john bowers

All this worry about little nuclear density gauges, when a Hell's Fire worth of spent fuel is stuffed in myriad SFP's, uncontained reactors waiting to happen. Fifteen reactors in the New Madrid Seismic Zone. Solar flares popping every few weeks. Both a big quake and a big flare both in the offing sooner or later. Broken pipes in Fukushima, faked earthquake engineering test results in Tennessee.

## How a Questioning Attitude Encourages Safety

posted on Tue, 21 May 2013 13:41:22 +0000

*Maria E. Schwartz*  
Office of Enforcement Senior Project Manager



Are we there yet? Why is the sky blue? Why is rain wet? Children have an endless list of questions as they discover the world around them. But as we grow older, most people tend to ask fewer questions. This may be due, at least in part, to the fact that we start to make assumptions about many of the things around us based on what we have already learned or observed. Sometimes we ask fewer questions because at some point, someone made us feel ashamed that we didn't know the answer or made it clear they had more important things to do than respond to our questions. Re-developing that questioning attitude we embraced as children, however, is very important to an organization's health and critical to its safety culture. The [NRC's Safety Culture Policy Statement](#) includes "Questioning Attitude" as a trait of a positive safety culture. The policy statement describes it as a part of a culture where "individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action." A questioning attitude helps to prevent "group think" by encouraging diversity of thought and intellectual curiosity. It challenges the entire organization to get clarification when something comes up that doesn't seem right. Examples include situations as simple as walking by a broken door day after day without stopping and questioning why it

remains broken; or skipping over a confusing step in a procedure you use every day rather than getting clarification. It could include ignoring an alarm because nuisance alarms go off all the time and they never indicate an actual emergency. Or it could be something a little more complicated such as not speaking up to question a calculation that doesn't seem right because the senior engineer performed the calculation. A positive safety culture requires the collective commitment by both leaders and individual employees to emphasize safety over competing goals. A questioning attitude supports that commitment.

#### Comments

comment #113894 posted on 2013-06-06 08:19:41 by Axel Singh in response to comment #106983

Excellent.

comment #113598 posted on 2013-06-05 22:46:42 by CaptD

What can "civilians," if they cannot get access to the data required to make informed comments, make informed comments to the NRC? This is a basic question that needs to be answered if the NRC is to actually trying to accept public input!

comment #113595 posted on 2013-06-05 22:43:09 by CaptD

Former Chairman of the NRC speaks ♣UT about San Onofre & Nuclear Safety.... Gregory Jaczko Fukushima Lessons for California  
[http://feedproxy.google.com/~r/SanOnofreNuclearWasteGeneratingStation/~3/dfqNl3Ln1pc/jaczko-fukushima-lessons-for-california.html?utm\\_source=feedburner&utm\\_medium=email](http://feedproxy.google.com/~r/SanOnofreNuclearWasteGeneratingStation/~3/dfqNl3Ln1pc/jaczko-fukushima-lessons-for-california.html?utm_source=feedburner&utm_medium=email)

comment #107015 posted on 2013-05-24 19:02:59 by 1948billhawkins

SCE/MHi threw the critical questioninig attitude in a ditch and the end result is no production with serious compromise in safety, waste of Billions of dollars, loss of credibility for SCE MHI NRC and Angry 8.4 Million Southern Californians

comment #107007 posted on 2013-05-24 18:41:08 by 1948billhawkins

Critical questioning attitude is optimizing production without compromising safety

comment #106983 posted on 2013-05-24 16:06:54 by CaptD in response to comment #105218

A. DeVolpi, PhD I agree, there are many safety concerns especially for the oldest reactors that makes rubber stamping them for additional years of service a serious concern! The Japanese thought they would never have a nuclear accident also, but time has proven them wrong, we cannot allow Nuclear Denial\* to result in a similar accident in the USA, we are already getting enough of the fallout from Fukushima! \* <http://is.gd/XPjMd0> The illogical belief that Nature cannot destroy any land based nuclear reactor, any place anytime 24/7/365!

comment #106296 posted on 2013-05-23 12:55:06 by Fred Stender in response to comment #105218

For sure, they sure wouldn't want to have to add any cost to running these old clunker plants which are being fed crack (uprates) and milked until they die or blow up (excessive profit taking). New nuke will never make economic sense at \$14B, but when they can buy old plants at \$200M, get life extensions, and then get uprates, these can be big profit makers. The number of incidents and mistakes at US plants has gone parabolic, at a time when you would think "they" would be on pins and needles to operate these plants as perfectly as they could in the magnifying glass of the ongoing disaster at Fukushima. But that is not the case. Showing that they plant owners are arrogant and simply profit seeking regardless of risk. They know the financial impacts of disasters will not be borne by themselves, so they don't give a rip.

comment #105680 posted on 2013-05-22 05:01:16 by kamilkoral

Encouraging to asking questions is fundamental for creating free- and open-thinkg society. Wise move!

comment #105464 posted on 2013-05-22 00:31:06 by john bowers in response to comment #105160

It already has. It blew across the Pacific. And its now flowing across the Pacific.

comment #105311 posted on 2013-05-21 17:41:28 by Alan Morris

While the NRC is to be congratulated for recognizing and encouraging the development of a "Safety Culture" in order to protect the public, it is disappointing that the organization's actual actions do not always match its goals or words. I refer, specifically, to the question of stockpiling and distribution of potassium iodide (KI) tablets for thyroid protection in the event of a nuclear emergency. It's not that the NRC does not recognize the value of KI in a radiation emergency, or questions its safety and effectiveness. In fact, the NRC has long distributed KI to people who live or work within 10 miles of US commercial nuclear power plants, and virtually every facility keeps it on hand for worker protection. But beyond the ten-mile boundary, there is almost no KI available for the general public, and no way to get it if it were ever needed. The result, should a large release of radioactive iodine (RAI) occur, would almost certainly be thousands of cases of thyroid cancer beyond the ten mile planning zone that KI could otherwise effectively prevent. Surprisingly, the NRC acknowledges the need for measures beyond ten miles in the event of a severe release. In their own "Criteria for Preparedness" (NUREG-0654) the authors state that to protect the public, "protective actions would need to be taken outside the planning zones." While this document emphasizes evacuation, sheltering and the interception of radioactive food and water, a sufficient supply of KI for all is not considered. This position defies logic and experience, given that in the early stages of a nuclear accident, the inhalation of contaminated air is the primary pathway for RAI to enter the body, and only KI represents an effective prophylactic defense. While evacuation, sheltering, and food control are valuable steps once RAI has settled out onto the ground, this could easily take a week or more, and areas at least 50 miles downwind could be jeopardized. It is hard to understand how the NRC's deliberate decision NOT to stockpile enough KI is consistent with the stated goal of the Safety Culture "to emphasize safety over competing goals to ensure protection of people and the environment." Surely, the experience at Chernobyl, where more than 6000 children contracted thyroid cancer, or the two comprehensive NRC research studies (NUREG-1433 and NUREG-6310) which both predict dangerous level of RAI for more than 50 miles, are powerful reasons why enough KI to protect everyone is an action that should be taken. Alan Morris Anbex

comment #105224 posted on 2013-05-21 14:13:22 by Axel Singh

Well-Written.

comment #105223 posted on 2013-05-21 14:09:57 by Fred Stender

Sure, that's why sacking Jackzo encourages "safety"

comment #105218 posted on 2013-05-21 14:00:32 by A. DeVolpi, PhD

A questioning attitude is seemingly nice, but from my perspective it's a bureaucratic self-illusion. Having once been intensely involved in nuclear-safety R&D, I've had to emerge from retirement to point out that some of the four traumatic loss-of-coolant accidents were preventable if patented instrumentation for ex-vessel water-level monitoring had been installed. Even though I've briefed the NRC Fukushima Lessons-Learned Task Force, and published several explanatory mainstream technical papers, the concept of direct, autonomous ex-vessel water-level monitoring has again been buried in the basement.

comment #105173 posted on 2013-05-21 12:10:23 by CaptD

To: Maria E. Schwartz Office of Enforcement Senior Project Manager You have your work cut out for you! Using San Onofre as an example, it has become painfully obvious that the NRC and specifically NRC Region IV have allowed the Utility to lead them down a dangerous operational path, that the public now realizes is totally unsafe! The associated dangers of any restart have been well documented by Ex-NRC Senior employees, Utility whistle blowers, nuclear experts from both inside and outside the USA, along with a huge number of knowledgeable public organizations, that have even employed their own experts to double check what the NRC is doing about what the Utility is proposing! You have only to search the ADAM database and you will find a mountain for technical articles that describe in detail what is going on at San Onofre; is anyone at the NRC even reading these and or responding to their authors? If the NRC really wants public input, then they should not only provide data so knowledgeable experts can review it, but then the NRC needs to actual consider what these outside experts say and respond to them about the concerns they have raised! To many, the only real surprise will be to find out if anyone at the NRC will take the responsibility to tell the Utility that San Onofre needs to be decommissioned! Sadly this decision is now moving beyond being based upon acceptable engineering design principles and has entered the political arena with the nuclear industry making use their considerable political influence! This should be ringing NRC alarm bells; because it is exactly what lead to Fukushima's Trillion Dollar Eco-Disaster, because the Japanese regulatory agency allowed themselves to be "bullied" into making poor decisions regarding safety, by both the very Industry they were regulating and their Utilities political supporters! San Onofre has now become the "poster boy" for how not to regulate and/or operate a nuclear power generating station. I suggest that you form a high level working group, (with a few Non-industry Experts) and use San Onofre as a test case to better understand how the NRC allowed itself to get so deeply involved in defending the very Utility it is supposed to be regulating, said another way the NRC needs to rethink how they do business! Right now, the NRC is working along side Edison and MHI to try and re-engineer Edison's poorly designed replacement steam generators; where is the impartial review, when the NRC has their own experts involved? Nuclear energy is BIG business and it is up to the NRC to insure that it is not only run safely but in such a way that any nuclear incident and/or nuclear accident is unacceptable because the risk of one or more Trillion Dollar Eco-Disaster would destroy our great Country for generations, just like Fukushima is doing in Northern Japan!

comment #105160 posted on 2013-05-21 11:13:57 by CaptD

(First posted by the DAB Safety Team on 12/10/12 and time has shown that little if anything has changed, except more problems have been identified by the ongoing additional investigations, yet Edison still replies to all the NRC's questions that everything is safe to run Unit 2 at 100% Power, then asked to run it "for a short while" at 70% Power and now with a few additional components it should be safe to run it at 100% Power ==> The NRC needs to do much more than have a questioning attitude, they need to determine "in-house" if what the Utilities are saying makes engineering sense, in order to guarantee the public safety. The USA cannot afford a Trillion Dollar Eco-Disaster.) Public's Perception of NRC Region IV Relationship With Southern California Edison Both seem to now be violating Federal Regulations and the Public's Trust • The actions of both reveal Energy Production is more important than Public Health and Safety • NRC finds repeated problems at SONGS, NRC says they all are no more than a Minor Violations o SCE says, Problem has been put in the Corrective Action System and have been addressed • SONGS has the worst Nuclear Safety Violations and Worker Retaliation Record in the USA o NRC says SONGS has Zero Worker retaliation and Nuclear Safety Violations o NRC SONGS Nuclear Safety Violations data conflicts with its own statements SONGS almost had a Big Nuclear Accident • Yet SCE and the NRC say, it was just a Minor Leak • Nobody mentions Unit 2 had a SG tube in operation with 90% wear SONGS Prepared a Defective 10 CFR 50.59 Evaluation for its Replacement Steam Generators • The NRC says no problem, SONGS acted according to their OWN rules again... • The Office of Nuclear Reactor Regulation says, Wait a Minute NRC, SONGS broke the Rules • Citizens say, when it comes to Edison, NRC has been sleeping at the switch for years NRC and Edison Attorney's working together against the Public • NRC Region IV is in non-compliance with President Obama's Open Government Initiative • NRC Region IV is in non-compliance with Senator Boxer's Open Government Initiative • NRC Region IV is in non-compliance with NRC Chairman Safety Mission and its Own Rules NRC and Edison actions give the perception of regulatory collusion • Public Meetings are for Edison and NRC, not for the Public • This is Democratic America and not a Third World Dictator Country • Edison is paid by their Ratepayers and the NRC is paid by the Taxpayers • Southern Californians have faith in NRC Chairperson and Atomic Safety Licensing Board • US Gov't. should not permit a Unit 2 Restart without a License Amendment and Public Hearings Southern Californians cannot afford a Fukushima-type DISASTER to occur in their Backyard

comment #105142 posted on 2013-05-21 09:57:04 by Ivan Catton

Because most problems are new problems, a questioning attitude is a necessary element of an effective safety culture. It is, however, often difficult to pursue because it sometimes requires that the person asking the questions be willing to put his reputation on the line.

Keep up the effort in this direction. It takes more than words to accomplish "the culture".

comment #109945 posted on 2013-05-29 12:03:13 by CaptD in response to comment #107015

Great comment! Awesome Animation: Dangerous San Onofre Generators <http://decommission.sanonofre.com/2013/02/awesome-animation-dangerous-san-onofre.html> If a picture is worth a thousand words, then an animation is worth millions of words... Salute to Ace Hoffman for posting this educational SanO animation

## An Update on Taking the Next Step – Building a 21st Century Digital Government

posted on Thu, 23 May 2013 15:07:12 +0000

*Stu Reiter*  
Senior Advisor, E-Government



Last August, we [noted](#) our efforts in support of President Obama's May 23, 2012, memorandum on Building a 21st Century Platform to Better Serve the American People. That memorandum launched a comprehensive [Digital Government Strategy](#) to make government services and information available anywhere, anytime, and on any device, and in formats that facilitate additional use by public developers and entrepreneurs. The NRC took this memo seriously and in March we implemented the agency's first mobile solution for the 2013 [Regulatory Information Conference](#), allowing attendees to access the conference agenda and download conference publications from their own mobile devices. We plan to further grow capabilities for future conferences. To improve access to information, we have also used [RSS feeds](#) to make a number of NRC resources more readily available. These include reports on the operating status and power output of commercial power reactors, daily events and activities occurring at commercial power reactors, power reactor inspection reports, and NRC daily news releases. In addition, through our newly available [Developer's Page](#) we are providing the ability to search and retrieve NRC documents from NRC's documents collections, operating reactor inspection reports and other NRC information resources. As part of our Digital Government Strategy program, we are developing plans that will continue to focus on making high value data and content available for application developers and opportunities to use mobile devices to improve existing services. So stay tuned.

### Comments

## Fort Calhoun – A Mixed Report Card

posted on Fri, 24 May 2013 17:20:10 +0000

*Lara Uselding*  
Public Affairs Officer, Region IV



NRC inspectors held a public meeting in Omaha, Neb., on May 17, to share preliminary information from a recent restart readiness inspection at the [Fort Calhoun](#) Station, operated by the Omaha Public Power District (OPPD). The

plant entered into the NRC's increased oversight category in 2011 after it shut down for a refueling outage. The outage was extended due to historic Missouri River flooding followed by an electrical fire and other restart complications. The meeting is one in a series we're holding to keep the public informed. The 15-member team of inspectors looked at 169 out of more than 450 items that need to be resolved prior to the NRC making a decision on restart. The team recommended closing three of the 18 main categories known as the [restart checklist](#). The three areas the team believes OPPD has appropriately addressed are third-party safety culture assessment, quality assurance, and integrated organizational effectiveness. In essence, the plant's officials have made improvements on some of the causes that led to the performance decline. It's important to note that as the team prepared for the inspection and began its review of the 169 items, they identified that 66 of those items were not fully ready for inspection as plant management stated. That means NRC inspectors were only able to fully inspect 60 percent of the original scope and will go back for a follow-up inspection. While OPPD has made progress, there is still a lot of work to be done. The team found the plant hadn't done a good job of evaluating whether a discovered condition exists in other areas of the plant and then implementing actions to address it. Because of this, the NRC has determined a number of restart checklist items are not ready for closure. In addition, NRC inspectors identified new performance deficiencies. Those preliminary findings still need to be evaluated by NRC management and results will be documented in the team's inspection report. The report will be issued within 45 days. The NRC will conduct follow-up inspections to look at the remaining open performance areas and to determine if plant personnel, equipment, and processes are ready to support the safe restart and continued safe operation. There will be additional public meetings in the local area before any decision about restart.

## Comments

comment #112262 posted on 2013-06-03 21:32:19 by Brian Kean in response to comment #110110

Really? Adequate protection - like the water bladders breaking - that protection? Or the backup generators catching on fire and seriously injuring a worker - like that? Or breakers that aren't in spec - and catch on fire spontaneously? Adequate protection to me means three lines of defense - primary, secondary, and tertiary - the primary backup systems failed. There have been hundreds of deficiencies identified since the flood - none of which to my knowledge were comprehensively "backed up" prior to the flood. Pumps failing, teflon that was removed in most plants in the 80's still in vulnerable/sensitive locations, floors not properly supported with the weight of machinery, leaks in areas that were not supposed to leak (and the public was lied to about) - the list is nearly endless. It is time to start telling the truth and stop candy coating this Fukushima on the Missouri. Please stop the baseless assertions that everything is safe and always has been. That is an obvious lie. Maybe the NRC needs to be the next department to be investigated after the IRS. Come on - you guys are better than that.

comment #111002 posted on 2013-05-31 13:38:59 by Hiddencamper in response to comment #110513

OPPD isn't operating the plant anymore. Exelon is trying to turn it around, and if you've been following the Ft. Calhoun information over the last year, Exelon has found a LOT of stuff wrong with the plant and been fixing it. Things like teflon containment penetrations, inadequate anchor bolts for emergency service water pumps, and a full study into the ground/soil erosion concerns. Stuff OPPD has been blowing off for years. The teflon issue was something that EVERY OTHER nuclear plant in the country fixed in the 80s. Exelon being in there has been improving things, and if anything, its becoming more apparent just how mismanged the station was as the reorganizational efforts continue.

comment #111070 posted on 2013-05-31 17:16:29 by Paveway III in response to comment #110513

As far as I know, the NRC still has OPPD as the licensed operator. Exelon are only contract operators until the OPPD board and management are through milking the company. OPPD will default on their bonds soon (if they haven't already) and declare bankruptcy as soon as the cash is gone. I certainly don't have a beef with the NRC inspection team or the working staff at Ft. Calhoun. They were never part of the problem. Both teams have had to work within the constraints of layers of broken organizations that seem eternally intent on thwarting their efforts. That's the real problem here. Whether it's cheapskate utility execs or deranged politicians, the corrosive effect on talented staff is unmistakable. These organizations are sick and drive good people away. \*That's\* what makes these plants unnecessarily risky for everyone. I can fix a corroded cooling-pump bolt and update engineering documentation. What I can't possibly do (for any length of time) is go out and find someone who understands why that problem even exists, knows how to fix the technical environment that permitted it, and THEN: not quit out of frustration in a year or two because of politics, autistic budgeting or some director's yacht payments increased. That's how TEPCO has always been run. See the problem?

comment #110513 posted on 2013-05-30 09:13:20 by Chris in response to comment #109992

The costs associated with inspections and NRC's regulatory activities are not born by the taxpayer. But please, let's not let the facts get in the way of a good rant. <http://public-blog.nrc-gateway.gov/2012/07/03/how-the-nrc-is-funded-following-the-money/>

comment #110545 posted on 2013-05-30 13:11:52 by Paveway III in response to comment #110513

The NRC responded to an idiotic demand by congress to show they are substantially self-funded through licensee fees. That only reinforces the current belief of 2/3rds of Americans that congress USUALLY does not act in the best interests of U.S. citizens. It has little to do with realistic or proper funding of the NRC. If I wanted the \$275/FTE/Hr accounting equivalent of nuclear plant regulators and inspection teams, then I would move to Bangladesh. I'm still subject to the full spectrum of taxpayer-backed financial risk \*every day\* from Ft. Calhoun despite the broken-funding model of the NRC. OPPD management is just gaming the system, acting like a spoiled child that does not want to pick up it's toys. It is a mini-TEPCO wannabe through and through. In case of disaster, the big shots simply move on. Employees and contractors are left to take the dose, and taxpayers will always end up paying for their own

decontamination and relocation. OPPD management was rewarded every year for their Wal\*Mart-cheap nuclear generation. If OPPD can't afford to staff, maintain and upgrade Ft. Calhoun today, then they should get completely out of the nuclear power generation business. Stop terrorizing the country. Censorship won't work next time. \*NO\* utility has some God-given right to run a profitable but understaffed, broken-down wreck of a nuclear plant upwind of anyone else. No OPPD ratepayer has a right to cheaper-than-average electricity by spreading the risk out to someone else's kid.

comment #115499 posted on 2013-06-09 03:00:45 by charles ostiediek in response to comment #110110

lara, is ft.calhoun one of the 31 reactors which must strengthen their hydrogen vents as per the announcement of the ruling on such released on 6/7/13? is this item on the restart checklist? has oppd been planning on such upgrades? thx.

comment #109992 posted on 2013-05-29 13:32:14 by Paveway III

So the NRC inspectors were duped by OPPD to fly in and waste their time when the plant was only a little over half-ready for inspection. I expect OPPD to milk U.S. taxpayers for all the FEMA money they can grab, but when did they decide THEIR time was more important than taxpayer-funded NRC inspection teams? I don't suppose OPPD or it's ratepayers want to pitch in a few million for the time and effort of a second inspection? U.S. taxpayers are getting weary of OPPD's reliance on eternal federal welfare to keep their money-losing utility afloat. Charge your ratepayers enough to maintain your fossilized equipment yourselves. Hard to be angry at OPPD when regulators are so publicly slapped around and respond thusly: "...The three areas the team believes OPPD has appropriately addressed are third-party safety culture assessment, quality assurance, and integrated organizational effectiveness..." Seriously? Good God... don't the inspectors have to pass drug tests? We're in big trouble when the inspection team's trip is wasted (well, \*half\*-wasted) by lying OPPD management and the inspectors STILL conclude that the above three categories were adequately addressed. Three of 18 categories down, only 15 to go! OPPD is an electric utility. They lost both trains of spent-fuel cooling power because they're too cheap to buy modern switchgear. When they are forced to buy modern parts - like the replacement circuit breakers - they have to make sure to disable features that are meant to ENHANCE safe and effective operation. Then the electric utility installs them without even checking to make sure the feature was disabled? Corrective action: make sure you check that your vendor configured electrical equipment like they said they did. Good job!

comment #110161 posted on 2013-05-29 18:42:09 by Hiddencamper in response to comment #109992

The NRC collects 90% of its total budget from the plants. Additionally, inspections at plants are billed to the utility. It doesn't come from the taxpayers.

comment #109640 posted on 2013-05-28 23:46:53 by john bowers

Did the temperature rise in the spent fuel pool after the electrical problem? The US Army COE blew levees in southeast Missouri to prevent downstream flooding of towns. Was there ever any contingency plan to blow levees to prevent a Fort Calhoun overheat, either the reactor or the SFP (or both)?

comment #110110 posted on 2013-05-29 15:58:58 by Moderator in response to comment #109640

The spent fuel cooling pool level was in its normal range. The temperature was approximately 80 degrees. There was an approximate 5 degree increase in temperature in the approximately 4 hours the cooling pumps were without power. The plant has adequate protection, as demonstrated during the last flood, to keep the plant in a safe shutdown condition during flooding. At the NRC, our focus is on the safe operations of U.S. nuclear power plants in addition to ensuring they have plans in place to protect against natural disasters that may affect the site. Lara Uselding

comment #117449 posted on 2013-06-10 09:00:25 by Moderator in response to comment #110110

Fort Calhoun is a pressurized-water reactor and therefore not covered by the Order to the 31 boiling-water reactors, which are listed on the NRC website: <http://www.nrc.gov/reactors/operating/ops-experience/japan/us-boiling-water-reactors.html> Lara Uselding

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## An NRC-Recommended Video in Honor of Memorial Day

posted on Tue, 28 May 2013 14:16:33 +0000

*Leonard Carsley*  
NRC Veterans Employment Coordinator



In honor of Memorial Day, the NRC highly recommends the [video](#), “Fields of Honor,” produced by the American Battle Monuments Commission. This independent federal commission manages 24 overseas military cemeteries, and 25 memorials, monuments, and markers, nearly all of which honor those who served in World War I or World War II. This well-done, five-minute video reminds us what Memorial Day is truly about – sacrifice and service.

### Comments

## Assessing NRC’s Nonproliferation Efforts

posted on Fri, 31 May 2013 18:03:43 +0000

*David McIntyre*  
Public Affairs Officer

The NRC has [denied](#) a petition for rulemaking filed by the American Physical Society. The APS wanted the NRC to require applicants for licenses for uranium enrichment or spent fuel reprocessing facilities to include a proliferation risk assessment in their license applications. In denying the petition, the Commission approved the staff’s two main reasons for the decision:  nonproliferation considerations are already an important part of the NRC’s regulatory process; and  the federal government, with its diplomatic and intelligence resources, can evaluate

Proliferation in international affairs refers to the spread of nuclear weapons knowledge, technology and capability.

proliferation risks better than a license applicant. What does this mean?

international affairs refers to the spread of nuclear weapons knowledge, technology and capability. Uranium enrichment and the extraction of plutonium through reprocessing spent fuel are two primary paths for developing nuclear weapons. Nonproliferation is a policy objective of the U.S. and the international community (most notably through the International Atomic Energy Agency) to prevent the proliferation of nuclear weapons by state and non-state actors. A key way of achieving this goal is to block the spread of nuclear technology used to produce weapons-usable material. The State Department is the lead U.S. agency on nonproliferation issues. Support comes from the Commerce,

Nonproliferation is a policy objective of the U.S. and the international community (most notably through the International Atomic Energy Agency).

Defense and Energy departments, the intelligence community and the NRC. The APS said in the petition they were concerned advances in enrichment or reprocessing technologies might make it easier for other countries to develop nuclear weapons. The group filed the petition after GE-Hitachi applied for a license to build and operate an enrichment plant in North Carolina using laser technology developed in Australia. (The NRC granted that license last September.) Because the laser technology was developed in Australia, the State Department conducted a proliferation assessment in 1999 as part of the original agreement to import the technology to this country. There is no requirement for such an assessment if the technology is developed and licensed here. NRC regulations already

provide a number of protections against the unauthorized spread of sensitive information, technology or material from the U.S. • [Physical security](#): Licensees must protect against sabotage or theft of special nuclear material at their facilities and in transit. • [Material control and accounting](#): Licensees must control and account for their inventories of special nuclear material and document its transfer. This includes protection against unauthorized production of enriched uranium or plutonium. • [Information security](#): Licensees must prevent unauthorized access to classified information and technology, through security clearances, physical protection, and cyber security. • [Export-import licensing](#): The NRC must approve the export or import of certain nuclear materials and equipment. Countries receiving the exports must provide assurances that the material or equipment will be protected, at least to the level in internationally-agreed guidelines. As the staff noted in the petition denial, these requirements and NRC’s continuous oversight form a tapestry of protection for nuclear material and technology. These regulations – focusing on preventing the theft or diversion of radioactive materials and classified technologies – provide day-to-day protection against proliferation risks. The Commission directed the NRC staff to periodically review these regulations and guidance. Why? To ensure they are robust enough to meet new proliferation challenges related to building and operating enrichment or

reprocessing facilities the NRC has not previously licensed. But that's not all. The NRC also supports U.S. nonproliferation policy through its regular interactions with the State Department and other agencies. The NRC continuously shares and receives information related to various threats and activities, including those related to proliferation concerns, inside and outside the country. The NRC also supports U.S. participation in the Nuclear Suppliers Group. This group of countries seeks to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons technology. The Commission also concluded there is a need to communicate more effectively with the public on how the NRC holistically addresses non-proliferation objectives in agency processes. And to communicate on how the agency contributes to broader government nonproliferation efforts. The NRC will continue to support the State Department and other federal agencies in these efforts, we will also continue to address proliferation risks in our comprehensive regulations for physical security, material control and accounting, information security, cyber security, and export control. For these reasons, the NRC is confident these multiple layers address proliferation risks and concerns that might be raised by NRC licensing enrichment or reprocessing facilities. The NRC's decision to deny the APS petition will be explained in greater detail in a Federal Register notice to be published soon. The staff paper recommending denial, the [Staff Requirements Memorandum](#) approving that recommendation, and the [Commissioners' voting records](#) are available on the NRC website.



### Comments

comment #113766 posted on 2013-06-06 02:58:45 by Personal Injury Lawyer

Good blog. Really helpful.

## Community Leaders Get Invites to SONGS Small Group Discussions -- Updated

posted on Fri, 31 May 2013 19:21:59 +0000

*Victor Dricks*  
Senior Public Affairs Officer  
Region IV



This week, the NRC is sending letters to dozens of state and local government officials in California, as well as environmental groups and business leaders, inviting them to participate in small group discussions with NRC officials. The discussions will focus on the processes and activities we're using to evaluate a possible restart decision on the [San Onofre Nuclear Generating Station Unit 2](#). The NRC is offering these small group meetings as opportunities for productive discussions on how the NRC fulfills its regulatory mandate for protecting public safety and the environment. Those invited to participate are recognized as community leaders, who could then share the information with their constituency and the public at large. These small group discussions will focus on process issues concerning the NRC's review, rather than specific areas of the staff's technical analysis. They do not replace the larger public meeting the staff will conduct. That meeting will occur after Southern California Edison has submitted, and the NRC staff has completed our inspection and technical evaluation of, SCE's response to the NRC's Confirmatory Action Letter (CAL). This new effort will consist of multiple small group gatherings in California with state elected officials, local elected officials, environmental non-governmental organizations, and economic development, energy, and local union/building and trade representatives. The discussion will include 15-20 participants with three to four NRC representatives and a facilitator. The NRC's objective is to maintain the small group size to promote frank, two-way discussions and dialogue. The discussions will be closed to public observation. The information discussed as part of this effort will be placed on the NRC [SONGS special webpage](#) prior to the discussions. No decisions about restart will be announced at these gatherings. Note: Here are the titles and organizations of the folks invited to participate: [Local elected officials](#) The mayors of: Los Angeles, Mission Viejo, Santa Ana, Vista, Encinitas, Irvine, Laguna Beach, Solana Beach, Huntington Beach, Laguna Niguel, Aliso Viejo, Laguna

Woods, Del Mar, San Clemente, San Juan Capistrano, Dana Point, San Diego, Redondo Beach, Laguna Hills, Industry, West Hollywood, Escondido, La Habra, Covina, and Hesperia. San Diego Unified School District, Board President [State Level California Energy Commission](#), California Public Utilities Commission (CPUC), and California Assembly [Environmental Non-Governmental Organizations](#) Residents Organized for a Safe Environment (ROSE), Peace Resource Center of San Diego, Citizens' Oversight, Sierra Club, San Clemente Green, San Onofre Safety, Democratic Party of San Diego, Alliance for Nuclear Responsibility, Friends of the Earth, Committee to Bridge the Gap, DAB Safety Team, Earth Ocean Society, and Women's Energy Matters [Economic Development, Energy and Local Unions](#) Business Manager UWUA, Local 246, SD Building & Construction Trades Council, IBEW Local 47, Orange County Taxpayers Association, Huntington Beach Chamber of Commerce, Cypress College, Chapman University, Los Kitos Farm, Muni-Fed Energy, Southeast Community Development Corporation, California Small Business Association, Orange County Hispanic Chamber of Commerce, Santa Ana Chamber of Commerce, and Adams Real Plus -- four other individuals with unknown organizational ties

## Comments

comment #112090 posted on 2013-06-03 13:17:23 by Moderator in response to comment #111889

The individuals selected for these meetings represent a broad range of interests and perspectives in order to add a diversity of viewpoints and input. Check back soon and you'll see the list posted. Victor Dricks

comment #112091 posted on 2013-06-03 13:17:41 by Joe Holtzman

Selective attendance is the same as self anointed censorship by the NRC. These meetings are Shams--not open, not transparent, not communicated, and not public. Shame on you NRC/Victor Dirks.

comment #112092 posted on 2013-06-03 13:18:20 by Moderator in response to comment #111065

The objective of these small group meetings is to explain NRC processes involved in the evaluation of a possible re-start decision for the SONGS Unit 2. As we've noted, the NRC will post the visual aid used during the meetings on our website prior to the first meeting. No other visual aids will be used by the NRC during these meetings; however, any visual aids brought by meeting participants will not be posted to the NRC website. Victor Dricks

comment #112093 posted on 2013-06-03 13:19:02 by Moderator in response to comment #111089

The DAB Safety Team has been invited to attend. Victor Dricks

comment #112094 posted on 2013-06-03 13:19:36 by Moderator in response to comment #111080

These small group meetings were designed to address the many processes and procedures the NRC has overseen relative to any re-start decision at SONGS. These meetings are not intended to be a substitute for a possible public hearing, and are being offered as a supplement to explain the NRC processes involved in a possible restart decision for SONGS Unit 2. Victor Dricks

comment #112096 posted on 2013-06-03 13:21:09 by Moderator in response to comment #111050

The nuclear industry had no input into who was invited to these discussions, nor will they be participating. The purpose of these meetings is so NRC officials can meet with a diverse group of interests to more specifically define its role in the possible re-start decision. Victor Dricks

comment #112081 posted on 2013-06-03 12:39:32 by Myla Reson in response to comment #111065

In order to promote trust, credibility, transparency and good government practices, secrecy and exclusion should not be relied upon. Videotaping and webcasting are essential. Myla Reson

comment #111889 posted on 2013-06-03 04:46:59 by Rod Adams (@Atomicrod)

Will there be any "community leaders" invited to these closed, small group meetings that have indicated that they support the beneficial use of nuclear energy? Unfortunately, I do not reside anywhere near San Onofre, but I can provide names of people from the American Nuclear Society who do and who have worked for many years to help their community to understand the importance of nuclear energy to our current and future energy supplies. Unfortunately, recent public communications from the NRC have indicated that they believe that there are only two primary groups interested in nuclear topics - antinuclear non-governmental organizations and "the nuclear industry". This assumption does not reflect reality. I do not believe that avoiding videotape promotes frank and open discussion; I believe it opens the door for people to make unsubstantiated statements in an irresponsible manner. Rod Adams  
Publisher, Atomic Insights

comment #112228 posted on 2013-06-03 20:14:01 by CaptD in response to comment #111889

Rod You can be sure that SCE and even SDG&E have been getting all their friends to appear, just like they have been doing at previous meetings! + Re: "unsubstantiated statements in an irresponsible manner" many feel SCE is the one doing that since they

failed to fully inform the NRC about all the changes they were making to the RSG, which we now know were discussed in 2004/2005 yet SCE decided, since they were in charge of the joint SCE/MHI AVB Team not to do them because they would have then triggered the full CFR 50.59 review which includes public hearings, both of which would have delayed the RSG project and cost SCE big money! In hind sight it would have saved everyone at least a billion dollars if not much more and kept the nuclear industry from getting a black eye from San Onofre!

comment #112229 posted on 2013-06-03 20:15:22 by CaptD

FYI: Lessons From Fukushima For San Onofre Two public figures who led the response in Japan and the United States to the Fukushima reactor crisis will appear together Tuesday for the first time to outline the lessons of Fukushima for Southern California, which now awaits the decision on whether or not the leaky San Onofre reactors near San Diego will be restarted. Former Japanese Prime Minister Naoto Kan will discuss his concerns about the inherent dangers posed by nuclear reactors. He will be joined by former U.S. Nuclear Regulatory Commission Chair Gregory Jaczko, who has emerged as a leading critic of safety at U.S. nuclear power plants. The event will be available live both to reporters in San Diego and via phone feed and Webcast to members of the news media elsewhere in the U.S. News event speakers will be: The Honorable Naoto Kan, former Prime Minister of Japan from June 2010 to August 2011; Gregory Jaczko, former chair of the U.S. Nuclear Regulatory Commission from May 2009 to July 2012; Peter A. Bradford, adjunct professor at the Vermont Law School, a former member of the U.S. Nuclear Regulatory Commission (NRC), and a former utility commission chair in New York and Maine; Arnold "Arnie" Gundersen, chief engineer of the energy consulting company Fairewinds Associates, and a former nuclear power industry executive; and Dave Roberts, County Board of Supervisors, San Diego. FOR PEOPLE OUTSIDE OF SO CAL : A live Webcast from this news event will be available to reporters outside of San Diego, CA., starting at 8:30 a.m. PDT/11:30 a.m. EDT on June 4, 2013, at <http://av4b.com/live/> FOR PEOPLE IN SO CAL: Members of the media in the San Diego area are invited to attend the seminar starting at 8:30 a.m. PDT on June 4, 2013, at the Chambers of the San Diego County Board of Supervisors, 3rd Floor, 1600 Pacific Highway, San Diego. (MAP) MEDIA CONTACT: Alex Frank at (703) 276-3264 or [afrank@hastingsgroup.com](mailto:afrank@hastingsgroup.com).

comment #112899 posted on 2013-06-04 17:12:53 by Yes Vermont Yankee (@yes\_VY) in response to comment #112521

I need to amend my comment above, because you have invited some business organizations. I am happy you did that...you are definitely ahead of the Jaczko visit to Vermont! My apologies for not noticing those invitations when I wrote the first note. However, you chose some organizations, but not others, and there seems to be no particular rhyme or reason to it. For example, why have you invited the mayor of Hesperia (about 70 miles from the plant) but not the mayor of Oceanside (the next town south)? Why have you invited the San Diego Unified School District but not Capistrano School District? I believe the latter district is much closer to the plant. And I think you might think about one more thing, since you are a federal agency: can you invite the local Democratic party to have a place at the table, and not invite the local Republicans? (Or, for that matter, the local libertarians, socialists, etc.) These are political parties, not NGOs. I don't think you can play favorites among them. You seem to have re-defined the Democrats as an environmental group, but I don't think that re-definition is actually within your power. Once again, I am glad you invited business organizations, and I know you can't invite all of them. However, you should make more of an effort to invite the local organizations, and you really cannot play favorites among political parties. Meredith Angwin, blogger at Yes Vermont Yankee. Former Project Manager at the Electric Power Research Institute (EPRI). Member of the EPRI speciality group for research on Steam Generators.

comment #111030 posted on 2013-05-31 15:27:33 by badger777

I can see why "closed to public being present" however, I assume that all meetings will be videotaped and posted on the web? Please verify?

comment #111050 posted on 2013-05-31 16:21:59 by art rosenzweig Yake 53 in response to comment #111030

boy, do I second that! We want to know what we've said as well as what you present. Oherwia call this illegal meeting off!

comment #111054 posted on 2013-05-31 16:30:50 by richard123456columbia

My personal thoughts: What qualifications do this group of people have to understand what the promoters of nuclear power are explaining to them. If they sway them, is the finger going to point to the group if it blows up in their face instead of the promoters. How long till the public gives up in frustration with never ending request to start these bastardized plants. Will it take brute force for them to quite requesting the start up that has been denied after a thorough investigation.

comment #111065 posted on 2013-05-31 16:51:53 by Moderator in response to comment #111030

In order to promote frank and open discussion, the meetings will not be videotaped, but the visual aids the NRC will be using will be posted on the SONGS webpage. One of the reasons community leaders were selected for these meetings was so they may recount the meeting to their constituencies and members. Victor Dricks

comment #111067 posted on 2013-05-31 16:59:34 by Moderator in response to comment #111054

The individuals invited to participate are expected to be leaders within the community, with representative viewpoints of the community or organizations they represent. If they chose such a role, these leaders could then be conduits of information to the larger

public in the area. Victor Dricks

comment #111075 posted on 2013-05-31 17:19:29 by richard123456columbia in response to comment #111050

s this how the nuclear industry works, just keep requesting until the public and all concerned gives up in frustration. Are they paying these people to attend and hand picking them to get those who have something to gain if the plants are restarted. The NRC should be using their forces to review other sites that were built as (a like for a like build), must be more jerry ringed builds to save money. Are they going to explain how they let these plants get built under their nose, do they not get a request to build (a like for a like) to make sure it is, before agreeing it is, not on the word of the builders, like how was this possible?

comment #111080 posted on 2013-05-31 17:39:29 by paineC'ville

Victor, as a well known tennis player used to scream at umpires, "You can't be serious!" To what farcical lengths with the NRC go next to avoid its adjudicatory public hearing obligations under the Atomic Energy Act? Do you understand how ridiculous this looks - - trotting out a proposal for "small group discussions" with "community leaders" of the NRC's own choosing while the Staff and Edison continue to resist the efforts of FOE and others to exercise the public's right under the Atomic Energy Act to an adjudicatory public hearing opportunity on the San Onofre restart issue, and the Commissioners dither, because a licensing board has already told them a licensing hearing is warranted. FOE petitioned for a license amendment hearing a year ago. This issue could have been well on the road to resolution by now if the Commission could just bring itself to keep faith with the licensing process as laid out in the AEA. Why on earth is the Commission going to such great lengths to avoid the license amendment process and the public's opportunity to adjudicate safety contentions in a public hearing process? Do you realize how ugly the Commission's stance appears to the general public? Do you really think concerned citizens so dimwitted that they will mistake the PR exercise you have outlined in your blog for the exercise of their statutory right under the Atomic Energy Act to a contested and appealable adjudicatory hearing opportunity on the full gamut of licensing issues involved in SCE's flawed steam generator replacements, including SCE's misguided original effort to evade a license amendment hearing that gave birth to this mess in the first place. The Commission must face the reality that there is no credible alternative for resolving this matter other than a full blown license amendment proceeding. All the many and varied attempts by Staff and SCE to duck this reality are only making matters worse, and make the Commission appear faint-hearted and ever willing to contort its rules on behalf of industry.

comment #111089 posted on 2013-05-31 18:11:54 by CaptD

Mr. Victor Dricks If the NRC does not invite the DAB Safety Team, after all the technical papers we have submitted about the many issues about San Onofre safety, then I must argue that those that are making the decisions as to whom to invite, are either not up to the task and/or have an agenda that should not be part of the public process!

comment #111098 posted on 2013-05-31 18:34:41 by CaptD in response to comment #111065

Mr. Victor Dricks By ONLY using NRC visual aids you are gaming the system, why not post all visual aids used in the discussions, what is the NRC afraid of? I can't wait until the NRC begins to explain why they have not required Edison to examine Unit 2 tube fatigue using the best techniques, not just the bobbin-coil which as Dr. Hopenfeld explains\* is not up to the task or how the 9,727 tubes will react to a MSLB! Prediction: Any restart discussions without outside experts will be perceived as a PR event. \* <https://docs.google.com/folder/d/0BweZ3c0aFXcFZGpvrlo4aXJCT2s/edit?docId=0BweZ3c0aFXcFX2gxRDFCRW9CVzg>

comment #112521 posted on 2013-06-04 08:09:59 by Yes Vermont Yankee (@yes\_VY)

I have read your list, and I am not particularly impressed. You do include elected officials, which is more than Jaczko did when he came to Vermont. However, there are no business organizations, no invitation to someone from the local American Nuclear Society chapter, etc. When Jaczko came to Vermont, at least one business organization (VTEP) and myself (a blogger with a sizable local following, in the process at that time of starting a not-for-profit) asked to be seated at the table. We were refused. Two nuclear opponents stopped by to tell me that if that had happened to them, they would have been offended at being excluded. They were kind and sympathetic to my situation. <http://yesvy.blogspot.com/2010/08/jaczko-retrospective.html> In my opinion, inviting only opponent organizations will not convince the opponents that they were "heard." Many opponents seem to think that "hear us" actually means "obey us." Opponents statements are heard and considered: that is simply not enough! (For example, there's a response below about how the NRC is "co-opting" anti-nuclear groups with this invitation.) In other words, these meetings won't please the plant opponents. However, this sort of one-sided invitation can definitely displease business groups and nuclear supporters, who don't even get heard in the most modest sense. I urge you to reach out to community groups, pro-nuclear people and business associations. You need to have many voices at these meetings. And you need to hear them all.

comment #114533 posted on 2013-06-07 10:11:19 by Andrea Jennetta

Congratulations, NRC. Your politically-motivated decisions--which were not based on SAFETY, which is your sole mission--have resulted in the closure of two reactors.

comment #113136 posted on 2013-06-05 08:21:14 by Moderator in response to comment #112899

Our original list was incomplete. We added the rest of the invitee list on Tuesday morning. So you didn't miss it. It was our mistake.

Moderator

comment #115244 posted on 2013-06-08 10:00:54 by George Allen

I am sorry San Onofre Nuclear Generating Station is being closed. Unit two ran 18 months at 100% power with no "in plane, tube to tube" wear. Tube examinations and repairs were done to ensure the next run cycle would be safe. U2 would be safe to run at 70% for five months. It has been 18 months since U2 produced power. The NRC decided to allow a full license amendment process take place. The NRC had agreed to a Confirmatory Action process which should have allowed the plant to start up this summer. The decision to allow a full license amendment process take place was the turning point for Edison's management. They could not continue to let the plant be shut down for another year and pursue an unknown License Amendment result.

comment #113292 posted on 2013-06-05 13:03:53 by Moderator in response to comment #112899

The NRC invited individuals who have interacted with us through meetings, e-mail, and letters, and who are expected to be leaders within the community, with representative viewpoints of the community or organizations they represent. Not inviting the Mayor of Oceanside was an oversight; he has since been invited. Victor Dricks

comment #115335 posted on 2013-06-08 18:10:50 by CaptD in response to comment #112093

Too bad these meeting got cancelled, there is still much work that needs to be done to finish the investigations that must go forward even though San Onofre is going to be decommissioned! N♣ San Onofre Gate

comment #111275 posted on 2013-06-01 09:34:58 by PublicAdvocate

This sounds like a thinly disguised divide-and-conquer strategy by the NRC. This kind of tactic is often used by governmental agencies that want to break up a strong opposition movement by the citizenry. Such invitation-only closed-door meetings are tools of manipulation which do not ultimately benefit the public. Governmental agencies usually host these meetings when they know they are in trouble. The NRC will attempt to use the meetings to try to defuse public discontent regarding the way the NRC has been mishandling regulatory oversight of SONGS and the NRC's resistance to meaningful public participation regarding safety issues at SONGS. Note that the NRC is hoping to use the "selected" meeting attendees as mouthpieces for the NRC's spin. Note also that the NRC wants to limit discussion to process issues only and avoid substantive technical issues. Afterward the NRC will attempt to paint these closed-door meetings as an agency effort to be open and responsive to public concerns. In reality, the NRC is trying to keep a lid on the simmering public distrust of its actions and inactions regarding SONGS such as the NRC's refusal to make inspection reports fully public. Invitees should not feel complimented. Nor should they conclude that an invitation means their views will be given any special consideration. The NRC is mainly looking to co-opt participants into quieting their public expression of concerns and possibly even say good things publicly about the NRC--all because they feel so special about being invited to a closed-door meeting with three or four NRC representatives. Bottom line: These planned invitation-only closed-door meetings are mainly designed to blow smoke. If they do not occur in a recorded public forum or in a signed written document, the NRC's assurances are written on the wind.

comment #112640 posted on 2013-06-04 10:00:46 by Andrea Jennetta

By "environmental groups" you mean "anti-nuclear organizations" and by business leaders you mean who, exactly? Where are the pro-nuclear environmental groups? Where is the American Nuclear Society? Where is the Nuclear Energy Institute? Where is the health physics professional society? Where is the local chamber of commerce? Rotary club? Elks? The engineering departments at local universities and colleges? Retired veterans of the nuclear navy? Democracy means EVERYONE, not just those who scream the loudest. NRC needs to quit bending over backwards for opponents to the exclusion of any citizen or group that might be pro-nuclear energy. It's so overtly political it's breathtaking.

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## Before the Browns Ferry Fire: Antiquated Notions That Electricity and Water Didn't Mix

posted on Tue, 04 Jun 2013 12:49:34 +0000

*Tom Wellock*  
*NRC Historian*



Browns Ferry Fire:

[caption id="attachment\_4192" align="alignright" width="300"] Historical Photo[/caption] Few events altered nuclear power regulation as much as the [Browns Ferry Unit 1](#) fire. In March 1975, thousands of electrical cables burned for about seven and a half hours, disabling all of Unit 1's and many of Unit 2's emergency core cooling systems. Only creative action by plant operators prevented reactor damage, and only a resort to water hoses rather than portable CO2 fire extinguishers quenched the flames. The NRC was just two months old when the fire started, and it enacted sweeping reforms to enhance reactor safety from fires, including fire detection, prevention and suppression. Browns Ferry was so momentous that any discussion of fire history before it often receives little attention and is mistakenly dismissed in a few sentences: The NRC's predecessor, the Atomic Energy Commission, didn't consider fire a nuclear safety issue. It erred in deferring to non-nuclear standards set by property insurance companies and engineering associations. Such deference was inadequate because insurance standards were designed to limit property damage rather than prevent a reactor accident. In fact, the fire can't be so easily blamed on AEC inattention. The agency did believe fire was a reactor safety issue, and it insisted on special fire protection designs that proved inadequate at Browns Ferry. Its key error, then, wasn't in deferring to non-nuclear fire insurance experts; it sometimes didn't defer enough. Most egregiously, nuclear regulators rejected expert recommendations on fire suppression systems believing that nuclear safety considerations demanded alternative designs. By the late 1960s, fire protection experts favored water as a fire suppressant. Tests and experience showed water was the most desirable fire suppressant even in areas with electrical equipment because of its ability to rapidly smother and cool a growing fire. Businesses used water suppression in diverse applications such as computer factories and electric cable rooms in steel mills. Even AEC weapons plants added water to supplement their CO2-based systems. Fire insurance associations recommended water-based fire suppression systems for civilian nuclear power plants. AEC regulators and the industry disagreed. Having limited nuclear-specific data on fires, they operated from the perspective that electricity and water didn't mix. They feared water would cause short circuits and disable backup reactor safety systems. With AEC encouragement, new plants commonly installed fixed CO2 fire extinguishing systems in electrical areas, as was done in Browns Ferry's damaged cable spreading room. In addition, the cable spreading room was not equipped with fire hoses and water supply piping called standpipes. David Notley, the NRC's first fire safety expert, noted the ironic result of the AEC's ignorance on fire suppression. Believing that nuclear power was a special exception to standard industrial practice, regulators dismissed non-nuclear experience that might have improved reactor safety. Had water been used early in the 1975 fire, the duration of the fire, the damage to the plant and the challenge to safely shutting down the plant would have been significantly reduced. The AEC did treat fire as a reactor safety threat, but it pursued ill-informed solutions. Chastened by Browns Ferry, the NRC expanded its fire regulations and launched a [fire research program](#) that have measurably improved plant safety.



## Comments

comment #114686 posted on 2013-06-07 14:23:11 by Paveway III

I'm glad the agency and plants responded to the evolution in fire suppression. What I don't seem to see are considerations for realistic amounts of flood or pooled water that may result from, among other things, fire suppression activities. Electrical switchgear in nuclear plants seem fairly vulnerable (my observation). The most recent example being the Arkansas Nuclear One accident where I understand switchgear was lost to a broken fire main. Are most nuclear plants' switchgear on the lower level(s) for a particular reason - like seismic - or is that just 'the way they do it'? I can't imagine drains and sumps alone would be adequate for keeping switching equipment above water for any length of time. The easy answer would seem to be 'put the switches on the second floor somewhere'. Maybe I'm missing something.

comment #113893 posted on 2013-06-06 08:11:33 by Moderator in response to comment #113133

Thanks for your interest, Mike. You are right about the role of the fire department in extinguishing the blaze. The operators, however, were very creative in finding alternative ways of keeping the reactor core covered with water, even though the emergency core cooling system for Unit 1 was disabled. Tom Wellock

comment #113042 posted on 2013-06-05 00:54:40 by Abbas

If electricity and water didn't mix: But Countries make electricity with water, what is the reason?

comment #113133 posted on 2013-06-05 08:06:05 by Mike Perry

I was around then, and my memory is that it wasn't "creative action by plant operators " that worked. The local fire department had wanted to do that from the time they arrived on the scene, but the plant (following thier regulations) resisted it until it was clear that they were losing the battle. Once water spray was authorized, the fire was out in a matter of minutes. But it was the local fire department, not plant operators, who had the successful plan. And it wasn't creative, it was the way the fire department training directed for fighting large cable fires. I could be wrong, but that is the way I remember it.

comment #130171 posted on 2013-06-29 10:29:43 by 911 Restoration Atlanta

It makes no sense? Hmm, actually there are some places that water has been the source of electricity - it's very good conductor so i think this is the reason why also that it shouldn't be mix together if it is not necessary.

comment #129460 posted on 2013-06-27 23:26:09 by Peter Crane in response to comment #113133

Mike -- I was around then too, in my very first days at NRC. You are absolutely right. The local fire department wanted to use water, but the plant was resisting. As far as they knew, you didn't put water on an electrical fire. The local Athens, Alabama fire chief finally said that he didn't care what the plant thought, he was going in alone with a fire hose. At that point the plant gave in and started using water, and the fire was soon out. The chief was the hero of the day. He saved the place. I wonder if he ever got the recognition he deserved. If I knew his name at the time, I've forgotten. By the way, some readers may not know the origin of the fire: that a worker was using a candle to test the adequacy of the seals around the cables going between the cable spreading room and the reactor building. There was, intentionally, negative pressure, so he was looking for any movement of the flame to see if there was air flow, which would indicate leakage. The air flow was strong enough that the negative pressure sucked in the candle flame, and the resulting fire burned through control cables. It's been 38+ years, so if my memory is faulty, someone please correct me. -- Peter Crane, NRC retiree

## Let's Chat – What Are Your Thoughts?

posted on Thu, 06 Jun 2013 16:41:07 +0000

*Holly Harrington  
Senior Advisor  
Office of Public Affairs*

The NRC launched a pilot of a new social media platform – Let's Chat – in April. It's somewhat similar to this blog, but it



features a real-time discussion on a specific issue with an NRC expert responding to the questions. So far, we've held three Chats – on the history of nuclear power in the U.S., on the Japan Lessons Learned Directorate and its activities, and on the role of the resident inspector. We appreciate everyone who has stopped by and sent us a question. (By the way, they are archived on the [site](#).) Our next session is today from 2 to 3 p.m. Eastern with Len Wert, from our Region II office in Atlanta. He will speak about his experiences during the many hurricanes he's dealt with, as well as how nuclear power plants are built to withstand a whole host of severe weather events. Now we'd like some feedback from you. Have you been to a Chat? What did you think? Are the times and days of the week convenient? We also like to hear your topic suggestions. We do have some [limitations](#) on topics for the Chat. It's not the place for regulatory issues currently before the Commission or likely to come to the Commission, for example, or actively being adjudicated. But if you suggest a topic and we can make it work, we'll put it on the schedule. Thanks for your input!

### Comments

comment #114674 posted on 2013-06-07 13:47:53 by Moderator in response to comment #114650

Thanks. We usually do, but apparently not every time! The Small Modular Reactor Chat is scheduled for June 18th at 2 p.m. Eastern. Thanks for your interest. Holly Harrington

comment #114709 posted on 2013-06-07 15:09:36 by Daryl A. Leon in response to comment #114674

Holly, I very recently joined the NRC Chat platform and have yet to participate in one of the live chats so the only feedback I can provide to your questions is that the date and time for the chats work quite well for me on the West Coast.

comment #114713 posted on 2013-06-07 15:20:26 by Moderator in response to comment #114674

Any particular topic you'd like us to cover? Holly Harrington

comment #114719 posted on 2013-06-07 15:41:32 by Daryl A. Leon

Yes, as a matter of fact. China has implemented a plan for a dramatic shift in electric power generation from fossil fuels to nuclear power, selecting the AP1000 reactor design as their primary design (with modifications). Currently, there are 17 power reactors operational there with 28 under construction, more about to begin construction, and even more planned or proposed. At last count, planned or proposed units is around 240 (~161,000+ MWe). A chat with regard to this shift and how it affects the U.S. and the U.S. nuclear power industry including fuel cycle (demand for uranium fuel) would be interesting.

comment #114765 posted on 2013-06-07 17:05:47 by Ivan

Should I post my questions here or I can put them only in the future chat-conference?

comment #114650 posted on 2013-06-07 13:00:47 by Bret W. Leslie, Ph.D.

when you send out an email describing the moderator for an upcoming chat (e.g., [New post] Small Modular Reactors) provide the date and time for when the chat will be held.

comment #115337 posted on 2013-06-08 18:18:32 by CaptD

I suggest that you start a "wish list" so that the topics most requested get moved to the top of the list! Also this would be a great project for someone that is not a NRC professional since that would save money and create a job for someone rather than having a highly paid NRC employee do it! Post chats so that others can read what was discussed and then we could have followup chats if the topic is well received.

comment #115339 posted on 2013-06-08 18:21:05 by CaptD in response to comment #114650

Hopefully these folks will be able to attend:  
[http://www.taxpayer.net/images/uploads/downloads/Golden\\_Fleece\\_SMR\\_Press\\_Release\\_FINAL\\_w\\_logo.pdf](http://www.taxpayer.net/images/uploads/downloads/Golden_Fleece_SMR_Press_Release_FINAL_w_logo.pdf) ...

comment #116323 posted on 2013-06-09 19:13:40 by john bowers in response to comment #114719

It's only a matter of time, then, until they have their Three Mile Island, Chernobyl, or Fukushima, destroy a huge area, and decide it's not worth it.

comment #125565 posted on 2013-06-20 11:08:48 by

how NRC views application of six sigma and other tools widely used in industry?

comment #125858 posted on 2013-06-20 17:27:25 by Taku

Hi I would like to know the T and UH levels of Zircon Sand if I import the Zircon Sand into USA.

comment #124281 posted on 2013-06-18 13:17:52 by Daryl A. Leon in response to comment #124220

It is very unlikely that SMR companies will actually move to construction by reason of the lengthy and extremely expensive licensing process required by the US NRC. Even if funding was present for construction, the financial licensing burden would wipe this out in a heartbeat for any financial advantage the SMR would have obtained otherwise. Look at Galena, AK as an example.

comment #124220 posted on 2013-06-18 11:25:21 by Tom Clements

As the economics of SMRs is very shaky at best and given that funding for construction of SMRs does not appear to exist, why should the NRC place serious resources into reviewing reactor design and licensing when it is very likely that no SMR will actually move to construction? The NRC should be very cautious in getting caught up in the continuous and exaggerated hype by the SMR companies about the viability of their imaginary products.

comment #124196 posted on 2013-06-18 10:22:34 by Abdul M. Khan

1. What are the advantages of SMRs as compared to large one - (technically and cost wise)? 2. If we need say, 1000 MWe power, why we should select 5 SMRs of 200 MWe each compared to one 1000 MWe nuclear plant, 3. Are SMRs of pressurized type or boiling water type or something else?

comment #123842 posted on 2013-06-17 17:46:21 by Robert Steinhaus

I would like to offer the following suggestions for potential future NRC Chat topics - 1) How will future fusion reactors be regulated? Is it clear that NRC will have regulatory jurisdiction and responsibility for fusion reactors? 2) Does the growth of US nuclear

regulation historically correlate to the increase in cost of nuclear power plants? What benefit/cost evaluations are performed by NRC before producing new regulation? Can the US public review NRC's benefit/cost analysis of new and existing regulation? Dr. Bernard Cohen, "Cost of Nuclear Power Plants - What went wrong?" – <http://www.phyast.pitt.edu/~blc/book/chapter9.html> 3) Many currently fear that there will be a mid-century phase-out of commercial nuclear power plants as old legacy plants built under AEC regulatory supervision are retired at end of life and fewer and fewer new nuclear plants receive licenses from NRC to be built. NRC is currently expected to fund its operations from license fees and yearly operating fees derived from operation of legacy nuclear plants. As legacy nuclear plants reach end of life and are not replaced with new nuclear plants because it is not possible to get COL licenses from NRC in a timely manner, how will NRC make up the shortfall in revenue and cover its \$1 billion dollar agency cost? Will MRC have to shrink as the number of commercial nuclear power plants in operation decline? 4) What genuinely promotes public safety? If the very high levels of NRC regulation obstruct the building of safe nuclear power plants and price up the technology to the point it is no longer built, does NRC's elevated standards of safety really end up making the public safer? If the result of excessive levels of nuclear regulation result in intrinsically less safe fossil fuel and renewable energy power plants getting built in the place of safer nuclear plants, how do NRC's high standards of safety actually end up producing greater safety in power generation for American Communities?

comment #117442 posted on 2013-06-10 08:56:28 by Moderator in response to comment #115337

All Chats are archived on the site, so anyone can revisit them at any time. All the NRC social media platforms are managed by the NRC, not by contractors. Holly Harrington

comment #117443 posted on 2013-06-10 08:57:10 by Moderator in response to comment #114765

If you have a question for the next Chat, scheduled for June 18th on the topic of small modular reactors, you can submit it ahead of time to [opa.resource@nrc.gov](mailto:opa.resource@nrc.gov). Holly Harrington

comment #117448 posted on 2013-06-10 08:58:51 by Moderator in response to comment #115337

Topics that are scheduled in the next months: July 23 -- Waste Confidence August 6 -- Seismic studies and nuclear power plants Sept. 3 -- Security and nuclear power plants (tentative) Sept. 17 -- Decommissioning (tentative) Holly Harrington

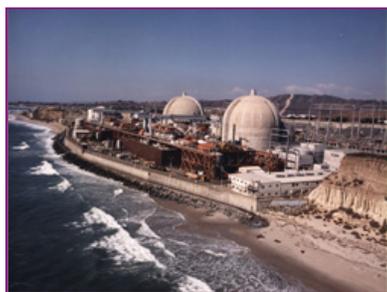
comment #117650 posted on 2013-06-10 11:06:44 by JOE BROWN in response to comment #117442

PATENT US 7,827,792 B2 WOULD BE ADVANTAGEOUS TO FUTURE POWER PLANT DESIGN.

## Today's SONGS Announcement: Now What?

posted on Fri, 07 Jun 2013 16:47:21 +0000

*Victor Dricks*  
Senior Public Affairs Officer  
Region IV



Today, Southern California Edison Co. announced it will permanently shut down the [San Onofre Nuclear Generating Station](#) in San Clemente, Calif. This has left many people -- who have been closely following events there -- wondering what happens next? First, SCE has not formally notified the NRC of its intention to shut down the two-unit site, so we do not yet know what they're proposing as a path forward, or how this will affect existing NRC adjudications, investigations, and licensing actions. But in light of this news, the NRC is cancelling the series of [small group meetings](#) we planned to hold next week to discuss process matters related to the potential restart of the plant. Once we get the notification, the agency's focus will shift from finishing our technical evaluation of Edison's proposed restart plan to ensuring the plant is safely and permanently removed from service and decommissioned. The NRC staff members are scouting potential locations for a large public meeting, and we hope to announce a time and location for this soon. At that meeting, NRC staff will provide an overview of the [decommissioning process](#) and opportunities for public participation.

### Comments

comment #114884 posted on 2013-06-07 20:40:14 by James Greenidge

Re: "The truth is that southern California had a nuclear near-miss, that could have ended up as another Fukushima if we had not been just plain LUCKY!" I don't like lies. I don't like gross exaggerations and I don't like poisonous lies tantamount to crying fire in a theater.. Anti-nukes are obliged to cough up solid certified engineering and scientific fact to your spiel or stop spewing [removed] to a bewildered public and windvane politicians. James Greenidge Queens NY The sincerely fair should view "Pandora's Promise", not fearful fearmongers.

comment #114877 posted on 2013-06-07 20:33:41 by CaptD

I'm counting on the NRC to complete all its investigations into what was going on at San Onofre and especially how SCE was able to build their 465 million dollar RSG without going through a CFR 50.59 process, which includes public hearings. Sweeping all the investigations "under the rug" will be a dis-service to both those that reported what was happening at San Onofre and to the NRC's role as a regulator to the nuclear industry! The NRC should be issuing fines and or other types of enforcement as well a re-thinking one of its core beliefs that only one SG tube can ever fail at any one time which San Onofre proved could happen!

comment #114689 posted on 2013-06-07 14:24:52 by joey

SWAN S.O.N.G. Swan songs are sad songs, but not in this case with Millions of people near nuclear waste Goodbye, San Onofre, we shed ye no tear Retire that plant and don't come back next year We're tired of the lies and we won't live in fear Barbara the Boxer yanked you by your ear Now off to the dust bin of history go You killed all the plankton; that, sadly, we know You wanted a restart though you knew it could blow Goodbye to your cold heart, and the worst SONG I know joey racano on facebook: shut down diablo canyon

comment #114688 posted on 2013-06-07 14:24:14 by joey

Here's the plan... [www.drivingthefuture.com](http://www.drivingthefuture.com)

comment #114663 posted on 2013-06-07 13:26:44 by Jamie Irwin

Thanks but no thanks. We don't need platitudes from the NRC. This is a disaster any way you spin it. The environment will suffer, ratepayers will be stuck with the costs of paying for more expensive replacement power, and hundreds of capable and talented people will be put out of work, have their lives disrupted, and their careers ruined. Take that decommissioning crap and stuff it.

comment #114659 posted on 2013-06-07 13:15:40 by joffan7

The NRC should take a good hard look in the mirror. Bureaucratic foot-dragging and process hijacks have impelled a political decision that closing this nuclear power plant is easier than wading for years through further wrangling. This is not a safety closure. This is a government interference closure. San Onofre could have been generating low-carbon power for another thirty years.

comment #116065 posted on 2013-06-09 13:52:57 by 1948billhawkins

SCE was afraid of of ASLB ruling and public hearings and NRC Commission started small group public hearings to comply with ASLB ruling of public hearings. So that was the breakdown and SCE to save face, not sure of their Restart Plan and avoid criminal investigations announced panicky Shutdown of Both Units. Shutdown does not mean that all the investigation will go away. You pay for what wrongs you do to others by retaliating, lying, discriminating and harassing for Nuclear Safety Concerns. If SCE Management would have listened to me when I rejected the SONGS Unit 3 Root Cause , SONGS would have Unit 2 rebuilt by now with public/NRC approval and producing power.

comment #114695 posted on 2013-06-07 14:35:00 by Anonymous in response to comment #114659

+1 to joffan7

comment #114697 posted on 2013-06-07 14:36:34 by CaptD in response to comment #114659

Joffan7 Your comment is VERY far from being realistic! San Onofre had so many RSG design problems that one pair of new RSG failed in less than a year and the other pair in less than 2 years, yet you urge them to restart and accuse the NRC of foot dragging... The truth is that southern California had a nuclear near-miss, that could have ended up as another Fukushima if we had not been just plain LUCKY!

comment #114698 posted on 2013-06-07 14:37:29 by CaptD

CA has plenty of Energy without any nuclear reactors! California has excess power without nuclear, according to data from the California Public Utilities Commission (CPUC), the California Energy Commission (CEC) and the electricity grid operator, the California Independent System Operator (ISO). Here is their chart showing that CA has a 20% (and growing) surplus of Energy without either El Diablo or San Onofre (which has been shuttered because of faulty NEW steam generators for about a year and a half) nuclear generators! <http://sanonofresafety.org/energy-options/> + There is a simple reason that California has the highest electric rates in the USA! The California Public Utility Commission (who sets the rates) has been allowing the Utilities to rip off rate payers

so they can reward their shareholders. This practice MUST STOP... Now is the time to demand that SCE (and SDG&E) pay us for the energy from our rooftop solar systems, (that we put into the grid) the same rate they pay themselves for the energy they put into the grid! This will reduce the payback period and encourage everyone to add solar to their roofs in order to gain energy freedom instead remaining an energy slavery to the Utilities!

comment #114710 posted on 2013-06-07 15:12:48 by CaptD in response to comment #114663

One thing is true, many workers will lose their jobs but many others will get employed to decommission San Onofre and that will last for many years! The root problem was that SCE tried to sneak their radical designed RSG's in and they failed when put into service! Now ratepayers and current employees are suffering while those responsible change retirement programs.... They are the ones you should direct your anger at.

comment #114739 posted on 2013-06-07 16:31:39 by joey in response to comment #114695

Low carbon but high residue. Radioactive residue. NRC did a good job on this one- made the right call.

comment #114762 posted on 2013-06-07 17:02:45 by Jamie Irwin in response to comment #114710

Decommissioning work stinks. It is low skill, low wage, and literally dead-end. Anyone who does it is basically an undertaker, tearing down the work of others. I for one would NEVER do it. I build things, not destroy them.

comment #114766 posted on 2013-06-07 17:06:39 by turnages in response to comment #114698

Tell you what, CaptD. Since the Utility is so Evil and won't pay you for all that surplus energy from your rooftop solar system, why don't you run you own ship? Disconnect from them and come out from their slavery? I'll come back in a year's time and see how you're doing.

comment #114785 posted on 2013-06-07 17:45:35 by turnages in response to comment #114697

From the press release: "After months of analysis and tests, SCE submitted a restart plan to the Nuclear Regulatory Commission (NRC) in October 2012. SCE proposed to safely restart Unit 2 at a reduced power level (70 %) for an initial period of approximately five months. That plan was based on work done by engineering groups from three independent firms with expertise in steam generator design and manufacturing." I would really like to know why the NRC thought that would have been an unreasonable course of action, especially as the original release from Unit 3 was so minor.

comment #114786 posted on 2013-06-07 17:46:09 by Michael K. Antonelli in response to comment #114659

I agree with joffan's post. Look back at Palo Verde in the 90's. When they had their steam generator tube rupture, they were back online doing a short cycle confidence run within months. I understand the SONGS SGs are unique among the industry, but they are still essentially heat exchangers, not some new or unknown device. Holding up the 70% restart for a confidence run which did have reasonable assurance of no safety significance for as long as it was is not efficient regulation. What was gained by delaying the restart, and why are these delays allowed? If reasonable assurance of safety can be assured for the conditions the plant is trying to operate in, there should be no delays in the restart of the unit. Additionally, the NRC needs to give the licensee very clear and unchanging requirements for restart ASAP after an event where a CAL is issued. The bar for SONGS kept changing during the process, and it was not clear where the bar was eventually going to land for almost a year. The NRC needs to improve on clear, efficient, effective communication of requirements early in all projects, not just what happened at SONGS, otherwise I fear we will be going back to the 80's and 90's where the nuclear industry was on a road to death and licensees who are trying to do the right thing have no choice but to close under an unclear and uncertain regulatory environment. Michael K. Antonelli

comment #114792 posted on 2013-06-07 17:58:44 by turnages

From the press release: "After months of analysis and tests, SCE submitted a restart plan to the Nuclear Regulatory Commission (NRC) in October 2012. SCE proposed to safely restart Unit 2 at a reduced power level (70 %) for an initial period of approximately five months. That plan was based on work done by engineering groups from three independent firms with expertise in steam generator design and manufacturing. " What weird and distorted risk assessment persuaded the NRC that this was a more dangerous course than, through delay after delay, to force California to burn more gas instead? The Kleen Energy gas explosion in 2010 killed 6 and injured 50. The San Bruno pipeline explosion, also in 2010, killed 8 and laid 38 homes in ruins.

comment #117911 posted on 2013-06-10 13:53:56 by CaptD in response to comment #115632

SteveK9 Your suggestion is exactly why the NRC should have N☠T allowed SCE to restart, it was an experiment, something which thankfully is not allowed due to safety regulations...

comment #114950 posted on 2013-06-07 22:24:21 by CaptD in response to comment #114689

Joey Great poem, SALUTE! Into Haiku? We all glow the same Matters N☠T who is to blame Nuclear is Lame

comment #115632 posted on 2013-06-09 09:47:47 by SteveK9

Perhaps it should really be renamed the 'Nuclear Rejection Commission'. SCE could have turned on Unit 1 at 70% tomorrow as requested. They are very confident this would work. If it did fail, detectors would measure this immediately and the reactor could be shut down safely. SCE gave up because they see years of pointless discussion ahead. So, over 2GW of clean, non-polluting, CO2-free energy will be lost forever, ... and for nothing.

comment #115092 posted on 2013-06-08 03:33:37 by PigWig in response to comment #114697

"... a nuclear near-miss, that could have ended up as another Fukushima if we had not been just plain LUCKY!" Every time there's ANY problem at a nuclear generating station, no matter how trivial the incident, we hear that. We must be close to our thousandth near miss and "just plain lucky". Hint: when the same "luck" happens time and time again, it's not luck. In the case of nuclear energy, it's the skill, intelligence, wisdom, and dedication of the workforce.

comment #115249 posted on 2013-06-08 10:19:11 by Jamie Irwin in response to comment #114698

What is the output of those rooftop solar installations when the sun goes down? Last I checked, it still gets dark about half the time in any given day. Do you use electricity at night? Where is it going to come from? If you have "storage batteries", how much capacity do those have? Will it be adequate for an extended period of no output from the solar panels? How many deep-charging cycles will your storage batteries handle before they have to be replaced? What are the environmental impacts of millions of tons of toxic materials from discarded storage batteries being thrown away and/or recycled? What is the payback period (without government subsidies) of the combined rooftop solar panels and energy storage systems?

comment #115326 posted on 2013-06-08 16:50:29 by George Allen in response to comment #114659

I agree with you joffan7. SONGS could have produced clean affordable power through 2022.

comment #115334 posted on 2013-06-08 18:07:44 by CaptD

N♣ San Onofre Gate First, a salute to all of San Onofre's loyal workers that have or will lose their jobs because of SCE Managements poor engineering decisions, everyone feels sorry for both you and your families, there is no good time to be laid off. We also feel sorry for all the local businesses and families that live in the neighborhoods located near San Onofre that will feel the effects of these job loses. Hopefully as many as possible of you can remain here by getting retrained by SCE, so that you can be retained or re-hired (along with many others) to decommission San Onofre a big job that we now know will last for many years and cost billions of dollars which will hopefully help jumpstart the entire southern California economy! To all those that are now upset, angry and/or worried about the future because San Onofre is being decommissioned, I urge all you to not focus your frustration upon those who protested by publicizing the many actual safety concerns at San Onofre but join with them and together lets all demand to learn much more about why San Onofre had to be decommissioned. We all deserve to know exactly who at SCE was responsible for their decisions to use unproven radical designed RSG's at San Onofre that not only failed so quickly after being put into service but leaked radioactivity into the air we breathe, putting everyone in southern California at risk! Because of this Corporate engineering debacle\*, recently laid off employees, present employees soon to be laid off and all the ratepayers are now suffering while those that are responsible are simply going to change their retirement packages and/or enjoy their golden parachutes; they are the only ones that should be held responsible! The US Government, the NRC, the CPUC and the State of California Attorney General must complete all of their investigations into San Onofre, so that those that are responsible can be identified and we all receive the maximum financial relief possible from them. SCE, SDG&E, the CPUC and MHI must be instructed ASAP not to shred any documents relating to San Onofre; the public will not accept a San Onofre Gate cover up. No longer can SCE or MHI claim that they must restrict any "proprietary information" on any company documents relating to San Onofre since they are now going to be decommissioning it, along with its new unsafe Replacement Steam Generators that contain so many major design flaws. In hindsight, Southern California had a nuclear near miss on 01/31/12 and if we were not just plain lucky we could have suffered a nuclear accident just like Fukushima, because of the dangerous Replacement Steam Generators that were in use at San Onofre. We now also have another major problem, which is to determine where both our Federal and State Regulatory Systems of checks and balances failed, in order to make sure that something like this never happens again because the USA cannot afford a trillion dollar Eco-disaster. To do that, it is vital that we insure that all the investigations mentioned above are done publicly and not behind closed doors so that all of us can better understand exactly how San Onofre's debacle occurred, the names of those that are responsible for it and exactly who we should hold responsible for the restitution of all our financial losses. \*San Onofre will be remembered as both a nuclear near miss, and as an engineering debacle of epic proportions like the Tacoma Narrows Bridge. <http://www.youtube.com/watch?v=j-zczJXSxnw>

comment #116313 posted on 2013-06-09 19:07:09 by john bowers

Excellent. Every NPP and SFP is a potential catastrophe, capable: of ruining an area the size of a large western state, or larger; of killing millions of people by heart disease, diabetes, and cancer over decades; of doing devastating damage to the human genome and the genomes of all creatures.

comment #116318 posted on 2013-06-09 19:11:09 by john bowers in response to comment #114663

Those workers should take their capabilities and talents and apply them to creating and deploying more efficient photovoltaic, wind,

tidal, geothermal, and hydropower technologies. The smartest could start figuring out ways to deploy technologies like Francisco Pachecho's autolytic hydrogen generator; how to overcome the organized crime, governmental, and political oppositions to such technology.

comment #118128 posted on 2013-06-10 16:30:31 by Jamie Irwin in response to comment #117505

Nah, I don't waste my time with unreliable and outrageously expensive boondoggles like solar and wind. I've been around too long to fall for that baloney.

comment #118136 posted on 2013-06-10 16:34:40 by Jamie Irwin in response to comment #115249

So you need the grid to back up your expensive hobbies when they aren't working, which is like at least once a day if your solar panels go dark. So the utility (grid operator) is expected to maintain a huge infrastructure so you can have backup when you need it. And the rest of the non-1%ers who can't afford expensive solar toys have to pay that much higher of a rate to keep your toys backed up.

comment #118150 posted on 2013-06-10 16:51:51 by joffan7 in response to comment #115326

I don't doubt that it would have run through to 2042 without incident. That is the thirty years I was thinking of.

comment #118154 posted on 2013-06-10 16:54:50 by joffan7 in response to comment #114786

Hear hear, Michael. Uncertainty is death to business, and the NRC has been dealing uncertainty in spades.

comment #118172 posted on 2013-06-10 17:18:55 by Jamie Irwin in response to comment #115249

And, Germany is planning to make up their capacity shortages by building more coal-fired power plants. They are doing that now. They know that solar is useless in their climate, and the experiences of their neighbors (Spain, Denmark, et al.) with wind has shown them what an unmitigated economic disaster overreliance on unreliable wind will be. So that means more CO<sub>2</sub>, more acid rain, more fly ash dumped into the environment. You want to follow Germany's example? You'll then be responsible for ruining the natural environment for your children and their heirs.

comment #123711 posted on 2013-06-17 13:27:02 by joy cash in response to comment #123701

Where can public access FEMA emergency evacuation plans for 8.4 million residents?

comment #119439 posted on 2013-06-11 10:51:56 by Anonymous in response to comment #119310

these kinds of conversations often fall apart because one "side" brings nothing but facts to the table, while "the other side" is not above exaggeration or downright lying. The problem is, both "sides" think this is what is happening, and they're not "the other side."

comment #126316 posted on 2013-06-21 15:35:19 by Jamie Irwin in response to comment #124249

Production at SONGS HAS STOPPED IMMEDIATELY! But, you know what? There is still MATERIAL TO BE DISPOSED OF. If you trashed every nuclear plant in the country right now, besides poisoning the atmosphere and acidifying the oceans with more fossil fuel burning, which you would be responsible for, you'd still have to dispose of material. But because your President (Obama) destroyed the Yucca Mountain project, there is no place for it to go other than the plant sites themselves. And then you get all huffy about that plan because you say some nonsense like it's a holocaust in waiting (which it isn't). So on the one hand you trash Yucca Mountain, then turn around and squawk because there is "no place to get rid of nuclear waste". Well, it's your fault there isn't, because of your President that you elected.

comment #119310 posted on 2013-06-11 08:46:24 by Moderator

We recognize this is an issue that raises emotions and on which people have significant differences of opinion, but please keep personal attacks out of the comments so we can post them. Moderator

comment #123704 posted on 2013-06-17 13:12:38 by Moderator in response to comment #122627

SoCal Edison last week certified to the NRC that they have permanently shut down San Onofre Units 2 and 3. However, the company has not yet submitted a decommissioning plan. See our blog post of February 28, "Deconstructing the Decommissioning Process," about Crystal River 3. The regulations and process will be similar for SONGS. As for the funding, all licensees – whether for operating or permanently shutdown reactors in decommissioning – must maintain decommissioning funds. The NRC reviews these funds every two years to verify reasonable assurance that adequate funding will be available for decommissioning when needed. David McIntyre

comment #123701 posted on 2013-06-17 13:02:53 by Moderator in response to comment #123188

Until a permanent federal repository is approved and constructed, spent nuclear fuel will be stored onsite both in the spent fuel pool and dry cask storage at the plants where it was produced. The Department of Energy is responsible for the developing a permanent disposal site of spent nuclear fuel and other high-level radioactive wastes. The Federal Emergency Management Agency has reviewed and approved the emergency response plans for San Onofre, and continues to inspect them during biennial exercises and annual assist visits. FEMA continues to believe there is reasonable assurance that timely evacuations can be performed for the populations at risk from any sort of emergency affecting the cities around San Onofre. Victor Dricks

comment #124273 posted on 2013-06-18 13:01:10 by joey in response to comment #123711

The responsibility for waste is on the people producing it. I don't care about the old rules, we are making new ones. Once the waste leaves the plant and enters the pools, it no longer belongs to PG&E or SCE. That will change. The public is a shareholder who foots all the burdens and bills but gets no benefit. All we get is a ticking nuclear conflagration in the wings. First 4 steps: 1 stop making more spent fuel 2 all spent fuel into dry cask storage within 7 years, then weld shut seawater cooling intakes. 3 establish an agency -a priesthood if you will- that will watch the spent fuel until it winds down in 500 thousand years, a 'nukes templar'. 4. Move spent fuel away from seismically active areas On Facebook: stop the diablo canyon seismic testing

comment #124249 posted on 2013-06-18 11:50:21 by Jamie Irwin in response to comment #123188

You should direct your concerns to Obama. Obama's DoE cancelled the Yucca Mountain repository in order to get Harry Reid re-elected to the Senate. Basically he put politics before your concerns. Do you like that? If it weren't for Obama cancelling Yucca Mountain, there would be a place for the SONGS material to go. But there isn't, because it was more important to get Harry Reid re-elected.

comment #124212 posted on 2013-06-18 10:59:53 by Moderator in response to comment #123711

You should consult your local emergency management authorities for that information; they are the ones who prepare, practice and implement evacuation plans. David McIntyre

comment #123188 posted on 2013-06-16 04:29:47 by joy cash

My only concerns at this point: When do we remove stored spent fuel at San Onofre, located between 2 active earthquake faults? What evacuation plans are viable for 8.4 million residents until spent fuel is safely removed from densely populated areas?

comment #124865 posted on 2013-06-19 13:32:08 by joey in response to comment #124321

I am no obama-ite. But nuclear waste should not go to yucca anyway- the underground water moves differently than the reports have told the public. In fact, there is a good reason why nobody wants that its dangerous and will outlast the human race. Dont blame obama on your timidity to stop production immediately. Its up to us, not him. Support the NRC and force them to vote our way.

comment #122627 posted on 2013-06-15 00:05:55 by BobinPgh

What method will be used to decommission San Onofre? Who would decide this? Since it is right on the beach, I think if it is not producing power anymore that the DECON method should be used to at least take the non-nuclear part closest to the beach away and give the land back to the public. The domes might be there awhile, but I would think there could be valuable metal and could some of the machinery be used anywhere else (although isn't San Onofre a unique plant?). When might people start to see a difference in how the place looks. All that exposed machinery was pretty ugly.

comment #130406 posted on 2013-06-30 02:57:17 by IA Nuke in response to comment #114877

Try and use more relevant terms. 10CFR 50.59 is for Changes, Tests and Experiments, which would have been completed for this kind of modification (and does not require public hearings). Tube Rupture is a postulated accident in a PWR and has been analyzed in FSAR's. Tech. Spec. Amendments and License amendments will garner public comment, but not 10CFR 50.59 documentation (which is not to say it is unavailable if requested). If you don't believe me, the CFR is a public document on the NRC website. Try reading 10CFR 50.91..... It is the correct place to look for Notice for Public Comment items.

comment #123843 posted on 2013-06-17 17:51:27 by joey in response to comment #123701

You have 7 years before the once through cooling seawater intake gets welded shut forever. You had better start planning to dry cask store everything by then. Joey Racano On Facebook: stop the diablo canyon seismic testing

comment #124321 posted on 2013-06-18 15:25:29 by Jamie Irwin in response to comment #124249

"I see a simpler solution: removal of radioactive materials from densely populated areas." Make your concerns known to your President. Don't go hammering the shutdown nuclear plant about it. It was your President who stopped Yucca Mountain. If Yucca Mountain were proceeding on schedule as required by Federal Law (which your President is in violation of) then there would be a place to send the material. There isn't, because of the actions of your President.

comment #124295 posted on 2013-06-18 13:57:52 by joy cash in response to comment #123701

I understand "sheltering in place" for San Diego School District with 132,000 school children is currently considered our plan in the event of radioactive nuclear event at San Onofre. We all know a viable evacuation is simply not possible. Imagine a teacher with 20 students in classroom lock down without adequate food, water & bathroom facilities for an unspecified time. Parents panicking in attempting to reach their children. Freeways in gridlock. No I don't see these plans as viable. I see a simpler solution: removal of radioactive materials from densely populated areas.

comment #117465 posted on 2013-06-10 09:17:17 by Jamie Irwin in response to comment #116318

It doesn't matter how "efficient" photovoltaic systems are if the sun doesn't shine. And, last I checked, that happens an average of half the time every day. Wind is terribly unreliable. You know what the average capacity of all the wind generators in CA was the last time you had a heat wave, when the electricity was needed the most? About 5%. Anyone who proposes relying on a system with a 5% capacity factor isn't very smart. If you want to replace the output of SONGS with the newest wind turbines, assuming a generous 35% capacity factor, you'd have to run a line of them from LA to Seattle and back. What do you think the 0.1%-ers living along the CA coast would think of that visual pollution? The so-called "environmentalists" will oppose so-called tidal and hydropower technologies. Those have devastating impacts on littoral currents and run-of-the-river natural flows. Contrary to hydropower development, you've got so-called "environmentalist" groups all over the West agitating to blow up dams (e.g., Glen Canyon). And, finally, geothermal. Did you know that the use of geothermal energy releases more radiation to the environment than a nuclear plant? If the one geothermal plant in CA (Geyers) were regulated by the NRC, it would never receive an operating license. Too much radon is brought up from deep underground and released to the air. You people are so concerned about a SONGS "near-miss" (which it isn't), you've got an on-going "miss" right now in these geothermal plants.

comment #117505 posted on 2013-06-10 09:46:40 by Jamie Irwin in response to comment #115334

Retrained to do what? Ride the garbage truck? Drive a forklift? No thanks. I didn't spend four years in college and five in graduate school to do that kind of crap. Decommissioning work stinks. It is literally a dead-end job. The whole time you are working yourself out of a job. It is tearing down the life's work of others, basically being a destroyer rather than a builder. We don't need more dead-end jobs in the economy right now. And you are "just plain lucky" that you don't kill dozens of people every time you drive your car. There are millions of drivers all over California. There is a potential for tens of millions of deaths if you weren't "just plain lucky". I think we should shut you all down "just to be safe".

comment #117920 posted on 2013-06-10 13:56:24 by CaptD in response to comment #117505

Jamie, so accept reality and be one of the first to start looking into Solar (of all flavors), think how many had to change occupations when the US space effort ended in the late 70's...

comment #117931 posted on 2013-06-10 13:59:59 by CaptD in response to comment #114884

Here is 24 pages of factual data that is based on solid engineering data not Utility mis-direction...  
<https://docs.google.com/document/d/1a79x07iXukMwPb-DfOzcWYUIEHc5H6X-psWq4PD05A/edit#> Enjoy

comment #117944 posted on 2013-06-10 14:05:25 by Jamie Irwin in response to comment #116313

And by advocating the scrapping of nuclear plants, you will be responsible for burning more natural gas, which will release hundreds of thousands of tons of CO2 and thousands of tons of methane to the environment. That will degrade the atmosphere and you will also be responsible for the acidification of the oceans, which will lead to the deaths of billions.

comment #117957 posted on 2013-06-10 14:11:20 by CaptD in response to comment #114766

turnages Many are doing just that and making our just fine, especially since the grid is a separate charge and belongs to us all! BTW in Germany most of the energy production is by non Utilities which keeps rates for all low; a model that the USA would wise to emulate! BTW: I have run my own ship and we got along just great whenever we were not using shore power!

comment #117967 posted on 2013-06-10 14:16:09 by CaptD in response to comment #115249

James Its simple, you add whenever you can and then withdraw when you need to, simple since the grid belongs to all of US! Now if we could get the Utilities that are supposed to operate as public utilities to pay us for the energy we put in at the same rate that they pay themselves for adding the same Energy (by using smart meters) then our payback period would be really short and many more would add safe risk-free solar to their roofs, which would help our Country! Germany is now pushing this and expects to be 100% renewable by 2050 if not before!

comment #117986 posted on 2013-06-10 14:27:44 by CaptD in response to comment #114786

A very large number of NRC internal reviews and a very large number of experts from outside the NRC wrote papers that identified the risks involved! Here is a great one on tube fatigue: <https://docs.google.com/folder/d/0BweZ3c0aFXcFZGpvRlo4aXJCT2s/edit#>

docId=0BweZ3c0aFXcFX2gxRDFCRW9CVzg + San Onofre's "almost new" replacement steam generators had more tube damage that all the rest of the US nuclear fleet combined and in Unit 3 8 tubes failed in-situ pressure testing something tht even the NRC found was a serious safety concern and in Unit 2 they found a tube with 90 wear which far exceed the safety limitation of 35% wall thickness allowed and SCE did not even know it! + Here is 24 pages of factual data that is based on solid engineering data not Utility mis-direction... <https://docs.google.com/document/d/1a79x07iXukMuwPb-DfOzcWYUIEHc5H6X-psWq4PD05A/edit#> Enjoy

comment #117991 posted on 2013-06-10 14:31:11 by CaptD in response to comment #114697

PigWig Would you be surprised to learn that San Onofre was a near miss, because of it poor replacement steam generators that had more internal tube damage that all the rest of the US nuclear fleet combined, that is how bad they were and that damaged occurred either in the first (Unit 3) or second operating cycle (Unit 2)... Sometimes are as bad as they seem!

comment #118000 posted on 2013-06-10 14:35:45 by CaptD

I hope that the NRC will commit to providing everyone with the results from the many investigations into why San Onofre's debacle occurred; perhaps then many of those in the nuclear field will realise that just because it is nuclear does not mean it cannot fail, and nuclear failure is unacceptable both for our Country and the Earth... Ask The Japanese! From a recent seminar in San Diego: Lessons for California from Gregory Jaczko, Former Chairman of the Nuclear Regulatory Commission + Former Japanese PM Kan and two other experts... <http://www.copswiki.org/Common/M1359>

comment #118008 posted on 2013-06-10 14:38:41 by CaptD in response to comment #116065

Yes, I agree 100% Said another way SCE continues to practice CYA and I predict that time will prove that SCE got more than a little nuclear design egg on their face and will now have to repay their ratepayers because of it!

## Do Not Fear Your Smoke Detector – It Could Save Your Life

posted on Tue, 11 Jun 2013 12:55:17 +0000

*Maureen Conley  
Public Affairs Officer*



We sometimes get calls from people worried about radiation from smoke detectors in their homes. There are many reasons why the public need not fear these products. Ionization chamber smoke detectors contain very small amounts of nuclear material. They might use americium-241, radium-226 or nickel-63. These products detect fires early and can save lives. [We explained how smoke detectors work in greater detail in an earlier [blog post](#).] The Atomic Energy Commission granted the first license to distribute smoke detectors in 1963. These early models were used mainly in factories, public buildings and warehouses. In 1969, the AEC allowed homeowners to use smoke detectors without the need for a license. Their use in homes expanded in the early 1970s. The NRC took over from the AEC in 1975. Makers and distributors of smoke detectors must get a license from the NRC. They must show that the smoke detector meets our health, safety and labeling requirements. Most smoke detectors sold today use 1 microcurie or less of Am-241. They are very safe. A [2001 study](#) found people living in a home with two of these units receive less than 0.002 millirems of radiation dose each year. That is about the dose from space and the earth that an East Coast resident receives in 12 hours. Denver residents receive that dose in about three hours. These doses are part of what is known as "background radiation." The radioactive source in the smoke detector is between two layers of metal and sealed inside the ionization chamber. The seal can only be broken by the deliberate use of force, which obviously we discourage. Still, even then it would result in only a small radiation dose. The foil does not break down over time. In a fire, the source would release less than 0.1 percent of its radioactivity. It's important to understand that none of the sources used in smoke detectors can make anything else radioactive. What about disposing of smoke detectors? A [1979 analysis](#) looked at the annual dose from normal use and disposal of Am-241 smoke detectors. The study used actual data and assumptions that would overstate the risk. It allowed the NRC to conclude that 10 million unwanted smoke detectors each year can be safely put in the trash. The [2001 study](#) looked at doses from misuse. It found that a teacher who removed an americium source from a smoke detector and stored it in the classroom could receive 0.009 millirems per year. If the

teacher used the source in classroom demonstrations, handling it for 10 hours each year would give less than a 0.001 mrem dose. A person who swallowed the source would receive a 600 mrem dose while it was passing through the body. I hope this information allays concerns. Unless you remove and swallow the source, your dose from a smoke detector could not be distinguished from what you get throughout your day. And that smoke detector could save your life.

### Comments

comment #119715 posted on 2013-06-11 14:28:09 by Fred Stender

Why don't you quote Sv? We all know sieverts Confusion by quoting Rem exasperates the misunderstanding and mistrust of nuclear data.

comment #119720 posted on 2013-06-11 14:30:57 by Fred Stender

I see...so its like eating a banana or flying on a plane. Aren't there other technologies that can effectively detect smoke without using a radioactive material?

comment #119802 posted on 2013-06-11 15:55:42 by Moderator in response to comment #119362

The 2001 study I mentioned also looked at the doses that people involved in distribution and sales would receive from handling smoke detectors. Stockhandlers who move large numbers of cartons of packaged smoke detectors and people who work near stored cartons would receive about the same dose as the homeowner—0.002 mrem over the course of a year. Maureen Conley

comment #119830 posted on 2013-06-11 16:22:34 by Moderator in response to comment #119720

Yes, there are optical smoke detectors that do not rely on radioactive material. Those smoke detectors are more effective at quickly detecting smoldering/smoky fires while the ionizing smoke detectors (those containing radioactive material) are more effective at quickly detecting fires that proceed quickly to flame without as much smoke. Because each type of detector is more effective in certain situations, many fire experts recommend they be used in combination with each other along with carbon monoxide detectors. Maureen Conley

comment #119831 posted on 2013-06-11 16:24:14 by Moderator in response to comment #119715

The 1979 analysis expressed results in terms of mrem only. The 2001 study expressed doses both in mrem and millisieverts. To keep the units of measure consistent, this blog post expresses dose in terms of mrem. The numbers are also more easily expressed as mrem, since 0.002 mrem is equal to  $2 \times 10^{-5}$  mSv. Maureen Conley

comment #119362 posted on 2013-06-11 09:53:54 by richard123456columbia

How about the storage of detectors like electrical wholesalers have about 200 in one area stacked up with work stations 20 feet away, would be common.

comment #119968 posted on 2013-06-11 19:16:43 by Michael K. Antonelli in response to comment #119715

US units are still in Rem, and last I saw, the NRC said they had no plans to move to Sv. I'm in the US and I would trust Rem more than Sv, (even though they are technically the same thing), but that's just training/experience/exposure to it.

comment #120151 posted on 2013-06-12 02:26:40 by PigWig

Every smoke detector I've ever seen has its ionization chamber inside a metal enclosure. Does that shield some/most/all of the emitted radiation? I mean, relative to the 2001 study and other safety assessments.

comment #120934 posted on 2013-06-13 00:32:52 by richard123456columbia in response to comment #119802

So then it is safe to work 20 feet from 200 detectors for 20 years, I sold fire alarm systems for commercial buildings and have been close to many detectors 20 feet or so. A note, to do a quick test of ionization detectors, at 20 feet with low air movement blow across a lit end of a cigarette towards a detector and within a minute or so it will alarm, the farthest distance I have done is 30 feet with 20 foot ceilings. The ambers from the cigarette easily set off the detectors. .

comment #120261 posted on 2013-06-12 08:00:30 by Dan Williamson in response to comment #119715

"We" all know sieverts? Not necessarily so. How many liters of gasoline did you put in your car yesterday?

comment #120545 posted on 2013-06-12 16:52:14 by Moderator in response to comment #120151

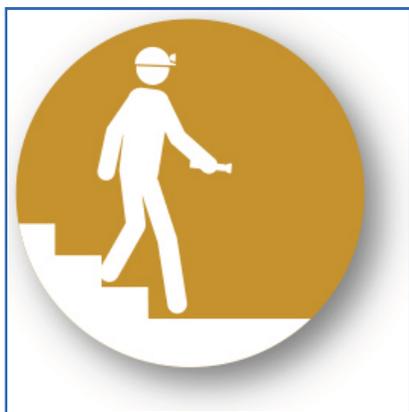
The ionization chamber and metal enclosure do indeed shield the majority of alpha particles coming from the radiation source. Most

additional alpha particles are blocked by the plastic housing. The radiation dose from an ionizing smoke detector is almost entirely from the gamma radiation that the radioactive source emits. As the blog post notes, however, the dose is so small that it cannot be distinguished from background. Maureen Conley

## Retracing the Steps of Post-Fukushima “Walkdowns”

posted on Thu, 13 Jun 2013 18:19:24 +0000

*George Wilson*  
*Team Lead*  
*Japan Lessons-Learned Directorate*



Every U.S. nuclear power plant recently completed “[walkdowns](#)” to review its existing flood and earthquake protection features. This work is part of the NRC’s efforts to learn from the 2011 Fukushima nuclear accident. Now, NRC experts are checking up on how a few plants carried out this work, as part of our review of the walkdown reports. We’ll do our audits over the next few weeks. For flooding walkdowns, we’ll visit Hope Creek/Salem and Oyster Creek in New Jersey; Vermont Yankee; Millstone in Connecticut; Brunswick in North Carolina; Quad Cities in Illinois; and Monticello in Minnesota. For earthquake walkdowns we’ll visit Beaver Valley in Pennsylvania; Seabrook in New Hampshire; Sequoyah in Tennessee; DC Cook in Michigan; Point Beach in Wisconsin; and Comanche Peak in Texas. Why those plants? Well, the walkdown reports might be unclear in some regard or may have taken an unusual approach to meeting the NRC’s request to carry out the work. Other reasons could include the relative experience of the plant’s walkdown staff, or a plant completing its work faster than the industry average. The bottom line is that we want to ensure the plants did a thorough job. For the audits, experts from NRC Headquarters will work with one of our resident inspectors at the site, spending several days at each plant. The team will examine documentation, discuss the walkdowns with the plant staff who performed them, and -- if necessary -- inspect plant

structures described in the plant’s walkdown report. The audit results will help the NRC staff better understand what additional questions we might need to ask as we continue reviewing all the walkdown reports. The plants we audit will have to resolve any issues that we identify, along with anything they noted during their walkdowns.

### Comments

comment #121474 posted on 2013-06-13 17:21:08 by Fred Stender

Will you publish the original Walkdown reports? It rhymes with "talk down", and is a strange word.

comment #121386 posted on 2013-06-13 14:59:47 by Diane Smith

What special precautions will there be, if any, for Diablo Canyon in CA?

comment #121405 posted on 2013-06-13 15:27:16 by Aladar Stolmar

It is a typical smoke blowing effort by the NRC: instead of correcting the design deficiency, namely that there is no plant which could claim avoidance of Zirconium firestorm ignition in the core for any initiating event, or even to have means to vent the reactor to prevent the stagnant super-heated steam to cover the cladding in the core with a gravity reserve of coolant; they are investigating these initiating events. Make the nuclear reactors unquestionably safe, please! It is not that hard!

comment #121433 posted on 2013-06-13 16:01:45 by TJ Mackisim

Fewer "walkdowns", more work on license renewals. That is my advice to you.

comment #121634 posted on 2013-06-13 21:42:27 by CaptD

Sharing knowledge is always a good thing, but hopefully what also occurred was an onsite check to insure that the NRC residents are not getting too cozy with the Utilities and blurring the inspectional lines by turning a blind eye to operational and/or maintenance issues that need to be corrected. That was part of the root cause at San Onofre; in short, Senior technical NRC inspectors should inspect other regions for compliance issues, that way the NRC would insure that all plants are complying with Federal CFR regulations!

comment #123420 posted on 2013-06-16 23:10:17 by john bowers

Can Wolf Creek's cooling reservoir withstand a quake? Is there karst geology underneath it by chance?

comment #124847 posted on 2013-06-19 12:45:35 by Moderator in response to comment #123420

Wolf Creek's cooling reservoir is designed to safely withstand the same earthquake the reactor is designed to survive. George Wilson  
comment #122163 posted on 2013-06-14 09:24:15 by Moderator in response to comment #121474

They original reports are available here: <http://www.nrc.gov/reactors/operating/ops-experience/japan/byorders/> George Wilson  
comment #122164 posted on 2013-06-14 09:26:04 by Moderator in response to comment #121386

I'm not sure what you mean by "precautions." The walkdown reports can be found here: <http://www.nrc.gov/reactors/operating/ops-experience/japan/byorders/> George Wilson

comment #122301 posted on 2013-06-14 12:33:20 by Diane Smith in response to comment #122164

Will there will be post-Fukushima inspections at Diablo Canyon? It sits on 14 earthquake faults, one of which runs under one of the units. Thanks!

## Astounding and (Perhaps) Little Known Facts about the NRC and Radioactive Materials: Part I

posted on Thu, 20 Jun 2013 12:20:20 +0000

*Brenda Akstulewicz*  
*Regulatory Information Conference Assistant*

We compiled these "factoids" for the Regulatory Information Conference, held in March 2013, based on input from throughout the NRC.



Conference attendees found these little known bits of history and trivia interesting. We hope you do, too! • The NRC's first Chairman, Bill Anders, was an astronaut on Apollo 8's mission to the moon. • In the 1930s, a failed experiment by a Swiss physicist for detecting gas using a radioactive source led to the discovery of smoke detectors when the scientist lit a cigarette and the detector registered a reaction. The NRC approved 70 different smoke detector designs in 1972. • It is estimated if only one NRC technical reviewer did each design certification application review, it would take 32 years to complete the review. • Some lightning rods contain Radium-226 to make them more effective. • Inspectors from Region IV get a lot of frequent flier miles. They review activities in remote locations such as Guam, Saipan and the northern reaches of Alaska, among other locations. • NRC's Office of Nuclear Regulatory Research, the Office of Nuclear Reactor Regulation, and the Office of Nuclear Material Safety and Safeguards are all mandated by Congress. • With six sites and 11 operating reactors, Illinois has more



nuclear power plants than any other state. • The NRC was the first federal agency to give the public electronic access to all of its public documents through the groundbreaking system known as ADAMS (Agencywide Documents Access and Management System). • Currently, 59 domestic and 76 foreign organizations use MELCOR, NRC's system-level severe accident analysis code. • Currently, 31 licensed research and test reactors are in the United States. The majority belong to colleges or universities. • The final safety evaluation report for the ESBWR design certification document contains about 3,800 pages. • The fastest growing use of nuclear materials in medicine is for diagnostic and cancer treatment procedures in veterinary medicine. NRC inspectors review the use of these materials in veterinary clinics. Watch for more next week!



### Comments

comment #125465 posted on 2013-06-20 09:17:21 by Monica Barnby

Thank you for sharing these little known facts. I did indeed find them interesting.

## Palisades Tank Leak Repaired -- Safe to Restart

posted on Mon, 17 Jun 2013 20:33:14 +0000

*Prema Chandrathil*  
Region III Public Affairs Officer



After intense NRC scrutiny that confirmed the plant is safe to operate, the [Palisades](#) nuclear power plant in Michigan restarted Monday after more than a month shutdown. In total 10 NRC inspectors performed a wide range of inspections to locate the leak in a refueling water tank, the reason for the shutdown, was fixed. Entergy employees identified a leak from the tank on May 5. The leak exceeded the level Entergy had committed to the NRC, which required the plant to shut down to ensure structural integrity of the tank. The tank is used during refueling outages and to supply water to the reactor during emergencies. It has leaked before. That's one reason why, in a [July 2012 letter](#), the plant made a commitment to measure and trend daily leakage from the tank, and shut down the plant if the leak exceeded certain limits. The NRC responded quickly once the leak was reported. The resident inspectors headed into the plant that Sunday, May 5, to closely follow Entergy's actions to shut down the plant and inspect their efforts to identify the leak. We also sent a specialist with a background in materials engineering to further inspect the plant's detailed actions to identify and repair the leak. And we had additional inspectors review and assess the plant's test and repair plan, look into the area beneath the tank, understand and analyze the stresses on the tank, review the root cause of the leak, and observe the actual welding and testing of the tank components. NRC's Region III also continued our commitment to openness and transparency by publicly documenting phone call discussions between Entergy and NRC management on this issue. Additionally, the region held a webinar on radioactive releases during which Region III staff addressed the public's questions and concerns about the tank leak. More than 70 people participated in the webinar. Going forward, the NRC will continue to make sure the tank remains safe. We will independently inspect the areas around the tank where leaks can be identified and will follow Entergy's actions to monitor the tank. If small leaks are discovered we expect Entergy to evaluate them according to the NRC's rules, and take appropriate action. We have received dozens of calls and inquiries about this issue. We want to assure you that the public and plant workers continue to be safe. We remain committed to being open and transparent about issues of concern to the local public. To that end, we will hold an internet event to discuss NRC regulations regarding this tank and why Palisades was safe to restart. Once a date has been determined details will be posted on the [NRC website](#).

### Comments

comment #126177 posted on 2013-06-21 07:40:11 by

You are like the boy who cried wolf too many times and no one believed him--only your mantra is repeatedly telling the public that this plant is safe when there are repeated forced shutdowns occurring. No one believes you. Repeated lies and coverups, faulty construction documents that have been kept from the licensing board are further evidence that there are more problems at this plant than the NRC and licensee will admit to and reason for permanent shutdown before meltdown. The public is no longer tolerant of your playing Russian roulette with our lives!

comment #124236 posted on 2013-06-18 11:39:47 by Jamie Irwin in response to comment #123856

Some might say that you are a clunker, and too old. Maybe even a slumlord. Should we shut you down too?

comment #123830 posted on 2013-06-17 17:01:47 by joffan7

So, you're absolutely sure you don't want to force some bogus hearings on the operators for a couple of years and force them to close the plant out of frustration?

comment #123856 posted on 2013-06-17 18:28:24 by Fred Stender

Palisades is a clunker, it is too old. And it is being run by a company with a bad history of poor preventive maintenance. Entergy. Some have even called Entergy a slumlord.

comment #123857 posted on 2013-06-17 18:29:27 by LillyMunster

Is a 40 year old design problem really something to declare a success? How many other plants have aspects of their design that do not match their official design documents with the NRC? Ft. Calhoun is riddled with problems where the plant as built don't match what

the NRC licensed. It makes one wonder how many more of these kinds of situations are out there being missed with a bigger potential for a unanticipated failure.

comment #123930 posted on 2013-06-18 00:05:44 by BobinPgh

Why not just get - A new tank? Probably does not cost more than the repairs and being over 40 years old is probably just going to leak again. maybe it could be made out of plastic that they didn't have back then rather than metal.

comment #127651 posted on 2013-06-24 11:05:53 by Jamie Irwin in response to comment #123830

Maybe they should constitute an ASLB to slow-walk this for another few years, just to get the operator to throw in the towel, just like SONGS. What's another trophy head on the wall, anyway?

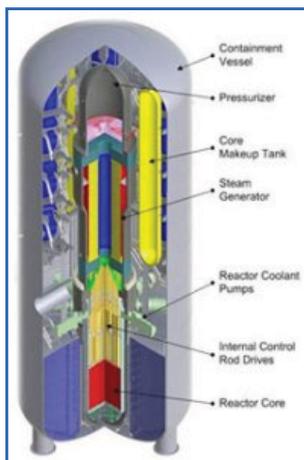
comment #125504 posted on 2013-06-20 10:07:34 by David Andersen. in response to comment #123930

You do realize that this is a very large tank, probably around 500,000 gallons.

## NRC Chat Considers A Possible “Small” Future

posted on Tue, 18 Jun 2013 13:07:27 +0000

*Scott Burnell*  
Public Affairs Officer



The NRC's first few [Chats](#) have focused on the present or past, but this week we're going to look ahead a couple years by talking about [Small Modular Reactors](#), or SMRs. These reactor concepts are much smaller than today's nuclear power plants. The small designs currently being discussed would generate less than 200 megawatts of electricity per reactor, compared to the 1,000 megawatts or more coming from many current reactors. These compact designs could be grouped at a single site, with each reactor a "module" in the overall power plant. SMRs would be built at a factory and could be transported to their final location by truck or train. Join us on [Chat](#) today at 2 p.m. Eastern with your questions for Anna Bradford, a senior manager for SMR activities in the agency's Office of New Reactors. Anna will spend an hour answering your questions about the basics of SMRs, as well as the NRC's plans for reviewing both reactor designs and possible locations for SMR-based nuclear power plants. Note: The archive of this Chat is available [here](#).

### Comments

comment #127761 posted on 2013-06-24 15:18:06 by Richard Perry in response to comment #125936

.How many TMI, Cher..., Fuku..., etc over the next 200 years can we handle till we have to live under ground. How many plants are needed to power the world, every new plant has owners scrimping on safety to make a profit to the point of lying like O... with the manufacture and designers supporting their actions, NRC was fooled or turned a blind eye to what they where doing. NRC must have given the OK or did not see that the like for like was going to produce more power, how in the hell can that be! anyone with a gradec12 education would ask how is this possible? And these groups you claim are telling the truth, they are a JOKE now.

comment #126356 posted on 2013-06-21 20:56:28 by john bowers

Furthermore, God knows exactly the number of people, men, women and children, including children in the womb, who have died as a result of nuclear industry pollution and catastrophes, and exactly where in every person's DNA damage has been done, and every case of disease. There is no getting around that kind of accounting. The very hairs of the head are numbered, and not a sparrow falls to the ground without Him knowing. One can claim zero deaths. God knows the truth. And God is just.

comment #125936 posted on 2013-06-20 20:30:58 by john bowers in response to comment #124203

Ha ha. When a pipeline catastrophe occurs, it does not contaminate an area the size of a couple large western states. It does not cause damage to the genomes of all affected living organisms. It does not have an attic stuffed full of enough spent fuel to endanger half the globe.

comment #125938 posted on 2013-06-20 20:32:54 by john bowers in response to comment #125936

A pipeline catastrophe generally does not require government and media wide censorship and coverup operations, thus corrupting both even more. It also does not result in chocolate bars which give you bone cancer, heart disease, or yttrium diabetes.

comment #124279 posted on 2013-06-18 13:13:50 by devolpi

Thanks, unable to participate, but would like to get a substantive summary.

comment #124234 posted on 2013-06-18 11:38:17 by Jamie Irwin in response to comment #124203

So are natural gas pipelines, of which there are many, many more than nuclear plants. Those pipelines pass directly under people's homes and the streets you walk and drive every day, and pose a much greater and more likely hazard than any nuclear plant. Did you know any of that? If so, why don't you go after those before you go after a nuclear plant? Hundreds, if not thousands of people in this country have been killed by natural gas accidents, not one has ever been harmed by a nuclear plant.

comment #124203 posted on 2013-06-18 10:35:31 by richard123456columbia

Are these plants fail safe , walk away when any problems occur. If not they are a time bomb.

comment #128352 posted on 2013-06-25 16:59:44 by Jamie Irwin in response to comment #125936

How many fatalities resulted from TMI? How many fatalities resulted from Fukushima? Compare the fatalities from Chornobil (really a weapons production reactor design, not an LWR like we use here) to the fatalities from natural gas, aviation, chemicals, medical errors, etc.? How many more fatalities are we going to have to suffer from use of coal and natural gas before we all have to live underground? How much more fossil fuel burning are we going to have to endure before the oceans are acidified to the point of being unable to sustain life? How much more atmospheric degradation are we going to have to suffer before we are forced to relocate to another planet? How can anyone with more than a 4th grade education not realize the dangers we face from NOT using nuclear energy to produce electricity in economical quantities with high reliability?

comment #125043 posted on 2013-06-19 20:14:12 by Paveway III in response to comment #124279

<http://chat.nrc-gateway.gov/2013/06/07/small-modular-reactors/>

comment #130090 posted on 2013-06-29 04:42:43 by John

It seems that these plants are just a ticking time bomb. They should really think about doing more to make these plants safer.

comment #124318 posted on 2013-06-18 15:17:25 by Jamie Irwin in response to comment #124234

I know the nuclear plants can withstand those kinds of events. My point was that there are a lot more natural gas pipelines around than there are nuclear plants. And many of those pipelines run under places where there are people around all the time, every day, constantly exposed to the danger those pipelines pose. So the earlier poster's mention of nuclear plants being a "time bomb", well, heck, if those are, then the natural gas pipelines he makes no mention of are multiple level time bombs, basically time bombs in spades. Yet the agitators go after the nuclear plants because they are "time bombs" but whisper nary a word of protest about gas pipelines, which have demonstrably caused hundreds of deaths among the general public, compared to zero for nuclear plants.

comment #124294 posted on 2013-06-18 13:56:44 by Moderator in response to comment #124234

The NRC only has authority over nuclear power plants, and we ensure that any plant near a pipeline is capable of safely withstanding an accident involving the pipeline. The Federal Energy Regulatory Commission and state agencies are responsible for the rules and regulations governing natural gas pipelines. Scott Burnell

comment #127650 posted on 2013-06-24 11:03:09 by Jamie Irwin in response to comment #125936

No, gas pipelines don't do anything other than kill thousands of people in a most horrible manner. Nuclear plants in this country and other western countries that make use of LWR technology have not harmed a single person. Not a single one. Windmills cover thousands of square miles of territory and despoil the environment for a lousy few percent of electrical demand. Likewise solar. Wind and solar are dinosaurs that would not exist without massive subsidies and feed-in tariffs and product purchases demanded by law, something no other energy source has. Yet the prices and unreliability are so high that countries like Spain and Germany are being

bankrupted by them.

## Two Separate NRC Efforts Address Spent Fuel Safety

posted on Mon, 24 Jun 2013 18:07:37 +0000

*David McIntyre*  
Public Affairs Officer

Today, the NRC is making publicly available four documents relating to the safe storage of spent nuclear fuel. The first three represent the agency's work to date on revising its waste confidence rule and analyzing the environmental effects of extended spent fuel storage. The fourth is a draft study examining whether earlier transfer of spent fuel from pools to dry cask storage would significantly reduce risks to public health and safety. Although both waste confidence and the spent fuel pool study discuss the safety of spent fuel, these are two separate efforts with distinct goals. So we wanted to explain the processes here on the blog to help avoid confusion.

Although both waste confidence and the spent fuel pool study discuss the safety of spent fuel, these are two separate efforts with distinct goals. So we wanted to explain the processes here on the blog to help avoid confusion.

The waste confidence documents represent a major milestone in the NRC's effort to address last year's U.S. Appeals Court decision striking down our waste confidence rule. The court directed the agency to analyze the environmental effects of never having a permanent repository for the nation's commercial spent fuel, as well as the effects of spent fuel pool leaks and fires. The [three waste confidence documents](#) being posted today on the NRC website are: • A staff paper to the Commission (SECY-13-0061) recommending publication of a proposed rule and draft generic environmental impact statement, or GEIS, for public comment; • A draft Federal Register notice containing the proposed rule and a "Statement of Considerations," or preamble, that explains the rule, the conclusions in the GEIS that support the rule, and the changes in format that the NRC is recommending as part of this rulemaking (Enclosure1); and • The draft generic environmental impact statement on the effects of continued storage of spent fuel (Enclosure 2); it serves as the regulatory basis for the proposed rule. A list of reference documents used in preparing the GEIS is also being posted on the NRC's [waste confidence webpage](#). These documents are now before the Commission and are being made publicly available under standard agency procedure. The Commission may approve, modify or disapprove these documents, so we are not yet seeking public comments. We hope to publish them officially for comment in late August or early September, but that timeframe depends on Commission approval. When they are published, the 75-day official public comment period will begin. During that period, we will hold 10 public meetings around the country to present the proposed rule and draft GEIS and receive your comments. Two of these meetings will be at NRC headquarters in Rockville, Md. The rest will be in New York, Massachusetts, Colorado, southern California, central California, Minnesota, Ohio, and North Carolina. Details will be announced closer to the dates on the NRC's [public meetings webpage](#) and the [waste confidence webpage](#). The [spent fuel pool study](#) is being published for public comment. A Federal Register notice to be published soon will set a 30-day deadline and explain how to submit comments. The NRC began this study after the Fukushima nuclear accident in March 2011. Although the spent fuel pools at Fukushima did not fail, the accident sparked debate in this country over whether it might be safer to transfer spent fuel from pools to dry cask storage sooner than is the norm. The study considered a pool at a boiling-water reactor with Mark 1 containment (the type used at Fukushima and 23 U.S. reactors) and an earthquake several times stronger than the pool was designed to withstand. It examined both a "full" pool and one with less fuel and more space between the assemblies, with and without emergency procedures to add water to the pool in the unlikely event an earthquake causes the pool to drain. The pool study and the waste confidence review are separate efforts. The draft GEIS does not explicitly reference the pool study, though the waste confidence staff worked closely with the staff preparing the pool study while developing relevant chapters of the draft GEIS. If a final version of the study is published before the final waste confidence GEIS, the staff will incorporate a reference to it in the final GEIS. These four documents represent two distinct NRC efforts on one very important subject: the safe storage of spent fuel and its environmental impacts. We look forward to your comments on the draft spent fuel pool study now, and on the waste confidence proposed rule and draft environmental study in the fall.



### Comments

comment #128221 posted on 2013-06-25 11:28:03 by Moderator in response to comment #128151

Sorry. Try this: <http://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber='ML13133A132>

comment #130086 posted on 2013-06-29 04:38:24 by John

Are there any more blogs about Fuel study? If so could anyone link me? I find this very informative and would love to learn more.

comment #128151 posted on 2013-06-25 09:09:04 by R Johnson

The link to the spent fuel study does not work. \_\_\_\_\_

## Factoring in Human Factors in Nuclear Power Plants

posted on Wed, 26 Jun 2013 13:15:47 +0000

*Valerie Barnes, PhD*  
*Sr. Human Factors Analyst*

Nuclear power plants are complicated. There are myriad systems and countless pieces of equipment that work together -- and independently - to produce electricity. And they must work in a way that's safe both for the communities around them and the workers themselves. But it takes more than machinery and equipment to make a plant run safely. It also takes people. And, well, people are very complicated, too. That's where we come in, NRC's human factors psychologists -- but we won't be asking workers to lie on a couch and tell us their feelings and thoughts. Rather, our job is to assess the many things that affect human performance on the job. We are experts in measuring how humans process information and make decisions, as well as the behavior of individuals, groups and organizations in real-life settings. We look at the design of procedures and computer interfaces, the ergonomics of the workplace, how jobs are staffed, how staffers are trained and qualified, and what's important for ensuring they are fit for duty. We also study communications and teamwork, and safety culture. It's our job is to ask and answer questions such as, "How might human



performance fail in these circumstances? How likely is failure and what are the potential consequences? What could be changed to make failures less likely or less consequential?" To answer these questions, the NRC's human factors researchers collect information from academic sources, conduct experiments, and use operating experience from the nuclear and other industries to evaluate how human capabilities and limitations impact nuclear safety and security. From there, we use the research findings to create technical reports, regulations, and guidance. We also help resolve safety issues and make regulatory decisions. To learn about this important -- but perhaps little known -- field of study and its importance to nuclear power plant safety, the NRC has just posted a [video](#) on the subject on YouTube. See what these specialized psychologists do -- which has nothing to do with having clients lie on a couch and talk about their dreams.

### Comments

comment #128680 posted on 2013-06-26 10:33:16 by

The NRC is assuming that politics, egos, lies, and job protection are not involved, when, in fact, these are the primary reasons for failures in human performance.

comment #128715 posted on 2013-06-26 12:04:47 by Troy Martel

I believe human factor Issues have contributed to the severity of accidents such as TMI, automobiles, motorcycles, trains, aircraft, ships, etc., where consequences are a function the quickness of operator awareness and action. But, given that NPP accident analysis assumes a delay of 30 minutes for an operator to take action, I don't understand how Human Factors studies help much. I believe it is better to simplify the designs and train operators to analyze the situation and initiate action, even when the procedures do not appear to address the accident situation.

comment #128747 posted on 2013-06-26 13:11:36 by CaptD

Dr. Barnes, I suggest that you start with those that have been retaliated against at San Onofre and use them as a case study on what has become a nationwide nuclear debacle! I'm sure many of those that tried to get SCE to do the right thing, yet were retaliated against instead, would be only too happy to share their experiences with you! This is an opportunity that the NRC needs to make the most of, if protecting public safety is truly their most important mission!

comment #129142 posted on 2013-06-27 09:54:19 by surajrma

I find it useful for me to read your articles as this helps me to extend my English language skills. Your topic is not that easy for me to understand and when i read more and more of your articles i feel like i am expanding my knowledge. Thanks

## The NRC Makes Sure Employees at Perry Are Focused on Worker Radiation Safety

posted on Thu, 27 Jun 2013 14:59:34 +0000

*Viktorija Mitlyng*  
*Senior Public Affairs Officer*  
*Region III*



Seven NRC inspectors started an in-depth inspection at the [Perry nuclear station](#) in Ohio last week to make sure

the plant has fixed long-standing problems with implementation of its program for protecting workers from unnecessary radiation. Over the past two years the NRC has identified multiple, significant weaknesses in Perry's implementation of its occupational radiation safety program. The issues identified relate only to protection of workers inside the facility, not protection of the public. There have been no overexposures to workers as a result of these issues, and there are no problems with the plant's program to protect the public from radiation. Discovery of these violations resulted in a steep increase in NRC oversight. Since then, NRC inspectors have been a consistent presence at Perry. The initial inspection conducted between August and November 2012 to determine if the plant has resolved deficiencies in the worker radiation safety area could not be completed because our inspectors continued to see mistakes before and during the inspection. Recognizing that the company's corrective actions had not been effective, we directed the plant to make additional improvements. After taking additional



steps, the plant told the NRC they were ready to show they had addressed the problems. We have conducted two extensive inspections at Perry within the last year involving multiple NRC specialists in various areas and from different parts of the agency. As we reported in a previous blog, we sent four additional inspectors to monitor radiation safety practices during a recent refueling outage, when the plant has the highest number of workers accessing high radiation areas. Our inspectors' observations provided valuable input for the current inspection. This high level of engagement from the NRC reflects the measure of our commitment to making sure workers at the plant are protected from unnecessary radiation exposure. Our specialists are now independently evaluating if Perry's efforts were sufficient to resolve worker radiation safety concerns. Specifically, their goals are to verify that the company: • thoroughly understands the causes of the problem; • has made sufficient improvements to prevent recurrence; and • has properly assessed if similar problems exist in other areas. We are also evaluating the overall safety culture of workers outside of the radiation safety group to determine if all workers are taking a personal responsibility for worker radiation safety at the plant. To that end, NRC inspectors will interview around 100 plant employees and contractors. If our inspection team determines that Perry has not been able to resolve the weaknesses in its implementation of radiation safety practices, the company will start to receive the highest level of NRC oversight for an operating plant.

#### Comments

comment #129903 posted on 2013-06-28 20:28:20 by Jamie Irwin

Sorry, no sale here. This approach of "we-don't-have-a-problem-now-but-think-there-might-be-sometime-later" can be used to justify any level of regulatory ratcheting, no matter how egregious. What we need now is less regulatory ratcheting and more productive work, like having license renewals take less than five or six years, approving new reactor designs, and constituting ASLBs that will not slow-walk operating approvals so much that plants end up shutting down for no good reason.

comment #129787 posted on 2013-06-28 14:36:47 by Moderator

The NRC's oversight over nuclear power plants is focused on identifying safety issues before they can challenge the safety of the plants, plant workers or the public. Our oversight of the Perry plant is a case in point. Nuclear power plants are responsible for making sure all necessary steps are taken to manage potential radiation exposure to workers so that overexposure do not occur. For over two years, the NRC has identified weaknesses in the plant's ability to effectively manage the radiation worker safety program. The weaknesses in procedures in workers briefings, training and other aspects of the occupational radiation safety program – if not corrected – could lead to actual overexposures. One violation that resulted in an increase in NRC's inspections had a significant potential overexposure to plant workers. As multiple issues documented in NRC's inspection reports and available on our website were identified, the NRC increased its oversight as required by agency rules. The NRC's 2012 annual assessment letter for Perry offers a summary of these issues. Viktoria Mitlyng

comment #129432 posted on 2013-06-27 20:01:15 by Jamie Irwin

So, I don't understand, you say there were no overexposures, but there were "violations". So you have to ratchet up "inspections" but there were no overexposures. What is there in the public record that is a basis for ratcheting up the regulatory activity? Is there a real problem here or not? Are we really trying to address a problem or just head hunting for another trophy on the wall? Sounds we're a little inspection-happy. Ratcheting for the sake of ratcheting is not a good use of (very) expensive personnel.

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#### Chairman Macfarlane Confirmed For A Five-Year Term

posted on Fri, 28 Jun 2013 14:13:27 +0000

*Eliot Bremner*  
Public Affairs Director



By unanimous consent last night, the U.S. Senate confirmed [Allison Macfarlane](#) to a full five-year term on the NRC Commission. President Obama had previously indicated he would re-designate her as Chairman. Unanimous consent is a Senate procedure that does not require a member-by-member roll call vote. Paperwork permitting, we expect her to be sworn into her new term as early as Monday morning. The NRC is headed by [five Commissioners](#) nominated by the President and confirmed by the Senate for staggered five-year terms, with one Commissioner's term ending on June 30th of each year. One of the five is designated as the Chairman and official spokesperson of the Commission. The other Commissioners are: Kristine Svinicki, George Apostalakis, William Magwood and William Ostendorff. Macfarlane was originally selected to complete the final year of the term held by the previous chairman. That term expires June 30. This is what she had to say about the confirmation: "I am honored by the trust the President has placed in me by nominating me for a full term on the Commission, and grateful that the Senate has confirmed my appointment. "The U.S. Nuclear Regulatory Commission fulfills an essential mission for the American people, with nuclear safety and security our paramount priority. During the past year, I've taken great pride in leading this exceptional agency. We have accomplished a substantial amount, and I am pleased that we will be able to continue this work. I will work with my Commission colleagues and the staff to ensure that the NRC continues to excel. I will remain committed to transparency and continue to seek opportunities to further public engagement. I will also continue to champion the importance of regulatory independence. "There are a number of significant issues facing the Commission. I have full confidence that we will meet the challenges ahead."

#### Comments

comment #130252 posted on 2013-06-29 20:12:42 by badger777

Lets hope she does a good job of methodically shutting down the worst of the nuclear power plants. It's too bad that Jackzo had to be sacked to make room for her.

comment #130254 posted on 2013-06-29 20:14:33 by badger777 in response to comment #129761

Excellent! I agree with her approach. This technology has failed us so many times, it is clear that us little humans are playing with a fire too hot.

comment #130255 posted on 2013-06-29 20:15:30 by badger777 in response to comment #129721

Good point Capt. And when the NRC gets dissed like San Onofre did to them, the penalties need to be severe, including jail time.

comment #129720 posted on 2013-06-28 11:05:56 by Guillermo Alcocer

Congrats!

comment #129721 posted on 2013-06-28 11:14:55 by CaptD

Great News for the USA and the NRC... The Chairman has been very receptive to comments from both non industry individuals and groups; something which will only make the NRC better in the long run! Now with a full Five-Year term ahead of her, I'm looking forward to GREAT changes in the way that the NRC is operated, especially in beefing up reactor safety enforcement and normalizing regional inspections so that senior inspectors supervise resident NRC personal in other regions to insure compliance in all 50.90 License Amendments.

comment #129761 posted on 2013-06-28 13:02:46 by Jeff Walther

"During the past year, I've taken great pride in leading this exceptional agency. We have accomplished a substantial amount, and I am pleased that we will be able to continue this work." Translation: We managed to shut down three perfectly good reactors with regulatory obstructionism, but there are still 100 to go. "I will work with my Commission colleagues and the staff to ensure that the NRC continues to excel." Translation: We've done a fantastic job of not issuing new licenses and shutting down any prospect of new licenses on the pretense of waste disposal. BTW, I'm proud to have had a hand in authoring the baseless geological report which provided political cover for killing the waste depository. We will continue to ensure that no new nuclear reactors have a hope of seeing the light of day. " I will remain committed to transparency and continue to seek opportunities to further public engagement. I will also continue to champion the importance of regulatory independence." Translation: We will give every nutcase and crackpot from the anti-nuclear movement a voice in our deliberations and will never ever listen to anyone who might favor nuclear electricity generation. This will be easy as there is no professional organization which actually lobbies for the expansion of nuclear electricity

generation. “There are a number of significant issues facing the Commission. I have full confidence that we will meet the challenges ahead.” Translation: Four new reactors did slip past us before I took over, but we'll be looking for ways to drive cost overruns on those, or to shut down additional operating reactors so as to even out the total.

comment #130210 posted on 2013-06-29 16:09:59 by in response to comment #129761

Well said. I'm still trying to understand how you can become a commissioner without actually knowing anything about nuclear power. This is two in a row now: Jackzo and this one. I pity a nuclear engineer working at the NRC. While this continues, the Chinese will be building AP1000s in four years. And Americans interesting in investing into nuclear power will simply take their money to China or Korea rather than deal with the Staff.

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