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USNRC

March 21, 2005 (2:37pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

(317)

U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

To Whom It May Concern:

Enclosed please find a CD-ROM containing nuclear-related animations and programs in support of my submission regarding PRM-73-12, and a printed copy of my electronic submission for PRM-73-12, which describes several of the programs on the CD, the others being also in support of this submission as well in support of other, future electronic submissions by this same citizen.

Thank you in advance,

Russell D. Hoffman
Author, animator, and programmer
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Template = SECY-067

SECY-02

To: "Emile Julian" <ELJ@nrc.gov>, <rhoffman@animatedsoftware.com>
From: "Russell D. Hoffman" <rhoffman@animatedsoftware.com>
Subject: Re: Comment on PRM-73-12: "Incompatible" file format (Flash (Macromedia))
Cc: "Adria Byrdsong" <ATB1@nrc.gov>, "Annette Vietti-Cook" <AVC@nrc.gov>, "Carol Gallagher" <CAG@nrc.gov>, "Evangeline Ngbea" <ESN@nrc.gov>, "Michael Lesar" <MTL@nrc.gov>, "Rebecca Giitter" <RLL@nrc.gov>
Bcc:
Attached:

To: "Emile Julian" <ELJ@nrc.gov>
"Adria Byrdsong" <ATB1@nrc.gov>
"Annette Vietti-Cook" <AVC@nrc.gov>
"Carol Gallagher" <CAG@nrc.gov>
"Evangeline Ngbea" <ESN@nrc.gov>
"Michael Lesar" <MTL@nrc.gov>
"Rebecca Giitter" <RLL@nrc.gov>
cc: "NRC" <the.secretary@hq.doe.gov>
"Office of Public Affairs/NRC" <opa@nrc.gov>

Date: March 7th, 2005

Re: My Macromedia Flash submission for PRM-73-12, available online at the following URL:
http://www.animatedsoftware.com/environm/onofre/2005/sce_memo/sce_memo_2004.swf
Depending on your browser/email settings, you may prefer to click here:
http://www.animatedsoftware.com/environm/onofre/2005/sce_memo/sce_memo_2004.html

Also see: Four animations of nuclear reactors:
http://www.animatedsoftware.com/environm/nukequiz/nukequiz_one/nuke_parks/reactor_parts.swf
Depending on your browser/email settings, you may prefer to click here:
http://www.animatedsoftware.com/environm/nukequiz/nukequiz_one/nuke_parks/reactor_parts.html

Emile Julian, et al:

It takes a gaggle of Nuclear Regulatory Commission officials (see "cc" list in your letter to me, shown below) to tell me the NRC can't accept/run a Macromedia Flash presentation unless it's submitted on CD-ROM, as per the NRC's Electronic Submission Rule, Sections 2.9 and 4.0.

Aside from being an added cost to the citizen to inform the NRC of the facts (and an added cost for the NRC to store the CD-ROM forever in a vault somewhere, which I presume you would do (at least it's not radioactive!)), and aside from the added pressure to make deadlines due to the added time needed for the postal service, and aside from the lowered likelihood of the submission ever getting to the NRC in the first place, due to fires, floods, tornados, airplane crashes, etc., as well as the occasional theft while the submission is in transit from me to you (the extra expense of registered mail being again a costly and time-consuming burden), a CD-ROM is unlikely to be as readily accessible to people both within the NRC and outside the NRC,

who will be reviewing the submissions for PRM-73-12. Meanwhile, I'll bet every one of you has a Flash player at home, either built into your home computer's web browser, or previously added for some web site you visited in your spare time.

Since you're calling my attention to a couple of obscure sections of an obscure and out-of-touch document to explain your rejection of an ubiquitous file format, I call YOUR attention to section 1.3.1 (b) (2) of the SAME document, which states: "NOTHING in this GUIDANCE DOCUMENT PRECLUDES presiding officers from their CURRENT PRACTICE of authorizing electronic communications on a case-by-case basis" (my emphasis).

Outside the NRC, it seems that hardly anybody is afraid of Flash's beneficial and benign technology. In fact, there are currently more than 500 million Flash users and more than one million Flash developers. Flash's penetration worldwide is currently 98.2% of all Internet-enabled PCs (such as the one you must have used to send your email to me). In comparison, Adobe Acrobat's PDF file format, which you do accept, has a worldwide penetration of 78.2%, a full 20 percentage points below that of Macromedia Flash. Both use a proprietary free player.

Please accept this letter as a Freedom of Information Act (FIOA) request to know who, if anyone, has ever looked at ANY Flash animations by ANYONE at ANY time on ANY NRC computer, and whether or not Macromedia Flash is used for any projects created by or for the NRC.

Your restrictive attitude on this issue is common within the NRC on MANY topics, from metallurgy (embrittlement, Wigner's disease, osteo-ripening, etc.) to statistical analysis of accident rates (such as for crane operations, control room operator error, etc.) to rates of harmful effects from so-called low-level radiation in the form of fission products <20 - 30 microns in size. Your assessments are based on worthless documents such as the FDA's ACCIDENTAL RADIOACTIVE CONTAMINATION OF HUMAN FOOD AND ANIMAL FEEDS: RECOMMENDATIONS FOR STATE AND LOCAL AGENCIES, 1998, which excuses massive contamination of crops, air, soil, livestock, and people after a nuclear accident.

I'm sure the NRC had a pretty good idea of how bad the Chernobyl disaster was, long before it became public knowledge. If you had shared that information, people could have begun to try to protect themselves, by testing for radioactive contamination, by throwing out contaminated milk, mushrooms, potatoes, sheep, etc. etc., which still happens to this day around the world, from Australia to Scandinavia to Kiev and in many other places. Instead you protected the Russian nuclear industry as much as you could, by saying nothing and then downplaying the danger when saying nothing was no longer an option. Where is your outcry now over Chernobyl's crumbling sarcophagus, in desperate need of repair/replacement, a dangerous and expensive job? I ask, because if you don't see the urgency there, will you see it here, when our time comes and you want to just cover your "mistake" in concrete? I ask, because you don't see a nuclear accident anywhere as a nuclear accident everywhere, because we are one tiny blue patch -- one relatively non-irradiated planet floating in a sea of lethal radiation, and you want to change all that. I ask, because I wonder if the Russians, who not so long ago were proven to have infiltrated the CIA to the highest levels, long ago infiltrated the NRC too, but nobody's noticed. It would explain SO much about why you don't seem to understand democracy.

You undoubtedly knew about the accident at Chalk River in Canada last summer -- another near-meltdown according to reports which have finally surfaced -- but you didn't let the cat out of the

bag. You didn't tell the people in America about the cloudshine or groundshine that undoubtedly followed the radioactive poofing that occurred. Nope, not our "watchdog" NRC! You're out to protect an industry and a system, not the human genome and human life.

The NRC usurps local and state authority without taking the commensurate legally binding responsibility for your actions. You let the nuclear companies continue to produce death-rods (aka "spent fuel") at every reactor in the country -- about 10 tons a week in aggregate -- when there is no technologically-sound, permanent solution to the waste problem, let alone the problem of safely storing the waste beforehand. You refuse to properly address the problem of transporting the waste to its final repository, not to mention the dangers inherent in transferring the waste from one "temporary" storage system to another, and another, and perhaps another and another after that, prior to reaching its ultimate (hopefully) storage place. More rational planning would, at the very least, eliminate some of these steps, because each step risks catastrophic mistakes and adds a multitude of additional terrorist vulnerabilities during the transfer procedures themselves.

Yucca Mountain is a scientific nightmare and Nevada has built a strong legal, scientific, and political case against it. After 50 years of deep thought by the NRC (that is, including its AEC forerunner), all you've come up with is to transport the waste onto Indian territory and bury it all together in a humongous tunnel under a mountain, in an earthquake zone, near a "dormant" volcano, where so-called 100-year floods are already causing enormous unanticipated moisture problems. Is the Yucca Mountain solution to our nation's nuclear waste problem BRILLIANT? Not at all! It's a "last resort." The scientists considered, and discarded, every other possibility, including rocketing the waste to the sun (too risky due to accident rates of the launch vehicles and the problems of space debris), dumping it at sea (would pollute the oceans horribly, plus the dangers of shipping the waste thousands of miles to some "deep sea" trench), reprocessing it (extremely polluting, expensive, risky, energy-intensive, and against public policy for those (and a few other) reasons), and feeding it directly to NRC officials (too much of it exists to solve the whole problem that way, even at the doses THEY (you) would accept as safe, or maybe even healthy!).

That left the scientists with nothing else to study except Yucca Mountain, which they were forced to accept as the one proposed solution by federal mandate. Their task -- safe disposal of nuclear waste -- is impossible. Nuclear irradiation always physically breaks down -- at the sub-atomic level -- any containment. It's a law of nature, so there's no fix, no cure, no work-around. There is NO safe solution to the problem of radioactive waste.

Every Environmental Impact Statement published by the NRC, DOE, NASA, or the nuclear industry offers a hidden GAMBLE, by presenting a "risk assessment" in which NO WORST-CASE SCENARIO IS EVER DESCRIBED TO THE PUBLIC. Instead, multiple scenarios -- thousands of them -- varying in both severity and likelihood of occurrence by two, three, four, five or even more orders of magnitude (with NONE of these projected scenarios actually representing a meltdown/burnup of more than about 1% of the fuel in an individual shipment or reactor) are AVERAGED TOGETHER so that the case presented to the public is a watered-down and sugar-coated version of the truth. It's like saying that one person losing 20 years of life to cancer is the same as 1,000 people losing a week of work to the common cold. It's like calling the destruction of 20,000 chemical bonds in the body (possibly including parts of one's reproductive DNA) by one tritium atom's radioactive decay "healthy" -- "Hormesis." In other

words, it's just totally fraudulent. Such summarizations, based (as they inevitably are) on biased estimates of thousands of individual risk factors, have no scientific integrity, and should not be used to justify public policy. Yet you do it all the time, for example, you (and the FDA, EPA, etc.) still base most so-called "low level radiation" allowable doses on grotesquely biased studies of Hiroshima and Nagasaki victims, data which was collected by biased researchers and then manipulated by biased statisticians for biased generals prior to presentation to the public.

Enclosed (see below) is a report I prepared about the dangers from terrorism at nuclear power plants, and what sort of damage terrorist's various weapons can do to, say, a control room of a reactor, its backup generators, its spent fuel pool, and its dry cask storage systems, all of which are located outside the containment domes. My father spent a lot of time firing a mortar during World War Two (and having mortars fired at him), and described in some detail (shown below) his own experience with the weapon, as well as the harrowing experience of facing, say, German 88s so that we can be free -- a freedom you are wasting. For what is freedom when one faces the very real prospect of an early and painful death? That's what we all face, thanks to radioactive pollution. Admittedly, there are other causes of cancer, leukemia (which took my older brother at age 39 over a decade ago), heart disease, fetal deformities, etc., but you use that fact to statistically HIDE the deaths nuclear weapons and nuclear power plants are responsible for, as if some number of cancer deaths -- billions (about 30% of the population) -- means it's okay to have millions (or even billions) more. Just as the tobacco companies denied the dangers of 2nd-hand cigarette smoke (and before that, 1st-hand cigarette smoke) the NRC, like a tobacco company on steroids, denies the dangers of radiation, specifically, globally increasing so-called "background levels" of man-made particulate radiation.

You can rest assured that if the damage from mortars, and the other examples shown below, is what the son of an Army combat soldier can know (Howard S. Hoffman, 13158418, 7th Army, 3rd Chemical Warfare Battalion, forward observer, five battle stars (Cassino, Rome, invasion of Southern France, Belgium (participated in the relief of Bastogne during the Battle of the Bulge, so "NUTS!" to you if you think I'm going to back off of these issues, ever), Holland, Luxembourg, Germany)), the terrorists undoubtedly know a whole lot more. The terrorists know our plants are all as embrittled as Davis-Besse's reactor pressure vessel head, which had corroded all the way through to the stainless steel liner -- which was bulging -- before anyone chanced to notice. The terrorists know our nuclear reactors are already old, and aging rapidly -- much more rapidly than any reactor owner (or the NRC) ever expected. At San Onofre, for example, valves, pipes, pumps, fittings, electrical circuits, grounding systems, and control systems have all failed in the past few years.

The plants are too big, too complicated, and too poorly documented technically, for thorough inspections by the teams you assign to each plant, that's obvious. Maybe if we had ONE commercial nuclear power plant in the United States, and ALL of you inspected that ONE plant 24/7, then, MAYBE, we could eliminate lack of inspection as one of the potential "root causes" of the failures that occur day after day in the nuclear industry. But maybe you would all just do cursory inspections anyway, or worse, just rely on reports from the plant's operators as your sole source of information, which is pretty much all you do now. Large portions of each plant are not easily accessible. The cost would be enormous to do proper inspections.

Instead, all plants are allowed to operate until some failure forces a SCRAM, as if SCRAMs are perfectly okay. But each SCRAM is a terror-ride for the plant's innards -- they are shoved around

and jostled like a sudden halt on a packed commuter train. At NRC annual hearings, which are held across the country for each facility, the cumulative number of SCRAMs for each reactor is NEVER presented, the number that occurred the previous year is not presented, and nor are these numbers compared to other similar reactor types in use around the world. Why isn't this and far more data being presented at these annual meetings? (Instead, we're presented with detailed instructions on how to distinguish between color codes for a few uselessly broad classifications. Most years, most plants inevitably get a green "A+" report card, no matter how many SCRAMs they had, or how long their outages lasted, or what caused them.)

And -- speaking of stonewalling the public -- when am I going to get my report, requested long ago (about a year, which is 103 years in nuclear waste build-up time in the U.S.A.), regarding the use of "beta blockers" (a heart medication that can cause hallucinations, mood swings, and heart attacks, among other side effects) in the nation's nuclear power plant control rooms?

And when (if ever) can I expect a response to my claim (shown below) that San Onofre (my local nuke) is, or soon will be, in SECRET violation of the evacuation rules (which should NOT be secret), and that because of THIS SECRET VIOLATION, "they" (some consortium, many unknowing of the true purpose of their project) are planning to build a new highway which basically goes NOWHERE except in case of a catastrophic radiation release at the facility? This proposed highway just happens to also be PERFECTLY SITUATED for transporting the millions of pounds of high level nuclear waste -- so-called "spent fuel" -- from San Onofre to Yucca Mountain, without having to transport it through Los Angeles. (This ignores the fact that the fuel is already too near Los Angeles in the first place, while it sits at San Onofre.) I demand to know if the NRC has encouraged this proposed highway, claimed to anyone that it will bring the plant into compliance of any evacuation rules, or in any way told San Onofre's owners that the highway would be necessary to allow San Onofre to continue to operate (local populations have increased dramatically since the plant was built).

Please add this letter, and all its attachments, including your letter of February 23rd, 2005, to my previous submission regarding PRM-73-12.

Sincerely,

Russell D. Hoffman
Concerned Citizen
Carlsbad, CA

Reference:
http://www.macromedia.com/software/player_census/flashplayer/

Encl.:

1) "25 simple ways a small group of terrorists, (for example, 25 or less), with 25 days (or less) of training, with $25,000 (or less) in household chemicals and store-bought weapons, in 25 minutes (or less), can destroy a nuclear power plant, kill 250,000 people (or more) within 2.5 hours (or less), cause 25 billion dollars (or more) in damages, and render uninhabitable 2,500 square miles of beachfront property for 2,500 generations" (plus discussion) (This section is

only included in its entirety to the original 7 NRC officials listed above.)
2) A Blast From The Past: Letter about nuclear terrorism written September 26th, 2001: What's changed?
3) Letter regarding why anyone would want to build a highway that doesn't solve current traffic problems
4) Letter regarding who is really in charge of safety for Californians
5) Study Links Infant Mortality to Radiation from Nuclear Plants
6) Your letter to me of February 23rd, 2005 (includes my prior email of January 22nd, 2005)
7) Contact information for this writer

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1) "25 simple ways a small group of terrorists, (for example, 25 or less), with 25 days (or less) of training, with $25,000 (or less) in household chemicals and store-bought weapons, in 25 minutes (or less), can destroy a nuclear power plant and kill 250,000 people (or more) within 2.5 hours (or less), cause 250 billion dollars (or more) in damages, and render uninhabitable 2,500 square miles of beachfront property for 2,500 generations" (plus discussion):
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To: allegation@nrc.gov
From: "Russell D. Hoffman" <rhoffman@animatedsoftware.com>
Subject: I allege...
Cc: California Senators, governor of California
To: Allegations Department, United States Nuclear Regulatory Commission
From: Russell Hoffman, Concerned Citizen, Carlsbad, CA
Date: January 28th, 2002
Re: I allege...

To Whom It May Concern,

While searching the NRC web site for useful information for my NUCLEAR POWER PLANTS IN AMERICA web page, which can be entered from here:

http://www.animatedsoftware.com/environm/no_nukes/nukelist.htm

...I found this page, which has a lot of information I had been having trouble finding:

http://www.nrc.gov/reactors/operating/list-power-reactor-units.html

But I noticed our lists have a number of significant differences. The main difference is yours doesn't give several important facts, while it could easily have done so, while mine doesn't give several important facts because it is very difficult to get these facts from the companies and government agencies involved.

For example, your list doesn't have any indication whatsoever of the radioactive content ("burden" would be a better word) of each nuclear power plant and its spent fuel pools, dry storage casks, etc.. Mine does. Yours doesn't say where the effluent from a meltdown would travel -- down what river, or downwind in which direction? Mine has the beginnings of this

information and I'm searching for the rest.

Your list doesn't say what spent fuel storage system the plants are using. Yours doesn't link to the company web sites. Yours doesn't link to activist's web sites, either -- and probably never will. Mine does all these things.

I noticed that the capacity factors you present start in 1994. Have you been unable to find earlier figures, or are you embarrassed to display them? It's common knowledge that the NRC has been allowing the plants to run hotter and at higher pressures lately, despite the fact that as they age they are becoming more and more embrittled and thus, more fragile. And you've been letting them continue to run despite more and more faults along the way, such as by increasing the repair time allowed for reactor emergency diesel generators before a shut-down would be required. Other problems the NRC ignores include plant employees who repeatedly lie to the public, (and especially, lied immediately after 9-11 when they (along with the NRC) tried for a while to claim the plants could withstand a similar attack). Also, your on-site inspectors (who have managed to replace EPA, OSHA, Cal-OSHA, and who-knows-how-many-other state and federal regulatory agencies) couldn't care less what happens outside the "nuclear area" (like, if an 80,000 lb crane falls 50 feet in the turbine room, it is ignored). Also, your regulatory environment won't even punish, let alone shut down, a plant that's run by people stupid enough, or incompetent enough, or careless enough to leave their Primary Containment Vessel inoperable for 30 years (i.e., since the plant was built) because no one noticed that 32 shipping bolts were never removed from eight large bellows, preventing their use if the moment ever came when they might be needed. (I was told by a high-level NRC employee that I would be notified if a fine was imposed, but, to date, I have not been.)

Taking all this loosening of what little regulatory oversight there ever was, in the industry that brought us Three Mile Island and a million smaller spills, it's no wonder capacity factors have gone up lately. If you turn a blind eye to everything, the plant owners make a lot more money and the capacity factors go up. But is that a good thing?

No, it's a very bad thing, actually.

One more point about these "capacity factors" presented in your chart, which are given in percentages. I noticed that many of the capacity factors go above 100%. Several are above 103% and one reactor (Surry 1 in Virginia) has a capacity factor one year of 104.4%, and twice since 1994, had capacity factors above 100%. (There's no indication to tell me if the numbers go up or down, that is, if 1994 is at the top or the bottom of the list, so I'm not sure which years are which.) So what exactly is the "capacity factor" based on? I've heard various pro-nuclear spokespeople and ranters claim capacity factors are now around 90%. But based on what baseline? Certainly, not a safe one! (Surry 1's overall capacity, even if 100% is "baseline", doesn't appear very impressive (or even as good as Surry 2, which never went above a 100.1% "capacity factor" in the years indicated.)

I allege that inclusion in the nuclear power plants chart at the NRC web site of the average capacity factors only since 1994 was done specifically because those capacity factors are higher than they were before 1994. But this increase has been at increased risk, such as less than a year ago when San Onofre Nuclear Generating Station had a record 31-day refueling cycle, and then the day they got back online, a fire and explosion caused a four-month outage,

which was followed, the day the unit went back online, with the afore-mentioned dropped load incident.

I further allege that rushing the refueling cycles in order to increase the capacity factors has led to accidents and near accidents, such as when an operator at San Onofre, inattentive perhaps due to long hours, banged a fuel assembly into the reactor vessel while withdrawing it from the reactor. That was in 1997. There should be two people on the kill switches for all fuel moves, sort of like in airplanes during takeoffs, when both the copilot and the pilot both put their hands on the throttle, so that the right thing is sure to be done. All nuclear fuel lifting devices should have multiple kill switches so that accidents become orders-of-magnitude less likely.

Attached below is a piece of poppycock I received from one of your contractors as a response to my list of "25 simple ways a small group of suicidal terrorists could melt down a nuclear power plant and kill millions of people". The responses are pretty ridiculous. Half his explanations actually just say that IF the licensees tried, they could protect against such a threat, or IF the military tried, THEY could protect against it. But unmentioned is that neither are trying to protect against these sorts of threats. Half his other answers are just absurd. That leaves about a quarter of his responses, which are all inappropriately minimized without any proof or citations presented to back up the author's claims.

For example, your contractor dismisses my suggestion that mortars could be successfully lobbed at a nuclear power plant because, he says, mortars are not "one shot, one kill" weapons. Let me explain how mortar shells work. This description is from a man who's one of my personal heros. He fought in World War Two as a mortar man (infantry) and forward observer, first in Italy, then in France and on through Belgium and into Germany, including a stretch of 154 days of straight combat. He experienced the terrifying attacks during the Battle of the Bulge, and took part in the relief of General McAuliffe's besieged troops in Bastogne. In total he fired the mortar thousands and thousands of times, defending America:

"Now, you understand that a shell doesn't have to hit you to kill you...Shrapnel consists of whirling pieces of the shell itself that has exploded, a jagged piece of metal maybe an inch long and a quarter of an inch wide, like a piece of a pencil, but it's steel and it's spinning, and if that were to hit you . . . For example, if it were to hit your leg it could take your whole leg off because of the momentum and the speed with which it's spinning. The fragments from shrapnel are terribly, terribly dangerous, and they go for a long distance... And your helmet doesn't really stop it; nothing stops that stuff, except being underground." (pp 93-94. Full citation below.)

Also, note these comments:

"A 4.2 mortar would shoot about a mile, as I recall.", and "Two guys can fire a mortar. One can fire a mortar if he has to... I remember spending about half an hour firing off fifteen or twenty shells all by myself" (Same author, p. 166. The reason this was being done (lone men firing mortars) was because of "bad lots" of ammunition supplied by unscrupulous weapons manufacturers. The authors cite an article in the New York Times, July 24th, 1946 about a Senate War Investigation Committee's findings. Also see NY Times articles from July 25th and Aug. 9th of the same year.)

If, as it is suggested by the author of the rebuttal to my "25 simple ways" document, we are safe

from mortar attacks because they are not "one shot, one kill" (sometimes, anyway), here's a description, again from the same WWII soldier's recollections book, of a "recoilless rifle": "This thing had cross hairs, a telescope, everything ... I'm standing right beside the guy, and he fires it ... out of the tank jump three or four Germans [who] run into the woods over there. He knocked it out with one shot." (pp. 118-119). That was in the early 1940's and tanks, even back then, were heavily armored (though not with Depleted Uranium like they use today). Today's weapons, with their sophisticated sabots to keep the pressure up as the bullet leaves the gun, and with their computer-designed shells and barrels, and with laser, GPS, and fiber-optic targeting capabilities, are even more deadly, more penatrating, and more accurate. But mortars would probably be good enough anyway.

The above book quotes are from: "Archives of Memory: A soldier recalls World War Two", by Alice M. and Howard S. Hoffman (Univ. of KY Press, 1990). Dr. Howard S. Hoffman, the soldier-author, is now an emeritus professor at Bryn Mawr University. He is also my father.

Here's a description of the effects of larger weapons, by Dr. Bennett Ramberg in his seminal work on the subject of nuclear reactor vulnerabilities: "The energy release of [conventional bombs, rockets, and artillery] is a function of their composition and the shaping of the charge to perform specific tasks. A 100-lb. general-purpose bomb can penetrate more than 2 ft. of concrete and 4 in. of steel. Since its power is proportional to its size, its 2,000 lb. counterpart can pierce more than 11 ft. of concrete and up to 15 in. of steel. Heavy, shaped charges are even more effective. An 800 kg (1,700 lb.) conical-shaped munition 89 cm in diameter and 1 m long with a steel liner can penetrate 10 m of concrete. Under development are even more effective munitions that are able to penetrate concrete or armor before releasing their main energy. In addition, artillery exists that can fire rounds over 20 mi. and pierce 5 ft of concrete. Therefore some munitions are currently capable of destroying even the hardest containments now in existence, although the number of strikes that would take full advantage of each facility's vulnerability cannot be well established on the basis of available data." (Ramberg, "Nuclear Power Plants as Weapons for the Enemy: An Unrecognized Military Peril" (Univ. of CA Press, 1980), pp. 64-66. For this paragraph Ramberg cites Tom Gervasi, "Arsenal of Democracy: American Weapons Available for Export" (New York: Grove Press, 1977), p. 170, and Cecil I. Hudson and Peter H. Hass, "New Technologies: The Prospects,", in Johan J. Holst and Uwe Nerlich, "Beyond Nuclear Deterrence: New Aims" (New York, Crane, Russak, 1979, p. 128.)

The New York Times, in a recent editorial, reminded the public that the containment domes at Indian Point are only three feet thick on the top, some other sources have said that the tops of some containment domes are even less thick than that. And the sides of even the thickest containment domes are only about 8 -10 feet thick at their thickest point.

Spent fuel pools and dry casks are far less protected and in some cases are hardly protected at all.

If you go onto the Marine military base at Camp Pendleton, California, which surrounds (except on the ocean side) San Onofre Nuclear Generating Station, you'll find some very large guns. It's an "open base" meaning just about anyone can go there (it may have tightened security somewhat since 9-11; I visited the base with a friend and former Navy Seal for a bike tour last summer). There is an interesting outdoor museum on the base, consisting of some acquired Vietnamese heavy artillery. Reading the inscriptions, one learns that in the attack in which the

weapons were captured, the North Vietnamese soldiers fired about 10,000 rounds from about 10 guns, but they barely touched the Marines who attacked them and took the guns, because the NV soldiers hadn't been properly trained. Well, that's yesterday's war. The terrorists will be properly trained next time, you can be sure of that. Or didn't you learn anything on 9-11?

Also, near the San Onofre nuclear power plant is a public camping area where an armored vehicle designed to look like a family camper could park and lob mortar rounds into the plant for who-knows-how-long. With, say, 200 or 300 assault weapons, some hand grenades, a rocket launcher, tear gas, and 5,000 rounds of ammo (hardly an impossible number of weapons to obtain, you'll have to agree now), you could hold off an attacking army for quite some time as you lob in mortar rounds on the plant. And you might not need to defend your position at all, because, by the time the first mortar lands, another is already in the air, and soon, another one after that. One person can fire a mortar round every minute or two, and four people using several mortars could fire a round every few seconds. As many as four to six could already be in the air before the first ones have landed!

Then the ground assault begins, of course, just in case the Spent Fuel Pool isn't drained and burning yet. If there are Dry Casks, a suicidal ground assault team could ensure that they have been knocked over and cracked open. Frankly, no terrorist is likely to bother with the containment dome and its reactor vessel of uranium when there are much bigger quantities of radioactive materials available for dispersal outside the domes. And once the facility has been blown to smithereens anyway, a meltdown is probably only minutes away at best, perhaps a little longer, perhaps only **seconds** away. But with all the control equipment, fire suppression equipment, coolant systems, etc. all busted up and permanently non-functional, I'd have to say that the situation would be very grave indeed, even without a meltdown of the core. Thousands would be dead and millions would be doomed to cancer, leukemia, and birth defects.

Are we going to trust the lives of millions of people to the accuracy and determination of our enemies, or are we going to take the pro-active steps necessary to eliminate the targets, and thus the danger, from our midst? Renewable energy is cost-effective and proven technology, and not vulnerable to terrorism.

I allege that the NRC has a responsibility to shut down all nuclear power plants in the United States IMMEDIATELY. Failure to do so is a dereliction of duty and a grave danger to the public.

I further allege that you would be willing to hire Scott Waddle despite his record at the helm of a pair of nuclear reactors, because he's got the one qualification you adore -- he's from the Nuclear Navy, and I further allege that your employee Charles Marschall lied to me in June and that it is well-known at the NRC that he did so with impunity.

Sincerely,

Russell D. Hoffman
Carlsbad, CA

Included below is the complete letter from Joseph Paez, Global Security Consultants, which I presume was commissioned by the NRC in some way, shape or form. I know I didn't commission it because if I had, I'd be demanding my money back and I'd fire the corporation that

would offer such trash as if it were a reasoned, scientific, technically responsible answer. But that's just me -- I realize the NRC has never been swayed by facts and isn't likely to start now. **Many scientists have told me they have resigned themselves to believing that only a major accident, with the accompanying pain, misery, and expense, will change your minds about what you are doing.**

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Mr. Hoffman,

Thank you for your concerns over the vulnerability of the San Onofre Nuclear power plant. As a citizen of California I understand your feeling of insecurity. As a member of Global Security Consultants, I assure you the efforts we are currently undertaking with some of the nations largest nuclear power facilities will all but make your issues mute. I've attached a word document with our responses to your article, "25 simple ways terrorists could destroy San Onofre Nuclear Generating Station and make SoCal uninhabitable for many millennia – have a nice day, I hope our responses will help ease any feelings of vulnerability you may be experiencing.

Thank you,

Joseph Paez

GSC Inc.

globalsecurityconsultants.com

I have read the below comments and have provided feedback where warranted on many of the points this writer makes. I have not yet figured out if he wants increased security for Air Travel, Nuclear Sites, Department of Transportation or just doesn't want power at all that is nuclear derived for some reason. But either way his comments below while many are quite far fetched hold some merit. Those that do hold merit are also addressable, and have been addressed by numerous Nuclear Facilities that Global Security Consultants, Inc. have had the opportunity to work with. We have found that many Nuclear Facilities are not just concerned with passing given requirements but are truly concerned with insuring the safety of the populace around their given areas of operation. Utilizing all Special Operations contractors (U.S. Green Berets, U.S. Delta Force Counter-Terrorism Unit, Army Rangers etc.) GSC has been able to assist these plants by

providing answers to not just the types of questions given below but numerous other questions pertaining to adversary capabilities and strategies vs. defensive responses and physical security measures to contradict these elements. I would also like to offer our number and web address to anyone that would see discrepancies in our responses below, and would like to question us on there relevancy.

Phone: 1.877.GSC.2235
Website: www.GlobalSecurityConsultants.com

Sincerely, Eric Wilson - Director Business Development, GSC, Inc.

1) Hijack a commercial jetliner ala WTC/Pentagon/PA disasters.? If one isn't
enough, hijack two.? If two isn't enough, hijack ten and be sure.

Nuclear Facilities located by airports are working with the FAA to minimize and address this issue. This is in addition to the FAA's elevated security measures. See number 19 below.

2) Rent, or even buy, a corporate jet so no pesky passengers can take back
the cockpit like what happened in PA.? It would do plenty of damage, if not
quite as much as a jumbo jet.? If one isn't enough, rent two...

Nuclear Facilities' Containment buildings were designed to withstand a
direct hit from a commercial airliner. A smaller airliner, while producing some exterior structural damage, would not sufficiently damage the containment building which houses the reactor vessel and thus not resulting in a meltdown.

3) A boat-bomb or depth-charge-carrying boat could be maneuvered over the
outflow tubes from the plant, which are each over a mile long and are marked
on navigation charts so that people don't drop their anchors on them.?
Destroying them would destroy San Onofre's ability to cool itself.? (These
tunnels may also be vulnerable to collapse when the waters recede just prior
to the arrival of a tsunami (as they always do), an effect the NRC did not
ever investigate despite professional advice that they should.)

Plant cooling capabilities are redundant, a boat carrying explosives 1) Will not necessarily damage the piping under the water, depth of piping and size of charge both have to be taken into consideration. 2) Even if a charge was placed directly on the piping it would have to be at a point above the water level or between the pumps and the plant, i.e. a charge placed out in the water randomly on a pipe approximately 20' below water level will just create a hole and another source of feed water into the pipe, 3) There are multiple on-site feed-water systems to accommodate the failure (whether mechanical or deliberate) of this initial feed water system to safely shut down the site. 4) There are also cost effective means of deterrence available to minimize an effective waterborne insertion by an adversary.

4) Steal a tank (as a depressed ex-soldier did in San Diego a few years
back) and ram it through the gate at San Onofre.

While this is an unlikely possibility, even if it were to happen, as in the above example, an inoperable tank could do little to cause an act of radiological sabotage. It could cause sufficient exterior damage but do little to the containment building itself that houses the reactor. This is assuming that the Nuclear Facility does not have sufficient or correctly placed vehicular barrier capabilities, which when deployed correctly can effectively eliminate this type of threat.

5) 50-caliber machine gun bullets would penetrate the coolant pumps, the
pipes, the control-room, etc.? You can bicycle up to the plant with a machine gun in a kiddie trailer, or simply stop your truck on the highway
(I-5) which runs past the plant, and blaze away.? You could get thousands of
rounds in before anyone could stop you.? Sure, you might not start a sequence which results in a catastrophic meltdown if you just start shooting
without knowing your target well.? But then again, the large front-page
aerial photo of the plant which was published yesterday in the North County
Times should give you more than enough information to aim at the most vulnerable sections.

The validity of this scenario actually causing any type of radiological
sabotage is virtually nonexistent. Lets assume that someone did have

a .50 caliber machine gun and opened fired on the plant. The aerial photo would be useless in that you can only fire Line of site (LOS) with the .50 caliber, and the equipment that is displayed in this type of photo will not be things such as the control room etc. If this adversary also had insider assistance to be able to pinpoint the location of critical areas within the varying structures, the .50 caliber would still not be effective against the structural design of most of the protected area buildings (3'reinforced concrete and in some cases an additional 1/4" steel liner).

6) Until just recently the NRC published the GPS locations of the plants to
6 decimal places.? (That web page has been taken down since September 11th,
2001.)? Terrorists could target a cruise-missile against the plant, or a
ballistic missile, using these values.? A well-aimed ballistic missile
wouldn't even need a warhead.? It's kinetic energy would be enough to destroy the plant.? And removing the locations from the web site is window-dressing at best, since the plants are kind of hard to hide in the
real world.? Just ride by on your bike and get the necessary coordinates
with your portable GPS.

Are we to open the realm of any possibility and require no parameters?
Obviously this is a farfetched grasping scenario. I will also assume that we should not leave the house or travel in our cars at least not without certain protective equipment to protect against the inevitable threats that we may run into. Because don't forget that our personnel information is also available out on the market. Maybe a reinforced roof on the house and car, should be implemented in the event of a stray meteor?

On a more realistic note even if in the future we were in a scenario where our forces could not effectively deter this type of assault on America prior to cruise-missiles entering our airspace, Nuclear Facilities would be just one of many targets, and not because the enemy wants to create a melt down and kill thousands of people, because this would not happen, but because they would be targeting our entire infrastructure (which includes many more and potentially more advantageous targets) attempting to deter us from effectively responding in a period of war.

7) Throw a short-circuiting-bomblet or grenade at the switchyard and other

electrical areas of the plant.? This would render it useless and could cause
a meltdown as well.? (A "short-circuiting-bomblet or grenade" is a small
device that contains not shrapnel but long wires which criss-cross the
target's electrical cables and short everything out.? NPPs need constant,
reliable off-site power to run, or they must use their emergency backup
diesel generators (which often don't start properly when they are tested,
and can also be shorted out along with the rest of the station).? Yes, these
bombs exist and we used them in Kosovo.)

Nuclear Facilities operate within the assumption that they will lose off-site power during all of the NRC and in-house security scenarios and drills that they run. This also includes protecting and responding to adversaries that attempt to breach the protected area perimeter and make their way to the diesel generators, which would require more than the "bomblet" described above. It would require a significant amount of explosives to incapacitate the Generators themselves and lets assume that the Security Force could not intercept the adversary prior to them reaching the Generators, the adversary could still not effectively complete it's mission. They would need to take out multiple diesel generators and in most cases even a tertiary power supply system.

8) Replace various pages of the control-room operating manuals with ones
that contain misinformation so the operators do the wrong thing sooner or
later.? (Requires one inside person; could be done years before the accident
occurs.? It could already have been done at numerous NPPs and we just don't
know it.)

Senior Reactor Operators or SRO's are required to go through extremely
intense classroom as well as simulator training to gain the knowledge that they bring to the table. They are not just drones that unthinkingly follow what they see on paper. These procedures are utilized in assisting the Operator at conducting his/her job and are reviewed for correct revision letters prior to use. The chances of a procedure that once followed kicks of a scenario that could create a meltdown by itself is unrealistic. In the unlikely event that the

procedure was not questioned before hand, once implementation started multiple alarms would alert the operator of other than normal conditions prior to any catastrophic result.

9) Get an insider to do something.? Insiders have access to many vital areas
of the plant.? There are thousands of workers at each plant.? Some are
always disgruntled about one thing or another.? And some might accidentally
say things at a party or somewhere, which others can use.

Nuclear Facilities have implemented a fitness for duty program which constantly observes appropriate behavioral characteristics, as well as in depth background checks are conducted on all employees. Even if this were not enough, an active insider bent on destruction would have minimal capabilities. It is not as if you can switch a single switch and a core meltdown occurs. You would need to perform a number of different tasks in conjunction with one another to achieve this effect. And lets not forget other people also monitor this equipment so it would not be able to happen in a vacuum and Nuclear Facilities do sport a heavily armed Security Force.

10)? Derail a high-speed train off its tracks, which go by only about 100 to
200 feet away from the plant.? With a little care and a bit of luck, the
train could actually be driven towards the plant by weakening the rail on
the plant side so the train falls towards that side.

See number 4 above. Also redundant vehicular barrier systems when deployed correctly at Nuclear Facilities will assist in deterring the trains approach.

11) Derail or blow up a chemical train on the tracks nearby.? Such an accident would probably kill everyone at the plant, which would probably
lead to a meltdown.

This would probably not lead to a meltdown even if it did result in the
death of everyone in the area. Once everyone dies the plant will not immediately meltdown, in fact it could be days before issues arise. And
with the above scenario lets not forget that many plant personnel are located in areas which are designed not to let steam or gases out into the environment which will obviously effectively keep the same

out. And of course one more point, the chances of a train carrying an airborne chemical gas killing everyone is not truly guaranteed, a lot of things need to be taken into account i.e. type of chemical, wind direction, etc.

12) Mortars can be lofted into the plant from miles away, including a nearby
highway rest area, a state park, or from the Interstate itself.? One might
call these a "drive-by war."

This scenario is a little more realistic. Though there are measures that security forces can take to minimize this threat. i.e. random patrols of the area etc., any adversary that chooses to use mortars will need to recon the area and set up a position. Random Patrols can make this very difficult. Shooting from the back of a vehicle while on the interstate is not very feasible. Mortars are not a one shot one kill type of weapon, in most cases they require multiple shots to acquire target or achieve the desired effect. One mortar would not do enough damage to the facility.

13) Crop-duster planes can be filled with gasoline instead of pesticides,
then the pilot simply turns on the vents in the final second or two before
impacting the plant.? The fireball would be tremendous.

This size of the plane as well as the fireball created would not sufficiently create the magnitude of damage required to create a meltdown.

14) Rent a piece of construction equipment such as a Caterpillar, and simply
aim it for the control room and let it roll.? Even if they kill the driver
they probably can't stop the vehicle.

Again see number 4 above. As well with properly placed vehicular barrier redundant systems this threat could be eliminated.

15) Rent a truck and fill it with explosives (as Timothy McVeigh did in
Oklahoma City).? There are not nearly enough perimeter controls to prevent
this.? Although the gates appear to be guarded, there do not appear to be
nearly enough physical barriers, especially for a delivery truck which has

already made it past the perimeter on false pretences.? (Even the plant's
soda machines need someone to come in with enough materiel (in cans, which
cannot be x-rayed) to blow the place to smithereens.)

This scenario is easily avoidable with the proper training given to Security Force Members on vehicular searching techniques as well as with the implementation of various explosive detection systems that can be deployed at the gate. Combine this with effective vehicular barrier
capabilities and you can minimize this risk.

16)? Use two vehicles -- one to draw away the limited number of guards at
the plant, the other, which arrives a few seconds later from a different
direction, actually does the damage.? A motor home at the state beach nearby
could be filled with terrorists who could take over the control room.

This scenario is also avoidable utilizing the correct and properly deployed vehicular barrier systems. These systems would need to be redundant and have remote control capabilities from not only the guard's location but also from the Central Alarm Station (CAS) and the Secondary Alarm Station (SAS). A trailer full of terrorist entering the plant even if outnumbering the guard force on site can be effectively deterred from there desired intent, by a well trained guard force and a variety of physical systems and barriers in place. For example, if you create delays for the terrorist element before they enter and once in the protected area, you can strategically position the Security Force to effectively engage the adversary. There is much that goes into determining the appropriate physical systems and barriers that will give you the required delays such as calculating charge size, breach times etc. Many Nuclear Facilities today are looking at exactly this with GSC to enhance security.

17) Steal some of the military training equipment on the base at Camp Pendleton.? This writer rode his bike over 20 miles on that military base
four months ago without being questioned or stopped, along with an ex-Navy
Seal.? We did not realize the significance of our sojourn at the time.

Adversaries stealing equipment or purchasing it is irrelevant, Nuclear
Facilities assume the adversary will be armed with explosive

capabilities when looking at their security plans.

18) Get an insider in the U.S. military to attack the plant with an A-10
Warthog or Apache helicopter.? This isn't as far-fetched as it may sound.? A
few years ago a distraught A-10 Warthog pilot suddenly veered off course
from his training mission, and flew 800 miles before running out of gas and
crashing into the side of a mountain.? He carried four 500-lb bombs at the
time as well as machine-gun ammunition.

Don't forget all the other soldiers and Americans that work in, or on
numerous other Department of Defense (DOD) equipment, i.e. C130's,
missile programs etc. If you got enough together you could take out
certain states at a time.
- Not Applicable

19) Since there is not a no-fly zone around the plant, any plane that
attacks it gets a free ride all the way in. No one can challenge a plane
which has not sent an "I have been hijacked" signal and which is flying in
legal airspace.? The nearest civilian airport is about 10 miles away, or
about 5 minutes away for even the slowest airplanes.? Our military could not
possibly react in time.

This is again a scenario that has to have parameters. Some solutions
that Nuclear Facilities have been working on with the FAA is to
insure that passengers stay in their seats when flying over nuclear
plants that are near airports. If this does not happen then the pilot
would alter course until the passenger is back in his/her seat.

20) Besides dropping depth-charges on the outflow tunnels (see item #3,
"boat-bombs"), you could maneuver a boat very close to the plant, which is
located at the ocean's edge, and shell the plant from the boat.? There are
numerous civilian harbors, beaches, etc. near the plant.

There is the ability to deter boats from critical waterborne
approaches to the plant site, these systems can be very cost
effective and easily

deployed. Utilizing a mortar system from a boat would pose the same problems as listed above (#12) as well as the added problem of instability for the mortar itself when located on a boat in the water.

21) Multiple small planes can attack the plant at one time, overwhelming
even a sophisticated air defense system.

Multiple small planes will have little effect on the vital equipment that is contained within the 3' and in some cases 5' reinforced concrete structures.

22) ASL -- Air, Sea, Land.? Terrorists can utilize all three at once to
overwhelm the defenders.

A correctly trained Security Force would be able to hold a defensive position against an integrated assault with multiple entries for the period of time needed for local law enforcement to respond as per the existing security plan.

23) NBC -- Nuclear, Biological, Chemical.? Terrorists can attack the plant
with BC to kill the operators and the security forces, and then calmly walk
in and take over the plant.

See number 11

24) (Censored -- the terrorists might not have thought of this one.)

Lets hope not. Lets hope they've thought in line with the majority of these other ideas.

25) The terrorists can simply wait for a meltdown to occur due to a natural
disaster such as a tsunami, earthquake, or tornado, or due to a manufacturing defect, or operator error.? The bottom line is, we have terrorists in Southern California.? Their name is Southern California Edison.

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2) A Blast From The Past: Letter about nuclear terrorism written September 26th, 2001: What's changed?:

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>>>>> LETTER TO THE NC TIMES RESPONDING TO THEIR ARTICLE ABOUT SAN ONOFRE: >>>>>

September 26th, 2001

Editor, North County Times

To The Editor,

On the front page of today's NC Times, Ray Golden, spokesperson for San Onofre Nuclear (Waste) Generating Station, says he, "had always been taught that we were designed specifically for large plane crashes...That was incorrect." If Mr. Golden "had always been taught that", then he should be able to document WHERE he learned it. If he can't he's a liar. [Note to readers: In today's NC TImes (September 27th, 2001), Golden has mentioned a decades-old "test" where they rammed an old jet on a rocket sled into a concrete wall, as if that is in some way equivalent to a 767 crashing into, say, the spent fuel pool and/or the control room, or even various parts of the containment dome where there are holes for pipes, replacement parts, new and spent fuel, and people to go through. -- rdh]

But that wouldn't be the first time. Last August Golden stated that the pressure vessel inside the containment dome could not suffer a catastrophic failure if the circular cracks found in other similar PWRs (Pressurized Water Reactors) also occurred at SON(W)GS, because, he said, they have equipment to detect slow leaks. But circular cracks don't necessarily have slow leaks before they have catastrophic failures.

Furthermore, the "light plane crash" Southern California Edison now says they had actually analyzed, undoubtedly wasn't full of incendiaries. Now we know it would be.

Golden tells us that a commercial jetliner impact wasn't considered because SON(W)GS isn't under any flight path "for any large airport". But anyone who has looked up in the sky around the plant knows large jets fly overhead regularly.

In June, Golden accused the opposition of being "completely misinformed and they don't understand the laws of physics". That very day, San Onofre dropped an 80,000 lb load when a strap broke. A properly lifted load would have used an I-beam to distribute the weight so that the loss of one strap wouldn't result in a dropped load. So who doesn't understand the laws of physics?

This year, workers at SON(W)GS spilled about 20 gallons of extremely volatile hydrazine (aka rocket fuel). Also, there was an explosion and fire in the switchyard, and another in the turbine room that put one entire unit out of commission for four months.

In order to properly protect the public, a 25-mile no-fly zone must be immediately declared around all nuclear facilities around the country. There is no way to tell friend from foe until it is too late otherwise. The sites need a much stronger perimeter fence, higher and with more barbed wire, and additional concrete barriers. But most importantly, San Onofre must be shut

down immediately and rendered impossible to restart. This would prevent the worst possible scenario: A takeover of the control room.

Nuclear energy has never been profitable, when all the costs are considered. Now the costs have suddenly and permanently skyrocketed, along with an increased public awareness of the risks. But these risks were there all along, and the NRC got a "bye" September 11th, 2001. We might not be so lucky next time.

Forcing the plant employees to carry photo badges at all times is utterly insufficient window dressing.

Breck Henderson of the NRC is quoted saying activists aren't facing reality (NT Times, September 26th, 2001)! The nerve! He claims the plants are safe against tsunamis, earthquakes, tornados and "other natural or man-made disasters". Sure, they can withstand small tsunamis and minor earthquakes, but to simply say the plants are "safe" against these threats is another big lie! And no plant has ever actually been through a tornado, either. Asteroids are not considered a credible threat because they don't happen often enough for the NRC to notice (nor did terrorism until September 11th, 2001). The reality is that hundreds of tons of debris fall from the heavens onto Earth every year. Some makes it all the way to ground at high speed.

Henderson says "we can prepare for enemy bombers flying over ... or tanks rolling up...if you have a military threat here in this country". Well, we have a threat, and they are NOT prepared.

The last paragraph of the article contains the biggest lie of all -- that an accident "could kill hundreds of people initially...". Try tens of thousands initially, and MILLIONS "over the years". Your numbers are off by many orders of magnitude.

Nukes are extremely vulnerable, unlike renewable energy sources such as wind, wave, tide, solar, hydroelectric, geothermal, biomass and other sources. All the nukes should be closed down immediately.

Sincerely,

Russell D. Hoffman
Carlsbad, CA

<<<<< END OF (FIRST) LETTER TO THE NC TIMES, SEPTEMBER 26th, 2001 <<<<<

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3) Letter regarding why anyone would want to build a highway that doesn't solve current traffic problems:
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Note: UNPUBLISHED (as far as I know)

Subject: Proposed California Private Toll Road Really a San Onofre Nuke Escape Route!

To: "LA Times" <letters@latimes.com>, <LATMag@latimes.com>
Los Angeles Times EXCLUSIVE

February 16th, 2005

To The Editor:

The proposed new toll road in Orange County, California is an escape route from San Onofre Nuclear (Waste) Generating Station. It is the second one built in the last ten years, the first one being route 73, which destroyed thousands of acres of wilderness land, with thousands more acres now being developed into thousands of houses near its exits. At the moment, it's relatively lightly used and it did NOT solve the problem for which it was allegedly built -- alleviating traffic on I-5 between San Diego and Los Angeles, especially in Orange County.

This proposed new road will also not solve that problem, and they aren't even expecting a lot of traffic on it in the first place -- hence it is only a two-lane road in each direction. If it gets a lot of traffic, it can be expanded to three lanes, which means that it will probably be built in such a way that, if needed in an emergency, it can be used as six outgoing lanes (or even more). As such, it is a "perfect" emergency evacuation route from San Onofre Nuclear (Waste) Generating Station! It starts within a few hundred yards of the plant and goes directly away from it, hopefully across or better yet, directly into the wind (but probably not).

The reason it's coming up at this time probably has to do with the lead-time necessary to have the road ready or nearly ready in time for San Onofre's next relicensing proceedings (which used to be done as hearings, but might just be paperwork formalities next time around). It can be presumed that evacuation routes (or a lack thereof) are one of the things they'll be looking into, whether openly or in closed proceedings.

Normally I oppose toll roads as dangerous. My birth state of Connecticut got rid of them some 15 years ago, in part due to strong local opposition, which was reaching a crescendo right around the time of a fiery multi-vehicle accident at a toll booth. The accident killed seven people, including a family with small children. A truck driver fell asleep and smashed into the line of cars at the toll booth.

Toll roads are fine if ALL the tolls are collected electronically. Otherwise, the toll collector pays in health effects of pollutants from vehicles at the tolls, the public pays individually in lost time waiting in lines, and society pays in needless "busywork" jobs.

The Nuclear Regulatory Commission and San Onofre Nuclear (Waste) Generating Station's owners, Southern California Edison division of the Edison Company, are required to have an "evacuation plan." As it currently stands, the public version of this document is nearly unobtainable AND hopelessly out of date -- decades old, in fact.

But somewhere in the bowels of these organizations and corporations there is probably required to be a slightly more current, slightly more realistic version of the evacuation plan. They are NOT required to publish it, or even to make its existence known to the public if they don't want to (and they most assuredly don't).

That secret document will undoubtedly state that without this so-called toll road, San Onofre Nuclear (Waste) Generating Station is and will remain "out of compliance with regulations" (as the phrase might go) regarding what to do if the accident they publicly claim can't happen -- happens.

Although in the real world such wild "out of compliance" facts would SHUT SAN ONOFRE DOWN, in the fairy-tale world of the Federal nuclear regulatory agencies and their nuclear corporate buddies, it's no big deal. They'll quietly propose a new road, find someone to build it, preferably someone who has no visible connection to the nuclear power plant, and then start shoving it down our throats. Many people along the route WILL PROFIT GREATLY from it, so they have no problem finding partners early on. Lots of construction companies are eager to get the ball rolling in their community circles.

And no one needs to be the wiser, right? Least of all the citizen, who has an out-of-compliance nuke in their back yard, who will lose thousands of acres of valuable real estate to an otherwise nearly-useless piece of pavement, and many of whom will also have to wait in line to pay for the privilege of using the new road. (Hopefully, tolls will be waived during a nuclear evacuation.)

Those who live along the proposed new route, or who will travel on it, should note that thousands of shipments of highly radioactive nuclear waste will undoubtedly occur on the new road. The waste is so radioactive that the trucks which carry it will probably not be allowed to stop for more than a few minutes at truck stops, for instance, for fear of irradiating neighboring truckers. The waste will be heading, if/when it opens, for the Yucca Mountain repository in Nevada, scheduled to open at the end of the decade but fraught with the usual government delays as well as loads of bad science (it should never be built; a better solution to the problem is needed, but in 50 years, nothing has worked out).

The gamma rays and other ionizing radiation emitting from the loads of nuclear waste, which has been piling up at San Onofre Nuclear (Waste) Generating Station for more than 35 years, will, as the waste is pulled out of its concrete and steel containers along the coast and transported along the new highway, penetrate citizens' homes and cars (and the citizens themselves), and if an accident (or act of terrorism) occurs, tens or hundreds of thousands of deaths -- or even millions -- could occur worldwide. A vast area around the accident will be closed, probably for thousands of years, and the new road will be permanently bisected with a "kill zone."

And yet, if the plant remains open, I cannot help but support ANY new evacuation routes. What a Faustian bargain, indeed!

The obvious answer to both our traffic problems and our energy resource problems is to build a floating off-shore highway that runs from San Diego to Los Angeles, complete with wave energy and wind energy machinery all along the way. If we did something like that, it would provide more than enough energy to shut down -- not just San Onofre -- and not just Diablo Canyon (the state's other nuclear power facility), BUT ALL OTHER NON-RENEWABLE POWER SOURCES IN THE STATE!

Tell the oil sheiks AND the nuclear barons to take a hike!

It would also alleviate traffic problems along the route where the traffic actually is.

Sincerely,

Russell Hoffman
Concerned Citizen
Carlsbad, CA
(760) 720-7261

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4) Letter regarding who is really in charge of safety for Californians
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To: "Jeff Ballinger, The Tribune" <jballinger@thetribunenews.com>

Tuesday, February 15th, 2005

Dear Sir,

Regarding seismic (the Hosgri Fault) ***or any other reason*** (terrorism and its thousand forms, tsunamis, accidental airplane strikes, tornados, asteroids, etc.) to close Diablo Canyon:

It is an **inaccurate interpretation of the law** which causes all the California state agencies, one after another, to defer the hard decision to close the plant to the Nuclear Regulatory Commission, and which causes you to claim (in the third paragraph of your article (shown below)) that California is helpless to shut Diablo Canyon (and San Onofre) IMMEDIATELY due to being hamstrung by federal authority. Read the laws which gave up that authority. There is a simple loophole to get it back -- namely, admit that the NRC cannot possibly do the job it has been assigned. They nearly failed at Davis-Besse, and the NRC was formed only after the events at Three Mile Island proved that the AEC was unable to do the job.

To call nuclear power a catastrophe waiting to happen is a simple statement of fact.

Take away the Price-Anderson Act -- a bankrupt (ie, virtually unfunded) piece of legislature that should never have been passed -- and the nuclear utilities would close the plants themselves. In other words, holding them responsible for their actions is all it would take.

A terrorist act is also all it would take, but your article assumes that such a thing simply cannot happen. You (and many others) also assume nor can large enough tsunamis, tornados, asteroids, etc. happen to cause a catastrophe, for where is any of that in your article or in anyone's calculation whom you quoted?

Do you think that the NRC is right, the AGs of 7 states are wrong, and the plants are properly protected? What a fantasy -- when does reality set in? The average citizen can see what happened on 9-11, they can see the hole in the Cole, and the holes JDAMs can create

(remembering that ANY high school kid can make a crude JDAM from remote-control airplane parts). As crude as box-cutters? No, not quite that unsophisticated. But just as effective for the task.

And let me get this straight. If the first study yields results suggesting the Diablo Canyon plant is dangerously close to the Hosgri Fault, THEN another study will kick in to see what could be offered to PG&E to get them to shut it down? How about we offer them jail time if they don't? For what, you ask? How about for holding California hostage to energy blackouts due to the unreliability of getting 4,000 Megawatts from nuclear power, which is prone to sudden SCRAMs? How about for creating some 6 to 8 million pounds of high level radioactive waste without a clue as to how to store it safely? Yucca Mountain is a scientific flop, a political disaster, and an ecological nightmare (see quotes from Las Vegas Sun article, below). Las Vegas hates it. Nevadans all despise it and are tired of being rained on by the radioactive debris of society. And even if Yucca Mountain ever does open, every time we move waste to a dry cask, we expose our shores and our citizens to additional dangers during the move itself. Crane operators drop things. Accidents happen. No industry is immune, but only one industry is so dangerous as to require a special regulatory agency to oversee it -- but can the NRC really understand crane logistics as well as, say, OSHA, with all their national experience? No. Accidents happen, and have happened. Do we wait for the big one before we stop the process, or do we trust the nuclear industry's statistically absurd claims that they will never, ever, ever make the ultimate mistake?

Do we learn from what happened at Davis-Besse, and all the other close calls that have occurred since nuclear power's inception, some of which are so terrifying that to hear about them send chills up your spine? It's obvious the nuclear power industry cannot perform the miracle of perfection they have promised. The miracle of 99.999999%+ containment of their waste for 10000 generations. They can't do that. So why are the plants open at all?

There is a lot of talk about raising the assumed level of danger from so-called "low-level radiation," which is an oxymoron to begin with. A single radioactive decay can destroy 20,000 or more chemical bonds within the human body, so even, say, so-called "low energy" tritium is a serious health risk. Just a week or two ago, x-rays were added to the Federal/EPA list of known carcinogens. That x-rays are a danger came as no surprise to nuclear activists, but the health physics community is appalled to see it listed, not because it is WRONG, but because they are afraid people will skip some vital x-rays. But I assume you believe in an informed public. That is, after all, the duty of journalists everywhere -- to inform the public. Alas, in the nuclear arena, I see very little of that going on. The pro-nuker spokesliars have iron-clad excuses for making up any answer to any question, and they'll do so at any time. Sworn testimony at a nuke plant hearing? I can't recall the last hearing I went to one where everyone (or anyone) was sworn in. So what's a reporter to do? It's hard work to find the truth in the nuclear industry, but worth the effort.

Regular releases from dry casks, spent fuel pools, operational reactors, and accidents are all valid issues that need to be re-addressed, but instead, have been effectively ignored by the NRC and the nuclear industry for decades, despite a wealth of new scientific information. The question is really NOT "should the assumed dangers be greater," it's whether they should be raised by a factor of, say, 10, 100, or 1000! According to the latest scientific research, it's highly likely that the original, decades-old risk-assessment calculations for whether Diablo Canyon is

safe or not should now include completely revised biological factors for whatever Diablo Canyon does release, on a good day or a bad one. But the NRC and the nuclear industry will stick to the old Hiroshima- and Nagasaki-based data, thank you very much. It's much more convenient for them to do so, since so much bias was already introduced at the time the research was done that it fits their needs to a "T." Hence, the nuclear industry will claim that Chernobyl only killed 28, or perhaps 31 people, when the real number, worldwide, is already probably over 100,000 people, and perhaps far higher.

As to it taking time for a long-term transition to alternative energy sources, in ONE 14-month period after the so-called electricity scarcity-related blackouts of 2000-2001, California added more generating capacity than ALL FOUR NUKES in California put out on a good day! I contend the blackouts were entirely politically-motivated to prevent people THEN from thinking: "Three of four nukes are shut and our lights are ON, gee, can't we turn these things off FOREVER?".

So it's time NOW to close these plants -- all four of them. Immediately. It can be done and there need not be any forced blackouts. It can be done with renewables, and
it would be highly cost-effective for the state.

It can be done and it must be done, or we will have our own Chernobyl. It most certainly CAN happen here. And assurances from the NRC or the industry to the contrary are based on specious claims that our reactors are radically different from Russian models, but all that really means is that the means to the end -- fuel melt, massive vaporized releases of radioactive fission products, and widespread death, pain, suffering, and financial loss -- is slightly different. Following a full-scale meltdown of a reactor or burn-up of a dry cask or just a portion of a spent fuel pool, millions dead is not impossible, and more than a million dead is probable.

But such a catastrophe is not in any California civil servant's calculation "for or against" Diablo Canyon or San Onofre. They consider themselves exempt from considering such "minor details" because of this so-called authority the NRC claims to have over them, and which they meekly concede, without justification, and in absolute abdication of their responsibilities. Such abdication is unheard of in any other industry. But the nuclear industry is not very normal in a lot of ways.

If you actually ask the NRC, as this writer has done, if they have or would consider closing the plants down because they don't make sense in the larger scheme of things for society, they will tell you FLAT OUT that's not their area of concern -- they only monitor the safety of the plants as they operate.

Now, whether they'll put it in writing is another thing, but this writer has been told on several occasions (at pubic hearings for San Onofre, for instance) that those bigger questions are the concern of the DOE, of which the NRC is only a small division.

The DOE, in turn, will stonewall the question permanently.

And what of California? California and all other nuclear states passed various bylaws and mandates and so forth stating that until such time as it can be seen that the Feds are not doing their job of managing the safety of the nuclear industry in California, all state agencies ABDICATE THEIR RESPONSIBILITY to the Feds.

These "laws" were passed long before the DOE or the NRC existed. They are posted at various .ca web sites, for instance, and if you look at them, you'll see they refer flat-out to the AEC, which was the forerunner of the DOE and the NRC, and hasn't existed in more than 25 years. A fresh look is certainly in order!

The fact is, both the NRC and the DOE are ignoring good energy choices for society -- nuclear isn't one of them. It is a safety risk we do not need to take. After all, the plants do JUST boil water! There are other -- better -- ways to boil water, which isn't the ultimate goal, anyway -- turning the electrical generator is. You don't need steam, even (wave power could do it). You don't need a turbine, you don't need a pressurized loop at 2200 PSI and 666 or so degrees (F). You don't need to generate two tons or so of spent fuel in California each week, which will have to be guarded for 1000 generations (far longer than recorded civilization). You don't need government secrecy, you don't need informants planted in activist organizations, you don't need special laws to protect the liars at the NRC who will tell citizens that 9-11 type attacks can't happen because Homeland Security has the airports covered -- when anyone with a credit card that's not maxed out can rent a private jet and crash THAT into a spent fuel pool or dry cask, or control room (which would almost surely lead to a meltdown as well).

So reporters should stop letting California's legislators, attorney general (who, with the six others, doesn't go nearly far enough in his/their current claim), health agencies, and environmental agencies off the hook. They all claim they are powerless in the hands of the almighty NRC. But that "power" wasn't ever actually yielded! It was loaned, and ONLY on condition -- not even true at the time but certainly not true now -- that the federal agencies (their forerunners, actually) would properly protect the public with their "expertise."

They didn't do so, so the deal giving the AEC/DOE/NRC ANY authority was long ago NULL AND VOID.

Sincerely,

Russell Hoffman
Concerned Citizen
Carlsbad, CA

Attachments to the original copy of this letter included:

1) Some nuke-related educational projects I've created
2) Yucca Mountain still far more fantasy than fact:
3) SLO Tribune article on Diablo Cyn's future, Feb. 13th, 2005
4) SLO Tribune editorial ignores numerous real problems with nuclear power
5) Letter from "A4NR" (Rochelle Becker)
6) Something's fishy: Altering the data to suit the client
7) Contact information for the author of this letter

The original letter is available online here:

http://www.animatedsoftware.com/environm/onofre/2005/NoTruthToTheRumor20050215.htm

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5) Study Links Infant Mortality to Radiation from Nuclear Plants:
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From: Oscar Shirani <obshirani@yahoo.com>
Subject: Fwd: Study Links Infant Mortality to Radiation from Nuclear Plants
To: beckers@thegrid.net, mlgav@hotmail.com, Karilyde@aol.com,
...snip... spatton@igc.org, Nancywrite@aol.com, ratri@msn.com, pse66@hotmail.com

From: "Suzanne Leta" <sleta@njpirg.org>
To: <Undisclosed-Recipient:;>
Subject: Study Links Infant Mortality to Radiation from Nuclear Plants
Date: Wed, 23 Feb 2005 17:47:51 -0500
Organization: New Jersey Public Interest Research Group

NEWS FROM ED MARKEY
United States Congress Massachusetts Seventh District
FOR IMMEDIATE RELEASE CONTACT: Mark Bayer
February 18, 2005 Michal Freedhoff
(202) 225-2836

NEW STUDY SUGGESTS SPIKE IN INFANT MORTALITY ASSOCIATED WITH RADIATION FROM NUKE PLANTS
Markey Questions NRC on Health Risks of Living Near Nuclear Reactors

Washington, DC: Rep. Edward Markey (D-MA), a senior member of the House Energy and Commerce Committee, the panel which oversees nuclear power regulation, today released a letter he sent to the Nuclear Regulatory Commission (NRC) regarding health risks for communities who live close to nuclear reactors. A new study released today by Dr. Ernest Sternglass of the University of Pittsburgh suggests that infant mortality increased significantly in 2002, after operating capacity at 104 nuclear power stations reached its highest levels.

"The nuclear industry and the NRC have automatically dismissed all studies that link increased cancer risk to exposure to low levels of radiation," said Rep. Markey. "The reality is that the data suggest that we should be taking this potential linkage much more seriously."

Rep. Markey's letter to the NRC was motivated by the ordeals of the Sauer family, former residents of Minooka, IL, which is located close to the Dresden nuclear power plant. The family has recently relocated because of concerns about the health impacts associated with living near the Dresden plant, which were heightened because of their daughter's brain cancer. In

June 2003, the NRC was presented with data obtained from the Illinois Department of Public Health (IDPH) that indicate that in Grundy County, IL between 1995-99, the infant mortality rate has doubled, there has been a nearly 400% increase in pediatric cancer and a 38% increase in cancer among those aged 28-44 years old (while the same statistic for all of IL decreased by 8%). Moreover, other statistics show that the incidence of leukemia was 50% higher in men and 100% higher in women in Grundy County than it was in the rest of the State. In its responses to the Sauers, NRC personnel have ignored these statistics and have instead cited a 1990 National Cancer Institute (NCI) study entitled "Cancer in Populations Living Near Nuclear Facilities", which has numerous flaws in design, since, as the authors themselves stated, the limitations in the design were accepted so that "it could be completed in a timeframe that was relatively short for a survey of such magnitude."

In addition to the Sauer case, Rep. Markey's office has been made aware of additional studies and data:
· Today, Dr. Ernest Sternglass of the University of Pittsburgh is releasing data at the American Association for the Advancement of Science meeting in Washington DC indicating a spike in infant mortality that occurred in 2002, coming after operating capacity at 104 nuclear power stations reached its highest levels and increased at the highest rate in the U.S. between 1997 and 2001. His work also refers to a scientific paper indicating that low levels of radiation exposure during pregnancy is directly related to low birth weight which, in addition to infant mortality, has also been implicated in numerous chronic diseases, including autism, asthma, cognitive dysfunction, rheumatoid arthritis, anemia, obesity, heart disease and cancer.
· A 2003 article by Joseph Mangano et al in Archives of Environmental Health found elevated levels of childhood cancers in populations living within 30 miles of nuclear power plants between 1988-1997. For example, in Plymouth County, MA (near the Pilgrim Power plant), there was found to be a 14.6% increase in the numbers of childhood cancers as compared to the rest of the country. And in Essex County, MA and Rockingham County, NH (near the Seabrook Power plant), there was found to be a 24.8% increase in the numbers of childhood cancer mortalities.

"The NRC needs to study – not summarily dismiss - the connection between serious health risks and radiation released from nuclear reactors. I am urging the agency to investigate these risks, and I will continue to closely monitor the NRC's progress in this important area," Rep. Markey concluded.

For a copy of the letter sent to the NRC, please see www.house.gov/markey

Suzanne Leta
Energy Associate
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11 N. Willow St
Trenton, NJ 08608
609 394 8155 x310
sleta@njpirg.org

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6) Your letter to me of February 23rd, 2005:
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At 10:20 AM 2/23/2005 -0500, Emile Julian wrote:
Mr. Hoffman,

Your e-mail to Ms. Carol Gallagher providing comment on PRM-73-12 was forwarded to the Office of the Secretary. I have attached the NRC's Electronic Submission Rule for your consideration. Please note Sections 2.9 and Section 4. You may wish to submit your website's video files as separate files on CD-ROM and include a cover letter describing the contents of the disc. You may also wish to submit the Macromedia Flash program on the disc, however, you may want to consider any copyright issues that may flow from installing a copy of Flash on the submitted disc, since your submission will be a public record. The NRC usually requires a copyright authorization for duplication of copyrighted material from the copyright holder. That release is usually obtained by the information or document submitter.

The NRC's official record system, ADAMS, is not structured to contain documents or files that contain links to either other documents or non-ADAMS sources such as websites. In lieu of any additional submission from you, we will docket your e-mail to Ms Gallagher as your comment, but please understand that as an official record, the URL links to the website therein will be broken once entered in ADAMS.

Emile L. Julian
Assistant for Rulemakings
and Adjudications
301-415-1966

>>> "Russell D. Hoffman" <rhoffman@animatedsoftware.com> 01/27/05 01:46PM >>>
Date: January 22nd, 2005

Re:"Incompatible" file format (Flash (Macromedia))

Dear Ms Gallagher,

I suppose if I had rendered my submission on canvas and in oils, that would have been

deemed an unacceptable submission format, at well (after all, I don't see it listed, either).

Flash is available nearly universally. Here is a quote from Macromedia's web site (Readme file for Flash):

"Flash Player continues to be distributed with every major partner, including Microsoft®, Apple, Netscape®, and AOL, to bring rich content and applications immediately to over 97% of internet viewers worldwide."

Now, can you really tell me, with a straight face, exactly WHY the Nuclear Regulatory Commission can't deal with ("docket," then actually view, then consider and respond to) the Flash format? I find it amazing that the NRC is perfectly willing to embrace a dangerous and unproven technology (nuclear power) about which very little is known (i.e., how to store the waste afterwards, how to contain it, how to ensure zero meltdowns, how to protect it from terrorists, etc.), yet they are staunchly resistant to adopting a common, benign, proven technology which can aid them in communicating better about everything!

There is simply no reason not to accept submissions to the NRC which are composed in Flash. It's downright Neanderthal of the NRC, frankly.

Furthermore, it is nearly impossible to make such complex points as need to be made regarding nuclear power's future in America and its vulnerability to terrorism without the aid of moving images and every other tool of human communication ever devised. If it were easy to communicate these facts, I wouldn't need to do so in the first place, because the problem would have been solved before it started. Citizens before me tried to warn the Atomic Energy Commission. Perhaps things would have been different if concerned citizens in the past had had a powerful medium of communication like Flash.

Since long before you, me, atomic power, or the NRC existed, it's been said that a picture is worth 1000 words. I contend that a moving image (in this case at 40 frames per second (nominal)) is worth even more, perhaps 40,000 words per second.

I have spent the past 25 years developing interactive educational software which uses animation as a teaching tool. My software, which I offer in the same language as my submission to the NRC (Flash), is site-licensed and used in classrooms at hundreds of universities, as well as at thousands of other locations such as hospitals, U.S. (and other) Navy training facilities, medical schools, community colleges, high schools, pump manufacturers and users, and by statisticians, as well as six-sigma trainees, etc.. around the world. But the NRC can't view it?

Below is the URL -- in plain text -- where my submission can be viewed online:

http://www.animatedsoftware.com/environm/onofre/2005/sce_memo/sce_memo_2004..swf
or try:
http://www.animatedsoftware.com/environm/onofre/2005/sce_memo/sce_memo_2004..html

The presentation comprises just one .swf (Flash) file (the .html is sometimes needed just to start the presentation). The current version is: 1.14.02. The file size is about 1.3 megabytes.

When the submission loads, mouse over the icon "ONE BAD DAY" on the left, and let it run. After the earthquake hits the nuke plant, mouse over the word "Godzilla" for one additional threat to nuclear power plants, specifically, that under a steady pounding, the "containment domes" are nothing more than eggshells, easily cracked. That's if a tornado, earthquake, tsunami, asteroid, airplane, rocket-propelled grenade, or something else, doesn't destroy the facility first.

Stare at the animated page "ONE BAD DAY" for a minute or two. Rerun it a few times. See if your mind doesn't start to wander into the realm where these atrocities ARE possible (that is to say, the real world, not the fantasy playland the NRC pretends we all live in).

And WHY are they possible? Because we have chosen our energy solutions poorly. We CAN close down San Onofre (and all the other nuke plants). The only question, really, is, "why doesn't the NRC/DOE (Department of Energy) understand this?" I'm not trying to tell the NRC anything they couldn't know all by themselves if they wanted to go out into the real world and learn it. I'm only trying to make it obvious that "the people" (AND THE TERRORISTS) know it already. Nuclear power plants were a mistake -- they are vulnerable and costly. The are WEAPONS OF THE ENEMY. Out here in the real world, millions already know this. We are simply trying to wake the NRC up, because the NRC happens to be in charge, and "Asleep at the Geiger Counter" (to quote the title from a recent book on the subject by Sidney Goodman (full reference below).

The NRC has the power to demolish the current power structure in America which allows an irresponsibly dangerous -- if once (50 years ago) technologically novel -- electrical energy solution to be enormously profitable for a small group of corrupt corporations. The NRC has the power to save America the misfortune of, for example, Chernobyl's permanent exclusion zone which is almost as large as Manhattan Island (and, actually, should be much larger than it is).

Apart from the material points of my original submission, the NRC's technological Luddite attitude should be resolved. And, why can't the NRC respond to citizen's inquiries in a timely manner? It's been nearly a year, for instance, since I submitted a request (in plain text format) for information about the use of "beta-blockers" (a heart medication) among control-room staff. What's the delay?

I would like this letter to be submitted in lieu of the actual Flash submission, so that regulators can view the animation online if they wish to take the initiative and get their heads out of the sand and try to envision the result of their folly -- the radiation which surrounds them (and everyone else) -- even though it is odorless, tasteless, and colorless.

By submitting this letter, at least the public record can show that the NRC is simply trying to hide from the truth in any way they can, however preposterous and uncooperative.

I look forward to hearing from you with an updated appraisal of the NRC's ability to handle modern technological systems which can aid in understanding complex issues of vital importance to society. I will not, however, hold my breath waiting.

Sincerely,

Russell Hoffman
Concerned Citizen
Carlsbad, CA

For affiliation purposes: Author, animator, and programmer, All About Pumps, Internet Glossary of Pumps, Internet Glossary of Heart Terminology; co-author and programmer, Statistics Explained, Internet Glossary of Statistical Terms, The Heart: The Engine of Life; author, Internet Glossary of Nuclear Terminology (aka "The Demon Hot Atom"), Internet Glossary of U.S. Nuclear Power Plants, Shut San Onofre web site; editor, Stop Cassini newsletter; author, The Effects of Nuclear Weapons (globally-distributed essay, written with the assistance of Pamela Blockey-O'Brien), "Three Mile Island Beatles," "World War III News Report," "No Cause For Alarm;" author and programmer, "Poison Fire USA" ("POIFU," an animated history of U.S. nuclear activities, including over 1500 data points ("POIFU," and most of the other items listed here, was written in (take one guess) Flash)).

P.S. Did you know that a nuclear power plant cannot blow up like a nuclear bomb? It can, however, release more than 1,000 times more radiation into the environment, killing hundreds of thousands of people, and that's not including releases possible from the spent fuel outside the reactor containment dome, which is present at every reactor in the county, in spent fuel pools and, increasingly, also in even-more-dangerous dry casks?

P.P.S.: Asleep at the Geiger Counter, by Sidney Goodman:
http://www.bluedolphinpublishing.com/Asleep.htm

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From: "Carol Gallagher" <CAG@nrc.gov>:
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At 03:55 PM 1/21/2005 -0500, "Carol Gallagher" <CAG@nrc.gov> wrote:
Mr. Hoffman,

The comment you loaded to the NRC's Rulemaking website (1479-0040; sce_memo_2004.swf) is in a file format that is incompatible with file formats accepted at the website.

Please resubmit your comment in a file format other than flash (macromedia) so that the comment can be printed and submitted for docketing.

Thank you,
Carol Gallagher
cag@nrc.gov

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7) Contact information for this writer:

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