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**From:** madroneweb@aol.com [mailto:madroneweb@aol.com]  
**Sent:** Wednesday, January 13, 2010 12:32 AM  
**To:** LRGEISUpdate Resource  
**Subject:** Draft Generic EIS for License Renewal of Nuclear Plants [NUREG-1437]

Note: I tried to send this comment to this e-mail address early in the 8:59 PM minute (Pacific Standard Time) of January 12th, 2010, but my computer then acted unusually and it would not show up on my sent mail of the last few weeks, but then I found it under "Mail You've Sent" in my computer filing cabinet. Hopefully it was received, and shall be received again.

\*\*\*\*\*

January 11, 2010

Bruce Campbell  
1158 26th St. # 883  
Santa Monica, CA 90403

Michael Lesar, Chief, Rulemaking and Directives Branch  
Mailstop TWB-05-801M, Division of Administrative Services  
Office of Administration  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
E-mail: Federal e-Rulemaking Portal at <http://www.regulations.gov> ; Docket ID NRC-2008-0608-0003

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RULES AND DIRECTIVES  
BRANCH  
USNRC

Re: NUREG-1437, Revision 1, July 2009 [Docket ID NRC-2008-0608-0003]

Dear Michael Lesar and to whom it may concern:

First I call for inclusion of comments into the record on the nuclear power reactor relicensing even if they do not mention the Docket number. I have seen no mention in these documents regarding a Docket #, and it certainly it is not mentioned in the "Abstract" part of the document which gives the address and e-mail to which to submit comments. A third party told me about Docket ID NRC-2008-0608, but that did not have the "-0003" part which I discovered when I was preparing to submit a comment through the [www.regulations.gov](http://www.regulations.gov) website. I object to a 2000 character limit on submissions of comments through that aforementioned website. Fortunately, I noted that comments will be accepted until 11:59 Eastern time this evening, so I held off on my comment submission and will examine the documents further. I noticed an e-mail address to which to send comments on the Abstract page, and though I see the NUREG # further up that page, I do not see any mention of Docket number there or elsewhere.

These comments are in addition to my oral comments at the hearing in Pismo Beach when I mostly made the case that U.S. nuclear power facilities are known for being a hodge-podge rather than having uniform components and facilities, and thus to assume that the vast majority of the facilities can be termed "generic" (and thus undergo less site-specific scrutiny) is preposterous. At that hearing, I pointed out some unique problems in regards to the Diablo Canyon and San Onofre nuclear power facilities, so even if there is some validity to the argument (which I severely doubt) that most of the reactors and their facilities in the U.S. can be termed generic, any argument that the Diablo Canyon and San Onofre facilities are merely "generic" is just a wild claim of the industry who wants to continue their costly yet profitable (to some) activities rather than develop reasonable contentions in regards to why Diablo and San Onofre should be considered "generic" rather than site-specific situations.

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SONSI Review Complete  
Template = ADM-013

F-REDS = ADM-03  
Add = S. Schneider (SKSH)  
J. Rikhoff (JSR2)

A. I call for serious study regarding what can be termed a "multiple" emergency planning and evacuation scenario -- which obviously would consider various factors relating to evacuation scenarios as well. And, seeing that roads and other transportation arteries are different around each nuclear power facility, thus the issue should be deemed "Category 2." Some of the multiple scenarios within a limited time frame which must be thoroughly assessed are the combination of a sizable earthquake, serious nuclear accident, and damaged and thus difficult to access and successfully travel along evacuation routes. Another such scenario would involve a sizable earthquake, tsunami, and damaged and difficult to access evacuation routes.

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B (1). I object to the document citing industry studies which apparently conclude that there is no increase in cancers in the vicinity of nuclear power facilities. Please specify the methodologies related to the study, and inform the public as to whether any such studies have been peer-reviewed. The very same month that the GEIS documents came out, an article came out authored by Rudi H. Nussbaum in the Journal of Occupational Environmental Health July - September 2009 (the article was called "Childhood Leukemia and Cancers Near German Nuclear Reactors: Significance, Context, and Ramifications of Recent Studies") which reviewed the results of a very thorough study with superior study design which was commissioned by the German government called the Epidemiological Study on Childhood Cancer in the Vicinity of Nuclear Power Plants. This article can be found at:  
<http://www.nirs.org/radiation/radhealth/kikkcommentary0709ijoe.pdf>

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#### "THE KIKK STUDY

##### KiKK Study Team and Design

In 2002 the German government contracted with the GCCR to conduct a state-of-the-art case-control study of childhood cancers and leukemia in the areas around the country's 16 commercial nuclear power plants. This Epidemiological Study on Childhood Cancer in the Vicinity of Nuclear Power Plants (Epidemiologische Studie zu Kinderkrebs in der Umgebung von Kernkraftwerken) is known by the acronym KiKK. In contrast to ecological studies that compare geographic averages of disease rates at area mid-point distances from the suspected source, a case-control study compares characteristics of individual children who suffer from disease (cases) with those of the same age and sex who live in the same area and do not suffer from this disease (controls). In the KiKK study, researchers Kaatsch et al. determined the distances of the places of residence of cases (at the time of diagnosis) and of controls with an accuracy of within 25 m. Thus a possible distance dependency of cancer risk could be determined with much greater reliability than in ecological studies. Based on radioactive emission data, as provided by the operators of the nuclear power plants, and using internationally adopted low-dose radiation risk factors as tabulated by committees of the United Nations (UNSCEAR),<sup>6</sup> the US National Academy of Sciences Committee on the Biological Effects of Ionizing Radiation (BEIR),<sup>7</sup> and the International Commission on Radiological Protection (ICRP),<sup>8</sup> the researchers predicted that radioactive emissions from nuclear power plants would not cause an increased risk for childhood malignancies.

Due to the superior study design and an extended study period (1980-2003), the KiKK study was expected

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to test once and for all whether there existed an association between residential proximity to a nuclear reactor and elevated incidence rates of childhood malignancies. In order to lend maximum credibility to the new investigation, the German Federal Office for Radiation Protection (Bundesamt für Strahlenschutz, BfS) appointed an independent external review committee of 12 scientists (5 epidemiologists, 2 pediatricians, 2 statisticians, and 3 physicists) to assist in the study's design and evaluation.

The study area included 41 counties in the vicinity of all 16 German nuclear power plants. Since individual radioactive exposure data for cases and controls were not available, residential distance from the likely point of radioactive emissions (the exhaust stack) served as a surrogate variable. Addresses of all children with leukemia or other malignancies < 5 years at the time of diagnosis (1592 cases) were compared to those of 3 times as many randomly selected children of the same age and sex, residing in the same region who did not have either of these diseases (4735 controls). Residential distance to the 16 power plants was the only variable for cases and controls.<sup>12,13</sup> The investigators' choice of the < 5 year age group of children was based upon the known high radiation sensitivity from conception through embryonic and fetal development to infancy.<sup>3-5,14-16</sup> To my knowledge, no other health study comparable in scope and power has ever been conducted anywhere in the world among populations potentially exposed to environmental radioactive contamination. Therefore, the KiKK study's power and scientific significance is unique in radiation epidemiology.

#### KiKK Findings

On the basis of their 1998 categorical conclusions,<sup>10</sup> the authors of the KiKK study stated that "no effect would be expected on the basis of the usual models for the effects of low levels of radiation."<sup>13</sup> Yet a logistic regression analysis of the ratio of KiKK cases to controls as a function of proximity ( $= 1/r$  with  $r$  the residential distance in meters, chosen as the independent variable) showed a strongly increasing risk for all cancers, and especially for leukemia, the closer the children had lived to nuclear plants at the time of diagnosis, with the sharpest rise within 5 km. During the study period 1980–2003, children < 5 years living within 5 km of a nuclear power plant were more than twice as likely to develop leukemia compared to children living > 5 km distant (OR, 2.19; lower limit 95%CI, 1.51). The increase in leukemia remained significant in children < 5 years living in the < 10 km zone compared to the > 10 km zone (RR, 1.33; lower 95%CI, 1.06), as reported in Kaatsch et al., Table V.12 Kaatsch et al. checked for plausible confounding factors, but they found none within the limits of uncertainty. However, because of variable response rates to questionnaires, this second part of the KiKK study lacked statistical power. Therefore, confounding factors

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could not definitively be excluded. The KiKK team also tested whether the findings were primarily influenced by any single plant, such as the well-known Krümmel leukemia cluster, by excluding that site from the analysis. Even when Krümmel (or any other single plant) was excluded from the study, the distance trend remained significant. Also, the trend is considerably stronger in the KiKK study with individual proximity of residential addresses as surrogate exposure variable, compared with the trends found in previous ecological studies, confirming the greater statistical power of the case-control design with individual characteristics.

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The last paragraph of the article on this study concluded that, "The KiKK study points out the need for a critical reexamination of uncertainties, flaws, and inappropriate generalizations in fundamental assumptions and models on which current radiation safety standards and regulations are based. A US government-sponsored case-control study, similar in design to the German KiKK study, would provide invaluable additional data for a sound scientific basis for such a reexamination since there are only minor design variations between US and German nuclear reactors. The KiKK study's ramifications add to the urgency of a policy debate regarding the high toll exacted in public health for nuclear power production."

Will the NRC review this German government-commissioned report, as well as other reports on cancers and leukemias in the vicinity of nuclear power reactors, and include them in their risk assessments and other analyses in the final documents on generic matters, and will they be considered at all in more site-specific Category 2 situations?

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B (2). During a given year, what percentage of the time does a nuclear reactor operate? I used to hear nuclear reactors were shut down close to half the time, though have heard they might be operating a greater percentage of the time in recent years (of course not including those reactors involved in the throes of steam generator or other replacement of major nuclear power facility components). So, let us use perhaps 40% (or analyze another figure while giving supporting evidence that it is valid) of the time that nuclear reactors are shut down in a given year. So if it operates for 60% of the time in a year, then it operates for about 219 days. One can calculate how many minutes in a 24-hour period (I come out with 1440) and then multiply that amount by 219 (I come out with 315,360 minutes). Even though wind and heat rising and other factors can result in different measurements as far as radioactive emissions within a given minute, but generally I think that is fairly trustworthy to consider a minute as a useful unit to get a good idea of the range of measurements of radioactive emissions in a given day -- meaning it would likely be difficult to hide a certain burp or other larger emission if one measured radioactivity every minute. With the aforementioned in mind, about how many measurements in regards to radioactive emissions does the average or median nuclear power facility submit to the NRC every year? If a given measurement fairly accurately reflects the amounts of radioactive emissions in a given minute, what percentage of minutes during the time a reactor is operating during a year is indicated by those submitted measurements? What kinds of rays/radiation and which radionuclides are usually measured for? Are certain kinds measured more for in the air, while tritium is measured more relating to water and water infiltration and migration?

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Seeing that it is likely the utility rather than NRC (let alone an independent entity) who takes such measurements of radioactive emissions, and seeing that in some situations (such as with

the "sweetheart" rate deal which Pacific Gas and Electric got from former California Attorney General Van de Kamp) a utility and its private investors make more money the larger percentage the time that the reactor operates. This would tempt some to avoid some repairs in order to maximize profit, and hope that a certain strained component will last until the planned replacement of a couple of other components in the future. Thus, due to that profit motive, a number of utilities are untrustworthy because they are under pressure to maximize profit for their investors. How will the NRC assure that public (and worker) health and safety is respected when the main goal is to make money for investors and the well-paid executives (some of whom having their substantial stock options?

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C. I notice that page S-9 mentions "unlined" cooling ponds. What percentage of nuclear power facilities in the USA have unlined cooling ponds? Would not unlined ponds leak and infiltrate more than lined ponds? I call for this issue to be a Category 2 issue since there obviously are different kinds of soil, varying infiltration rates, and differing groundwater situations at each nuclear power facility. What is involved with "groundwater protection programs" if at least some of them fail to even take the basic precaution of lining the cooling ponds for the hot spent nuclear fuel? Is the spent nuclear fuel too "hot" to allow a liner to last very long, so the industry figures why bother?

4.3.1

D. I wish to make some comments regarding geology and soils. I note on page 2-7 that it is claimed that there is merely a "Small impact" on geology and soils at all nuclear power facilities "if best management practices were employed to reduce erosion associated with continued operations and refurbishment." Excuse me, but seeing that "Geology and Soils" is the category, one must look at the effects not only of the nuclear power facility on Geology and Soils, but must also examine the effect of geology / soils / seismic setting on the nuclear power facility. Also, if one seriously examined potential effects on the nuclear power facility by shifting geology, soils, and seismic setting, then one would realize that this could result in a major accident which then would bring much larger than a "small" impact to the soils of such a facility due to serious radiological contamination from the nuclear power facility.

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The NRC may well cling to their claim that there is just a small impact from geology and soils, but seeing that seismicity was ignored, and seeing that the effect of the geological setting on the nuclear facilities was ignored, clearly "Geology and Soils" (including seismic setting) need considerably more study and are site-specific, thus calling for a "Category 2" determination.

How can parts of the document consider and label "Geology and Soils" as a "Category 1" issue when the first three full sentences on page 3-50 of the GEIS says, "However, within each province, the local geology may differ significantly from the regional conditions. The geologic setting of each plant is therefore a site-specific function of the local geology rather than the physiographic province in which it is located. Plants are located in a wide variety of settings, including uplands along rivers, glaciated till plains, Great Lakes shorelines, and coastal sites."(?) The first sentence in the next paragraph says, "The geologic resources in the vicinity of each nuclear power plant vary with the location".

E. It is ironic that some portions of the documents acknowledge "diverse environmental conditions" (page S-6) and shifting biological communities, yet there are unsupported claims acting like all environments at and around nuclear power facilities are very stable, unchanging, and predictable. You can't have it both ways even if you have some lawyers instructing you what to say in some portions so that the document's conclusions may have a better chance of being validated in a courtroom.

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For instance, page S-6 of the GEIS says, "The affected environments of the operating plant sites represent diverse environmental conditions." And on page S-7 (under the heading "5.5 Impacts from Continued Operations and Refurbishment Activities Associated with License Renewal"), it says under "Geology and Soils" that "Impacts on geology and soils would be small

at all plants if best management practices were employed to reduce erosion. This is a Category 1 issue."

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I note that it says on page 3-49, "Soils and subsoils at nuclear plant sites also vary in terms of their geotechnical properties relative to site construction projects and their hydraulic properties relative to the movement of infiltration, groundwater, and contaminants." It goes on to say that certain nuclear sites must be protected from erosion including along riverbanks and along coastlines. Thus, more reason to consider such issues a Category 2.

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F. I object to the dismissal in the documents of the impacts from "low-level" radioactive waste. The documents must admit that so-called "low-level" waste sometimes has as hot and long-lived waste as "high-level" waste because if high-level waste is spilled, it is my recollection that it and the materials involved with cleanup are then declared "low-level" radioactive waste.

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G. I note the admission on page S-13 that nuclear reactor shutdowns (and I conclude that would also be valid for facilities who fail to get an extension of their operating license) would result in "short-term reductions in entrainment and impingement rates and thermal plume characteristics." Since there are differing species around every site (including around the intake and discharge areas), then clearly there must be site-specific (yes, Category 2) examinations of the impact of all facilities on the mix of species in the vicinity -- not just if there are listed threatened or endangered species in the area. Also, global climate change combined with ongoing shift in biological communities and with effects from intake and discharge must be predicted for each nuclear power facility in a site-specific manner (thus Category 2). This further makes a mockery out of the claim made in the documents that there is assured environmental stability around all nuclear power facilities.

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Nuisance organisms were mentioned in the document. Do some of these nuisance organisms thrive due to the thermal discharge plumes at nuclear power facilities, do some thrive on impinged and entrained organisms, and how would global climate change affect such organisms combined with these other factors? This series of questions requires site-specific analyses.

H. Does the NRC recognize the conclusion by Dr. John Gofman first made in the 1960s which declared that there is no safe level of radiation? If not, why not? Thus, even if no emissions exceeded "design basis", would not his scientific conclusion indicate that there would be deleterious impacts from exposure to radiation even if it is within some formal or legal radiation emission level?

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I. The very first sentence of the Summary (page S-1) says that, "The Atomic Energy Act of 1954 authorizes the U.S. Nuclear Regulatory Commission (NRC) to issue commercial nuclear power plant operating licenses for up to 40 years and permits the renewal of licenses upon expiration." Does anything in this sentence imply that a renewal of an operating license can be granted before the expiration of the current license? I believe not! Thus, it appears that there would be a violation of the Atomic Energy Act of 1954 to grant or even consider an extension of an operating license before expiration.

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I just got off the telephone within the past two minutes with the California Department of Motor Vehicles (yes -- I spoke with an actual human even in the 21st century!). To renew one's drivers license, one needs to wait until one receives a drivers license renewal notice which are generally sent out two to three months preceding the expiration of one's drivers license. I asked if one could renew their drivers license earlier than that -- giving a potential scenario that if I was out of the state or country between February and mid-September (and my birthday is in August and that is when my drivers license would expire), and I want to be able to drive immediately upon my return to California, could I renew the license this month (which is more than seven months before my license would expire)? I was told that I could not renew my drivers license early as I suggested, but I could ask for a license extension so that my current license could briefly be extended so that I could drive immediately upon my return to California.

reactors, how can one conclude there will be the funding, the will, the technology, and the expertise at a given point of time in the future to decommission nuclear power facilities? Thus, I conclude that decommissioning is not assured in the least unless it is done in the foreseeable fairly near future time frame with a stable and sufficient decommissioning fund from which the utility can draw funds to accomplish the decommissioning.

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K. I note that page S-2 says that, "While the NRC staff considers a wide range of alternatives to license renewal, THE ONLY ALTERNATIVE WITHIN NRC'S DECISION-MAKING AUTHORITY IS NOT TO RENEW IT." Why go through this extensive paperwork process if the only alternative within the NRC's decision-making authority is not to renew an operating license? The sentence in the document (preceding the quote above in this paragraph) said that, "The NRC also cannot ensure that environmentally preferable energy alternatives are used in the future." While the NRC cannot choose what kind of energy will be used, it can eliminate one of the worst energy alternatives as far as impact to the environment by eliminating the option for license extension of these old dangerous nuclear power facilities.

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Page S-2 also mentions that "the decision to operate a nuclear power plant under a renewed operating license are to be determined by State, utility, system, and where authorized, Federal (other than NRC) decision makers." Would the NRC hold off on issuance of an operating license extension (or even consideration of a utility's application papers for such a license extension) if a state has called for additional studies and precautions to take place before any consideration of an extension of an operating license (as is the case with the Diablo Canyon facility and state-mandated seismic studies)?

L. I believe that there was not an effort to get a range of studies and perspectives in regards to reactor accident consequence scenarios. Does the NRC consider the Sandia Labs 1982 reactor accident consequence study, including the worst-case reactor consequences which were hidden from public view until released by Representative Markey? Has there been as thorough an assessment of U.S. nuclear reactors and potential accident consequences since this 1982 study? If so, which studies are they, and have they been peer-reviewed? If not, why ignore this very basic information mentioned in the Sandia study -- unless it is too disturbing and might interfere with the NRC's promotion of the nuclear power industry?

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It seems apparent that the accident probability figures in this document are, shall we say, wishful thinking. Seeing that lawyer-types are reminding writers that of course we have to act like we are abiding by pertinent regulations, yet real-life on-the-ground experience indicates that we are not living in a fail-safe world, while every year in the USA more than a thousand incidents or violations of safety requirements are reported to the NRC. Aging of whatever living being or whatever piece of equipment can have serious consequences which are not addressed in the least in the GEIS.

M. I note on page 3-50 of the GEIS under the headings "3.5 Hydrology 3.5.1 Surface Water" that is admitted that, "An exception is the Palo Verde plant in Arizona, which relies on treated municipal wastewater for cooling." I call for the Palo Verde nuclear power facility to be considered non-generic due to this admitted uniqueness in the kind of water used for cooling the reactors. Seeing that the City of Phoenix adds hydrofluosilicic acid to its water supplies, and there are associated damages to metal pipes from years of being exposed to this corrosive substance, such impacts need to be seriously assessed even during this operating license period, and certainly must be considered carefully before any consideration of an operating license extension for that large facility.

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N. Besides some points regarding Geology and Soils being mentioned earlier, I also want to mention my concern in regards to the beach erosion at the San Onofre facility. Certainly, significant recent erosion at that site certainly makes not only that, but adds to the importance of examining many other components of the facility (including big demolition and construction jobs related to steam generator replacement). Since the plan is to replace steam generators at Diablo

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Drivers can cause damage as our vehicle accident rate indicates. But it would be virtually impossible to cause thousands of deaths within the first years, cause any cancer or leukemia, or cause hundreds of billions of dollars of property damage from operating such a vehicle. If there are fairly strict regulations as far as drivers license renewal to be able to drive which potentially (in a bad scenario) could cause some injury or death, why should nuclear power facilities (with the industry historically being subsidized by taxpayer funds while waiving most liability for damages relating to a potential accident) be able to get a license extension when they can cause such serious damage not only in the near term, but for thousands of generations? (By the way, if there was an accident with the consequences resulting in thousands of deaths within the first years, cause any cancer or leukemia, or cause hundreds of billions of dollars of property damage, would that impact be considered "small", "moderate", or "large"?)

Do you accept that one with a basic drivers license generally can do less damage with that vehicle than the potential for nuclear reactors to wreak? Humans are certainly not perfect, and they sometimes go blind or have other deteriorating eyesight, get ill suddenly or chronically, and sometimes are under the influence -- all of which could impact safe operation of motor vehicles. I have seen the deterioration of the health of my parents, and realize that a decent percentage of elderly people need to be carefully evaluated around the time of license renewal. Seeing that there is deterioration of the equipment of a nuclear power facility during its operation, seeing that there is already serious refurbishing and replacement of components (sometimes replaced by substandard or even counterfeit equipment) of such facilities even a decade before the expiration of some of their operating licenses, and seeing that imperfect humans operate such facilities, please explain the logic which would renew operating licenses for nuclear power facilities since there seem to be increasing problems when there is aging of components at nuclear power facilities?

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J. It appears that one key reason for the big push for relicensing of nuclear reactor operating licenses is that it would further delay the very expensive decommissioning process. Decommissioning should be a Category 2 issue because of the differing components of various "hotness" at different facilities, and also due to the often battered shape which a number of decommissioning funds find themselves since the economic collapse of two autumns ago. Seeing that a number of utilities decided to play the casino game of the stock market, thus the investors of those utilities (who would reap advantage from profitable investments) need to make up the funds lost by bad investments of those decommissioning funds! And one cannot assume that the federal government (with its massive debt) will be able to afford decommissioning scores of plants that the utilities just can't seem to afford to take apart and somewhat decontaminate, and a number of taxpayers don't have much extra to make up some of the gap in funding for decontamination. Plus, transportation routes to needing-to-be-identified facilities (for everything from spent fuel to mixed waste to low-level waste to other trash) must be clearly specified for each kind of radioactive or mixed waste.

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With the increase in the recycling of radioactive metal in the past decade or decade and a half, the GEIS must indicate how many components of nuclear power facilities would be eligible to be recycled and thus allowed in zippers, fenceposts, bicycles, etc.

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The GEIS should give us an update regarding technologies involved with decommissioning -- for instance, is there still difficulty cutting reactor vessel steel? Is it easier to cut reactor vessel steel on embrittled reactors? What problems are associated with embrittled reactors in terms of safety during operation, and what challenges do embrittled reactors and reactor vessels pose during the decommissioning process?

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I disagree with the contention that assured the reader of these documents that of course decommissioning of nuclear reactors will take place. Given the economic situation these days, and seeing that a number of companies pocket lots of funds on one hand while spinning off some company on the other hand that would likely be responsible for funding decommissioning of their



Canyon and at San Onofre in this general time frame under the older operating license, how many other steam generator replacements should we expect during the "life/half-life" of the facility operation at those facilities?

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O. Please carefully examine the implications for public health and safety (and how it would impact risk assessment safety margins) of doing such major reconstruction (some varieties of which have never been done before as at San Onofre) during the current license, and then have at least one more major reconstruction if the facility is to achieve the ridiculous time frame foreseen by consideration of a multiple decade operating license extension. Another point to factor in when doing site-specific or any cumulative effects analysis is the combination of differing kinds of facilities, aging impacts on the facilities, technical glitches and human error, all combined with the major component replacement and reconstruction at the facilities. Such examinations clearly must take place under Category 2 in future NRC documents.

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P. The NRC should not even consider renewing an operating license if new earthquake faults have been discovered during the current operating period of the license. Since quakes are often sudden and come with no warning, thus the seismic settings are not "gradual and predictable" and should clearly be deemed Category 2.

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Q. The GEIS fails to account for the added radioactivity and added stress on the facility and its components due to extending the operating license for a nuclear reactor. Plus, the destination of all spent fuel, mixed waste, low-level waste, and other kinds must be clear in order to have a reputable and thorough environmental impact statement on this long-lived issue.

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No license extensions -- especially for more unique facilities such as Diablo Canyon and San Onofre who have many unique features including seismic setting and various work related to seeking to have it withstand major quakes (though it is insufficient).

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Sincerely,

Bruce Campbell