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Ruth Pullen

From: rsp2048 [rsp2048@earthlink.net]
Sent: Tuesday, July 29, 2008 10:40 AM
To: GrandGulf.COLAEIS@nrc.gov
Subject: Comments relating to the COL EIS for Grand Gulf 3
Attachments: Addendum for COL EIS scoping meeting due 072908.doc; Art of Energy EfficiencyArt Rosenfeld.pdf; Lovins The Nuclear Illusion.doc; RenewableEnergyMississippi.pdf; Co-op America Utility Solar Study.pdf; Price of Nuclear Saloncom.doc; Scientific American_ A Solar Grand Plan2007.pdf

These comments (Addendum for COL EIS scoping meeting due 072908.doc) and the attached supporting documents are being submitted as additions to my oral comments at the June 19, 2008 scoping meeting in Port Gibson, MS.

Please note my ****** change of e-mail address ********* and send any future correspondence to rsp2048@earthlink.net.

Thank you.

Ruth Pullen

This is a copy of the e-mail I sent on 7/28/08 and 7/29/08. I had requested, but not received a delivery receipt for either e-mailing. Therefore, I am mailing a hard copy by postal service. Please let me know if you received the e-mailed versions, because if you did not, you may not have received other comments as well.

Thank you,

Ruth Pullen

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Add = T. Dozier (tsd2)

Addendum to my oral comments presented at the June 19, 2008 scoping meeting in Port Gibson, MS for the Grand Gulf Unit 3(GG3) COL application.
Submitted 28 July 2008

Ruth Pullen
P.O. Box 720415
Byram, MS 39272

I urge NRC staff to read the attached document ***Lovins The Nuclear Illusion.doc,*** (http://www.rmi.org/images/PDFs/Energy/E08-01_AmbioNucIllusion.pdf) which addresses many issues discussed in these comments including concerns raised by the NRC such as base load power, peaking power, and backup power. The document also shows the advantage of renewables, cogeneration, efficiency, etc, over nuclear power. Amory Lovins, Rocky Mountain Institute Cofounder, Chairman, and Chief Scientist is an award- winning, nationally and internationally recognized consultant on energy issues and puts to rest the argument that nuclear power is a viable and better solution to our energy needs than the numerous other solutions available today. (contact information: (303) 245-1003, (970) 927-3851, www.rmi.org).

I believe the following are issues that NRC staff should consider when preparing the EIS:

I. Need for Power

According to the Final Environmental Impact Statement(EIS) for the Early Site Permit(ESP); 'An ESP environmental report is not required to include a benefits assessment (e.g., the need for power) (10 CFR 52.17) or a discussion of energy alternatives (NRC 2003a); **these may be deferred to the CP or COL application** (emphasis mine) (Introduction, page 1-3).

Since we are at the COL stage, it is time for the benefits assessment discussed above to be produced and evaluated in the EIS. The fact that Entergy is considering designating GG3 a merchant plant, indicates that more power is not needed in Mississippi. Because building a plant, the plant's discharges, wastes, etc., affect the environment, **the need for power should be one of the first and major considerations in this EIS.**

Entergy Mississippi, Inc. provides electricity to more than 433,000 customers in 45 Mississippi counties, approximately 17% of its customer base of about 2.6 million in portions of Arkansas, Louisiana, Mississippi, and Texas. Based on these numbers, it is impossible to justify building another reactor in Mississippi. The facility should not be built at all, but if it is, it should be built where demand is greatest.

Furthermore, advances and successes in energy efficiency, conservation, cogeneration, and renewables, make the need for a new reactor unnecessary at any location. References and attachments discussed in section II. will clarify this statement.

II. Alternative Energy. This issue was not adequately addressed in the FEIS for the ESP and therefore should be considered in this EIS. Looking only at the Port Gibson site when reviewing possible alternatives does not take into account one of the primary advantages of renewable energy, i.e. distributed resources. Nor does it account for the entire service area, or the Gulf of Mexico, which has wind resources for Mississippi and surrounding states of at least Class 4- Class 7, not Class 1 as the ESP FEIS stated for Mississippi and Louisiana. (see attached

Renewable Energy Mississippi.pdf page 1.
http://www.citizen.org/documents/RenewableEnergyMississippi.pdf)

In Section 9.2.2.2 of its ESP application, SERI established a target value for the desired electrical output of 2000 MW(e) for a new nuclear generating facility constructed at the Grand Gulf ESP site and used this value in its analysis of energy alternatives (SERI 2005). (ESP FEIS, pg 8.3,), yet it has not been established that any new power is needed, and certainly not 2000MW.

In section 8.2.1(ESP FEIS page 8-3) it is stated that 'The Commission determined (NRC 2005) that conservation or demand side management programs are not a reasonable alternative to an ESP for a base load nuclear power plant. Consequently, this alternative is not further considered.' This is an outdated and inaccurate assessment of modern day programs and needs to be reconsidered. I urge the NRC staff to read papers (see attached *Art of Energy EfficiencyArt Rosenfeld.pdf)* written by Arthur H. Rosenfeld, Commissioner, California Energy Commission, and to contact him to discuss these issues.((916) 654-4930, ARosenfe@Energy.State.CA.US). Mr. Rosenfeld is an award- winning innovator in energy efficiency and California has implemented energy efficiency standards that are emulated both nationally and internationally. The attached Amory Lovins document also discusses these issues.

I also urge NRC staff to read *California Illuminates the World* by Craig Canine. http://www.nrdc.org/onearth/06spr/ca1.asp Below are a couple of quotes from the article, which discuss California's policies and Art Rosenfeld's accomplishments:

> 'Since 2001, California has bounced back, fashioning a new framework of utility regulations that places greater emphasis on efficiency than ever before. Through 2008, utility companies plan to spend $2 billion -- a record for any state -- to help Californians save energy. The investment will yield a net gain of $3 billion in economic benefits for the state by reducing utility bills. **"This efficiency campaign will avoid the need to build three large power plants,"** says Brian Prusnek, a senior staff member at the California Public Utilities Commission.... **How many other investments yield a 50 percent financial return and reduce pollution?'** (emphasis mine)
>
> ...'California's efficiency standards for new buildings, introduced in 1978 and known as Title 24, have been replicated all over the world. The code governing new construction in Russia, for example, is **cutting energy use by more than 40 percent, thanks to California.'** (emphasis mine) Examples such as these show the benefits of alternatives not only to the consumer, but also to Entergy itself.

According to Heather Staley, Chief Executive of the Energy Efficiency and Conservation Authority (EECA), **'Investment in energy efficiency is often the cheapest solution and should always be considered when looking at future needs.**(emphasis mine) Locking in energy efficiency now means gains into the future'. ...'Many energy efficiency measures are instant. **We can realise the benefits right now, including cheaper power bills and reduced environmental impacts.'**(emphasis mine) (http://www.eeca.govt.nz/news/media-releases/future-energy-needs.html)

Furthermore, the cost of renewable energy is rapidly dropping because of improvements in technology, and, as market share continues to grow, some at over 20% per year, some such as solar increasing even more. (see attached document *Co-op America Utility Solar Study.pdf*

http://www.solarcatalyst.com/research.html). In addition, according to the U. S. Department of Energy's National Energy Renewable Energy laboratory(NREL), 'Customer choice programs are proving to be a powerful stimulus for growth in renewable energy supply. In 2007, total utility green power sales exceeded 4.5 billion kilowatt-hours (kWh), about a 20% increase over 2006.' Utility green pricing programs are one segment of a larger green power marketing industry that counts Fortune 500 companies, government agencies and colleges and universities among its customers... **In addition, the rate premium that customers pay for green power continues to drop.** (emphasis mine). http://www.nrel.gov/news/press/2008/348.html

As will be discussed in the Socioeconomic Effects section of this document, reduction in power bills will be of great benefit to Claiborne County, one of the poorest counties in Mississippi, and indeed to Mississippi, one of the lowest per capita income states in the U.S.

Also, distributed energy ' technologies are playing an increasingly important role in the nation's energy portfolio. **They can be used to meet base load power, peaking power, backup power, remote power, power quality, as well as cooling and heating needs.**' (emphasis mine) http://www.nrel.gov/learning/delivery_storage.html

III. Socioeconomic effects: As the price of nuclear energy continues to climb(Lovins attached document and also attached document *Price of Nuclear Saloncom.doc*), the cost of renewable sources of energy and energy efficiency continues to drop. Entergy has requested, and the Mississippi Legislature has passed, provisions to allow a rate hike to pay for the new plant construction, whether or not the GG3 facility is ever completed or put on-line. Claiborne County is one of the poorest counties in the state and this rate increase would cause economic hardship for many of its residents. It would also cause economic hardship for many other Entergy customers in various parts of Mississippi and other States in the service area. In addition Entergy has requested a 28 % rate increase because of higher Natural Gas prices, adding an additional burden to ratepayers.

At the same time Entergy is requesting rate increases, it has programs to help needy families pay utility bills. 'Across Entergy's four-state utility system, almost one-quarter of all households have incomes that fall below the poverty level.' Entergy has revenues of more than $10 billion, and the utility worked with others to help approximately 18,000 needy families and individuals with utility bills in 2007. (http://www.entergy-mississippi.com/news_room/newsrelease.aspx?NR_ID=275) The company acknowledges economic problems in Mississippi, yet requested a rate increase to build a facility that is not needed.

I am also concerned about the inadequate emergency planning and infrastructure in Claiborne County and beyond. Claiborne County's emergency planning infrastructure is too under-funded to deal with the present nuclear plant-let alone a new plant. There is not adequate money available to fund the Sheriff's Department, Civil Defense, Fire Department or hospital. No new reactors should be considered until these inadequacies have been remedied.

IV. Terrorist attacks

The fact that 10 CFR Part 52 states that 'an applicant for a license to manufacture, construct, and operate a utilization facility... is [not]required to provide for design features or other measures for the specific purpose of protection against the effects of — (a) Attacks and destructive acts, including sabotage, directed against the facility by an enemy of the United States, whether a

foreign government or other person' shows how biased this entire process is towards the utility companies. Not only should these safety features be considered, but the environmental impact statement should contain an evaluation of the effects of contamination of the Mississippi River resulting from a catastrophic accident or terrorist attach at the reactor site. Why would terrorists select this site when Port Gibson is not an area of economic significance like New York? Because of the site's proximity to the Mississippi River. An accident or act of sabotage at this facility and its stored nuclear waste could contaminate the Mississippi River and the Gulf of Mexico. Many communities downstream depend on the River for drinking water and the River is a major commercial transportation artery, used for shipping large amounts of cargo both upstream and downstream. In addition, the extensive industrial corridor between Baton Rouge and New Orleans depends on River water for processing. In the event of an accident, these industries might have to be shut down. Contamination of vital wetlands that provide nurseries for larval and other developmental stages of fish, for shrimp, oysters, etc., could devastate the seafood industry. Certainly the tourist industries in Florida, Mississippi, Louisiana, and Texas would be affected. Thus the economic consequences of a severe accident or attack could affect not only this region, but the entire country- just the type of effect that terrorists accomplished with 911 and would want to cause again. Because of these factors, another reactor at Port Gibson would greatly increase the likelihood of a terrorist attack. I am attaching a document presented by John Large at a United Nations Disarmament Forum on terrorism entitled *The Implications of 11 September for the Nuclear Industry* (http://www.unidir.org/bdd/fiche-article.php?ref_article=1910) (some of his credentials are as follows: 'He has published on the safety of nuclear systems, irradiated fuel and nuclear weapons transport, insurance, risks and risk management, on decommissioning of large-scale nuclear facilities, radioactive emissions and discharges, and the safety of nuclear reactor propulsion units at sea, as well as advised several governments on nuclear related issues') .

The 911 terrorists were considering an attack on a nuclear facility, therefore a terrorist attack and the resulting consequences should be considered as a Design Basis Threat (DBT) and should be included in the EIS.

V. Issues not considered and resolved in the ESP FEIS.

I quote from the ESP FEIS. 'The CP or COL applicant must address any other issue not considered and not resolved in the EIS for the ESP.' (ESP FEIS introduction, page 1-4) 'Moreover, pursuant to 10 CFR 51.70(b), the NRC is required to independently evaluate and be responsible for the reliability of all information used in an EIS prepared for a CP or COL application, and the staff may (1) inquire into the continued validity of information disclosed in an EIS for an ESP that is referenced in a COL application and (2) look for any new information that may affect the assumptions, analyses, or conclusions reached in the ESP EIS.' (ESP FEIS introduction, page 1-4, 1-5). Other stipulations are also required which I am sure NRC staff will follow diligently, including verification of all assumptions listed in Appendix J and also the need for power.

Please Note:
This is the url for the attached *Scientific American* Article.
http://www.sciam.com/article.cfm?id=a-solar-grand-plan&print=true