

June 10, 2011

# Friends of the Earth

U.S. Nuclear Regulatory Commission  
FOIA/Privacy Act Officer  
Mailstop: T-5 F09  
Washington, DC 20555-0001

FOIA/PA REQUEST

Case No.: 2011-0252  
Date Rec'd: 6-15-11  
Specialist: Dennis  
Related Case: \_\_\_\_\_

**FOIA Request for John Ma's Unredacted Version of "Dissenting View"  
on AP1000 Shield Building**

To Whom it Concerns:

This is a request being filed under the Freedom of Information Act (FOIA), as amended.

I am filing this request as a duly authorized employee of Friends of the Earth, a legally registered non-profit environmental organization, with which I hold the title Southeastern Nuclear Campaign Coordinator. All information gathered under this request will be used for non-profit, public education purposes only, both in South Carolina and nation-wide.

I request that all fees associated with this request be waived given the non-profit educational and scientific use which will be made of the information. My organization and I will disseminate the information obtained under this request to the benefit of public understanding of the Nuclear Regulatory Commission's review process for the AP1000 reactor and the ability of the AP1000 reactor withstand impacts and seismic events.

I and my organization have a long-demonstrated ability to analyze and disseminate information to the public on the various nuclear programs, for non-profit, public interest use and have been an intervenor in the combined operating license application of South Carolina Electric and Gas (SCE&G), which is based on the AP1000 design. We maintain a formal role in the AP1000 review process by commenting in the rulemaking issued on the AP1000 DCD Rev. 18 design. The requested documents in their unredacted form are thus an integral part of better public understanding of the NRCs review of the AP1000 reactor.

Besides filing this request for Friends of the Earth, I am also filing it in coordination with the non-profit public interest organization NC Waste Awareness and Reduction Network (NC WARN), which is also formally involved in various aspects of the AP1000 review before the NRC.

I have recently been provided fee waivers in other FOIA requests to the NRC, thus establishing a basis for a similar fee waiver determination in this case.

If the NRC maintains that the documents are in any way proprietary and will be withheld in response to this request, I expect a full justification be made for such a claim and that applicable FOIA exemptions, Council on Environmental Quality regulations, as well as other

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applicable regulations be cited. Any earlier determination by NRC staff as to the proprietary nature of the document must be reconsidered given this request.

I maintain the right to appeal any aspect of your decisions regarding this request, particularly if a less than full justification is made concerning a claim that the documents have any aspect that is claimed to be proprietary in nature.

The requested information which can be provided in printed form, via a CD or DVD, or via e-mail.

I request that the information be provided as it becomes available and that you do not wait until all the information is accumulated to provide it to me.

The NRC office to which this request applies is likely the Division of New Reactor Licensing in the Office of New Reactors.

So that you better understand the focus of this request, I am attaching two pages related to the document and the filing of the non-concurrence related to safety of the AP1000 reactor design.

**I hereby request the following documents, including any attachments:**

1. Unredacted and complete version of John Ma's "Safety Evaluation Report for AP1000 Shield Building," which was filed by Mr. Ma, Senior Structural Engineer, Engineering Division, NRO, under the NRC's non-concurrence process. The document may also be titled "Dissenting View on the AP1000 Shield Building Safety Evaluation Report With Respect to the Acceptance of Brittle Structural Module to be used for the Cylindrical Shield Building Wall."
2. Any subsequent documents, memos, or reports in any form on the AP1000 shield building filed by John Ma after the filing of the document named above.

Thank you very much for your timely attention to this FOIA request, which is important to public interest groups monitoring developments related to the ongoing review of the AP1000 reactor.

If you have further questions or want to discuss this request, please contact me at your convenience via telephone at 803-834-3084 or via e-mail at [tomclements329@cs.com](mailto:tomclements329@cs.com).

Sincerely,



Tom Clements

Southeastern Nuclear Campaign Coordinator

### NON-CONCURRENCE PROCESS

**SECTION A - TO BE COMPLETED BY NON-CONCURRING INDIVIDUAL**

TITLE OF DOCUMENT <b>Safety Evaluation Report for AP1000 Shield Building</b>	ADAMS ACCESSION NO. <b>ML102630229</b>
DOCUMENT SPONSOR <b>Thomas Bergman</b>	SPONSOR PHONE NO. <b>301-415-7192</b>
NAME OF NON-CONCURRING INDIVIDUAL <b>John S. Ma</b>	PHONE NO. <b>301-415-2732</b>

DOCUMENT AUTHOR       DOCUMENT CONTRIBUTOR       DOCUMENT REVIEWER       ON CONCURRENCE

TITLE <b>Senior Structural Engineer</b>	ORGANIZATION <b>NRO/DE/SEBI</b>
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**REASONS FOR NON-CONCURRENCE**

The staff's proposed safety evaluation of the AP1000 shield building does not provide reasonable assurance of structural integrity for design basis events.

The AP1000 shield building safety functions include shielding plant structures from impact loads, such as tornado missiles, protecting plant equipment during seismic events, similar to containment and shield structures in other reactor designs. The shield building additionally supports the passive containment cooling water storage tank (PCCWST), and defining the cooling flow path for passive containment cooling. These additional functions are very important to the passive safety design, and are unique to the AP1000.

NRC regulations, such as GDC 1, require that structures, systems, and components important to safety be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety functions to be performed.

NRC regulatory guidance endorses use of the American Concrete Institute (ACI) code for design of safety related structures at nuclear power plants. The ACI code is used as the basis for review of all other reinforced concrete structures, other than containment structures.

The applicant's design for AP1000 shield building does not fulfill key elements of the ACI code. Structural integrity cannot be assured for design basis events, because it has not been demonstrated that the building can absorb and dissipate energy imparted on the structure by an impact or seismic event. NRC staff acceptance of a design which does not fulfill the code would set a regulatory standard below that applied to other designs, in spite of the greater importance of the shield building to the AP1000 design.

Details of the basis for this position are described in the attached position papers:

- Enclosure 1 (ADAMS Accession # ML103020232)
- Enclosure 3 (ADAMS Accession # ML103081056)

CONTINUED IN SECTION D

SIGNATURE 	DATE <b>11/04/2010</b>
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**SUBMIT FORM TO DOCUMENT SPONSOR AND COPY TO YOUR IMMEDIATE SUPERVISOR AND DIFFERING VIEWS PROGRAM MANAGER**

**December 3, 2010**

**Enclosure 1**

**Redacted Version of Dissenting View on the AP1000 Shield Building Safety  
Evaluation Report With Respect to the Acceptance of Brittle Structural  
Module to be used for the Cylindrical Shield Building Wall**