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**Docket:** NRC-2010-0131  
AP1000 Design Certification Amendment

**Comment On:** NRC-2010-0131-0001  
AP1000 Design Certification Amendment

**Document:** NRC-2010-0131-DRAFT-0020  
Comment on FR Doc # 2011-03989

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## Submitter Information

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## General Comment

The AP1000 containment interior has an inorganic zinc coating. The DCD discusses the production of hydrogen caused by fuel damage, but does not go into detail on the hydrogen production caused by the interaction of zinc and steam to produce ZnO and H<sub>2</sub>. Given the recent events in Japan, is it possible to have a station black-out during full power operation lead to the activation of the automatic depressurization system, which fills containment with steam? Given that the hydrogen re-combiners are non-safety systems and we assume they don't work, will the steam/zinc coating interaction produce enough H<sub>2</sub> gas in containment to reach explosive levels between the time the Class 1E batteries can no longer operate the hydrogen ignition system (4 hours) and the 72 hour mark for safety system operation?

Template = SEL4-067

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## Rulemaking Comments

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**From:** Gallagher, Carol  
**Sent:** Wednesday, April 13, 2011 12:05 PM  
**To:** Rulemaking Comments  
**Subject:** Comment on Proposed Rule - AP1000 Design Certification Amendment  
**Attachments:** NRC-2010-0131-DRAFT-0020.pdf

Van,

Attached for docketing is a comment from an anonymous individual on the above noted proposed rule (3150-A181; 76 FR 10269) that I received via the regulations.gov website on 4/12/11.

Thanks,  
Carol