

## **PMLevyCOLPEm Resource**

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**From:** Tanya Simms  
**Sent:** Tuesday, May 26, 2009 10:51 AM  
**To:** 'robert.kitchen@pgnmail.com'; 'david.waters@pgnmail.com'; 'tillie.wilkins@pgnmail.com'  
**Cc:** Brian Anderson; PMLevyCOLPEm Resource  
**Subject:** Draft RAI 2827 Related to SRP Section 9.2.1 for Levy County Nuclear Plant, Units 1 and 2  
**Attachments:** RAI 2827 draft.doc

To All,

Attached is Draft RAI 2827 related to SRP Section 9.2.1 for Levy County Nuclear Plant, Units 1 and 2. If no response is heard by close of business May 29, 2009, the final RAI will be issued.

Tanya Simms  
Project Manager  
New Reactor Licensing  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, Maryland 20852-2738  
301-415-1387  
[tanya.simms@nrc.gov](mailto:tanya.simms@nrc.gov)

**Hearing Identifier:** Levy\_County\_COL\_Public  
**Email Number:** 157

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**Subject:** Draft RAI 2827 Related to SRP Section 9.2.1 for Levy County Nuclear Plant,  
Units 1 and 2  
**Sent Date:** 5/26/2009 10:50:56 AM  
**Received Date:** 5/26/2009 10:50:57 AM  
**From:** Tanya Simms  
**Created By:** Tanya.Simms@nrc.gov

**Recipients:**

"Brian Anderson" <Brian.Anderson@nrc.gov>  
Tracking Status: None  
"PMLevyCOLPEm Resource" <PMLevyCOLPEm.Resource@nrc.gov>  
Tracking Status: None  
"robert.kitchen@pgnmail.com" <robert.kitchen@pgnmail.com>  
Tracking Status: None  
"david.waters@pgnmail.com" <david.waters@pgnmail.com>  
Tracking Status: None  
"'tillie.wilkins@pgnmail.com'" <tillie.wilkins@pgnmail.com>  
Tracking Status: None

**Post Office:** HQCLSTR02.nrc.gov

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**Options**

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Request for Additional Information No. 2827 Revision 0  
Levy County, Units 1 and 2  
Progress Energy Florida, Inc.  
Docket No. 52-029 and 52-030  
SRP Section: 09.02.01 - Station Service Water System  
Application Section: 9.2.1- Service Water System

QUESTION from Balance of Plant Branch 1 (SBPA)

09.02.01-\*\*\*

The cooling capability of the service water system (SWS) mechanical draft cooling towers for the Levy units can be adversely affected by interactions that exist between the SWS two mechanical draft cooling towers between units. In addition, interactions between cooling towers (circulating water system (CWS) versus service water system) may adversely affect the cooling capacity of the SWS. Because Levy is utilizing mechanical induced-draft towers for the circulating water system versus natural draft cooling towers as submitted by other COL applicants, interactions on the SWS cooling towers is now more likely due to the difference in height of the discharge plume. Adverse interactions can occur due to localized atmospheric influences caused by siting considerations, the locations of major structures, the locations of the mechanical draft cooling towers, mechanical draft cooling tower fan speed, and wind effects. Because the AP1000 utilizes only one SWS mechanical draft cooling tower in its design, interaction effects between the mechanical draft cooling towers of multi-unit sites was not evaluated by the staff for the AP1000. Therefore, additional information is needed to address potential adverse interactions between the Levy mechanical draft SWS cooling towers and mechanical draft CWS cooling towers for the two Levy units.