

## PMLevyCOLPEm Resource

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**From:** Tanya Simms  
**Sent:** Monday, May 11, 2009 11:53 AM  
**To:** 'robert.kitchen@pgnmail.com'; 'david.waters@pgnmail.com'; 'tillie.wilkins@pgnmail.com'  
**Cc:** Brian Anderson; PMLevyCOLPEm Resource  
**Subject:** Draft RAI 2485 Related to SRP Section 8.2 for Levy County Nuclear Plant, Units 1 and 2  
**Attachments:** RAI 2485 draft.doc

To All,

Attached is Draft RAI 2485 related to SRP Section 8.2 for Levy County Nuclear Plant, Units 1 and 2. If no response is heard by close of business May 14, 2009, the final RAI will be issued.

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**Hearing Identifier:** Levy\_County\_COL\_Public  
**Email Number:** 117

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**Subject:** Draft RAI 2485 Related to SRP Section 8.2 for Levy County Nuclear Plant,  
Units 1 and 2  
**Sent Date:** 5/11/2009 11:53:21 AM  
**Received Date:** 5/11/2009 11:53:21 AM  
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Request for Additional Information No. 2485 Revision 0  
Levy County, Units 1 and 2  
Progress Energy Florida, Inc.  
Docket No. 52-029 and 52-030  
SRP Section: 08.02 - Offsite Power System  
Application Section: 8.2

QUESTIONS for Electrical Engineering Branch (EEB)

08.02-\*\*\*

RAI-SRP 8.2-EEB-01

FSAR Section 8.2.1.1.1 describes that the ratings for the 500 kV and 230 kV circuit breakers associated with the LNP 1 and LNP 2 are rated at 3000A, with interrupting capability of 50,000 amperes RMS. This Section further describes the rating for the switchyard disconnect switches. Please provide details of why the ratings for circuit breakers and disconnect switches in the switchyard are adequate for the application.

08.02-\*\*\*

RAI-SRP 8.2-EEB-02

FSAR Section 8.2.1.4 describes switchyard and transmission line testing and inspections. In order for the staff to complete its review, please indicate the extent to which maintenance and modifications to the switchyard and substation will be reviewed, controlled, and approved through the LNP testing and inspection process.

08.02-\*\*\*

RAI-SRP 8.2-EEB-03

FSAR Section 8.2.1.4 states that the plant transmission activities coordinator (PTAC) serves as a liaison regarding transmission system interfaces between the nuclear plant organizations and other organizations. In order for the staff to complete its review, please indicate how the information from the PTAC is shared among the LNP units.

08.02-\*\*\*

RAI-SRP 8.2-EEB-07

FSAR Section 8.2.2 states that the “transmission study has confirmed that the interface requirements for steady state load, nominal voltage, allowable voltage regulation, nominal frequency, allowable frequency fluctuation, maximum frequency decay rate, and the limiting under frequency value for the RCP have been met.” Please provide the summary of the grid stability analysis results, the assumptions made, and the acceptance criteria for each case analyzed. Additionally, please, provide the nominal frequency, allowable frequency fluctuation, maximum frequency decay rate, and the limiting under frequency values used for the RCP in the analysis.

08.02-\*\*\*

RAI-SRP 8.2-EEB-08

The LNP FSAR is not clear regarding the routing of power, control, and instrument cables from the switchyard to the reserve auxiliary transformers. If the routing of the cables is underground, please describe the cables' design features and the monitoring program that will be implemented to avoid or arrest the degradation of cable insulation from the effects of moisture.

08.02-\*\*\*

RAI-SRP 8.2-EEB-04

FSAR Section 8.2.2 states that, "in order to maintain Reactor Coolant Pump operation for three seconds following a turbine trip ..., the grid voltage at the high side of the main step-up and reserve auxiliary transformers cannot drop from the pre-trip steady-state value by more than 15 percent of the rated voltage." Please indicate the estimated minimum pre-trip steady-state voltage at the transformers, whether this was used in the analysis, and whether a system disturbance would meet the 15 percent requirement.