

9 Twin Orchard Drive
Oswego, NY 13126
June 25, 2006

Mr. John P. Boska
Project Manager, NRR
US NRC
Washington, DC 20555-0001

Dear Mr. John P. Boska:

I do not think that Entergy/FitzPatrick has the recommended number of cells in their 419 volt LPCI batteries. (They have 186 cells).

I am reading this recommendation:

“The nominal voltage of a lead-acid cell is 2.0 Vdc and the number of cells used for the dc system is half the nominal system voltage (e.g. 24 cells for a 48-Vdc system). Similarly, 60 and 120 cells are normally used for 125- and 250-Vdc systems. This number is by no means fixed and may vary based upon system maximum or minimum voltages.”

If you call the LPCI battery a nominal 420 volts, they are about 24 cells short.

The reference is: “Considerations for Selecting and Sizing Batteries” by Marco W. Migliaro. IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS VOL IA-23, NO.1, JANUARY/FEBRUARY 1987. I found it in Section 3 of the “Sourcebook on Lead-Acid Batteries” published by IEEE STANDARDS PRESS in 1992.

Could you have somebody check that they have the right number of cells for the LPCI service?

Very truly yours,


Tom Gurdziel