

November 10, 2009

Telephone call to:

Dr. Frank Pazzaglia, Chair, Dept. of Earth and Environmental Sciences

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Telephone: 610-758-3667

NRC Geologist Alice Stieve conducted a telephone interview with Dr. Frank Pazzaglia regarding Dr. Pazzaglia's interpretation of a fault (un-named) beneath northern Chesapeake Bay, in Pazzaglia, 1993, Stratigraphy, petrography, and correlation of late Cenozoic middle Atlantic Coastal Plain deposits: Implications for late-stage passive-margin geologic evolution, Geological Society of America Bulletin, v. 105, pp. 1617-1634. Pazzaglia interprets a fault through northern Chesapeake Bay (CB) based on 8 meters of elevation difference (interpreted as faulting) on Turkey Point beds on the east and west side of CB. Turkey Point beds are approximately 113 km (70 miles) from the proposed Calvert Cliffs Nuclear Plant Unit 3 site.

A vital piece of information from this conversation was that Dr. Pazzaglia did not have specific elevations at the three locations he examined Turkey Point beds and he examined only one location on the west side of the fault. He also stated that there may be original depositional relief on the base of Turkey Point beds that could account for the elevation difference between the eastern and the western field sites. His field research was focused on chronostratigraphic correlations between Fall Zone and Coastal Plain deposits and not about examining structural evidence for a particular fault.

There is no follow-on action associated with this telephone call. It was an independent review by NRC staff of an author's field research.

Pazzaglia's interpretation was a topic of 3 requests for additional information (RAIs), RAI 71, Question 02.05.01-19, RAI 130, Question 02.05.01-48, and RAI 219, Question 02.05.01-67) to the CCNPP COL applicant which have been resolved at this point (1/24/2011).