## **Bauer**, Laurel

From: Sent: To: Cc: Subject: Karas, Rebecca –  $N^{\sqrt{2-G}}$ Friday, January 29, 2010 9:26 AM Bauer, Laurel; Li, Yong; Munson, Clifford Stieve, Alice RE: Revised LC wording for review

Thanks, Laurel. Yes, it should be more than the North Anna permit condition. The reason is that for an ESP, we haven't granted an operating license, so you don't need as much detail on what to do if they find something because we still could hold back the license. But, for a COL, we need the types of things you have regarding the requirement to do the mapping and to evaluate any features they find to make sure they are not capable faults. Jerry Wilson could probably help you on wording. So, Alice, your RAI to Calvert should identify they need to commit not only to notifying us but to doing mapping and evaluating any potentially capable features and notifying us if they find anything.

From: Bauer, Laurel Sent: Wednesday, January 27, 2010 10:27 AM To: Karas, Rebecca; Li, Yong; Munson, Clifford Subject: Revised LC wording for review

I revised the wording from what I sent you yesterday to include deformation features other than faults. I realize that this is probably WAY too long (based on wording for the North Anna PC, below) but hopefully you have some guidance on what does not need to be there.

The NRC staff proposes to include a condition in any COL that might be issued in connection with this application requiring the COL holder to (1) perform geologic mapping and evaluation of any future excavations for safety-related structures, (2) demonstrate that deformation features discovered during excavation and construction (particularly faults, cavities, or other features of engineering significance) do not have the potential to compromise the safety of the plant, and (3) notify the NRC staff when excavations are open for inspection.

If, during geologic mapping of the walls and floors of site excavations, the applicant identifies evidence for potentially capable tectonic faulting, such as (but not limited to) an offset marker horizon, a confined zone of increased fracturing, monoclinal or soft sedimentary folding, a zone of cataclasis, or liquefaction features, the applicant shall notify the NRC. In addition, the applicant will evaluate whether the field evidence is indicative of capable faulting by doing a detailed analysis of the geologic features to include at a minimum: (1) additional trenching, (2) photographing and logging of features, and (3) determining the age of offset or deformation. The applicant shall document all of its findings in a report that includes detailed geologic maps and logs, documentation of the evidence used to determine whether or not a feature indicates capable tectonic faulting, and whether or not a feature poses a significant decrease in the factor of safety, or adversely affects the PSHA for the site.

## North Anna PC:

If the ESP holder performs an excavation for a safety-related structure, the ESP holder shall perform geologic mapping of such excavation, evaluate any unforeseen geologic features that are encountered, and notify the NRC no later than 30 days before any such excavation is open for NRC examination and evaluation. An applicant for a CP or COL referencing this ESP shall perform geologic mapping of any excavation for a safety-related structure, evaluate any unforeseen geologic features that are encountered, and notify the NRC no later than 30 days before any such excavation is open for NRC examination and evaluation.