**Santos, Cayetano**

**From:** (b)(6)
**Sent:** Monday, June 28, 2010 9:23 PM
**To:** (b)(6) Nourbakhsh, Hossein; Santos, Cayetano
**Subject:** Consultant's Report on SOARCA
**Attachments:** Consultant's Report on the SOARCA June 21, 2010 Meeting.doc

My consultant's report on the SOARCA subcommittee meeting is attached.
Tom Kress





D/7

June 26, 2010

# Consultant's Report on the SOARCA Subcommittee Meeting June 21, 2010

T. S. Kress

## Background

The purpose of this meeting was to brief the subcommittee on the current status and direction of the SOACRA project. I have the following comments on this meeting.

## Comments

1. The staff ought not communicate the results as having risk implications. They should stay with the original objective of making the project a consequence determination.

2. A source of some criticism of the project has been that the assessed consequences do not include PRA sequences that have CDF contributions of $10^{-6}$/yr or less. I think restricting the assessed consequences by using this "cut-off" value is a reasonable approach. I would be tempted to defend it as having excluded only sequences that would have such low frequency that they would never be expected to occur during a reasonable lifetime for the existing fleet of U.S. plants.

3. I believe the white paper by Hossein Nourbakhsh provides sufficient benchmarking of the assessed consequences that a Level-3 benchmarking, while useful, is not necessary.

4. I would liked to have seen the consequences include societal impacts (i.e. overall costs associated with the consequences).

5. The assessment of potential mitigation measures was a good and useful part of the project. I would like to have seen a listing of all the mitigation measures available to the fleet of plants.

6. I agree with the ACRS position that seismic sequence ER needs to include impacts on the surrounding infrastructure and how it might affect evacuation.

7. With respect to uncertainty assessment, I would focus strictly on the selected SOARCA sequences.

8. I think the knowledge and insights gained from this project ought to make their way into current plant PRAs and SPAR models.

9. It is not important to assess sites as dual unit sites. The consequences would at most double.

10. Similarly to 9, neglect of shutdown and low-power sequences should not greatly invalidate the results.

11. The study result reflect improvements in source terms and accident phenomenology. These improvements should be listed and discussed in the report.

12. On the issue of dose response models, it appears that there was not a lot of difference in the results for the four different models assumed. They might as well focus on LNT.