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**Date:** 8/5/04 4:24PM  
**Subject:** Additional Questions for Monday's Call

Attached are the additional questions from the CNWRA. If you have trouble with the WordPerfect file, let me know and I will resend in a different format. If you have any questions, please let me know.

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### **Additional Questions and Comments**

1. Confirm that the faulting recently discovered at WCS site is not active.
2. The PGA estimated at the National Enrichment Facility site from the 1992 magnitude 5.0 earthquake appears to be more than the PGA estimated from the seismic hazard calculations (refer to Figure 3.2-27).
3. Section 3.2.6.4.1 states that the Nuttli, 1973 (WIPP attenuation model), Nuttli, 1986, and Toro, 1997 attenuation equations are used in the seismic hazard calculations. Results are only shown for the Toro, 1997 and Nuttli, 1973 attenuation models (refer to Table 3.2-29). Why aren't any results shown for the Nuttli, 1986, attenuation model (which is the most conservative model)?
4. Was a background seismicity model used in the hazard calculations?
5. Do the individual curves in Figure 3.2-29 represent the total hazard (i.e., the sum of both local and distant source zones for the particular combination of seismic source zones, attenuation models, b-values and upper bound magnitudes)?
6. Figure 3.2-29 shows an additional curve for the Rio Grande Rift Source zone. Was this curve considered in the development of the weighted average hazard result?
7. What weighting scheme was used to obtain the hazard result? How was the weighting scheme determined? Why isn't the most conservative hazard curve used instead (refer to Figure 3.2-29)? The most conservative hazard curve appears to correspond to a maximum magnitude of 6.5 (M<sub>x</sub> 6.5) for the 1931 Valentine earthquake. The maximum magnitude estimated for the 1931 Valentine earthquake is between 6.0 and 6.4.
8. The 10,000 year return period peak horizontal ground acceleration is estimated at 0.15 g. Based on the most conservative hazard curve in Figure 3.2-29 as well as the maximum peak ground acceleration produced at the site by the 1992, magnitude 5.0 earthquake, this PGA appears to be too low.
9. Is the shape of the uniform hazard spectra in Figures 3.2-21 and 3.2-32 a simplified version of the original uniform hazard spectra. Does it envelope the original uniform hazard spectra?
10. How were the impact velocities with the tornado-generated missiles determined? The "Assessment of Tornado, Tornado Missiles and High Wind Loads at NEF for ISA and Design Basis" report does not provide this information.
11. Where is the high pressure CO<sub>2</sub> pipeline going to be relocated?
12. What will be the effect of this relocated pipeline to the facility?
13. If the relocated CO<sub>2</sub> pipeline is going to go in the same place as the sour gas pipeline, how will the likelihood of explosion be affected?
14. Will the size of the pipeline have an effect on explosion intensity?