FCPA/PPD review of Solid Xenon R&D Initiative at Fermilab

The committee is charged with reviewing the progress of the R&D effort to grow solid Xenon crystals and the proposal to develop methods for collecting ionization and scintillation light generated in such crystals by particle interactions. Specifically, we would like the committee to evaluate:

- 1. Science one can accomplish with Solid Xenon crystals
 - a) Is the science case strong and aligned with Fermilab goals?
 - b) Does this effort have a reasonable chance to achieve these science goals?
 - c) What role will Fermilab have in this effort?
- 2. Progress in growing solid Xenon crystals
 - a) Evaluate information on the size and quality of crystals grown to date
- b) Assess the prospects for growing larger crystals in the future, with upgrades to the apparatus
- c) What resources were used and what is still needed (both FTE/SWF and M&S)?
- 3. Assess the proposals to readout charge and light from solid Xenon crystals
 - a) Do these proposals make sense technically?
 - b) Is the proposed schedule and budget reasonable?
 - c) What is the science and technical manpower required?
 - c) Is this R&D effort likely to result in a science experiment?

We ask that the committee provide a written report, with comments, findings and recommendations to FCPA and PPD within one week after the March 11 review.