

## ANNOUNCEMENT

### Seven-Story Building-Slice Earthquake Blind Prediction Contest

The School of Engineering at the University of California at San Diego (UCSD), the Portland Cement Association (PCA) of Skokie, IL., and the NEES Consortium Inc. (NEESinc) are pleased to announce a blind prediction contest. The contest is open to teams from the practicing structural engineering community, the academic and research community (including graduate students), and the undergraduate engineering student community (with graduate student or faculty advisors).

Between October of 2005 and January 2006, a full-scale vertical slice of a seven-story reinforced concrete wall building was subjected to increasing intensity of uniaxial earthquake ground motions on the new NEES Large High-Performance Outdoor Shake Table located at UCSD's Engelkirk Structural Engineering Center. Responses were measured using an extensive instrumentation array, and all results have been archived for future release. The largest input motion was the Sylmar Medical Facility free-field record obtained in the 1994 Northridge Earthquake, which is one of the strongest recorded motions from that event and includes some near-fault ground-motion characteristics. The building slice was designed using a displacement-based and capacity approach for a site in Los Angeles that resulted in design lateral forces that are significantly smaller than those currently specified in building codes used in the United States.



The prediction contest will be “blind” and compare analytical response “predictions” with those measured during experimental testing. All predictions are **due on May 15, 2006**. There will be three categories of winners and PCA will award a \$2500 prize to each winning team. Details regarding the contest rules, the structure, and the ground motions can be found at <<http://nees.ucsd.edu/7Story.html>>. NEESinc will also reimburse a representative of the winning team from each of three award categories allowable travel expenses to attend the NEES Annual Meeting that will be held in Washington D.C. June 21-23, 2006 <<http://www.nees.org/4am/>>.

In addition, all entries will be compiled and compared at a technical session at the NEES Annual Meeting and NEESinc will reimburse Annual Meeting registration fees for a representative from up to eight teams in each of the three categories (practitioner, academic and research including grad students, and undergraduate students) who submit a complete prediction by the May 15 deadline. While names and affiliations of all participating teams will be identified, results will be presented anonymously (unlabeled), except for those of the “winning” entries from each contestant category. The technical session at the NEES Annual Meeting will focus on relevant lessons learned regarding modeling uncertainty, practical needs for improved simulation capabilities or training, and the merits of large-scale testing.