PROPOSAL IT1-3 (2009)

SCOPE: Part 1 Exceptions to ASCE 7-05 Sec 11.1.4

PROPOSAL FOR CHANGE:

Rearrange 11.1.4.1, add new Sec 11.1.4.2

11.1.4 Alternate materials, design, and methods of construction.

11.1.4.1 General. The provisions of this standard are not intended to prevent the use of any material, alternate design method, or alternate method of construction not specifically prescribed, provided that any such alternate has been approved and its use authorized by the authority having jurisdiction. The authority having jurisdiction may approve any such alternate, provided that the authority finds that the alternate is satisfactory and complies with the intent of the provisions of this standard, and that the alternate is, for the purpose intended, at least the equivalent of that prescribed in this standard in suitability, effectiveness, durability, and seismic resistance.

11.1.4.2 Approval of proposals under Sec 11.1.4. *Nothing in this section shall limit the ability of the authority having jurisdiction to develop general requirements for proposals under Sec 11.1.4 or specific requirements for particular components or systems. In the absence of such criteria, the approval process shall include the following.*

11.1.4.2.1 Peer Review*. Peer review of the initial submittal, final design, and construction documents.*

11.1.4.2.2 Preliminary Submittal*. A submittal of a detailed description and if applicable, design criteria for the alternate material or method, for approval by the authority having jurisdiction prior to application for a building permit.*

11.1.4.2.3 Structural Design Criteria. *For complete seismic force resisting systems, a structural design criteria based on one of the following:*

1. The performance based design procedures for the applicable Occupancy Category described in the International Code Council Performance Code, 2006.

2. Nonlinear procedures described in ASCE/SEI 41-06 Seismic Rehabilitation of Existing Buildings, using a primary performance objective of Collapse Prevention for the MCE, and a secondary performance objective for serviceability to be defined in the design criteria.

3. The probabilistic, nonlinear analysis methods of ATC 63, "Recommended Methodology for Quantification of Building System Performance and Response Parameters," indicating a less than 10 percent probability of structural collapse for MCE ground motions. [Note: ATC 63 is not yet published but the methodology is completed; the proper reference will be inserted when available]

11.1.4.2.4. Nonstructural Design Criteria*. For seismic protection of nonstructural components not part of a designated seismic systems, the design shall demonstrate that the components and systems are capable of remaining secured to the structure and will not generate life-threatening debris under Design Earthquake Ground Motion. For designated seismic systems and components of such systems, the design shall demonstrate that the components and systems will be capable of remaining functional following design level shaking. The procedures of Sec. 13.2.5 and 13.2.6 may be applied as satisfactory fulfillment of these requirements.*

REASON FOR PROPOSAL:

To provide guidance to authorities having jurisdiction on acceptable approval processes.

IT1 VOTE:

5 Y, 0 YR, 0 N