STATE OF CALIFORNIA
STATE AND CONSUMER SERVICES AGENCY
CALIFORNIA BUILDING STANDARDS COMMISSION
2525 NATOMAS PARK DR., SUITE 130
SACRAMENTO, CA 95833
(916) 263-0916 Phone
(916) 263-0959 Fax
Email: cbsc@dgs.ca.gov

Office Use Item No. _____

PARTICIPATION COMMENTS FOR THE NOTICE DATED AUGUST 31, 2012
Written comments are to be sent to the above address.

WRITTEN COMMENT DEADLINE: OCTOBER 15, 2012

Date: 10/3/2012

From:

Ryan Huxley, CE 59763, SE 4798 — Ryan Huxley
Name (Print or type) — (Signature)

-- Individual
Agency, jurisdiction, chapter, company, association, individual, etc.

10466 Yellow Rose Lane	San Diego	CA	92127
Street	City	State	Zip

I/We (do) (do not) agree with:

[X] The Agency proposed modifications As Submitted on Section No. ___1616A.1.16_____

and request that this section or reference provision be recommended:

[ ] Approved [ ] Disapproved [ ] Held for Further Study [X] Approved as Amended

Suggested Revisions to the Text of the Regulations:

Modify the currently proposed 1616A.1.16 as follows:
1616A.1.16 ASCE 7, Section 12.13.1. Modify ASCE 7 Section 12.13.1 by adding Section 12.13.1.1 as follows:
12.13.1.1 Foundations and superstructure-to-foundation connections. The foundation shall be capable of transmitting the design base shear and the overturning forces from the structure into the supporting soil. Stability against ~~overturning and~~ sliding shall be in accordance with Section 1605A.1.1.
In addition, the foundation, ~~and~~ the connection of the superstructure elements to the foundation, *and overturning stability at the structure-soil interface* shall have the strength to resist, in addition to gravity loads, the lesser of the following seismic loads: (rest unchanged, except as noted below)

1. The strength of the superstructure elements
2. The maximum forces that would occur in the fully yielded structural system
3. Forces from the Load Combinations with overstrength factor in accordance with ASCE 7 Section 12.4.3.2

Exceptions:
1. Where referenced standards specify the use of higher design loads.

2. When it can be demonstrated that inelastic deformation of the foundation and superstructure-to foundation connection will not result in a weak story or cause collapse of the structure.
3. Where basic structural system consists of light-framed walls with shear panels, unless the reference standard specifies the use of higher design loads. [comment - keep this amendment unchanged.]
4. Overturning stability at the structure-soil interface may be designed in accordance with Section 1605A.1.1 where it can be demonstrated that the ratio between the largest to the least overturning factor of safety for all vertical seismic force-resisting element foundations is less than 1.2.

Where the computation of the seismic overturning moment is by the equivalent lateral-force method or the modal analysis method, reduction in overturning moment permitted by Section 12.13.4 of ASCE 7 may be used.

Where moment resistance is assumed at the base of the superstructure elements, the rotation and flexural deformation of the foundation as well as deformation of the superstructure-to-foundation connection shall be considered in the drift and deformation compatibility analyses.

Reason: [The reason should be concise if the request is for "Disapproval," "Further Study," or "Approve As Amend" and identify at least one of the 9-point criteria (following) of Health and Safety Code §18930.]

An underlying assumption about the structural inelastic seismic response is that the inelastic deflections will be an amplification of the elastic analysis and design, even if rocking occurs. However, in structures with rigid or semi-rigid diaphragms having configurations with substantially different overturning factors of safety at lateral lines of resistance, a redistribution of seismic forces will occur. In other words, when one vertical lateral resisting element rocks well before other lines of resistance, redistribution occurs due to limited capacity of rocking elements. This may lead to diaphragm and/or collector failures. Furthermore, an undesirable torsional response may result from rocking occurring at some frame lines but not others. The 1.2 limit is consistent with torsional irregularity concerns captured by Table 12.3-1.

The following criteria in the Health & Safety Code Section 18930(a) apply to this proposed revision: 1 and 3 (see below for further information).

HEALTH & SAFETY CODE SECTION 18930

SECTION 18930. APPROVAL OR ADOPTION OF BUILDING STANDARDS; ANALYSIS AND CRITERIA; REVIEW CONSIDERATIONS; FACTUAL DETERMINATIONS

(a) Any building standard adopted or proposed by state agencies shall be submitted to, and approved or adopted by, the California Building Standards Commission prior to codification. Prior to submission to the commission, building standards shall be adopted in compliance with the procedures specified in Article 5 (commencing with Section 11346) of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code. Building standards adopted by state agencies and submitted to the commission for approval shall be accompanied by an analysis written by the adopting agency or state agency that proposes the building standards which shall, to the satisfaction of the commission, justify the approval thereof in terms of the following criteria:

(1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.
(2) The proposed building standard is within the parameters established by enabling legislation and is not expressly within the exclusive jurisdiction of another agency.
(3) The public interest requires the adoption of the building standards.
(4) The proposed building standard is not unreasonable, arbitrary, unfair, or capricious, in whole or in part.
(5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.
(6) The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.
(7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.
    (A) If a national specification, published standard, or model code does not adequately address the goals of the state agency, a statement defining the inadequacy shall accompany the proposed building standard when submitted to the commission.
    (B) If there is no national specification, published standard, or model code that is relevant to the proposed building standard, the state agency shall prepare a statement informing the commission and submit that statement with the proposed building standard.
(8) The format of the proposed building standards is consistent with that adopted by the commission.
(9) The proposed building standard, if it promotes fire and panic safety as determined by the State Fire Marshal, has the written approval of the State Fire Marshal.