SCOPE: Adopt Chapters 11-23 of ASCE 7-10 as the basis of the 2014 NEHRP Provisions. This proposal includes only language from the Standard.

PROPOSAL FOR CHANGE:

The proposed change is to adopt by reference ASCE/SEI 7-10, Minimum Design Loads for Buildings and Other Structures, Ch. 11-23, as the basis for the 2014 Edition of the NEHRP Recommended Seismic Provisions.

Note: The standard has not been provided here as an attachment because it is available through ASCE/SEI.

REASON FOR PROPOSAL:

Under the terms of BSSC’s contract with the Federal Emergency Management Agency (FEMA) for the development of the 2014 NEHRP Recommended Seismic Provisions, the 2014 Provisions Update Committee is charged to update and revise the Provisions to the maximum extent practical, and to adopt design procedures and requirements by reference to ASCE 7-10 and its referenced standards therein if appropriate. This proposal is to adopt the ASCE 7-10 seismic chapters (Ch. 11-23) in their entirety for the 2014 Provisions. This is consistent with a previous update of the Provisions and represents the culmination of changes that have occurred since the inception of the BSSC/PUC’s Provision updating process.

Early editions of the Provisions contained complete design procedures as well as extensive material detailing requirements. As the individual materials industries adopted seismic design requirements into their design standards (e.g. ACI 318, AISC Seismic Provisions) these requirements were deleted from the Provisions and standards were adopted by reference, sometimes with modifications. Now that ASCE-7 has developed a large and competent seismic task committee, it is time for the NEHRP Provisions to directly adopt the general design procedures for buildings as well as those for non-building structures and components by referencing ASCE-7. By doing so, BSSC/PUC and its working groups will not be burdened with the maintenance of code-like language. It also allows the BSSC/PUC to reestablish the Provisions as the venue in which new procedures and technologies for seismic design can be debated, evaluated, developed, and placed into implementable format for the design-practicing community.

Since the 2009 NEHRP Provisions adopted ASCE 7-05 by reference, a detailed comparison of the technical differences between the 2009 Provisions (ASCE 7-05 plus the exceptions and modifications adopted by the Provisions) and ASCE 7-10 and its referenced standards is provided as a separate attachment to this proposal.

It is expected that, like the 2009 Provisions, the 2014 Provisions will have three parts:
• PART 1 - the charging language requiring the use of ASCE 7-10 and the standards it referenced therein and BSSC-approved modifications and additions to ASCE 7-10
• PART 2 - the modifications and additions to the commentary of ASCE 7-10
• PART 3 - new procedures, technologies and systems for use by professionals on provisional basis but not yet available in standards and building codes