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**HOSPITAL BUILDING SAFETY BOARD  
Structural and Nonstructural Regulations Committee**

**Wednesday, March 6, 2024  
10:00 a.m. – 4:00 p.m.**

**Teleconference Meeting Access:  
HBSB Teams SNSR Committee  
Access Code: 574-538-426**

**Committee Members Present**

Farzad Naeim, Vice Chair  
Cody Bartley  
Michael Davis  
Teresa Endres  
Martin Hudson  
Jennifer Thornburg

**HCAI Staff Present**

Chris Tokas, OSHPD Deputy Director  
Richard Tannahill  
Roy Lobo  
Mia Marvelli  
Carl Scheuerman  
Ali Sumer  
John Gray

**Consulting Member Present**

Mark Hershberg

**HBSB Staff Present**

Veronica Yuke, Acting Executive Director  
Marcus Palmer  
Evet Torres

- 1 **1. Call to Order and Welcome**
- 2 **Facilitator:** Farzad Naeim, Ph.D., P.E., S.E.; Committee Vice-Chair
- 3 Mr. Naeim called the meeting to order at 10:00 a.m., welcomed everyone on behalf of
- 4 Jim Malley, and transitioned to roll call and meeting advisories with Veronica Yuke.
- 5
- 6 **2. Roll Call and Meeting Advisories/Expectations**
- 7 **Facilitator:** Veronica Yuke, Acting Executive Director

1 Ms. Yuke conducted the roll call, confirmed a quorum with more than five council  
2 members present, and outlined the rules of engagement and voting procedures for the  
3 Structural and Nonstructural Regulations Committee meeting.

### 4 **3. Triennial Code Cycle update and timelines**

5 **Facilitator:** Mia Marvelli, Architect, Supervisor; HCAI

6 Ms. Marvelli provided an update on the 2025 Title 24 code packages submission  
7 process for the triennial code cycle, highlighting key deadlines, including the final  
8 submission to the Building Standards Commission by May 3, 2024, and outlined the  
9 adoption process for the 2024 International Building Code (IBC) and International  
10 Existing Building Code (IEBC) with amendments. She emphasized the importance of  
11 the upcoming Building Standards Commission meetings and the role of code advisory  
12 committees in reviewing and providing technical feedback on the code packages, with  
13 final regulations to be adopted by January 1, 2026.

14

### 15 **4. Proposed continued amendments for risk category designation of Skilled** 16 **Nursing and Acute Psychiatric Facilities**

17 OSHPD proposes not to adopt model code change to Table 1604.5, Risk Category  
18 of Buildings and Other Structures. Model code revised the risk category for all I-2  
19 occupancies to Risk Category IV which may have conflicts with State law and a  
20 significant cost of compliance impact to skilled nursing and acute psychiatric  
21 facilities.

22 **Facilitator:** Chris Tokas, S.E., F. SEAOC, C.B.O., Deputy Director; HCAI

23 Mr. Tokas discussed the implications of adopting the 2024 IBC change that would  
24 categorize all Group I-2 occupancies, including skilled nursing and acute psychiatric  
25 facilities, into Risk Category IV, emphasizing the conflict with state law, significant  
26 compliance costs, and the established effective emergency preparedness and design  
27 standards in California. He highlighted California's advanced building code enforcement  
28 and quality assurance practices, ensuring the safety and functionality of healthcare  
29 facilities, and concluded with a decision to maintain the current risk category  
30 designations in the 2025 CBC based on these considerations.

### 31 **Committee Comments**

- 32 • Mr. Naeim commended Mr. Tokas for the informative presentation and critiqued the  
33 national code's feasibility for California, especially the significant underestimation of  
34 costs associated with moving from Risk Category II to IV.
- 35 • Martin Hudson inquired about the impact of not adopting the model code change on  
36 community resilience, specifically regarding the economic and operational roles of  
37 healthcare facilities in communities. Mr. Tokas highlighted California's proactive  
38 measures in building design for resilience and ductility, detailed strategies to ensure

1 healthcare facilities remain operational post-disaster, and reaffirmed California's  
2 leadership in code development for healthcare facility safety and resilience.

- 3 • Jennifer Thornburg expressed appreciation for Mr. Tokas' explanation but raised  
4 concerns about adherence to the Health and Safety Code requirement to follow the  
5 model code, urging a stronger emphasis on how California's approach aligns with  
6 health and safety objectives. Mr. Tokas agreed, acknowledging the importance of  
7 demonstrating compliance with health and safety regulations.

#### 8 **Public Comment**

- 9 • A public member asked about distinctions for subacute beds. Mr. Tokas responded  
10 that subacute beds in skilled nursing facilities have extra resiliency requirements,  
11 including emergency power and design features to support patients.
- 12 • Another public member highlighted the high cost of building in California,  
13 emphasizing the significant impact of code changes on construction costs, especially  
14 for healthcare facilities. She noted concerns over a potential 20% increase in  
15 seismic load requirements leading to construction cost increases well beyond 2%,  
16 which could deter the development of new healthcare facilities and impact patient  
17 care in acute hospitals.

#### 18 19 **MOTION: [Davis/Endres]**

20 The committee unanimously approved a motion to endorse the presentation to keep the  
21 risk categories as outlined in the current 2022 California Building Code by the Office of  
22 Statewide Hospital Planning and Development (OSHPD).

#### 23 24 **5. Proposed amendments to the 2025 California Building Code (CBC), Title 24,** 25 **Part 1**

26 **Facilitator:** Ali Sumer, Ph.D., S.E., Supervisor; HCAI

27 Mr. Sumer discussed proposed amendments to the 2025 CBC, Title 24, Part 1, primarily  
28 focusing on Chapter 6, with an emphasis on editorial revisions and clarifications to  
29 streamline the code and enhance its applicability.

30 Key changes to Chapter 6 include:

- 31 • **Deletion of Extension for Administrative Extensions:** Removed the provision for  
32 an extension not to exceed two years, as it is now irrelevant.
- 33 • **Corrections to Section Numbers:** Aimed at improving navigation within the code,  
34 including correcting references and section numbers for damage control and  
35 structural performance categories.
- 36 • **Removal of Redundant Provisions:** Equivalent provisions in later editions of the  
37 CBC were removed to prevent confusion, particularly regarding damage control  
38 categories.

- 1 • **Hospital Building Seismic Compliance Plan:** Added a requirement for owners to  
2 submit a revised compliance plan by March 1, 2025, for buildings not in compliance  
3 with section 130065, aiming to refresh compliance plans that are decades old.
- 4 • **Adjustment of Submission Deadlines:** Changed NPC evaluation submittal  
5 deadlines from January 1st to March 1st to address logistical issues related to  
6 holiday periods, without altering the final compliance deadline of January 1 b, 2030.
- 7 • **Clarification on Seismic Design Categories:** Specified that the compliance plan  
8 requirements apply universally, addressing ambiguities around seismic design  
9 categories, particularly for hospitals.
- 10 • **Streamlining of NPC Project Requirements:** Simplified language around NPC 4D  
11 operational plans, making clear that not all utilities need to be detailed in  
12 submissions unless they are critical to seismic compliance.
- 13 • **Shear-Only Anchor Testing:** Clarified that shear-only anchors used in seismic  
14 bracing do not require tension testing, simplifying compliance for non-structural  
15 components.
- 16 • **Reorganization of Shear Load Sections:** Moved and clarified sections related to  
17 allowable shear loads for anchors, distinguishing between cast-in-place and post-  
18 installed anchors and referring to manufacturers' evaluation reports for capacity  
19 determination.
- 20 • **Elimination of Outdated Extension Details:** Removed historical extension details  
21 that are no longer relevant, simplifying the document and focusing on current and  
22 future compliance requirements.
- 23 • **Specification on NPC 3 Areas:** Defined the focus on NPC 3 areas for 4D  
24 evaluation reports, eliminating the need to detail minor utilities not subject to seismic  
25 requirements in these reports.
- 26 • **Clarification on Intermediate Milestone Exemptions:** Provided clear guidelines  
27 on exemptions for hospitals that do not plan to continue operations beyond 2030,  
28 reducing unnecessary submission requirements.

29  
30 Mr. Lobo discussed proposed amendments to Chapters 6 and 7 of the 2025 CBC, Title  
31 24, Part 1, focusing on editorial changes, updates to align with the IBC 2024, and  
32 specific revisions to definitions and compliance requirements.

33  
34 Key changes include:

- 35 • **Health and Safety Code Authorization:** Identified the specific health and safety  
36 code section that authorizes OSHPD to enforce the California Building Standards  
37 Code.
- 38 • **Alignment with IBC 2024:** Updated sections to reflect changes in the IBC 2024,  
39 including title changes and definitions.
- 40 • **Definitions Update:** Added and clarified definitions in Parts 2 and 10, and Chapter  
41 7 of Part 1, ensuring consistency with other California codes.

- 1 • **Name Change from Health to Hospital:** Updated OSHPD's designation to reflect  
2 its current name, changing references from health to hospital.
- 3 • **Electronic Submission of Geotechnical Reports:** Encouraged electronic  
4 submission of geotechnical reports while still allowing hard copies, simplifying  
5 submission processes.
- 6 • **Construction Documents Preparation:** Clarified that architects and engineers  
7 licensed in the appropriate branch may prepare construction documents, specifying  
8 the roles of civil engineers, architects, and structural engineers in preparing  
9 documents for the anchorage and bracing of non-structural components.
- 10 • **Pre-approvals Cleanup:** Revised language on pre-approvals to specify that not all  
11 pre-approved details need to be incorporated into construction documents, defining  
12 material alterations that would invalidate pre-approvals.
- 13 • **Site Data Reports and Design Documents:** Streamlined requirements for the  
14 submission of site data reports and clarified that design and construction documents  
15 must comply with the California Building Standards Code across various sections,  
16 including architecture, mechanical, and plumbing.

17

#### 18 **MOTION: [Hudson/Bartley]**

19 The committee unanimously approved a motion to approve the proposed amendments  
20 to the 2025 CBC title 24 Part 1 code changes as presented.

21

#### 22 **6. Proposed amendments to the 2025 CBC, Title 24, Part 2**

23 **Facilitators:** Roy Lobo, Ph.D., S.E., Principal Structural Engineer;

24 Emil Von Roth, S.E., Senior Structural Engineer; and Ali Sumer; HCAI

25 In a comprehensive discussion, Mr. Lobo discussed the proposed amendments to the  
26 2025 CBC, Title 24, Part 2, focusing on a wide range of updates from editorial cleanups  
27 to significant changes in code standards to align with the latest industry practices and  
28 the IBC 2024 model code.

29 Key changes include:

- 30 • **Alignment with IBC 2024:** Adapted sections to match the IBC 2024 changes,  
31 particularly in alternative materials and construction methods.
- 32 • **Definitions:** Expanded definitions to include new OSHPD categories (OSHPD 1,  
33 1R, 2, 4, & 5) and updated the definition of "freestanding" buildings.
- 34 • **Peer Review:** Adjusted peer review requirements reflecting model code changes.
- 35 • **Temporary Structures:** Specified that OSHPD may grant only one extension for  
36 temporary structures when cause is demonstrated.
- 37 • **Electronic Submission of Reports:** Transitioned to preferring electronic  
38 submission for geotechnical reports to streamline processes.
- 39 • **Construction Documents and Special Inspections:** Clarified the preparation of  
40 construction documents and updated requirements for special inspections and  
41 testing for structural steel.

- 1 • **Offsite Construction:** Defined and added new amendments for offsite construction,  
2 emphasizing regulatory compliance and inspection requirements.
- 3 • **Concrete and Masonry Changes:** Made significant updates in the concrete and  
4 masonry sections, including deleting outdated amendments and aligning with current  
5 standards.
- 6 • **Structural Steel Amendments:** Maintained risk categories for OSHPD 2 and  
7 OSHPD 5 and introduced criteria for specific moment connections.
- 8 • **Seismic and Wind Considerations:** Updated seismic design references to ASCE  
9 722 and specified considerations for wind tunnel tests.
- 10 • **Wood Construction:** Made minor updates to align with compliance methods for  
11 cross-laminated timber.
- 12 • **Lath and Plaster:** Added a minor change permitting the use of screws instead of  
13 staples for securing lath to supports.
- 14 • **Form and Plastic Insulation:** Removed the requirement for submitting certain  
15 insulation materials to OSHPD, simplifying the approval process.
- 16 • **Photovoltaic Systems:** Added design criteria for photovoltaic panel systems for  
17 wind and seismic loads.
- 18 • **Ballasted Photovoltaic Systems:** Classified as an alternative system, requiring  
19 specific attention and approvals.
- 20 • **Risk Categories for Skilled Nursing and Acute Psychiatric Facilities:** Decided to  
21 continue with the existing amendments from the 2022 code concerning risk  
22 categories.
- 23 • **Soil and Foundation:** Updated and clarified soil and foundation standards, deleting  
24 amendments that are now addressed in the model code.
- 25 • **Adhesive Anchors and Reinforcing Bars:** Updated testing requirements for  
26 adhesive anchors and reinforcing bars in concrete, simplifying testing protocols for  
27 certain conditions.

## 28 **Committee comments**

- 29 • Farzad Naeim suggested changing "system" to "method" in the wind tunnel section  
30 for accuracy, but Mr. Lobo explained that "alternative system" is a defined term in  
31 their compliance methods, justifying its current usage.
- 32 • Cody Bartley expressed concern over the quarter-inch diameter limit for post-  
33 installed anchors' proof testing exceptions, questioning its applicability. Mr. Lobo  
34 clarified that the limit was set due to smaller anchors typically not requiring testing  
35 due to low load bearing capacity but showed openness to revising this based on  
36 standard practice.
- 37 • Mark Hershberg inquired about the inclusion of "tiny house" in the definition of offsite  
38 construction, leading Mr. Lobo to acknowledge the need to review its  
39 appropriateness and relevance to OSHPD.
- 40 • Martin Hudson suggested clarifying groundwater considerations in geotechnical  
41 reports to include both current levels and anticipated changes during the structure's

1 life. Mr. Lobo responded positively to reviewing and potentially refining the language  
2 for clarity and accuracy.

- 3 • Jennifer Thornburg warned against specifying future groundwater levels due to  
4 unpredictability, emphasizing using historical high groundwater levels for liquefaction  
5 analysis. Her comment led to a discussion on the importance of considering both  
6 historical and current groundwater levels in geotechnical reports, aligning with  
7 Mr. Lobo's acknowledgment of the need for clear guidance in the documentation.

#### 8 **Public comment**

- 9 • A public member inquired about the classification of group I-2 occupancies in risk  
10 category 4, seeking clarification on whether language in tables 1604.5 and 1604A.5  
11 would be modified for skilled nursing and acute care. Mr. Lobo clarified that an  
12 amendment already specifies categories for OSHPD 2 and OSHPD 5 as category 3,  
13 not 4, with model code language remaining standard but amended for OSHPD  
14 applicability. Richard Tannahill further clarified that OSHPD 5's reference is being  
15 deleted since it doesn't apply, aligning with OSHPD 1 for facilities without emergency  
16 surgery.
- 17 • The same public member questioned the use of proprietary names like Simpson  
18 Strong Tie in the code. Mr. Lobo responded that it's acceptable as these are already  
19 included in AISC 358, which lists specific systems without giving preference to any.

#### 21 **MOTION: [Bartley/Davis]**

22 The committee unanimously approved a motion to approve the proposed amendments  
23 to the 2025 CBC, Title 24 Part 2 as presented with additional comments.

### 25 **7. Proposed amendments to the 2025 CBC, Title 24, Part 10**

26 **Facilitators:** Roy Lobo, Ph.D., S.E., HCAI

27 Mr. Lobo presented the proposed amendments to the 2025 CBC, Title 24, Part 10,  
28 focusing on aligning with the 2024 International Existing Building Code (IEBC) and  
29 adjusting for name changes to reflect the Office of Statewide Hospital Planning and  
30 Development. The presentation detailed various editorial changes, adoption of new  
31 standards, and clarification of existing regulations to ensure they are up to date with the  
32 current practices and standards.

33 Notable changes include:

- 34 • Adoption of ASCE 41-13 for SPC-2 and SPC-4D buildings, and ASCE 41-23 for  
35 other OSHPD 1 buildings.
- 36 • Updates and clarifications based on ASCE 41 section references and terminologies  
37 due to the transition to ASCE 41-23.
- 38 • Introduction of specific provisions for wood building performance levels in relation to  
39 hold down requirements.

- 1 • Adjustments in risk categories to align with model code language and ensure clarity
- 2 for specific OSHPD categories.
- 3 • Deletion of amendments now addressed in the model code to reduce redundancy.
- 4 • Inclusion of qualifying non-acute services, like chemical dependency recovery
- 5 services, in the definition of freestanding buildings.
- 6 • Structuring and deletion of specific sections for clearer guidance and compliance
- 7 with the latest standards.

8

9 **MOTION: [Hudson/Bartley]**

10 The committee unanimously approved a motion to approve the proposed amendment to

11 the 2025 CBC Title 24, part 10 as presented.

12

13 **8. Comments from the public/committee members on issues not on this agenda**

14 **Presenter:** Farzad Naeim

15 No comment.

16 **9. Adjournment**

17 The meeting was adjourned by Mr. Naeim at 1:15 p.m.