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**Hospital Building Safety Board
Ad hoc "HCAI Design Guide for Planning and Preparing
for Disasters" Webinar Development Subcommittee**

November 20, 2025
10:00 a.m. – 4:00 p.m.

Meeting Locations:

2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 2000, Los Angeles, CA 90071

Subcommittee Members Present

Teresa Endres, Subcommittee Chair
Gary Dunger, Vice-Chair
Janice Cheung
Jennifer Cox
Mikhail Fuks
John Griffiths
Kelly Martinez

HCAI Staff Present

Chris Tokas
Arash Altoontash
Hussain Bhatia
Mia Marvelli
Jamie Schnick
Ken Yu
Heather Hoganson, Attorney

Consulting Members Present

Abdel Darwich

HBSB Staff Present

Marcus Palmer
Evet Torres

- 1 **1. Call to Order and Welcome**
- 2 **Facilitator:** Teresa Endres, AIA, ACHA, EDA, AAH, Senior Associate, Medical Planning
- 3 Director, Taylor Design; Subcommittee Chair
- 4 Teresa Endres called the HBSB Ad hoc "HCAI Design Guide for Planning and
- 5 Preparing for Disasters" Webinar Development Subcommittee meeting to order on
- 6 November 20th at 10:00 a.m.

2. Roll Call and Meeting Advisories/Expectations

Facilitator: Veronica Yuke, HCAI; HBSB Executive Director (or designee)

Ken Yu opened by introducing himself as filling in for Veronica Yuke. He proceeded with the roll call confirming attendance and confirmed that a quorum was present.

3. Review and Approve the Draft September 23, 2025, Meeting Report/Minutes

Facilitator: Teresa Endres (or designee)

Discussion and Input

Teresa Endres began by reviewing the draft meeting report and minutes from the September 23, 2025, meeting. She clarified a correction on line seven, noting that a comment was mistakenly attributed to Veronica Yuke but should have been attributed to herself.

She summarized the previous meeting's proceedings as follows:

- The HCAI Design Guide for Planning and Preparing for Disasters was discussed, which had been published on March 1, 2024, and initially presented at the ASHE PDC conference by Teresa Endres, Richard Tannahill, and Gary Dunger.
- The presentation reviewed the emergency design task force, which consisted of six working groups, and emphasized that the guide promotes designing beyond the code, which represents only the minimum standard.
- Richard Tannahill clarified that the guide is not about post-disaster response, but about embedding preparedness into facility design.
 - He noted that during COVID-19, a “do anything” mentality led to poor decisions and emphasized designing with built-in flexibility for air handling and infection control.
 - The team discussed integrating lessons learned from outbreaks such as SARS (2003), MERS (2012), and Canada's related code changes, which were included in the guide.
 - HVAC system strategies were discussed, including topics like wildfire smoke infiltration, infection control, and filter recommendations.
 - A video by Gary Dunger showing patient evacuation during a seismic event was included in the original presentation and influenced design considerations for seismic events.
- Chris Tokas and others discussed staffing shortages, and the expectation that hospitals remain fully operational after a seismic event.
- The group discussed how adaptations made under the Governor's emergency order during COVID often required follow-up permits and that some temporary changes remain unresolved.

- 1 • A discussion took place around the ambiguity of the term “resilience.” The group
2 agreed to rename the subcommittee to align with the guide’s title: HCAI Design
3 Guide for Planning and Preparing for Disasters.
- 4 • John Griffiths inquired about the audience’s response to the ASHE presentation.
- 5 • Abdel Darwich emphasized the need to plan for overlapping threats such as
6 wildfires, pandemics, and earthquakes.
- 7 • The group agreed to divide these topics into a series of seven webinars,
8 supported by Chris Tokas.
- 9 • The subcommittee confirmed that all guide chapters would be included in the
10 webinars.
- 11 • The team reviewed resilience design criteria and identified eight topics,
12 eventually narrowing it down to seven.
- 13 • Gary Dunger emphasized integrating resiliency, sustainability, and equity into
14 planning.
- 15 • John Griffiths highlighted mechanical system strain caused by extreme
16 temperatures.
- 17 • Microgrids were discussed under the Power Independence topic.
- 18 • Abdel Darwich noted the guide lacked ASHRAE’s updated extreme temperature
19 metrics.
- 20 • Janice Cheung and Gary Dunger presented updates to California’s Title 24, Part
21 7, including topics like ember-resistant vents, non-combustible materials,
22 defensible space, and maintenance.
- 23 • Abdel Darwich presented on two ASHRAE documents:
 - 24 ○ Standard 241 (Infectious Aerosol Control)
 - 25 ○ Guide 44 (Wildfire Smoke Preparedness)
 - 26 ○ Chris Tokas urged inclusion of both documents in the webinar content.
 - 27 ○ Corrections were noted to page 7, line item 18, clarifying that there are seven
28 topics, not eight.
 - 29 ■ The seven finalized topics were:
 - 30 1. Power Independence
 - 31 2. Interface 2025
 - 32 3. Wildland Urban Interface (WUI) for HVAC (including ASHRAE 44)
 - 33 4. Infection Control – HVAC
 - 34 5. Infection Control – Operations
 - 35 6. Infection Control – Design
 - 36 7. Hazard Vulnerability Assessment
- 37 • Subcommittee assignments were discussed for each topic, forming smaller
38 workgroups referred to as “sub-subs”, with two board members and one OSHPD
39 staff per group to comply with Bagley-Keene requirements.

- The Hospital Building Safety Board staff would serve as the central point of contact for the seven sub-subcommittees.
- The group proposed a webinar per topic, to be developed from outlines into full presentations.
- A preliminary timeline was discussed, suggesting one webinar per month starting February 2026, beginning with the Power Independence topic.
- The originally scheduled next meeting date of October 15 had been updated to the current meeting date.

Subcommittee and Public Comments:

- There were no public comments made during this agenda item.

Voting:

Motion to approve the draft September 23, 2025, meeting report/minutes:

- **Motion:** Abdel Darwich
- **Second:** Unidentified member
- **Outcome:** Motion passed

Informational and Action Items:

- Approval of the September 23, 2025, meeting minutes with identified corrections (e.g., line seven attribution and clarification of topics).
- The finalized list of seven webinar topics was confirmed.
- Subcommittee assignments (“sub-subs”) established.
- The webinar series schedule was preliminarily structured to begin in February 2026.
- The group acknowledged that future refinements and lessons learned would continue to inform updates to the design guide.
- Chris Tokas concluded the item by emphasizing the broader mission:
 - The ultimate goal is a resilient hospital leading to a resilient community.
 - He reinforced that the guide and the webinars are components of this overarching mission, referencing tools like white papers, advisory guides, and “inspect to pass” protocols.

4. Review decision for a series of webinars based on the HCAI Design Guide for Planning and Preparing for Disasters and additional topics from September meeting

Facilitator: Teresa Endres (or designee)

Discussion and Input

1 Teresa Endres initiated the review of the previously agreed-upon plan to create a series
2 of webinars based on the HCAI Design Guide for Planning and Preparing for Disasters.
3 She called on sub-subcommittee members assigned to each topic to provide progress
4 updates.

5 **Power Independence (Sub-sub: John Griffiths, David Bliss, Jamie Schnick):**

- 6 • Jamie Schnick presented a structured outline:
 - 7 ○ Part 1: Introduction on power reliability, microgrids, and healthcare continuity.
 - 8 ○ Part 2: Planning—combining resources to provide power during outages.
 - 9 ○ Part 3: Implementation—referencing Jamie’s existing “how-to” guide on
10 microgrid development.
 - 11 ○ Part 4: Recommendations—annual testing and retro-commissioning of
12 microgrids.
- 13 • John Griffiths supported Jamie Schnick’s work and requested sharing of the
14 written outline.
- 15 • Ken Yu instructed Jamie to send materials to HBSB staff for distribution.
- 16 • Chris Tokas stressed focusing the webinar strictly on power independence, not
17 emissions, and emphasized resilience over environmental messaging.
- 18 • David Bliss highlighted recent hospital power failures and discussed healthcare
19 economics' impact on infrastructure upgrades.
- 20 • Mia Marvelli, BSU Supervisor, asked to keep webinars within 1.5 hours (1 hour of
21 content + 30 minutes Q&A) and advised tying topics directly to the guide.
- 22 • Teresa Endres affirmed the target timing and welcomed potential collaboration
23 with BSU.
- 24 • Jamie Schnick clarified that Power Independence is not in the original guide,
25 suggesting it should be written before the webinar and proposed inviting
26 Mark Kaufman (Inovus) as a technical advisor.
- 27 • Heather Hoganson confirmed that non-board members like Kaufman may
28 participate without violating the Bagley-Keene Act, provided no quorum is
29 reached.
- 30 • Chris Tokas, Mikhail Fuks, and John Griffiths discussed challenges locating
31 correct versions of HCAI documents online.
- 32 • Teresa Endres recommended using official site navigation instead of search
33 engines for accuracy.

34 **Wildland Urban Interface (WUI) – Title 24, Part 7 (Sub-sub: Gary Dunger, Janice
35 Cheung):**

- 36 • Gary Dunger has completed ~80% of an outline but has not yet collaborated with
37 Janice Cheung.
- 38 • Chris Tokas will identify an OSHPD staff member to join the sub-sub.

- 1 • The presentation focuses on:
 - 2 ○ New Title 24 Part 7 regulations, formerly Chapter 7A.
 - 3 ○ Construction requirements for healthcare facilities in wildfire-prone areas.
 - 4 ○ Fire hazard severity maps, defensible space, ember-resistant vents, roofing,
 - 5 and water access.
- 6 • Gary suggested the presentation may be under 30 minutes, proposing it might be
- 7 combined with another topic.
- 8 • Mikhail Fuks supported the idea of combining WUI Title 24 (Topic #2) with
- 9 HVAC-related smoke infiltration (Topic #3).
- 10 • Abdel Darwich clarified:
 - 11 ○ Topic 2 focuses on protecting buildings from fire.
 - 12 ○ Topic 3 focuses on protecting occupants from smoke—relevant statewide.
- 13 • Chris Tokas noted the different audiences but supported combining content for
- 14 broader exposure.
- 15 • Abdel Darwich and Teresa Endres agreed combining topics can cross-educate
- 16 designers and expand awareness.
- 17 • Abdel Darwich raised questions about how technical the webinars should be.
- 18 Consensus was they should be conceptual and reference-based, not step-by-
- 19 step design tutorials.
- 20 • The need for abstracts for each webinar was confirmed.
- 21 • Mia Marvelli emphasized webinars should inform without being interpreted as
- 22 technical directives.

23 **Wildland Urban Interface – HVAC (Sub-sub: Abdel Darwich, Mikhail Fuks):**

- 24 • Abdel Darwich had previously presented related content and will share it with
- 25 Mikhail Fuks.
- 26 • Larry Enright may be involved from OSHPD, pending confirmation.
- 27 • Mia Marvelli asked who would technically review the presentations from OSHPD.
- 28 Chris Tokas confirmed appropriate internal reviewers will ensure accuracy and
- 29 compliance.
- 30 • Mikhail Fuks recommended waiting to finalize the structure or combine topics
- 31 until outlines are fully developed.

32 **Infection Control – HVAC (Sub-sub: Abdel Darwich, Mikhail Fuks):**

- 33 • Abdel Darwich proposed to build on his September presentation and incorporate
- 34 ASHRAE Standard 241.
- 35 • Group agreed that Abdel Darwich and Mikhail Fuks may speak directly and
- 36 submit outlines via HBSB staff.

37 **Infection Control – Operations (Sub-sub: Jennifer Cox, Kelly Martinez):**

- Jennifer Cox and Kelly Martinez have not yet met, but both expressed intent to collaborate.
- Jennifer Cox noted her hospital is currently undergoing licensing and has operational insights.
- Kelly Martinez supported combining infection control topics later if feasible.

Infection Control – Design (Sub-sub: Teresa Endres, Kelly Martinez):

- Teresa Endres noted this topic is lightly covered in the guide and offers an opportunity to go deeper.
- Jennifer Cox raised the question of including water system design/management (e.g., Legionella).
- Abdel Darwich and Mikhail Fuks acknowledged it's a good topic, though not in the guide.
- Kelly Martinez suggested such elements might fit within Hazard Vulnerability Assessment.
- Arash Altoontash clarified that “disaster” for OSHPD purposes requires a gubernatorial declaration per the Health & Safety Code.
- Kelly Martinez emphasized the HVA process allows hospitals to define their own highest-risk events and plan accordingly.
- Janice Cheung confirmed that emergencies or disasters must be declared by local or state officials to qualify for resource allocation and response frameworks.

Hazard Vulnerability Assessment (Sub-sub: Jennifer Cox, Kelly Martinez):

- Kelly Martinez presented an outline:
 - Introduction to HVA
 - Purpose and resilient hospital model
 - Methodology overview, including a scoring matrix based on event severity and mitigation.
 - Categories: natural, technological, human hazards, and hazardous materials.
 - Role of HVA in hospital-wide resilience planning
- Jennifer Cox supported the outline and will coordinate with Kelly Martinez.
- Teresa Endres instructed that outlines can be submitted in any format (Word, PowerPoint, etc.).

Planning and Coordination Notes:

- All outlines and coordination must be routed through HBSB staff.
- Each webinar is intended to be 1–1.5 hours long.
- Power Independence webinar will be the first, targeted for February 2026.
- Order of topics may be adjusted based on readiness and logical sequencing.

- Final presentations will undergo technical review by assigned OSHPD staff.
- All board members are encouraged to collaborate freely within their sub-subs, ensuring any shared outcomes are submitted for the official record.

Subcommittee and Public Comments

- There were no public comments made during this agenda item.

Informational and Action Items

- Sub-subcommittee members to finalize outlines for their assigned topics.
- Jamie Schnick to invite Mark Kaufman (Inovus) as subject matter expert.
- All presentations to tie back to the Design Guide, even when covering new material not originally included.
- Webinar abstracts will be developed and included in outreach/advertising.
- Next steps include:
 - Completion of outlines
 - Scheduling and sequencing of webinar releases (starting February 2026)
 - Determination of appropriate OSHPD reviewers
 - Coordination across teams to ensure consistent messaging and guide alignment.

5. Discuss which HCAI Design Guide for Planning and Preparing for Disasters Sections can be integrated with the topics in Item #4

Facilitator: Teresa Endres (or designee)

Discussion and Input

Teresa Endres initiated the discussion by confirming the subcommittee's shared intent to align the content of the HCAI Design Guide for Planning and Preparing for Disasters with the seven webinar topics developed under Agenda Item #4. She asked the subcommittee to confirm whether all guide sections would be integrated in some form into the webinar series.

Subcommittee members expressed general consensus (without a formal vote) on the integration strategy. The plan includes standardized opening and closing segments for each webinar and targeted alignment of guide sections with the content of each topic.

Confirmed Integration Approach:

- Sections 1 and 2 will be used as standardized introductory content across all webinars.
- Sections 9 and 10 will serve as standardized closing content, presented by OSHPD staff.

- All relevant sections of the guide will be tied to specific webinar topics based on content alignment.

David Bliss's Framing Slide Proposal:

- Section 1 (Introduction) will reflect David Bliss's suggestion for a recurring framing slide at the beginning of each webinar. This slide will help connect each topic to the overarching goal of resilient healthcare design.

Webinar Topics aligned to Design Guide Sections:

○ Framing / Introduction (All Webinars)

- Section 1 – Introduction: Why the Guide
- Section 2 – How to Apply the Guide

○ Power Independence

- Not originally in the guide. Referenced via supplemental materials (e.g., ASHRAE guides, white papers). Suggested to be positioned between Sections 6 and 7 in future structuring.

○ Infection Control – HVAC

- Section 3 – Ventilation strategies focused on infection control

○ Infection Control – Design

- Sections 4 and 5 – Architectural and engineering considerations for infection control

○ Infection Control – Operations

- Sections 5 and 6 – Operations planning and surge capacity management

○ WUI – Title 24, Part 7

- Section 7 – Exterior interface and air quality strategies (with some HVAC crossover)

○ WUI – HVAC

- Section 8 – Mechanical systems and HVAC protections for wildfire smoke

○ Hazard Vulnerability Assessment (HVA)

- Section 10 – Facility hazard assessments
(*Not originally identified as such; later clarified as applicable*)

○ Emergency Project Expediting

- Sections 9 and 10 – Procedures for emergency permitting, coordination, and post-disaster facility transitions

1 ○ **Alternate Care Sites / Surge Planning**

- 2 ▪ Section 6 – Temporary facility conversion, surge capacity
3 strategies

4 **Additional Notes and Clarifications**

5 **Power Independence:**

- 6 • Jamie Schnick initiated the discussion on integrating the topic.
7 • Teresa Endres supported placing it between Sections 6 and 7 for webinar flow.
8 • Mia Marvelli raised concerns about expanding or revising the guide prior to fully
9 using its published content.
10 • Teresa Endres clarified the webinars will reference external content (e.g.,
11 ASHRAE guidelines) through appendices or hyperlinks, not by altering the guide.

12 **Section Clarifications:**

- 13 • Abdel Darwich confirmed Section 3 applies solely to Infection Control – HVAC.
14 • Sections 4, 5, and 6 were confirmed to support Infection Control – Design,
15 Operations, and Surge Planning.
16 • Sections 7 and 8 align with WUI topics and advanced HVAC design related to
17 wildfire smoke protection.
18 • Sections 9 and 10 will be presented at the end of each webinar by OSHPD staff
19 and include guidance on expedited emergency project review and coordination.
20 • Section 11 (non-hospital facility conversions) was discussed as potentially
21 relevant.
22 ○ Kelly Martinez referenced her experience leading the Los Angeles Surge
23 Hospital during COVID-19 and offered to contribute materials.
24 ○ The section may be integrated into the Infection Control – Design or Surge
25 Planning webinars, but no formal decision was made.

26 **Supplemental Content Strategy:**

- 27 • New materials (e.g., ASHRAE 241, wildfire guidance) will be referenced via links
28 or appendices.
29 • No modifications to the Design Guide are planned at this stage.
30 • Existing OSHPD resources such as Advisory Guides, PINs, and CANs will be
31 linked for further detail.

32 **Subcommittee and Public Comments**

- 33 • Jamie Schnick initiated the structural integration of Power Independence.
34 • Mia expressed workload concerns; Teresa Endres responded with assurances
35 that supplemental content will not revise the core guide.
36 • Abdel Darwich, Gary Dunger, Mikhail Fuks, Jennifer Cox, and Kelly Martinez
37 contributed to the alignment of topics and guide sections.

- John Griffiths and David Bliss supported structuring the webinars to reflect the logic and intent of the guide while remaining useful to stakeholders.

Informational and Action Items

- All webinar topics will integrate relevant guide sections as applicable.
- Sections 1 and 2: Framing slides for the start of each webinar.
- Sections 9 and 10: Standardized closing, presented by OSHPD staff.
- Power Independence: External materials to be referenced, not embedded.
- Abstracts will be prepared for each webinar aligning with guide content.
- Supplementary standards (e.g., ASHRAE) will be linked, not embedded.
- All outline materials and coordination are to be submitted to Evett and Marcus for review and official processing.
- Consensus was reached on the integration approach and on standardized framing and closing structures for all webinars.

6. Discuss Schedule for the Series of HCAI Design Guide for Planning and Preparing for Disasters Webinars in 2026

Facilitator: Teresa Endres (or designee)

Discussion and Input

Teresa Endres proposed tabling the detailed scheduling discussion for the webinar series until the next meeting. The intent is to allow all sub-subcommittees to complete and submit their draft outlines and consider the logical sequence of topics.

Next Meeting Date:

- Evett Torres proposed the next meeting of this subcommittee be held on January 22, 2026.
- Teresa Endres confirmed this date, and a consensus was reached among board members present. No objections were raised.
- Going forward, subsequent meeting dates will be determined at the end of each meeting, rather than setting an entire schedule in advance.

Expectations for the January 22, 2026, Meeting:

- All sub-subcommittees are expected to submit:
 - Draft outlines for their assigned webinar topic(s)
 - A proposed position within the overall webinar sequence
- The purpose is to facilitate a coordinated discussion to finalize the webinar order based on:
 - Readiness of material
 - Logical topic flow (e.g., design preceding HVAC)

- Content integration from the guide

Clarifications and Assignments:

- Teresa Endres clarified that the Power Independence webinar will remain first due to its advanced readiness.
- Other sub-subcommittees (e.g., Abdel Darwich and Mikhail Fuks for WUI and HVAC topics) will determine whether Topics 2 and 3 can be reasonably combined based on their outlines.
- Each group should send their outline and proposed schedule placement to HBSB staff by December 19, 2025 (four-week deadline).

Supporting Coordination and Review:

- Outlines will be reviewed internally and coordinated with OSHPD staff, including Chris Tokas, Mia Marvelli, and others, to ensure content:
 - Aligns with agency guidance
 - Does not contradict existing statutory, regulatory, or advisory material
 - Is technically accurate and supportable

Public Comment – Hazard Vulnerability Assessment (Item #7):

- Public Comment: Suggestion to include historical data as a component of the Hazard Vulnerability Assessment (HVA) methodology.
 - Jennifer Cox confirmed this is typically covered under the likelihood scoring based on past events.
 - Kelly Martinez added that recording historical incidents is critical in both assessing risk and validating mitigation steps. The input will be reflected in the webinar content.

Subcommittee and Public Comments

- Mia Marvelli requested clarification on what board members should prepare by the next meeting. Teresa Endres reiterated:
 - One draft outline per webinar topic
 - Proposal for topic order/position in the series
- Public comments were addressed thoroughly and incorporated into the planning for the HVA webinar.

Voting

- No vote was held during this agenda item. Consensus was reached on:
 - January 22, 2026, as the next meeting date
 - December 19, 2025, as the deadline for submitting draft outlines

Informational and Action Items

- Next Meeting Date: January 22, 2026

- Deadline for Outline Submissions: December 19, 2025
- Each sub-subcommittee must submit:
 - Draft outline of their assigned webinar topic
 - Suggested placement of their webinar in the 2026 sequence
- Send materials to: HBSB Staff
- OSHPD Review Coordination: Teresa Endres and Evett Torres will coordinate with OSHPD staff to assign appropriate reviewers per topic
- All outlines will be compiled into presentation slides for in-depth scheduling discussion at the next meeting.

7. Comments from the Public/Subcommittee Members on Issues not on this Agenda

Facilitator: Teresa Endres (or designee)

Discussion and Input

Teresa Endres introduced the final agenda item, opening the floor to both subcommittee members and members of the public to provide general comments or raise issues not covered in the current meeting agenda.

Subcommittee and Public Comments

- No comments from either subcommittee members or the public during this agenda item.

8. Adjournment

Teresa Endres formally expressed appreciation to all board members and staff for their participation and contributions to the meeting. The meeting was officially adjourned at 11:54 a.m.