



2020 West El Camino Avenue, Suite 800  
Sacramento, CA 95833  
hcai.ca.gov



## **HOSPITAL BUILDING SAFETY BOARD Full Board Meeting**

**December 11, 2024**

1:00 p.m. – 4:00 p.m.

**December 12, 2024**

9:00 a.m. – 3:00 p.m.

### **Location:**

2020 West El Camino Avenue, Suite 900, Sacramento, CA 95833

### **Appointed Members Present**

Louise Belair, Chair  
Janice Cheung  
Jennifer Cox  
Michael Davis  
Gary Dunger  
Teresa Endres  
Michael Foulkes  
Martin Hudson  
Courtney Johnson  
Scott Mackey  
Farzad Naeim  
Carl Newth

### **HBSB Staff Present**

Veronica Yuke, Executive Director  
Marcus Palmer  
Evelt Torres

### **Ex-Officio Members Present**

Elizabeth Landsberg, HCAI Director  
Kevin Day, Building Standards Commission  
(Delegate)  
Nathaniel Gilmore, Department of Public Health  
(Delegate)  
Jeremy Lancaster, State Geologist  
Jennifer Thornburg (Delegate)  
Chris Tokas, OSHPD Deputy Director

### **Director-Appointed Ex-Officio Members Present**

David Bliss  
Bert Hurlbut  
Michael O'Connor

### **HCAI Staff Present**

Scott Christman  
Arash Altoontash  
Richard Tannahill  
Roy Lobo  
Mia Marvelli  
Andia Farzaneh

1   **1. Call to order and Welcome**

2   **Facilitator:** Louise Belair, PE, LEED AP, Senior Vice President, WSP; Board Chair

3   Louise Belair opened the meeting, welcoming everyone and outlining the day's agenda.  
4   The meeting was officially called to order at 1:04 p.m., and she expressed anticipation  
5   for the discussions ahead.  
6

7   **2. Roll Call and Meeting Advisories/Expectations**

8   **Facilitator:** Veronica M. Yuke, Manager, HCAI; Executive Director

9   Veronica Yuke conducted the roll call, confirming the presence of a quorum.  
10

11   **3. Department of Health Care Access and Information (HCAI) Update**

12   **Facilitator:** Elizabeth Landsberg, Director, HCAI

13   **Summary of Updates:**

- 14       • Elizabeth Landsberg provided an update on HCAI's legislative activities,  
15       mentioning the governor's actions on seismic safety bills. She discussed the  
16       signing of Assembly Bill 869 and the veto of Senate Bill 1432 and a Bill for  
17       Providence facilities.
- 18       • Elizabeth Landsberg discussed the budget cuts, including a 7.95% reduction in  
19       operating expenses and the elimination of 10,000 vacant positions.
- 20       • She covered the work of the Office of Health Care Affordability on primary care  
21       benchmarks and cost growth targets, including the requirement for health plans  
22       to achieve a 15% primary care spend rate by 2034.

23   **Discussions and Public Input:**

- 24       • None.  
25

26   **4. Overview and approval of the August 15, 2024, Full Board draft Meeting**  
27   **Report/Minutes**

28   **Facilitator:** Louise Belair

29   Louise Belair reviewed the key topics covered in the August 15, 2024, Full Board  
30   meeting, including updates on HCAI activities and committee reports.  
31  
32

1 **Discussions and Public Input:**

- 2 • None.

3 **Informational and Action Items:**

4 • **Informational:**

5 Summary of the key topics covered, including:

- 6 ○ HCAI activities update.
- 7 ○ Updates on budget shortfalls, loan approvals, and legislative actions
- 8 related to seismic standards.
- 9 ○ Nomination and approval of the Hospital Building Safety Board Chair and
- 10 Vice-Chair.
- 11 ○ Approval of previous full board, committee and subcommittee meeting
- 12 reports.
- 13 ○ OSHPD updates.

14 • **Action:**

- 15 ○ **Motion to Approve:** Michael Foulkes, to approve the August 15, 2024,
- 16 Full Board meeting report.
- 17 ▪ Teresa Endres seconded the motion.
- 18 ▪ The report was unanimously approved.

20 **5. Education and Outreach Committee**

21 **Facilitator:** Scott Mackey, AIA, NCARB, APEC, Healthcare Design Consultant;

22 Committee Chair

23 Scott Mackey presented a comprehensive update on the activities and achievements of

24 the Education and Outreach Committee for 2024. The August 1, 2024, and September

25 26, 2024, draft meeting reports emphasized the committee's efforts to improve

26 stakeholder engagement, disseminate critical knowledge, and address key educational

27 needs in healthcare design and compliance.

28 **Discussions and Public Input:**

29 • **Published Guides:**

- 30 ○ The committee successfully published two guides aimed at healthcare
- 31 professionals:
- 32 ▪ "Design Guide for Planning and Preparing for Disasters," which
- 33 provides practical steps for disaster readiness.

- " Design Guide for Working on Projects under OSHPD Jurisdiction – Tips from the Experts," a resource compiling best practices from industry leaders.

- These guides were distributed through various online platforms and physical events.

- **Webinars Conducted:**

- Two major webinars were hosted:
  - A session on prefabricated systems, attended by over 200 participants, focused on simplifying compliance and inspection processes.
  - A workshop on integrated review processes, designed to streamline communication and efficiency between design teams and regulatory bodies.
- Both webinars received overwhelmingly positive feedback, with attendees requesting follow-up sessions on specific technical aspects.

- **Certification Training:**

- The Certification Training for Construction Administrative Proficiency (CAP) program was launched in 2024.
- The program aims to certify administrative professionals in essential healthcare project management skills.
- Initial feedback highlighted the program's effectiveness, but some participants suggested including more practical case studies.

- **Outreach Expansion:**

- Increased engagement with rural hospitals and under-resourced facilities to address disparities in access to educational resources.
- Initiatives were launched to translate key materials into multiple languages to broaden accessibility.

## **Discussions and Public Input:**

- None.

## **Informational and Action Items:**

- **Informational:**

- The committee helped publish two design guides in 2024: " Design Guide for Working on Projects under OSHPD Jurisdiction – Tips from the Experts" and "Design Guide for Planning and Preparing for Disasters".

- The committee completed webinars on " Preapproved Fabricated Components and Systems" and the "PIN 50 Integrated Review."
- The new Certification Training, Construction Administrative Proficiency (CAP) program launched this year, had a 39% pass rate on the initial exam.

- **Action:**

- **Motion to Approve:** Teresa Endres, to approve the August 1, 2024, and September 26, 2024, Education and Outreach Committee meeting reports.
  - Michael Foulkes seconded the motion.
  - The report was unanimously approved.

## **6. "Inspect-to-Pass Approach to Field Inspections" Webinar Development Subcommittee of the Education and Outreach Committee**

**Facilitator:** Michael L. Davis, CHI, Senior Consultant, DavisHBC, Inc; Subcommittee Chair

Michael Davis provided an overview of the October 24, 2024, draft meeting report, and an update on the progress of the "Inspect-to-Pass Approach to Field Inspections" webinar. The subcommittee aims to improve field inspection processes by standardizing best practices and fostering collaboration between regulatory agencies, healthcare facilities, and contractors. Discussions emphasized key challenges in inspection protocols, solutions to enhance efficiency, and next steps in webinar development.

### **A. Content Development:**

- The subcommittee finalized a draft outline of the webinar to include:
  - Preparation steps for inspections, emphasizing pre-inspection documentation.
  - Strategies for resolving common compliance issues.
  - Case studies showcasing successful collaborations between inspectors, contractors, and facility owners.
- Modules were assigned to subcommittee members:
  - Michael Davis developed content for inspectors of record and testing agencies.
  - Cody Bartley focused on contractors and subcontractors.
  - Scott Mackey contributed to the design professionals of record module.

- Joe LaBrie and Monica Colosi worked on field staff processes and oversight perspectives.

### **B. Proposed Webinar Structure:**

- Interactive sections such as live Q&A and real-time scenario demonstrations were added to enhance participant engagement.
- Participants will receive templates and checklists for use during field inspections.

### **C. Feedback and Adjustments:**

- Pilot sessions highlighted areas for improvement:
  - Clarify the webinar title to avoid perceptions of leniency and emphasize collaboration and accountability.
  - Include region-specific examples to address geographic variations in inspection practices.

### **D. Launch Timeline:**

- The webinar is scheduled for public rollout in March 2025, after multiple practice sessions to refine delivery.

### **Discussions and Public Input:**

- Michael Davis reported on the first meeting of the Inspect-to-Pass Approach to Field Inspections Webinar Development Subcommittee.
- The committee assigned material development to various members:
  - Michael Davis: IOR and testing agency portion.
  - Cody Bartley: contractors and subcontractors.
  - Scott Mackey: DPORs.
  - Gary Dunger: ownership perspective.
  - Monica Colosi and Joe LaBrie: OSHPD and field staff portion.
- The committee emphasized the need for a clear definition of "inspect to pass" within the webinar, with examples of what it is and what it is not.
- The committee discussed options for renaming the webinar, with suggestions like "Successful Inspections: A Guide to Passing" to better reflect the collaborative approach.

### **Informational and Action Items:**

#### **• Informational:**

- Overview of the group's discussions on the webinar's name, presentation content, and schedule.

1       • **Action:**

- 2           ○ Incorporate example case studies and allow for interactive discussion
- 3           periods in the Inspect-to-Pass Approach to Field Inspections webinar.
- 4           ○ Finalize the content and schedule the webinar in early 2025.
- 5           ○ **Motion to Approve:** Michael Davis to approve the October 24, 2024,
- 6           Inspect-to-Pass Webinar Development Subcommittee meeting report.
- 7               ▪ Michael Foulkes seconded the motion.
- 8               ▪ The report was unanimously approved.
- 9

10   **7. Codes and Processes Committee**

11   **Facilitator:** Michael O'Connor, Principal, Nichols, Melburg & Rossetto; Committee

12   Chair

13   Michael O'Connor provided an overview of the September 11, 2024, draft meeting

14   report, and summarized the committee's discussions on several topics:

15       **Triennial code cycle update and timelines:**

- 16           ○ Michael O'Connor provided an update on the 2025 Title 24 code package
- 17           submission process.
- 18           ○ Key deadlines include the final submission to the Building Standards
- 19           Commission in November 2024, with public hearings in December 2024,
- 20           and anticipated adoption of approved amendments in early 2025.
- 21           ○ The effective implementation date for the 2025 code changes will be
- 22           January 2026.
- 23           ○ Michael O'Connor also mentioned amendments to the Administrative
- 24           Code, including AB 869 which addresses extensions for small and rural
- 25           hospitals.

26       **Electronic Test, Inspection and Observation (eTIO) system update:**

- 27           ○ An update on the eTIO system, which is being designed to replace paper-
- 28           based reporting and enhance real-time tracking of inspections.
- 29           ○ Beta testing for the eTIO system was progressing as planned, with public
- 30           testing expected by the end of 2024.
- 31           ○ A change log feature is being added to help streamline communication
- 32           between design professionals and inspectors.

33       **Standard details development:**

- 34           ○ An update on the standard details project, focusing on intersecting wall
- 35           assemblies, one-hour ceiling assemblies, and roof assemblies.
- 36           ○ The project aims to develop details pertaining to seismic conditions and
- 37           basic framing for remodel projects, particularly for skilled nursing facilities.

## Discussion and Public Input:

- None.

## Informational and Action Items:

### • Informational:

- Details on the triennial code cycle timeline and process, including key deadlines and amendments.
- Overview of the eTIO system development and the standard details project.

### • Action:

- Finalize and distribute an onboarding guide for the eTIO system, focusing on accessibility for small and rural facilities.
- Review feedback to strengthen sustainability provisions in modular construction guidelines.
- Plan training and outreach sessions to prepare stakeholders for the 2025 code updates.
- **Motion to Approve:** Michael O'Connor, to approve the September 11, 2024, Codes and Processes Committee meeting report.
  - Carl Newth seconded the motion.
  - The report was unanimously approved.

## 8. Structural and Nonstructural Regulations Committee

**Facilitator:** Louise Belair

Louise Belair provided an overview of the October 23, 2024, draft meeting report, and summarized the committee's discussions on several topics:

- **Triennial code cycle update and timelines:** Updates on the 2025 Title 24 code package submission process, including key deadlines and the anticipated effective date of January 2026. She also highlighted amendments to the Administrative Code, including AB 869 addressing extensions for small and rural hospitals.
- **Streamlining pre-approval programs:** Summarization of the plan to update OSHPD pre-approval programs to align with the new ASCE 7-22 force equation being incorporated into the 2024 CBC. The modifications will not invalidate current pre-approvals but provide supplementary guidance.
- **Proposed PIN for Steel Quality Assurance and Quality Control:** A proposed PIN to align OSHPD QA/QC requirements with the latest IBC



and AISC standards. The intent is to enhance compliance, streamline inspections, and reduce costs.

- **Motion:** The committee unanimously approved a motion to recommend the steel QA/QC PIN for approval at the December 2024 Full Board meeting.
- **Automated seismic compliance portal:** The new automated portal to help streamline submissions of seismic compliance plans for healthcare facilities. Facilities will have access to pre-loaded historical data, enabling them to review and update existing information rather than starting from scratch. Training sessions and online resources will be provided to facilitate the submission process. Key features include pre-populated data, validation tools, dashboard access, and public transparency.
- **AB 869 and Seismic Compliance Update:** AB 869, signed into law on September 28, 2024, addresses seismic compliance for specific categories of hospitals and offers provisions to delay the January 1, 2030, compliance deadline by up to five years for certain facilities. The key components of AB 869 include eligibility for deadline extension, submission requirements, and incremental compliance milestones.
- **AB 1882 reporting requirements:** The new mandate for general acute care hospitals to report on healthcare services provided in each building. The 2024 reporting portal will open on November 1, 2024.
- **Proposed PIN for Design and Implementation of Anchorage and Bracing of NPC Items Required to Meet NPC Compliance Guidelines:** A proposed PIN focused on the design and implementation of anchorage and bracing for critical non-structural components to achieve NPC compliance. It addresses the anchorage and bracing of critical non-structural components such as mechanical equipment, piping systems, electrical conduits, and ceiling assemblies. The PIN provides detailed design criteria, construction requirements, and inspection protocols for anchoring and bracing non-structural elements. Facilities must comply with the anchorage and bracing requirements before the final 2030 compliance deadline for NPC 5.

### **Discussion and Public Input:**

- Courtney Johnson and Jennifer Thornburg noted inaccuracies in the attribution of comments in the meeting report.
- Michael Davis suggested that the committee explore improvements in communication with rural facilities, as these facilities often face unique

challenges in accessing resources and information related to seismic compliance.

- Jennifer Thornburg recommended including additional guidance and future PINs to address specific geological constraints faced by facilities located in high seismic regions.

## **Informational and Action Items:**

- **Informational:**

- Details on the streamlining of OSHPD pre-approval programs and the proposed steel QA/QC PIN.
- Overview of the automated seismic compliance portal development.
- Summary of the AB 1882 healthcare services reporting requirements and the proposed PIN for NPC anchorage/bracing.

- **Action:**

- HCAI to develop new administrative regulations to support implementation of AB 869.
- **Motion to Approve:** Louise Belair, to approve the October 23, 2024, Structural and Nonstructural Regulations Committee meeting report as corrected.
  - Scott Mackey seconded the motion.
  - The report was unanimously approved.

## **9. Instrumentation Committee**

**Facilitator:** Martin Hudson, PhD, PE, GE, Principal Geotechnical Engineer, Hudson Geotechnics, Inc.; Committee member

Martin Hudson discussed the four major topics discussed by the Instrumentation Committee at the October 29, 2024, meeting, including seismic instrumentation, structural health monitoring, and data collection.

### **Seismic Instrumentation:**

- Martin Hudson discussed the committee's continued work on the seismic instrumentation program, which involves the installation of instruments to measure seismic motions in healthcare facilities.

### **Structural Health Monitoring:**

- The committee previously published a white paper on how hospital owners and users can utilize the data from the seismic instruments to understand the structural health of the buildings.

- The committee expressed concern that there has been limited promotion and distribution of this white paper, and they want to ensure stakeholders understand the utility and benefits of the structural health monitoring program.

#### **Webinar Development:**

- The committee informally agreed to establish a subcommittee with the Education and Outreach Committee to develop a webinar to educate stakeholders on the structural health monitoring white paper and promote the instrumentation program.

#### **Data Collection and Utilization:**

- The committee reviewed the data that has been collected from the various types of seismic instrumentation installed (HCAI-funded, owner-funded on new hospitals, and owner-funded on retrofits).
- The committee discussed the value of this data and the potential to highlight interesting recordings, such as the different responses observed between a new hospital in Oxnard with different foundation types.
- The committee informally recognized that developing white papers or case studies to bring attention to the instrumented data could be beneficial, as it could prompt further research and study by the scientific and engineering community.

#### **Collaboration with HCAI:**

- The committee reiterated the collaborative nature of the instrumentation program between the committee and HCAI staff.
- Future objectives include exploring ways to enable real-time earthquake response capabilities using the instrumentation data.

#### **Discussion and Public Input:**

- Scott Mackey commented that promoting the instrumentation program will help encourage other facilities to install the recording devices, as the data can provide real benefits in evaluating the health of buildings.
- Teresa Endres asked how the board and committee plan to reach out to structural and geotechnical engineers to educate them on the instrumentation program, so they can inform their clients.
- Louise Belair suggested the Education and Outreach Committee could be a good avenue to help promote the instrumentation program and white papers to the broader industry.

#### **Informational and Action Items:**

1       • **Informational:**

- 2           ○ Overview of the Instrumentation Committee's activities and future plans,  
3           including hosting webinars and exploring white papers/case studies.

4       • **Action:**

- 5           ○ The committee agreed to establish a subcommittee with the Education  
6           and Outreach Committee to develop a webinar promoting the Seismic  
7           Instrumentation of Healthcare Facilities white paper. Explore the creation  
8           of a centralized database for seismic event data to support research and  
9           decision-making.

- 10          ○ **Motion to Approve:** Martin Hudson, to approve the October 29, 2024,  
11          Instrumentation Committee meeting report.

- 12           ▪ Michael Davis seconded the motion.  
13           ▪ The report was unanimously approved.

14  
15   **10. Ad hoc Board Procedures Committee**

16   **Facilitator:** Michael Foulkes, Director, State and Local Government Affairs, Apple Inc.;  
17   Committee Chair

18   Michael Foulkes provided an update on the changes made to the Board's Policies and  
19   Procedures.

- 20          ○ Michael Foulkes explained that the committee met that morning to review and  
21          make a couple of corrections to the Board's Policies and Procedures.
- 22          ○ The first change they discussed was regarding the frequency of board meetings.  
23          Michael Foulkes stated that the Board Procedures have been updated to reflect  
24          that the board will now meet “up to three times per year”, rather than a set  
25          number of meetings.
- 26          ○ Michael Foulkes clarified that the number of Full Board meetings will vary  
27          depending on the year: in years where there is a chair election, the board will  
28          have three meetings, while in non-election years, the board will have two  
29          meetings.
- 30          ○ The second change the committee made was to update the references to the  
31          "Facilities Development Division" to "Office of Statewide Hospital Planning and  
32          Development" within HCAI.

1 **Discussion and Public Input:**

- 2 • None.

3 **Informational and Action Items:**

4 • **Informational:**

- 5 ○ Changed the Board Policies and Procedures to make the number of times  
6 the full board meets per year more flexible.

7 • **Action:**

- 8 ○ **Motion to Approve:** Michael Foulkes, to approve the changes to the  
9 Board Policies and Procedures.  
10 ▪ Scott Mackey seconded the motion.  
11 ▪ The changes were unanimously approved.

12  
13 **11. Review and approve 2025 Committee Assignments, Goals, and Meeting**  
14 **Calendar**

15 **Facilitator:** Scott Mackey

16 Scott Mackey, as the incoming Board Vice-Chair, presented the recommended  
17 committee assignments, goals, and meeting calendar, for 2025.

18 Scott Mackey also presented the proposed meeting dates for each committee in 2025.  
19 He noted there will be two Full Board meetings in 2025: June 3 – 4 in Los Angeles, and  
20 December 10 – 11 in Sacramento.

21 **Discussion and Public Input:**

- 22 • Martin Hudson expressed strong support for the assignments, commending their  
23 strategic alignment with members' strengths and priorities.  
24 • Teresa Endres proposed incorporating a mid-year review process to assess  
25 progress on goals and refine strategies as needed.  
26 • A rural hospital representative suggested additional workshops for smaller  
27 facilities to address unique compliance challenges.  
28 • Another participant emphasized the importance of publishing the finalized  
29 calendar early to maximize public participation.

30 **Informational and Action Items:**

31 • **Informational:**

- 32 ○ Detailed breakdown of the proposed committee compositions, meeting  
33 dates, and focus areas for 2025.

1       • **Action:**

- 2           ○ **Motion to Approve:** Scott Mackey, to approve the 2025 Committee  
3           Assignments, Goals, and Meeting Calendar.  
4           ▪ Michael Foulkes seconded the motion.  
5           ▪ The assignments, goals and meeting calendar were unanimously  
6           approved.

7  
8       **12. Office of Statewide Hospital Planning and Development (OSHPD) Update**

9       **Facilitator:** Chris Tokas, SE, FSEAOC, CBO, Deputy Director, HCAI

10      Chris Tokas provides an end-of-year briefing, celebrating achievements and victories as  
11      an organization. He emphasizes the importance of having a strategic and dynamic plan  
12      of operations. The purpose for OSHPD is to advance collaboration with healthcare  
13      design professionals and providers to build safe, sustainable, and resilient facilities. He  
14      also highlighted the need for healthcare affordability and the importance of providing  
15      valuable public service.

16       **Strategic Goals and Achievements**

- 17           • **Improving consistency in field operations:** This involved ensuring  
18           uniform services across regions and improving the quality of work by  
19           design professionals.  
20           • **Enhancing training programs:** OSHPD implemented training in areas  
21           like fire and life safety, field compliance, and structural engineering, to  
22           grow staff expertise.  
23           • **Enriching pre-approved details:** OSHPD shifted focus to prefabricated  
24           components and systems to drive innovation and efficiency.

25       **Legislative Mandates and Compliance**

- 26           • **SB 1432:** Attempted to extend seismic compliance deadlines for all  
27           hospitals but was not approved.  
28           • **AB 869:** Allows small, rural hospitals to apply for three-year seismic  
29           compliance deadline extension.  
30           • **SB 1447:** Authorizes a three-year seismic compliance delay for Children's  
31           Hospital Los Angeles.  
32           • **SB 1119:** Attempted to address SPC-1 buildings that have not met  
33           deadlines but was not approved.  
34           • **The Glazer bill:** Allows more flexibility in building standards for outpatient  
35           clinics.

- **SB 1319:** Authorizes SNFs that apply to provide therapeutic behavioral health programs to receive approval from DHCS, CDPH, and HCAI simultaneously.

#### **Plan Review and Field Performance Update**

- Reported on plan review and field performance, highlighting the workload and the distribution of projects across regions:
  - The use of matrix management to ensure efficient project review and the importance of communication between OSHPD and design professionals.
  - The anticipated approval dates for projects and the impact of the pandemic on project timelines.
  - Emphasized the importance of accountability and collaboration between OSHPD, design professionals, and owners to ensure timely project approvals.

#### **Prefabrication and Climate Change Effects**

- Highlighted the success of prefabrication projects and the benefits of using prefabricated components and systems.
- Detailed the impact of climate change on healthcare facilities and the need for resilient and independent power systems.
- Mentioned the progress on decarbonization and the potential for all-electric hospitals.
- Emphasized the importance of creating island hospitals that can operate independently during disasters.

#### **Building Standards and Industry Coordination**

- Mia Marvelli provided an update on the Building Standards Unit's (BSU) activities, including education and outreach efforts.
- Discussed the importance of frequent communication with sister agencies, such as CDPH and the California Office of State Fire Marshal.
- Highlighted the role of BSU in developing and publishing guides and codes.
- Mentioned the impact of legislative changes, such as SB 869, on OSHPD's regulations and the need for consistent messaging.

#### **Training and Certification Programs**

- Joe LaBrie discusses the goals and achievements of the Inspection Services Unit (ISU), including increasing the competency of IORs and internal staff.

- Highlighted the importance of training programs, such as the Construction Administration Proficiency (CAP) certification.
- Mentioned the success of the first CAP certification exam and the plans for future exams.
- Emphasized the value of the CAP certification for hospital administrators and design professionals.

### **Improving Consistency and Accountability**

- Joe LaBrie discussed the efforts to improve consistency in IOR daily reports and the importance of clear communication.
- Highlighted the ongoing training programs and the focus on performance expectations for design professionals.
- Mentioned the changes to the use of terms like "inspection" and "observation" to ensure clarity and consistency.
- Emphasized the importance of accountability and collaboration between OSHPD, design professionals, and owners to achieve project goals.

### **Future Goals and Legislative Changes**

- Joe LaBrie outlined the plans for the upcoming year, including setting new goals and focusing on key areas for improvement.
- Discussed the potential impact of new legislative changes like the chemical dependency recovery hospital bill, on OSHPD's regulations.
- Highlighted the importance of staying informed and adaptable to changes in the healthcare industry.
- Emphasized the need for continuous improvement and innovation to meet the evolving needs of healthcare facilities.

### **Seismic Compliance Program Status**

- Roy Lobo focused on NPC compliance, with no NPC-1 buildings remaining, but 50% of buildings are NPC-2, needing upgrades by 2030.
- Outlined the requirements for NPC compliance as of January 1, 2024, including evaluation reports and water rationing plans.
- Discussed the status of NPC compliance, with 63% of hospital buildings fully compliant and 11% not submitting any requirements by the deadline.

### **AB 1882 and Signage Requirements**

- Roy Lobo explained the public notices and posting requirements due to AB 1882, with many webinars conducted to ensure compliance.



- Status of signage compliance was presented, with 13% of hospitals not submitting any signage, and some hospitals having non-compliant signage.
- Highlighted the importance of public awareness of seismic compliance status through QR codes on hospital buildings.
- Discussed the services reporting requirements, with 76% of facilities reporting their services and 24% not reporting.

### **Small and Rural Hospital Relief Program**

- Roy Lobo introduced the Small and Rural Hospital Relief Program created by SB 395, aimed at improving seismic resilience of small and rural hospitals:
  - The program has allocated \$1.2 million, with \$57 million remaining in the fund.
  - 38 applications have been received, with 26 approved and 12 finalized, and efforts to reach out to 72 more hospitals.
  - Emphasis on the importance of getting hospitals to SPC-4D minimum by 2030 to continue operations beyond that date.

### **Pre-Approvals and Seismic Instrumentation**

- Roy Lobo discussed the OSP program, which includes equipment that needs to be functional post-earthquake, with 800 OSPs ready for use.
- The OPM program for seismic bracing of components was also covered, with 740 OPMs approved.
- The OPAS program for testing labs and special inspectors was highlighted, with 59 approved agencies.
- Discussed the new formula for computing force requirements for design of non-structural components, with updates required for 2025 CBC compliance.

### **Emergency Operations Center (EOC) Activities**

- Hussain Bhatia provided an update on EOC activities, noting that the year was busy with wildfires and earthquakes.
- Discussed the use of spotter camera networks and AI to monitor fires, with examples from the VISTA fire and Thompson fire.
- Emphasized the importance of evacuation zones and the consolidation of data by Cal OES.
- Highlighted the role of EOC in public safety power shutoffs, with no GAC facilities affected.

## **Cape Mendocino Earthquake and Seismic Instrumentation**

- Hussain Bhatia discussed the Cape Mendocino earthquake, noting its strong magnitude and aftershocks.
- Highlighted the importance of seismic instrumentation in hospitals, with 85 hospitals currently instrumented.
- Discussed the challenges of upgrading obsolete seismic instrumentation and the need for funding.
- Emphasized the role of EOC in monitoring seismic activity and providing real-time information to hospitals.

## **Future Goals and Objectives**

- Top three objectives for 2025:
  - smooth transition to a new headquarters
  - address new statutory changes for clinics
  - address AB 869 for seismic extensions
- Discussed the move to a new building on Richards Boulevard, with operations expected to be moved by July.
- Highlighted the transition to a cloud-based system for EOC, with efforts to ensure a smooth transition.
- Emphasized the importance of continuous collaboration with facilities to achieve seismic compliance.

## **Discussions and Public Input:**

- David Bliss raised concerns about climate change and its impact on hospitals, including heat burden and air quality.
- The need for real-time visibility into resource availability, especially fuel, was discussed.
- The potential use of mobile supplemental energy supply systems to extend hospital operations beyond 96 hours was highlighted.
- The importance of having a reinsurance product to cover fuel delivery liabilities was emphasized.
- Committee members discussed the challenges of handling a large number of projects due to the extension not being approved.
- The importance of collaborative approaches to plan review, such as the one used for large projects, was highlighted.
- The need for the industry to start submitting projects and not make excuses about resource constraints was emphasized.
- The potential for contracting out work to meet deadlines was discussed.
- Hussain Bhatia provided additional information on the Cape Mendocino earthquake, noting that no content damage was reported in hospitals.

- The importance of building appropriately to deal with earthquakes was emphasized.

### **Informational and Action Items:**

- **Informational:**

- OSHPD's strategic goals and achievements.
- Legislative mandates impacting OSHPD.
- Updates on plan review, field performance, and education/outreach efforts.
- Initiatives on prefabrication, climate change resilience, and all-electric hospitals.

- **Action:**

- Conduct public meetings to discuss revisions to clinic construction standards.
- Coordinate with CDPH to clarify requirements for chemical dependency recovery hospitals.
- Offer annual training program on construction administration proficiency.
- Schedule next certification exam for construction administration proficiency program

### **13. Special Presentation: Delivering the First All-Electric Hospital in the Nation**

**Facilitators:** Louise Belair; Joe Brothman, Facilities and General Services Director, University of California Irvine Health; and Chris Tokas

Louise Belair, Joe Brothman, and Chris Tokas facilitated a special presentation that explored the challenges and successes of delivering the first all-electric hospital in the United States. The presentation highlighted the University of California Irvine's Medical Center campus as a cutting-edge healthcare facility. The project involved a partnership with Hensel Phelps as the general contractor, CO Architects as the architect, Degenkolb as the structural engineer, WSP/tk1sc as MEP engineers, and Stantec as the civil engineer.

#### **1. Project Timeline and Design Build Activity:**

- Joe Brothman discussed the project timeline, noting that the design build activity was conducted through digital meetings due to the COVID pandemic.
- The project included four buildings, including a central utility plant, two parking structures, and a 144-bed hospital with an emergency department, which is still under construction.

- The project goals included the University of California's carbon neutrality initiative, aiming to be carbon neutral by 2025, with healthcare operations following shortly thereafter.
- The project focused on electrification and decarbonization, designing the building to rely solely on electricity as its primary energy source and eliminating the use of fossil fuels.

## **2. Electrification and Decarbonization Strategies:**

- Joe Brothman explained the concept of electrification, designing a building to rely solely on electricity, and decarbonization, implementing carbon neutral or low carbon energy sources.
- The project incorporated an all-electric central utility plant to provide clean, efficient energy for the building's operations.
- Decarbonization strategies included leveraging renewable energy sources like solar power to minimize the carbon footprint and partnering with utility providers to ensure clean electricity supply.
- Electrification and decarbonization went hand in hand to ensure sustainable building operations, reducing indoor and outdoor air pollution, and improving air quality for patients and staff.

## **3. Design Strategies and Energy Use Intensity:**

- Joe Brothman discussed the design strategies for the all-electric hospital, including high-efficiency electric heat systems, electric water heating solutions, and self-imposed stretch goals for steam systems and humidification.
- The project aimed to optimize energy performance, reduce operating costs, and advance sustainability through strategies like high-performance HVAC systems, LED lighting, and advanced building automation systems.
- The energy use intensity stretch goals were tailored to the unique operational demands of different healthcare facility types, with ambitious targets for clinics and ambulatory care centers and acute care hospitals.
- The project included advanced HVAC systems for critical spaces, energy-efficient equipment, and energy recovery systems to capture and reuse waste heat.

## **4. Operational Impact and Financial Considerations:**

- Joe Brothman transitioned to the operational impact of the project, discussing the financial aspects and maintenance costs of the all-electric system:

- Traditional centralized natural gas systems require significant infrastructure and are cost-prohibitive, while distributed electric systems are more cost-efficient and require less labor for maintenance.
- The transition to an all-electric steam system, results in a cost reduction of over \$1.4 million annually, with a simple payback time of 3.8 years.
- The project aligns with California's carbon neutrality goals, reducing greenhouse gas emissions, and improving indoor air quality, benefiting patients, staff, and the surrounding community.

#### **5. Regulatory Implications and Future Plans:**

- Chris Tokas discussed the regulatory implications, noting that there are no regulatory obstacles to the project, and that California is making great progress towards achieving net-zero energy for its built environment.
- The California Global Warming Solutions Act aims to reduce greenhouse gas emissions to 1990 levels by 2020, with further targets set for 2030 and 2045.
- The project aligns with the broader mission of UCI Health to deliver world-class care in an environmentally responsible way, reducing operational costs, and improving resilience and reliability.
- Future plans include eliminating diesel generators, introducing microgrids and battery storage, and considering the use of hydrogen as a fuel source.

#### **Discussions and Public Input:**

- Dave Bliss inquired whether the simple payback calculation included the cost of electricity and discussed the challenges around continuous generation resources for full electrification.
- Martin Hudson raised the question of exploring ground source heat exchange systems for the project.
- Carl Newth asked about the fuel source for the emergency generators in the all-electric hospital.
- There was discussion on the challenges of electrification, including the need for natural gas on-site as an intermediate step and the potential use of hydrogen as a fuel source in the future.
- The board members provided positive feedback on the project, calling it "fantastic" and praising the team's work.

## **Informational and Action Items**

- **Informational:**

- Details on the project timeline, goals, electrification and decarbonization strategies, and energy use intensity targets.
- Operational and financial impacts of transitioning to an all-electric system.
- Regulatory implications and alignment with California's decarbonization goals.

- **Action:**

- Explore the use of ground source heat exchange systems for future projects.
- Discuss concentrated solar technologies that can generate electricity and provide domestic hot water.

## **14. Comments from the Public/Board Members on issues not on this agenda**

**Facilitator:** Louise Belair

Louise Belair opened the floor for public comments

## **Discussions and Public Input:**

- Board members expressed gratitude for Louise Belair's outstanding leadership as the chair.

## **Informational and Action Items:**

- **Informational:**

- Jim Malley and Scott Mackey will be taking over as the new Board Chair and Vice-Chair, respectively.

- **Action:**

- None.

## **15. Adjournment**

**Facilitator:** Louise Belair

Louise Belair thanked everyone for their support over the last four years, stating that it had been an enlightening and pleasant experience working with the group of professionals on the board.

Louise Belair adjourned the meeting on 12/12/2024 at 2:03 p.m.