



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



Hospital Building Safety Board Full Board Meeting

April 18, 2024

10:00 a.m. – 4:00 p.m.

2020 West El Camino Ave, Conference Room 900, Sacramento, CA 95833

The Board may not discuss or act on any matter raised during the public comment section that is not included on the agenda, except to place the matter on a future meeting agenda. (Government Code §§ 11125, 11125.7, subd. (a).)

Appointed Members: Louise Belair, PE, LEED AP, Board Chair
Jim O. Malley, SE, Board Vice-Chair
Cody Bartley
David Bliss, MD
Janice Cheung, PE
Michael L. Davis
Gary Dunger
Teresa Endres, AIA
Michael Foulkes
John Griffiths, PE
Martin B. Hudson, PhD, PE, GE
Scott Mackey, AIA
Farzad Naeim, PhD, SE, Esq

Director-Appointed
Ex-Officio Members: Bert Hurlbut
Michael O'Connor

Ex-Officio Members: Elizabeth Landsberg, HCAI Director
Daniel Berlant, State Fire Marshal
Wendy Collins (Delegate)
Jeremy Lancaster, State Geologist
Jennifer Thornburg (Delegate)
Kevin Day (Acting), Building Standards Commission, Executive Director
Irina Brauzman (Delegate)
Tomás J. Aragón, MD, Dr. PH, Department of Public Health, Director
Nathaniel Gilmore (Delegate)
Chris Tokas, OSHPD Deputy Director

HBSB
Executive Director: Veronica M. Yuke (Acting)

Item #1

Call to Order and Welcome

Facilitator: Louise Belair, PE, LEED AP, Board Chair (or designee)

Item #2 Roll Call and Meeting Advisories/Expectations

- Determination of Quorum
- Conduct of Meeting

Facilitator: Veronica Yuke, Acting Executive Director (or designee)

Item #3

Department of Health Care Access and Information (HCAI) Update

- Swearing-in Ceremony for new HBSB members:
 - Jennifer G. Cox, BSN, RN, PHN, CIC, Public Member Representative
 - Courtney B. Johnson, PG, CEG, Engineering Geologist Representative
- HCAI Update
- Discussion and public input

Facilitator: Elizabeth Landsberg, Director, HCAI (or designee)

Item #4

Overview and approval of the December 5 – 6, 2023, draft Meeting Report/Minutes

- Discussion and public input

Facilitator: Louise Belair (or designee)



Hospital Building Safety Board

Report by
Louise Belair, BOARD CHAIR

BOARD MEMBERS Present:

Scott Jackson, BOARD VICE CHAIR

Cody Bartley, David Bliss, Janice Cheung, Michael Davis, Gary Dunger, Teresa Endres, Michael Foulkes, John Griffiths, Martin Hudson, Michele Lampshire, Marshall Lew, Scott Mackey, James O. Malley

DIRECTOR APPOINTED EX-OFFICIO MEMBERS Present:

Bert Hurlbut, Michael O'Connor

STATUTORY EX-OFFICIO MEMBERS Present:

Scott Christman, HCAI Director Delegate; Wendy Collins, (Delegate) State Fire Marshall; Chris Tokas, OSHPD Deputy Director; Nathaniel Gilmore, (Delegate) Department of Public Health; Jennifer Thornburg (Delegate) State Geologist; Kevin Day, Building Standards Commission, Executive Director;

HCAI STAFF Present:

Arash Altoonash, Deputy Division Chief, Richard Tannahill, Deputy Division Chief, Joe Labrie, Roy Lobo, Mia Marvelli, Nanci Timmins, John Gray, HCAI Attorney

HBSB STAFF Present:

Veronica Yuke, Acting Executive Director, Evett Torres

MEETING REPORT:

Meeting Date: December 5 & 6, 2023

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 1: Call to Order & Welcome
 - Louise Belair, Board Chair called the meeting to order.
- Topic 2: Roll Call and Meeting Advisories/Expectations
 - 12 members present. Quorum was established.
 - Veronica Yuke, Executive Director read the advisories.
- Topic 3: Nomination and Election to fill the unexpired Vice-Chair vacancy – Louise Belair, Board Chair
 - Current Board Vice-Chair Scott Jackson is retiring before the end of his term.
 - James Malley was nominated as Board Vice-Chair for the remainder of the term until the end of 2024.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 4: HCAI Update – Scott Christman, HCAI Chief Deputy Director
 - Governor’s proposed budget was estimated to be released on January 10, 2024
 - Mention of the 50th anniversary of the Song-Brown Healthcare Workforce Training Act.
 - 2023 marked the 50th anniversary of the Alfred E. Alquist Hospital Seismic Safety Act.
 - Review of HCAI related bills:
 - SB 525 – Minimum wage law for Healthcare Employees.
 - SB 326 – Bill expanding Mental Health Services Act to the Behavioral Health Services Act.
 - SB 779 – Expansion of data collection from California clinics.
 - AB 1392 – Expansion of the hospital supplier diversity program.
 - AB 1471 – Seismic compliance milestones for specific hospitals.
 - AB 242 – Bill allowing critical access hospitals to employ physicians directly.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 4: HCAI Update (Continued)
 - Review of HCAI programs accomplishment:
 - Distressed Hospitals Loan Program had 30 applications and offered loans to 17 hospitals
 - HPD program released first data product in 2023
 - OHCA new efforts to slow healthcare spending growth
 - Mr. Tokas sworn in new HBSB members:
 - Janice Cheung, Fire / Life Safety representative
 - Martin Hudson, Geotechnical Engineer representative
 - Mr. Tokas recognized outgoing HBSB members:
 - Bruce Clark, Engineering Geologist representative
 - Scott Jackson, Fire / Life Safety representative
 - Michele Lampshire, Public Member representative
 - Marshall Lew, Geotechnical Engineer representative

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 5: Overview & Approval of August 17,2023 FB draft Meeting Report/Minutes – Louise Belair, Board Chair
 - Highlights were:
 - Swearing in new HBSB Board members:
 - Micheal Davis – Inspector of Records Representative
 - Teresa Endres – Architect Representative
 - Sharon Goei – Local Building Official Representative
 - Recognition of outgoing HBSB Board members:
 - Deepak Dandekar – Architect Representative
 - David Khorram – Local Building Official Representative
 - Review and Approval of April 20, 2023 Full Board Meeting report
 - Committees Report Overview & Approval: Energy Conservation and Management, Structural & Nonstructural Regulations, Codes & Processes, Off-Site Fabrication /Preassembled Components Webinar Subcommittee of the Education and Outreach Committee

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 5: Overview & Approval of August 17,2023 FB draft Meeting Report/Minutes (Continued)
- Highlights were:
 - OSHPD Update highlights were reviewed.
 - Inspection Service Unit Update highlights were reviewed.
 - Building Standards Unit Update highlights were reviewed.
 - Structural Service Section Update highlights were reviewed.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 6: Energy Conservation and Management Committee – John Griffiths, Committee Vice-Chair
 - Overview & Approval of October 25, 2023 draft meeting report/minutes.
 - Highlights were:
 - Microgrid Task Force Update.
 - Intervening code cycle changes for the California Electrical Code.
 - Microgrid project at Kaiser Permanente San Marcos Medical Center.
 - Microgrid components.
 - Review of topics to be discussed in 2024.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 7: Education and Outreach Committee – Scott Mackey, Committee Chair
 - Overview & Approval of May 24, 2023 draft meeting report/minutes.
 - Highlights were:
 - Focus on the October 2023 Tips from the Experts seminar structure and planning milestones.
 - Overview & Approval of July 26, 2023 draft meeting report/minutes.
 - Highlights were:
 - Planning and development of October 2023 Tips from the Experts seminar.
 - Confirmation of seminar event dates.
 - Breakdown sessions, agenda, resources and presenters presented.
 - Status of proposed webinars.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 7: Education and Outreach Committee (Continued)
 - Overview & Approval of August 30, 2023 draft meeting report/minutes.
 - Highlights were:
 - Confirmation of Seminar rehearsal date.
 - Each seminar presenter outlined their own sections.
 - Overview & Approval of September 27, 2023 draft meeting report/minutes.
 - Highlights were:
 - Report on status of the final edits/revision to the Tips from the Experts Guide booklet.
 - Each session presented their material.
 - Update on Small and Rural Hospital Relief Program webinar.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 7: Education and Outreach Committee (Continued)
 - Overview & Approval of November 1, 2023 draft meeting report/minutes.
 - Highlights were:
 - California Hospital Projects A to Z Seminar Debrief.
 - Update on Guide for Working on OSHPD projects.
 - Update on Emergency Design Guide.
 - Update on PIN 50 Webinar and Offsite Fabrication/Preassembled Components Webinar.
 - Discussed Opportunities for 2024.
 - Overview of the October 5 & 10 Seminar:
 - 143 people attended in Newark.
 - 152 people attended in Irvine.
 - Overall positive response from attendees.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 8: Codes and Processes Committee – Michael O’Connor, Committee Chair
 - Overview & Approval of the August 14, 2023 draft meeting report/minutes.
 - Highlights were:
 - California Building Standards Codes revisions for the 2022 Intervening Code Cycle.
 - 2024 Code Cycle Triennial Proposed Updates.
 - Overview & Approval of the October 17, 2023 draft meeting report/minutes.
 - Highlights were:
 - Building Standards Code Cycles Updates.
 - California Mechanical Code Part 4 of Title 24 proposed code changes.
 - California Plumbing Code Part 5 of Title 24 proposed code changes.
 - Update on Electronic TIO development
 - Pre-Approved Details update.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 9: Instrumentation Committee – Jim Malley, Committee Vice- Chair
 - Overview & Approval of October 26, 2023 draft meeting report/minutes.
 - Highlights were:
 - Review of the Fiscal Year 2022-23 HCAI/CSMIP Hospital Instrumentation annual report.
 - Annual HCAI update to the committee regarding CSMIP
 - Approval of Final copy of white paper on “The Benefits of Strong Motion Instrumentation in Hospital Facilities.
 - Testing criteria for allowable load rating of vibration isolators
 - Committee Goals for 2023

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 10: Structural and Non-Structural Regulations Committee – Jim Malley, Committee Chair
 - Overview & Approval of November 7, 2023 draft meeting report/minutes.
 - Highlights were:
 - Proposed amendments to 2025 California Building Code Title 24 Part 1.
 - Proposed amendments to 2025 California Building Code Title 24 Part 2.
 - Proposed amendments to 2025 California Building Code Title 24 Part 10.
- Topic 11: Ad Hoc Board Procedures Committee – Michael Foulkes – Committee Chair
 - Reporting on the committee meeting held on December 5, 2023 to discuss the Board Chair and Vice-Chair replacement procedures in the event they are unable to complete their respective term.
 - Chair: Vice Chair take on the Chair’s responsibilities.
 - Vice-Chair: Chair nominates a board member at the next scheduled Full Board meeting, nomination taken from the floor and election conducted.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 12: Administration of Process for filling Board Vice-Chair vacancy – Louise Belair, Board Chair
 - Beginning April 2024, a nominating committee will seek nominations for the chair and vice-chair to serve during the 2025-2026 term, with elections planned for the August 2024 Full Board meeting.

- Topic 13: Review and approve 2024 Committee Assignments, Goals and meeting calendar – Louise Belair, Board Chair
 - The current committees will continue for 2024
 - The goals and committee members for each committee were reviewed and approved.
 - Full Board Meetings for 2024 will be April 18, August 15, and December 10 & 11.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 14: OSHPD Update - Chris Tokas, OSHPD Deputy Director
 - Review of the 3 objectives for OSHPD in 2023.
 - Review of HCAI achievements for 2023.
 - Review of the 3 objectives for OSHPD for 2024:
 - Improve consistency in the field operations.
 - Training Programs (Academies) fully functional by year end.
 - Update the OSHPD Preapproved Details (OPDs)

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 15: Inspection Service Unit - Joe LaBrie, Inspection Services Unit Supervisor, Bob Lyons and James Pan ISU Staff
 - Mr. Lyons gave report of the study of the Certified Hospital Inspector Utilization and recommendations.
 - Mr. Pan reviewed the Certified Hospital Inspector Utilization survey data.
 - Mr. LaBrie gave a report on the ISU activities for 2023.
- Topic 16: Building Standards Unit Update – Mia Marvelli, Building Standards Unit Supervisor
 - Update on National Codes and Standards.
 - Update on HCAI/CDPH coordination.
 - Update on HCAI/California Administrative Code Coordination
 - HCAI / AIA Collaboration through different CA Chapters
 - Update on upcoming OSHPD Webinars

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 17: Fire Prevention Unit Update – Nanci Timmins, Chief Fire Life Safety Officer
 - Report on FPU activities for 2023.
 - Detail of training conducted for various organizations/groups of professionals.
 - Update on PINs and CANs.
- Topic 18: Structural Services Section Update – Roy Lobo, Principal Structural Engineer
 - Review of Seismic Compliance documents/applications required to be submitted to HCAI/OSHPD by January 1, 2024.
 - Update to the seismic compliance and safety website.
 - Review of webinar topics for 2024.
 - Structural Support Unit update.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF TOPICS

- Topic 19: Comments from the public/board members not on this agenda – Louise Belair, Board Chair
- Topic 20: Adjournment – Louise Belair, Board Chair
 - Meeting adjourned on December 6, 2023 at approximately 2:51pm.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF MOTIONS

- Motion 1: The board unanimously voted to nominate Jim Malley as the Board Vice-Chair.
- Motion 2: The board unanimously voted to approve the August 17, 2023, Full Board meeting draft Report/Minutes as presented.
- Motion 3: The board unanimously voted to approve the October 25, 2023 – Energy Conservation & Management Committee draft Meeting Report/Minutes as presented.
- Motion 4: The board unanimously voted to approve the May 24, 2023; July 26, 2023; August 30, 2023; September 27, 2023; and November 1, 2023, Education and Outreach Committee draft Meeting Reports/Minutes as presented.
- Motion 5: The board unanimously voted to approve the August 14, 2023 – Code and Processes Committee draft Meeting Report/Minutes as presented.

Meeting Date: 12/5/2023 & 12/6/2023

OVERVIEW OF MOTIONS

- Motion 6: The board unanimously voted to approve the October 26, 2023 – Instrumentation Committee draft Meeting Report/Minutes with corrections.
- Motion 7: The board unanimously voted to approve the November 7, 2023 - Structural and Non-Structural Regulations Committee draft Meeting Reports/Minutes as presented.
- Motion 8: The board unanimously voted to approve the December 5, 2023 – Ad Hoc Board Procedures Committee change to the Board Policies and Procedures addressing the replacement of the Vice-Chair should the Vice-Chair become unable to serve out the full term.

NEXT STEPS:

- None discussed

Meeting Date: 12/5/2023 & 12/6/2023

CONCLUSION

- Questions and Answers
- This report requires a MOTION by a Board Member and must be SECONDED by a Board Member for further ACTION.

Item #5

Ad Hoc Board Procedures Committee

- Overview and approval of the December 5, 2023, draft Meeting Report/Minutes
- Discussion and public input

Facilitator: Michael Foulkes, Committee Chair (or designee)



Ad Hoc Board Procedures Committee

by

**MICHAEL FOULKES, CHAIR
SCOTT JACKSON, VICE CHAIR**

COMMITTEE MEMBERS:

LOUISE BELAIR

HCAI STAFF:

RICHARD TANNAHILL

ARASH ALTOONTASH

JOE LABRIE

CARL SCHEUERMAN

JOHN GRAY

KEN YU

VERONICA YUKE

EVETT TORRES

MEETING REPORTS:

Meeting Date: 12/5/2023

Meeting Date: 12/5/2023

OVERVIEW OF TOPICS

- Review of Board Policies and Procedures
- Vice Chair vacancy Procedure

Meeting Date: 12/5/2023

OVERVIEW OF MOTIONS

A motion was made to approve the addition of item D in Section VI related to the replacement of the Vice Chair when not able to serve out the full term. This would allow the Chair to recommend a replacement candidate for Vice Chair at the next scheduled Full Board meeting. That appointment would not affect eligibility limits for serving as the Vice Chair under the limits outlined in Section VI A. 1. A. The motion passed unanimously.

NEXT STEPS:

- Ad Hoc meetings called as needed

Meeting Date: 12/5/2023

CONCLUSION

- Questions and Answers
- This report constitutes a MOTION to the BOARD and must be SECONDED by a Board Member who does not serve on the Committee for further ACTION.

Item #6

Codes and Processes Committee

- Overview and approval of the following draft Meeting Report/Minutes:
 - January 10, 2024
 - February 21, 2024
- Discussion and public input

Facilitator: Michael O'Connor, Committee Chair (or designee)



Codes & Processes Committee

CODES AND PROCESSES COMMITTEE MEMBERS

MICHAEL O'CONNOR, CHAIR
TERESA ENDRES, VICE CHAIR
LOUISE BELAIR
GARY DUNGER
JOHN GRIFFITHS
SCOTT MACKAY
JIM MALLEY

CODES AND PROCESSES CONSULTING MEMBERS

KELLY MARTINEZ
BELINDA YOUNG

CODES AND PROCESSES HCAI STAFF

CHRIS TOKAS
RICHARD TANNAHILL
LARRY ENRIGHT
MIKE HOOPER
MIA MARVELLI
DIANA NAVARRO
JAMIE SCHNICK
NANCI TIMMINS
JOHN GRAY

CODES AND PROCESSES HBSB STAFF

VERONICA YUKE
MARCUS PALMER
EVETT TORRES

MEETING REPORTS:

- Meeting Date: 1/10/2024
- Meeting Date: 2/21/2024

OSHPD TIMELINE & HBSB MEETINGS

DUE TO CBSC

Feb. 1, 2024

Submit CMC & CPC

May 3, 2024

Submit CAC, CBC, Vol. 1 & 2,
and CEBC

REVIEWED BY HBSB/COMMITTEE

Jan. 10, 2024 (Codes and Process) CMC and CPC

Feb. 21, 2024 (Codes and Process) CAC, Vol. 1

Mar. 6, 2024 (Struct & Non-Struct) CAC, CBC Vol.
2 and CEBC

Apr. 18, 2024 HBSB Full Board Meeting

Meeting Date: 1/10/2024

OVERVIEW OF TOPICS - TOPIC 1

Topic 1 – Proposed amendments to the 2025 California Mechanical Code (CMC), Part 4, Title 24

Presenter: Mia Marvelli, HCAI & Larry Enright, HCAI

- Effective date of 2025 Title 24 is January 1, 2026

Meeting Date: 1/10/2024

OVERVIEW OF TOPICS - TOPIC 2

Topic 2 – Proposed amendments to the 2025 California Plumbing Code (CPC), Part 5, Title 24

Presenter: Larry Enright, HCAI

616.0 Emergency Water Supply

~~615.4~~**616.0** *[OSHPD 1] Emergency Water Supply.*

~~615.4.1~~**616.1** *For new acute care hospital buildings submitted...*

616.2 *Storage tanks connections and circulation shall be designed to limit water stagnation and temperature stratification. Supplemental disinfection and circulation shall be provided where the disinfection levels of the public water supply are not adequate to maintain minimum levels of disinfectant for water quality consistent with the facility's water management program.*

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 1

Topic 1: Proposed amendments to the 2025 California Administrative Code, Part 1, Title 24

Presenter: Mia Marvelli, HCAI & Clara Wu, HCAI

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 2

Topic 2: Proposed amendments to the 2025 California Building Code, Part 2, Volume 1, Title 24

Presenter: Mia Marvelli, HCAI & Clara Wu, HCAI

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 2

Topic 2: Proposed amendments to the 2025 California Building Code, Part 2, Volume 1, Title 24

Presenter: Mia Marvelli, HCAI & Clara Wu, HCAI

1225.6.6 SPECIAL TREATMENT PROGRAM SERVICE.

Refer to California Administrative Code (Part 1 of Title 24), Section 7-119, Functional Program, for requirements. Projects associated with Special Treatment Program Services in skilled nursing and intermediate-care facilities shall include a Patient Safety Risk Assessment. The skilled nursing facility shall have a minimum of 30 beds and shall meet the requirements of Chapter 3, Division 5, Title 22, California Code of Regulations.

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 2

Topic 2: Proposed amendments to the 2025 California Building Code, Part 2, Volume 1, Title 24

Presenter: Mia Marvelli, HCAI & Clara Wu, HCAI

1224.30 PEDIATRIC AND ADOLESCENT UNIT. *A pediatric nursing unit shall be provided if the hospital has eight or more licensed pediatric beds. Pediatric patient area and adolescent patient area shall be separate from each other and shall be separate from adult nursing units. Common areas including exam and treatment room, service areas, and playrooms may be shared and used by pediatric and adolescent patients at different times. The unit shall meet the following standards:*

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 3

Topic 3: Proposed amendments to the 2025 California Mechanical Code, Part 4, and California Plumbing Code, Part 5, Title 24

Presenter: Larry Enright, HCAI

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 3

Topic 3: Proposed amendments to the 2025 California Mechanical Code, Part 4, and California Plumbing Code, Part 5, Title 24

SECTION 321.0 Essential Mechanical Provisions. [OSHPD 1, ~~4R~~, 2, 3 (Surgical Clinics only) 4 & 5] During periods of power outages essential electrical power shall be provided for the following equipment:

...

321.3 Cooling equipment necessary to maintain temperature and humidity listed in Table 4A for a minimum of one operating room and other category 1 spaces as identified in the facility's safety risk assessment.

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 3

Topic 3: Proposed amendments to the 2025 California Mechanical Code, Part 4, and California Plumbing Code, Part 5, Title 24

417.0 Testing and Balancing Airborne Infection Isolation Rooms and Protective Environment Rooms.

[OSHPD 1, 2, 3, 4 & 5] *Prior to acceptance of the rooms, all mechanical systems shall be tested, balanced, and operated to demonstrate to the owner or designated representative that the installation and performance of the systems conform to design intent. All testing and balancing shall be performed by a qualified independent agency certified by the Associated Air Balance Council (AABC): the National Environmental Balancing Bureau (NEBB); or the Testing, Adjusting and Balancing Bureau (TABB). [Air balance testing shall include a pressure test at all doors serving the isolation and ante rooms.](#)*

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 3

Topic 3: Proposed amendments to the 2025 California Mechanical Code, Part 4, and California Plumbing Code, Part 5, Title 24

422.0 Minimum Number of Required Fixtures

422.3.1 [OSHPD 1, 2, 3, 4 & 5] *Separate toilet facilities shall be provided for the use of patients, staff personnel and visitors.*

Exceptions:

(1) For Primary Care Clinics ~~Only~~ Where a facility contains no more than three examination and/or treatment rooms, the patient toilet shall be permitted to serve waiting areas.

(2) For public waiting areas with an occupant load of 10 or less, one toilet facility, designed for use by no more than one person at a time, shall be permitted for use by both sexes.

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 4

Topic 4: Update on Electronic Test, Inspection, and Observation (eTIO) Development

Presenter: Larry Enright, HCAI

- Continuous progress being made by the HCAI Inspection Unit and the Programming Team. The committee looks forward to demonstration when available.

Meeting Date: 2/21/2024

OVERVIEW OF TOPICS - TOPIC 5

Topic 5: Standard Details Update

Presenter: Gary Dunger, Committee Member

- Details for Skilled Nursing Facilities are being developed.

Meeting

Date: 1/10/2024

OVERVIEW OF MOTIONS

- **Motion 1:** The committee unanimously voted to approve the proposed amendment to the 2025 California Mechanical Code Part 4, Title 24.
- **Motion 2:** The committee unanimously voted to approve the proposed amendment to the 2025 California Plumbing Code Part 5, Title 24 as discussed and presented.

Meeting

Date: 2/21/2024

OVERVIEW OF MOTIONS

- **Motion 1:** The committee unanimously voted to accept and approve the draft January 10th, 2024, meeting report with correction.
- **Motion 2:** The committee unanimously voted to approve the proposed amendment to the 2025 California Administrative Code, Part 1, Title 24.
- **Motion 3:** The committee unanimously voted to approve the proposed amendment to the 2025 California Building Code Part 2, Volume 1, Title 24, as presented with minor adjustments made on invasive procedures.
- **Motion 4:** The committee unanimously voted to approve the proposed amendment to the 2025 California Mechanical Code Part 4 and California Plumbing Code Part 5, Title 24.

Meeting Dates: 01/10/2024 & 02/21/2024

CONCLUSION

- Questions and Answers
- This report constitutes a MOTION to the BOARD and must be SECONDED by a Board Member that does not serve on the Committee for further ACTION.

Item #7

Instrumentation Committee

- Overview and approval of the January 25, 2024, draft Meeting Report/Minutes
- Discussion and public input

Facilitator: Farzad Naeim, PhD, SE, Esq., Committee Chair (or designee)



Instrumentation Committee

by

**FARZAD NAEIM, COMMITTEE CHAIR
JIM MALLEY, COMMITTEE VICE CHAIR**

COMMITTEE MEMBERS:

**MARTIN HUDSON
JENNIFER THORNBERG**

CONSULTING MEMBERS:

**HAMID HADDADI
MOH HUANG
TONY SHAKAL**

HCAI STAFF:

HUSSAIN BHATIA, EROL KALKAN, ROY LOBO, ALI SUMER,

MEETING REPORT:

- Meeting Date: January 25, 2024

Meeting Date: 1/25/2024

OVERVIEW OF TOPICS

- **Discussion on issues related to the Instrumentation of wood-framed hospital buildings**
Facilitator: Farzad Naeim, Committee Chair
- **Selection of candidate wood-framed hospital buildings for HCAI Instrumentation**
Facilitators: Ali Sumer and Erol Kalkan, HCAI
- **Approval of the selection of candidate wood-frame hospital buildings for HCAI instrumentation for further discussion and prioritization**
Facilitator: Farzad Naeim, Committee Chair

Topic 1: Discussion on issues related to the Instrumentation of wood-framed hospital buildings

1. There is a need for increased instrumentation in flexible diaphragm buildings, particularly wood-frame hospitals, compared to ordinary concrete or steel buildings
2. One motivation for considering wooden buildings is the planned retrofits for small and rural hospitals
3. It is also relatively easier to install instruments on wood frame buildings compared to steel or concrete structures

❖ Informational and Action items

➤ None

Topic 2: Selection of candidate wood-framed hospital buildings for HCAI Instrumentation

- Wood-frame hospital buildings are predominantly single-story 27 facilities with the built eras ranging from 1902 to 2023.
- There are currently only two instrumented wood-frame hospital buildings
 1. John F. Kennedy Memorial Hospital, Indio
 2. Tenet Health Central Coast Twin Cities Community Hospital, Templeton
- In total, there are 307 wood-frame hospital buildings in California

Topic 2 (continued):

The recommended criteria for selection of wood-framed hospital buildings for HCAI Instrumentation:

- Plan irregularities, hence they have many wings
- Flexible diaphragm
- Shear walls
- Construction year
- SPC category
- Rocking
- Seismicity

Topic 2 (continued):

Mr. Kalkan proposed seven wood-frame hospital buildings candidates for HCAI instrumentation:

1. Providence Redwood Memorial Hospital, Fortuna
2. Healdsburg Hospital, Healdsburg
3. Providence Santa Rosa Memorial Hospital, Santa Rosa
4. Hazel Hawkins Memorial Hospital, Hollister
5. Community Memorial Hospital – Ojai
6. Monterey Park Hospital, Monterey Park
7. Community Hospital of San Bernardino

Topic 3: Approval of the selection of candidate wood-frame hospital buildings for HCAI instrumentation for further discussion and prioritization

❖ MOTION: [Hudson/Malley]:

- The committee unanimously voted to approve the selection of candidate wood-frame hospital buildings for HCAI instrumentation for further discussion and prioritization.

❖ Informational and Action item:

- None

Meeting Date: 1/25/2024

CONCLUSION

- The next Committee meeting is scheduled for October 29, 2024, and will focus on the issues related to mobilizing seismic instrumentation towards efficient structural health monitoring purposes.
- Questions and Answers
- This report constitutes a MOTION to the BOARD and must be SECONDED by a Board Member that does not serve on the Committee for further ACTION.

Thank you!

Item #8

Structural and Nonstructural Regulations Committee

- Overview and approval of the March 6, 2024, draft Meeting Report/Minutes
- Discussion and public input

Facilitator: Farzad Naeim, Committee Chair (or designee)



Structural and Nonstructural Regulations Committee

by
James O. Malley, Chair

COMMITTEE MEMBERS:

Farzad Naeim, Vice Chair

Cody Bartley

Louise Belair

Bruce Clark

Michael Davis

Sharon Goel

Marshall Lew

Farzad Naeim

Jennifer Thornburg

CONSULTING MEMBER : Mark Hershberg

HCAi STAFF:

Chris Tokas, Richard Tananahill, Arash Altoontash, Roy Lobo,
David Neou, Carl Scheuerman, Mike Hooper, Joe LaBrie, Mia Marvelli,
Jamie Schnick, Ali Sumer, Veronica Yuke, John Gray

MEETING REPORTS:

Meeting Date: March 6, 2024

Meeting Date: March 6, 2024

OVERVIEW OF TOPICS

- Topic 1 –Triennial Code Cycle Update and Timelines (Mia Marvelli, HCAI)
- Topic 2 - Proposed continued amendments for risk category designation of Skilled Nursing and Acute Psychiatric Facilities, (Chris Tokas; HCAI)
- Topic 3 –Proposed amendments to the 2025 California Building Code (CBC), Title 24, Part 1 (Ali Sumer; HCAI)
- Topic 4 – Proposed Amendments to the 2025 CBC, Title 24, Part 2 (Roy Lobo, Emil Von Roth and Ali Sumer; HCAI)
- Topic 5 – Proposed Amendments to the 2025 CBC, Title 24, Part 10, (Roy Lobo; HCAI)

Meeting Date: March 6, 2024

Topic 1 –Triennial Code Cycle Update and Timelines

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

Meeting Date: March 6, 2024

Topic 2: Proposed continued amendments for risk category designation of Skilled Nursing and Acute Psychiatric Facilities, (Chris Tokas; HCAI)

- ❖ OSHPD proposed not to adopt model code change to Table 1604.5, Risk Category of Buildings and Other Structures. Model code revised the risk category for all I-2 occupancies to Risk Category IV which may have conflicts with State law and a significant cost of compliance impact to skilled nursing and acute psychiatric facilities.
- ❖ **MOTION: [Davis/Endres]**
 - The committee unanimously approved a motion to endorse the presentation to keep the risk categories as outlined in the current 2022 California Building Code by the Office of Statewide Hospital Planning and Development (OSHPD).

Meeting Date: March 6, 2024

**Topic 3 –Proposed amendments to the 2025 California Building Code (CBC),
Title 24, Part 1 (Ali Sumer and Roy Lobo; HCAI)**

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

1. Deletion of Extension for Administrative Extensions
2. Corrections to Section Numbers
3. Removal of Redundant Provisions
4. Hospital Building Seismic Compliance Plan
5. Adjustment of Submission Deadlines
6. Clarification on Seismic Design Categories
7. Streamlining of NPC Project Requirements
8. Shear-Only Anchor Testing

Meeting Date: March 6, 2024

Topic 3 –Proposed amendments to the 2025 California Building Code (CBC), Title 24, Part 1 (Ali Sumer and Roy Lobo; HCAI)

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

1. Health and Safety Code Authorizations
2. Alignment with IBC 2024
3. Definitions Update
4. Name Change from Health to Hospital
5. Electronic Submission of Geotechnical Reports
6. Construction Documents Preparation
7. Pre-approvals Cleanup
8. Site Data Reports and Design Documents

Meeting Date: March 6, 2024

Topic 3 –Proposed amendments to the 2025 California Building Code (CBC), Title 24, Part 1 (Ali Sumer and Roy Lobo; HCAI)

MOTION: [Hudson/Bartley]:

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

Meeting Date: March 6, 2024

Topic 4 – Proposed Amendments to the 2025 CBC, Title 24, Part 2 (Roy Lobo, Emil Von Roth and Ali Sumer; HCAI)

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

1. Alignment with IBC 2024
2. Expanded definitions to include new OSHPD categories
3. Adjusted peer review requirements reflecting model code changes
4. Temporary Structures: Specified that OSHPD may grant only one extension for temporary structures when cause is demonstrated
5. Electronic Submission of Reports
6. Construction Documents and Special Inspections
7. Offsite Construction

Meeting Date: March 6, 2024

Topic 4 – Proposed Amendments to the 2025 CBC, Title 24, Part 2 (Roy Lobo, Emil Von Roth and Ali Sumer; HCAI)

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

8. Alignment with IBC 2024
9. Concrete and Masonry Changes
10. Structural Steel Amendments
11. Seismic and Wind Considerations
12. Wood Construction
13. Lath and Plaster
14. Form and Plastic Insulation
15. Photovoltaic Systems
16. Ballasted Photovoltaic Systems
17. Risk Categories for Skilled Nursing and Acute Psychiatric Facilities
18. Soil and Foundation
19. Adhesive Anchors and Reinforcing Bars

Meeting Date: March 6, 2024

**Topic 4 – Proposed Amendments to the 2025 CBC, Title 24, Part 2
(Roy Lobo, Emil Von Roth and Ali Sumer; HCAI)**

MOTION: [Bartley/Davis]

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

Meeting Date: March 6, 2024

**Topic 5 – Proposed Amendments to the 2025 CBC, Title 24, Part 10
(Roy Lobo, HCAI)**

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

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

Meeting Date: March 6, 2024

**Topic 5 – Proposed Amendments to the 2025 CBC, Title 24, Part 10,
(Roy Lobo, HCAI)**

Continued:

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

❖ **MOTION: [Hudson/Bartley]**

- The committee unanimously approved a motion to approve the proposed amendment to the 2025 CBC Title 24, part 10 as presented.

Meeting Date: March 6, 2024

CONCLUSION

- Questions and Answers
- This report constitutes a MOTION to the BOARD and must be SECONDED by a Board Member that does not serve on the Committee for further ACTION.

Item #9

Education and Outreach Committee

- Overview and approval of the February 8, 2024, draft Meeting Report/Minutes
- Discussion and public input

Facilitator: Scott Mackey, AIA, Committee Chair (or designee)



Education and Outreach Committee

by

Scott Mackey, CHAIR
Cody Bartley, VICE CHAIR

COMMITTEE MEMBERS

Louise Belair
Deepak Dandekar
Gary Dunger
Bert Hurlbut
David Khorram

CONSULTING MEMBERS

John Donelan
Kelly Martinez
Bruce Rainey
Bill Zellmer

OSHPD STAFF

Hussain Bhatia
Monica Colosi
Mike Hooper
Jamie Schnick
Nanci Timmins

MEETING REPORTS:

- **Meeting Date: February 8, 2024**

Meeting Date: February 8, 2024

OVERVIEW OF TOPICS

Review of 2023 Committee Supported Accomplishments

- Two OSHPD 3 Clinic Webinars = May 16 & 18, 2023
- Robots & Robotics in Hospitals Webinar = June 29, 2023
- Tips from the Experts Seminars = October 5, 2023, in Newark, CA and October 10, 2023, in Irvine, CA

Meeting Date: **February 8, 2024**

OVERVIEW OF TOPICS

Notice of 2024 Committee Supported Presentation

- American Society of Healthcare Engineers (ASHE) 2024 International Summit and Exhibition on Health Facility Planning Design and Construction (PDC) conference held in San Diego, March 17th through the 20th, 2023
- Richard Tannahill, Gary Dunger and Teresa Endres presented the Planning and Preparing for Disaster Guide.



Meeting Date: **February 8, 2024**

OVERVIEW OF TOPICS

Notice of 2024 Committee Supported Presentation

- American Society of Healthcare Engineers (ASHE) 2024 International Summit and Exhibition on Health Facility PDC conference (continued).
- Jamie Schnick, Ratan Milevoj (Valley Children's Healthcare), Walt Vernon (Mazzetti) presented on the use of microgrid systems in healthcare projects under OSHPD jurisdiction.





Meeting Date: **February 8, 2024**

OVERVIEW OF TOPICS

Update on the Guide for Working on OSHPD Projects – Tips from the Experts

- Mia Marvelli and Paul Coleman presented updates to the Guide.
- The Guide updates focused on added information related to the organization's naming conventions, revisions and additions to the submissions and permitting standards, bringing many of the sections up to current design, construction and technology standards.
- Included adding and deleting sections & subsections, acronyms & abbreviations.

Meeting Date: **February 8, 2024**

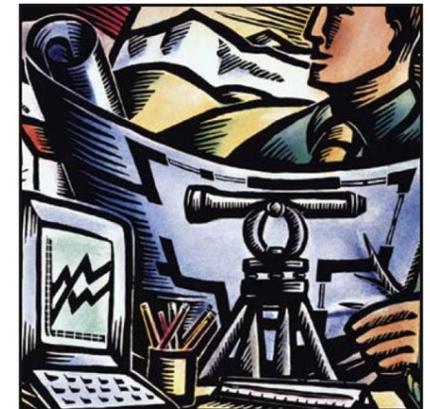
OVERVIEW OF TOPICS

Update on the Guide for Planning & Preparing for Disasters

- Paul Coleman presented updates to the Guide formally known as the *Emergency Design Guide*.
- The Guide was completely reformatted to align with the Guide for Working on OSHPD Projects to create a uniformity between documents.
- Revisions and updates addressed impacts of earthquakes, wildfires and pandemics on existing and temporary facilities throughout the State.
- Included adding and deleting sections, subsections, acronyms & abbreviations.

HCAI Department of Health Care
Access and Information

**DESIGN GUIDE FOR
WORKING ON PROJECTS
UNDER OSHPD JURISDICTION**



Tips from the Experts

Office of Statewide Hospital Planning and Development

April 15, 2024

Version 4.0

Meeting Date: **February 8, 2024**

OVERVIEW OF TOPICS

Update on the Policy Intent Notice (PIN) 50 – Integrated Review Webinar

- Gary Dunger presented specifics regarding the webinar content: a 1-hour webinar focusing on the client's perspective of the integrated review process.
- Tentative presenters for the webinar would include himself, Diana Navarro and Monica Colosi.
- Specifics included highlights of the agenda, an outline of the webinar, and the focus of the content.



Meeting Date: **February 8, 2024**

OVERVIEW OF TOPICS

Update on the Offsite Fabrication / Preassembled Components Webinar

- It was determined that this event will be advanced by a Subcommittee of this Committee.
- Cody Bartley was identified as the Chair of this Subcommittee and Scott Mackey as Vice Chair.
- Teresa Endres, Member of the Board, was also added to the Subcommittee.
- Cody Bartley will provide a separate presentation on this event.

Meeting Date: **February 8, 2024**

OVERVIEW OF TOPICS

Discussion on New Opportunities for Educational Content, Events or Programs for 2024

- Classification of imaging procedures into Class 1, 2 and 3.
- Revisiting the “Inspect to Pass” approach to Field Inspections.
- Formal rollout of OSHPD 6: Chemical Dependency Recovery Hospitals (CDRH)
- New program on “Tips for Working with OSHPD in the Field.”
- Working with photovoltaics, microgrids, and battery systems associated with utility independence from the electrical grid and utility companies.

Meeting Date: **February 8, 2024**

OVERVIEW OF TOPICS

- **Discussion on New Opportunities for Educational Content, Events or Programs for 2024 (continued)**
 - Creation of a Design Professional Mentorship Program through HCAI.

- **Future Education and Outreach Committee Meetings**
 - May 22, 2024
 - August 1, 2024
 - September 26, 2024
 - Additional meetings may be added as needed.



Meeting Date: **February 8, 2024**

OVERVIEW OF MOTIONS

No Motions were presented.

Meeting Date: **February 8, 2024**

CONCLUSION

- **Questions and Answers**
- **This report constitutes a MOTION to the BOARD and must be SECONDED by a Board Member who does not serve on the Committee for further ACTION.**

Item #10

Offsite Fabrication/Preassembled Components Webinar
Development Subcommittee

- Overview and approval of the February 28, 2024, draft Meeting Report/Minutes
- Discussion and public input

Facilitator: Cody Bartley, Committee Chair (or designee)



Offsite Fabrication/Preassembled Components Webinar Subcommittee

by

Cody Bartley, CHAIR
Scott Mackey, VICE CHAIR

SUBCOMMITTEE MEMBERS

Teresa Endres

OSHPD STAFF

Chris Tokas
Richard Tannahill
Joe LaBrie
Mia Marvelli
Ali Sumer
Nanci Timmins
John Gray

Offsite Fabrication/Preassembled Components Webinar Subcommittee

MEETING REPORTS:

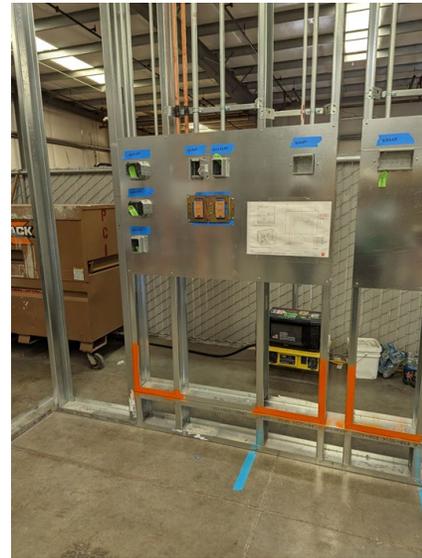
- Meeting Date: February 28, 2024



Meeting Date: **February 28, 2024**

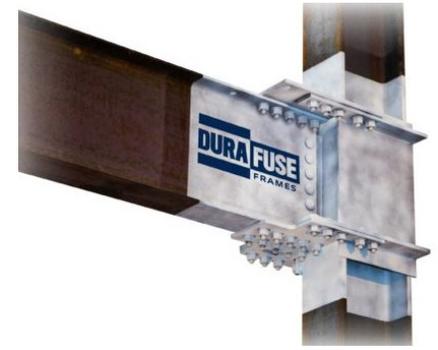
OVERVIEW OF TOPICS

- **Update on the draft content for Offsite Fabrication/Preassembled Components Webinar**
 - Cody Bartley presented an overview of the current slide deck for the webinar.
 - Content is focused on the perspective from OSHPD's staff, the architect's impacts, the contractor's key factors, and presentation of the definitions for clarity.
 - Examples of both design projects utilizing prefabrication and/or preassembled components.
 - Distinctions between the various methodologies and components.



Meeting Date: February 28, 2024

OVERVIEW OF TOPICS



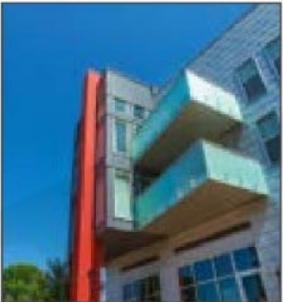
- **Update on the draft content for Offsite Fabrication/Preassembled Components Webinar (continued)**
 - Critical aspects of the review, approval and inspection processes.
 - Noted necessary modifications to the current TIO form and future eTIO form.
 - Refinement of the presentation, distribution of content per speaker and sufficiency of examples, definitions and current examples in place or under review.



Meeting Date: **February 28, 2024**

OVERVIEW OF TOPICS

- **Review of Speaking roles and proposed presenter**
 - A 2-week deadline was issued to complete webinar content including slides.
 - Agree to schedule the next meeting in the middle of March for a first draft review.
 - Agreed to schedule a rehearsal of the webinar in mid-April.



Meeting Date: **March 26, 2024**

OVERVIEW OF TOPICS



- **Review of speaking roles and proposed presenters**
 - Cody Bartley indicated that presenters are identified on the slides
 - Timeline for the slide deck was discussed and confirmed it would be finalized and formatted for presentation ahead of the next meeting

- **Agenda for April 24, 2024 was established**
 - Cody Bartley indicated that the purpose of the next meeting would be to conduct dry runs through the webinar and the date was established.

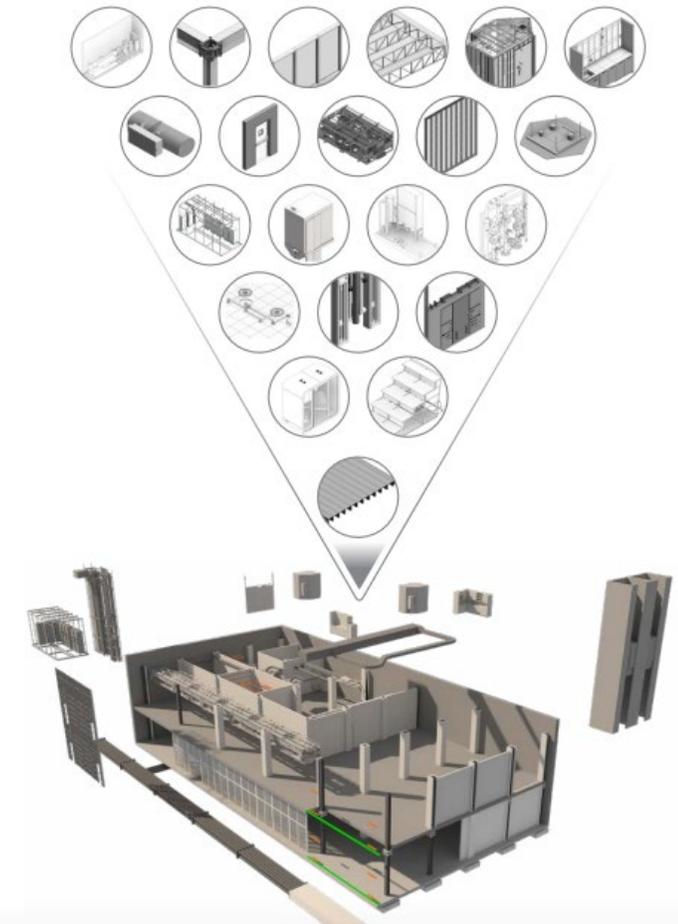
Meeting Date: February 28, 2024

OVERVIEW OF MOTIONS

- No Motions were presented.

BUILDINGS AS PRODUCTS

Standardize your real estate portfolio by buildings facilities using a personalized kit-of-parts.



Meeting Date: February 28, 2024

CONCLUSION

- **Questions and Answers**
- **This report constitutes a MOTION to the BOARD and must be SECONDED by a Board Member who does not serve on the Committee for further ACTION.**

Item #11

Appoint a Nominating Committee for Chair and Vice-Chair elections at the August 2024, Full Board meeting

- Discussion and public input

Facilitator: Louise Belair (or designee)

Item #12

Office of Statewide Hospital Planning and Development (OSHDP)
Update

- Workload and performance
- Personnel changes
- Discussion and public input

*Facilitator: Chris Tokas, SE, F.SEAOC, CBO, Deputy Director
(or designee)*



OSHPPD Briefing to the HBSB

Chris Tokas, S.E., C.B.O., F. SEAOC
Deputy Director, Office of Statewide Hospital Planning & Development

April 2024

California's Climate Commitment

CALIFORNIA'S CLIMATE PLAN
LAYS THE ROADMAP TO 2045

- 2006: AB 32 Global Warming Solutions Act of 2006
 - Reduce its greenhouse gas (GHG) emissions to 1990 levels by 2020
- 2021: Governor Newsom Signs Climate Action Bills to Tackle the Climate Crisis and Protect Vulnerable Communities
- 2022: California Releases World's First Plan to Achieve Net Zero Carbon Pollution
- 2023: Governor Newsom Unveils New Proposals to Build California's Clean Energy Future



CALIFORNIA CLIMATE COMMITMENT

New, World-Leading Climate Action

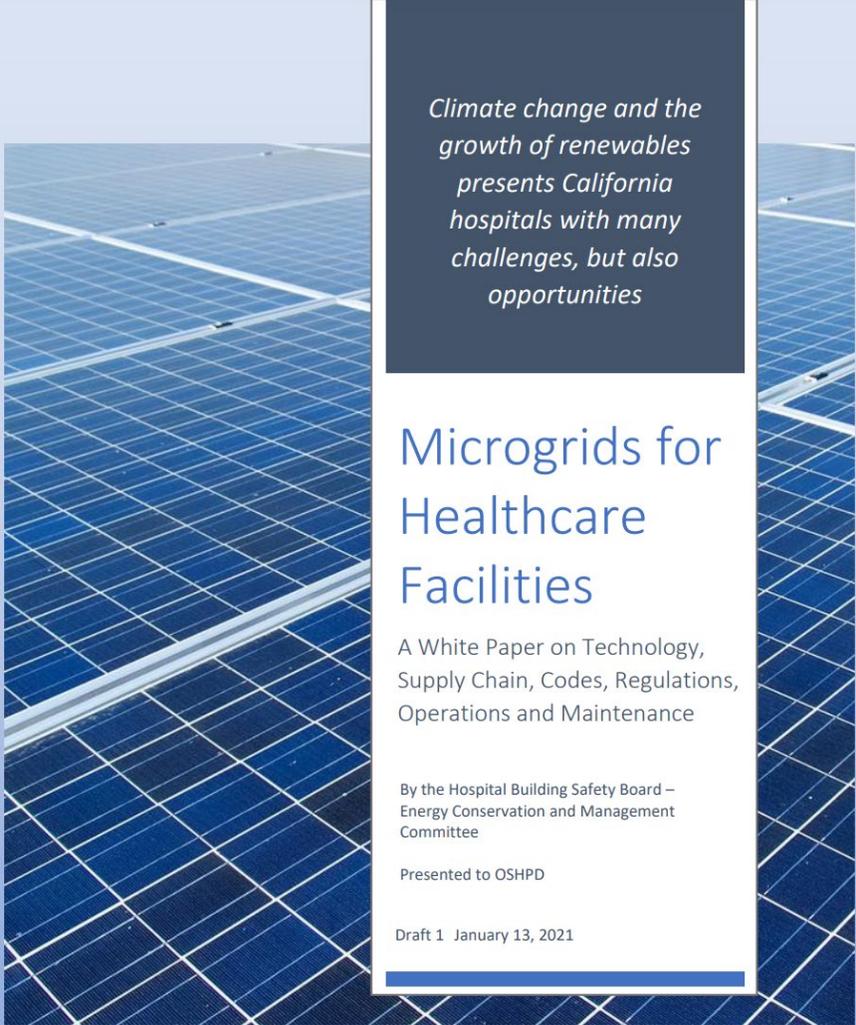
- The California Climate Commitment, Governor Newsom's comprehensive plan to:
 - Cut pollution, transition away from big oil
 - Deliver clean, reliable, and affordable energy
 - Save Californians money and create prosperous communities



and accelerating the transition away from big polluters, Governor to the most robust, comprehensive climate action in history – the commitment invests **\$54 billion to fight climate change** and enacts new that **cut pollution, deploy clean energy and new technologies, and m harmful oil drilling**

nt will:
tion by 71%
use gas emissions 85% by 2045
oil consumption to less than one-tenth of what we use today, a 94% drop
and 86% drop in demand for all fossil fuels
in new jobs
ns \$200 billion in health costs due to pollution

ING CLIMATE ACTIONS
AB 1279 establishes a clear, legally binding, and achievable goal for statewide carbon neutrality as soon as possible, and no later than 2045, emissions reduction as part of that goal.
IC GRID: SB 1020 creates clean energy targets of 90% by 2035 and 95% by state's trajectory to 100% clean energy by 2045.
POLLUTION: SB 905 and SB 1314 establish a regulatory framework for of carbon removal and carbon capture, utilization and sequestration, for the continued production of fossil fuels.
TIES FROM HARMFUL OIL DRILLING: SB 1157 establishes a setback between any new oil well and homes, schools, or parks. Ensures ion controls for existing oil wells within 3,200 feet of these facilities. AB 1757 requires the state to develop an achievable carbon removal working lands.



Climate change and the growth of renewables presents California hospitals with many challenges, but also opportunities

Microgrids for Healthcare Facilities

A White Paper on Technology, Supply Chain, Codes, Regulations, Operations and Maintenance

By the Hospital Building Safety Board – Energy Conservation and Management Committee

Presented to OSHPD

Draft 1 January 13, 2021

Background

Hospitals are facing the challenge of power disruptions which are much longer than those previously anticipated due to Public Safety Power Shutoff (PSPS) programs in California. To continue to provide even basic patient care, facilities must provide backup power in excess of the 96 hours currently code required. Backing up hospitals for the purpose of life and safety, however, is only a first step in addressing power needs during PSPSs. Providing energy for full business continuity for operating rooms, emergency departments and medical office buildings, to meet the full spectrum of needs of staff and patients in PSPS-affected area, fulfills bigger picture, comprehensive, emergency management goals.

The ECM Committee was charged with developing a white paper to present to OSHPD as a guide to develop code modifications to support the adoption of microgrid technology to reduce or eliminate the need to rely on generators as the source of emergency power for Hospitals in California

The Hospital Building Safety Board (HBSB), Energy Conservation and Management (ECM) Committee has been tracking developing solutions for several hospital Microgrid pilot projects, including the Kaiser Permanente Richmond Hospital and the San Benito Health Foundation Community Health Center. The Committee has hosted several presentations on Microgrid solutions during regular meetings. The HBSB ECM committee has also been working closely with the California Energy Commission, who are mandated with implementing California's Net Zero Energy (NZE) goals. Committee members also visited the Santa Rail Jail Microgrid project in August of 2019.

Under the leadership of the ECM Committee, this white paper is the work of industry experts who volunteered and spent countless hours to share their knowledge and experience with this technology. The intent of the white paper is to describe the microgrid technology, the need for this technology to be used in Hospitals in the State of California and the standards and justification for its implementation.

Abstract

Climate change and the growth of renewables presents California hospitals with many challenges, but also opportunities.

This white paper investigates the role Microgrids can play in addressing the challenges of climate change and also how they will allow for better utilization of available renewables.

This white paper explores the needs, challenges and solutions necessary to deliver this more reliable and sustainable power distribution system for California's hospitals.

To be able to effectively deliver healthcare microgrids in California we recognized early that all aspects need to be addressed. We have therefore broken this white paper into three distinct sections to ensure we are addressing each aspect required to implement these solutions. The categories are; Technology/ Supply Chain, Codes/ Regulations and Institutional/Financial

AB 2511 - CMS Categorical Waiver



The screenshot shows the CMS.gov website header with navigation links for Medicare, Medicaid/CHIP, Medicare-Medicaid Coordination, Private Insurance, Innovation Center, Regulations & Guidance, Research, Statistics, Data & Systems, and Outreach & Education. Below the header is a search bar and a link to "Back to Policy & Memos to States and CMS Locations". The main content area features a large heading: "Categorical Waiver – Health Care Microgrid Systems (HCMSs)". Below this heading is a table with the following information:

Title	Categorical Waiver – Health Care Microgrid Systems (HCMSs)
Memo #	QSO-23-11-LSC
Posting Date	2023-03-31
Fiscal Year	2023

electricity can be provided by clean energy technologies (e.g., fuel cells, solar, wind, energy storage, etc.). • Except as noted below, CMS is issuing a categorical waiver permitting new and existing health care facilities subject to CMS requirements to utilize alternate sources of power other than a generator set or battery system only if in accordance with the 2021 edition of the NFPA 99, 2023 edition of the National Electric Code (NFPA 70), and associated references. •

with the 2021 edition of the NFPA 99, 2023 edition of the National Electric Code (NFPA 70), and associated references. •
The categorical waiver excludes long-term care (LTC) facilities that provide life support as the LTC requirements at 42 CFR 483.90(c)(2) requires these facilities to have an emergency generator without exception.

Energy Resilient Healthcare Facilities

- **University of California Office of the President (UCOP) - Carbon Neutrality Initiative**

<https://ucop.edu/carbon-neutrality-initiative/index.html>

UNIVERSITY OF CALIFORNIA Office of the President

Jobs People Search

HOME ABOUT ORGANIZATION INITIATIVES

Carbon Neutrality Initiative >

Carbon Neutrality Initiative

OVERVIEW ORGANIZATION STUDENT INVOLVEMENT REPORTS RESOURCES

UC, a national leader in sustainability, has pledged to become carbon neutral by 2025, becoming the first major university to accomplish this achievement.

UCI Health-Delivering the Nation's First All-Electric Hospital



**Artist conceptual rendering, subject to change*

Leading Edge: Delivering the Nation's First All-Electric Hospital



Louise Belair

Senior Vice President

WSP/tk1sc



Joe Brothman

Director of Facilities

UCI Medical Center



Gina Chang

Principal

CO Architects



Sean Hu

Vice President

WSP/tk1sc



Chris Tokas

Deputy Director

HCAI

5th Southern California Hospital, Outpatient Facilities & Medical Office Buildings Summit

April 16, 2024 | 8:00 am to 3:15 pm - Lunch Included | 3643 Wilshire Blvd - Los Angeles, CA 90010

5 Hours CEUs: AIA HSW, AHA, CHFM, CHC, CHESP, PDH | 2 Hours Networking

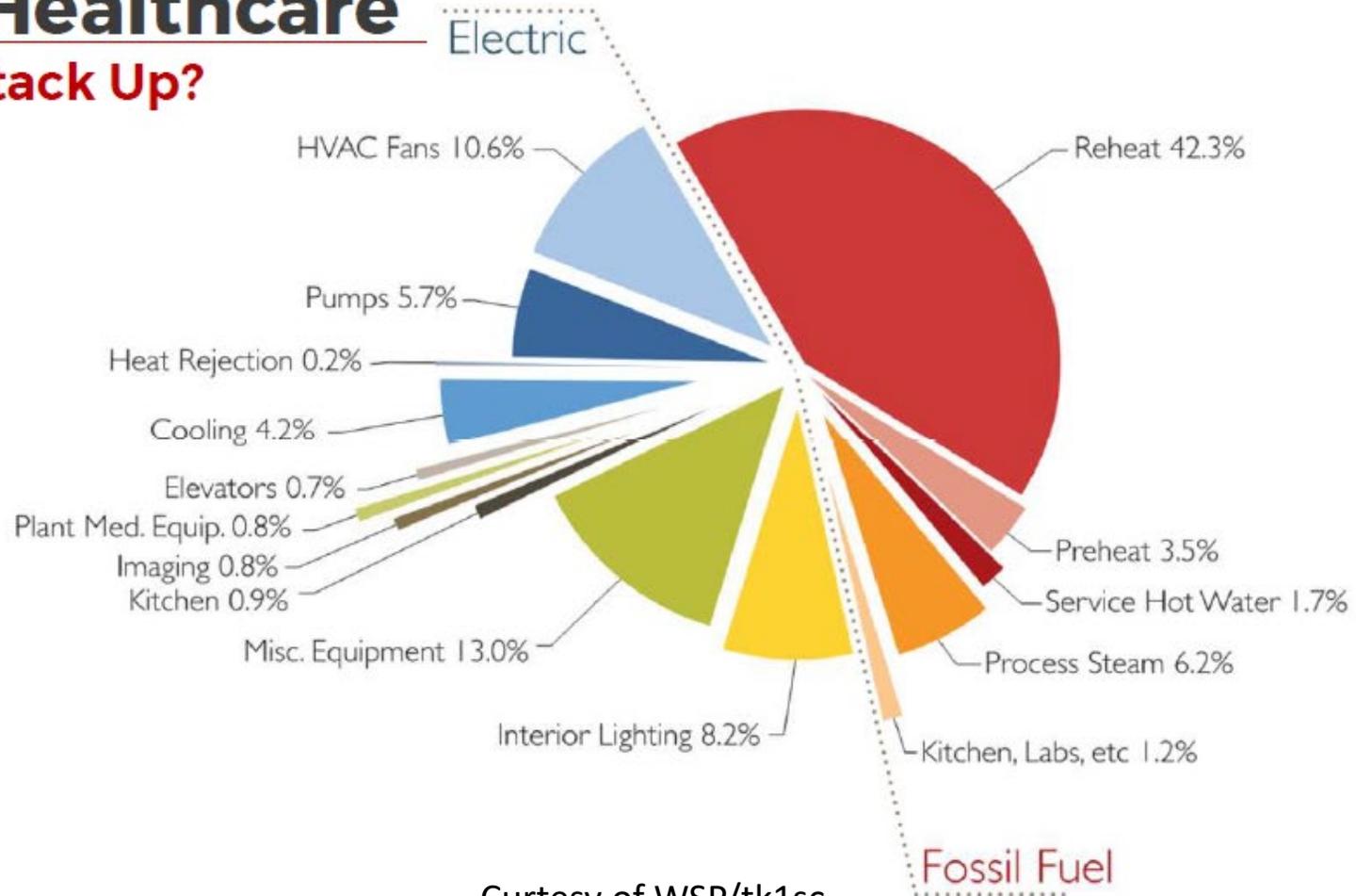
SquareFootage.net | AMFP – SoCal | National, Regional & Local Partners

Energy Resilient Healthcare Facilities

Decarbonizing Healthcare

How Does Healthcare Stack Up?

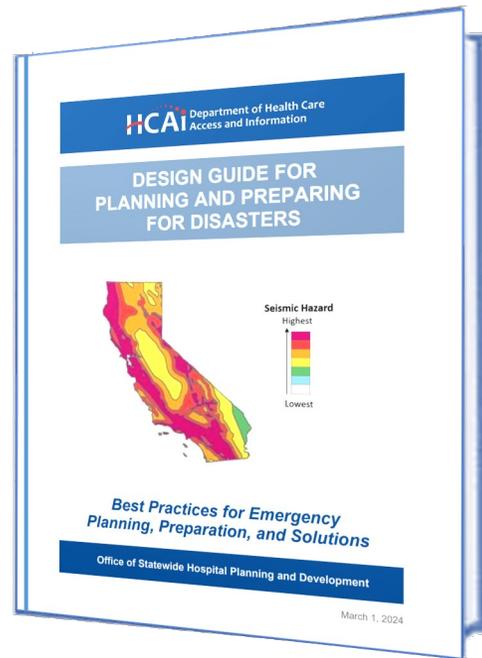
- Kaiser Permanente
- University of California Health Facilities



Courtesy of WSP/tk1sc

Design Guide for Planning and Preparing for Disasters

Best Practices for Emergency Planning, Preparation, and Solutions



ACKNOWLEDGEMENTS

**Department of Health Care Access and Information (HCAI)
Hospital Building Safety Board (HBSB) and Codes and Processes Committee**

Office of Statewide Hospital Planning and Development
Chris Tokas, Deputy Director
Richard Tannahill, Deputy Division Chief

Emergency Design Task Force

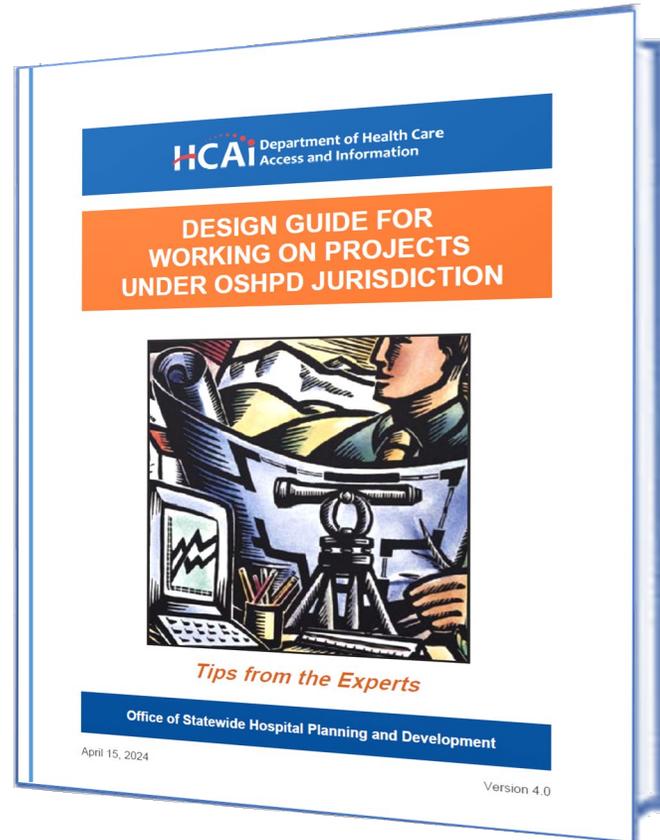
Dr. Michael Bennett, MD	CA Department of Public Health
Matthew Bernard	OSHPD, Field Compliance Unit (North Los Angeles)
Hussain Bhatia	OSHPD, Architectural & Engineering Unit (Coastal Region)
Braden Bill	R&A Engineering Solutions, Inc.
Lori Campbell	OSHPD, Building Standards Unit
Paul Coleman	OSHPD, Building Standards Unit
Abdel Darwich	Guttman & Blaevoet Consulting Engineers
Gary Dunger	Cedars-Sinai Health System
Teresa Endres	Taylor Design
John Genest	Children's Hospital Los Angeles
Nathanial Gilmore	CA Department of Public Health
Bill Gow	OSHPD, Building Standards Unit
John Griffiths	CONTECH-CA
Rachel Hole	Taylor Design
Murat Karakas	Arup
David Mason	OSHPD, Building Standards Unit
Diana Navarro	OSHPD, Architectural & Engineering Unit (North Los Angeles Region)
Mark Paone	MJP Architects
Ravi Rao	Taylor Design
Diana Scaturro	OSHPD, Architectural & Engineering Unit (North Region)
Carl Scheuerman	OSHPD, Seismic Compliance Unit
Nanci Timmins	OSHPD, Fire Prevention Unit
Evelt Torres	OSHPD, Hospital Building Safety Board Staff
Ramya Vasudevan	Taylor Design
Joe Warner	Nichols, Melberg, Rosetto

Design Guide for Planning and Preparing for Disasters

Best Practices for Emergency Planning, Preparation, and Solutions

- Planning, Preparing, and Implementing Solutions for a Seismic Event
- Emergency Patient Room Ventilation Conversion
- Emergency Operations for Surge Capacity
- Spaces That Can be Split into Multiple Zones
- Other Considerations for Surge Capacity
- HVAC System Considerations for Handling Smoke During Wildfires
- Upgrading Air Filters
- How To Expedite Emergency Projects
- OSHPD's Response for Disasters
- Coordination for Temporary Surge Facilities and Alternate Care Sites

Design Guide for Working on Projects Under OSHPD Jurisdiction



California Hospital Projects A to Z . . . Tips from the Experts

FOCUS:

- HCAI/OSHPD**
- The History of the Guide
 - HCAI/OSHPD W^o: Who, What, When, Where, and Why?
 - Seven areas of OSHPD responsibility
 - Electronic Services Portal

Tips for Owners

- Organizing the work
- Project Phases

Submittals, Design, and OSHPD Review

- HCAI/OSHPD Roles and Jurisdiction
- Geologic Hazards
- Architect's Roles and Responsibilities
- The Structural Engineer's Roles and Responsibilities
- MEP Roles and Responsibilities

Working with OSHPD in the Field

- Inspector of Record Guidelines
- Testing, Inspection and Observation Guidelines
- Working with HCAI/OSHPD Field Staff

Thursday, October 5, 2023

DoubleTree Newark – Fremont
39900 Balentine Dr.
Newark, CA 94560
(510) 490-8390

Tuesday, October 10, 2023

Hilton Irvine/Orange County Airport
18800 MacArthur Blvd.
Irvine, CA 92612
(949) 833-9999

SEMINAR INFORMATION:

\$220 per person Includes breakfast, buffet lunch, and morning and afternoon refreshments
7:30 am – 8:30 am Registration & Breakfast
8:30 am – 4:45 pm Seminar (includes one-hour lunch)

REGISTER ONLINE:

<https://payments.hcai.ca.gov/hbsb/>

- No refunds for cancellations received less than one week prior to the event, or for no-shows.

- Registered attendees will receive an email with a link to the seminar materials three days before the seminar, as well as a copy of the *Guide for Working on Projects Under OSHPD Jurisdiction* at the seminar.

- Questions: OSHPD.Seminar@hcai.ca.gov or (916) 440-8411

HCAI/HSSB Educational Seminar of 2023: California Hospital Projects A to Z... Tips from the Experts

Workload in Construction Costs for Projects Over Time

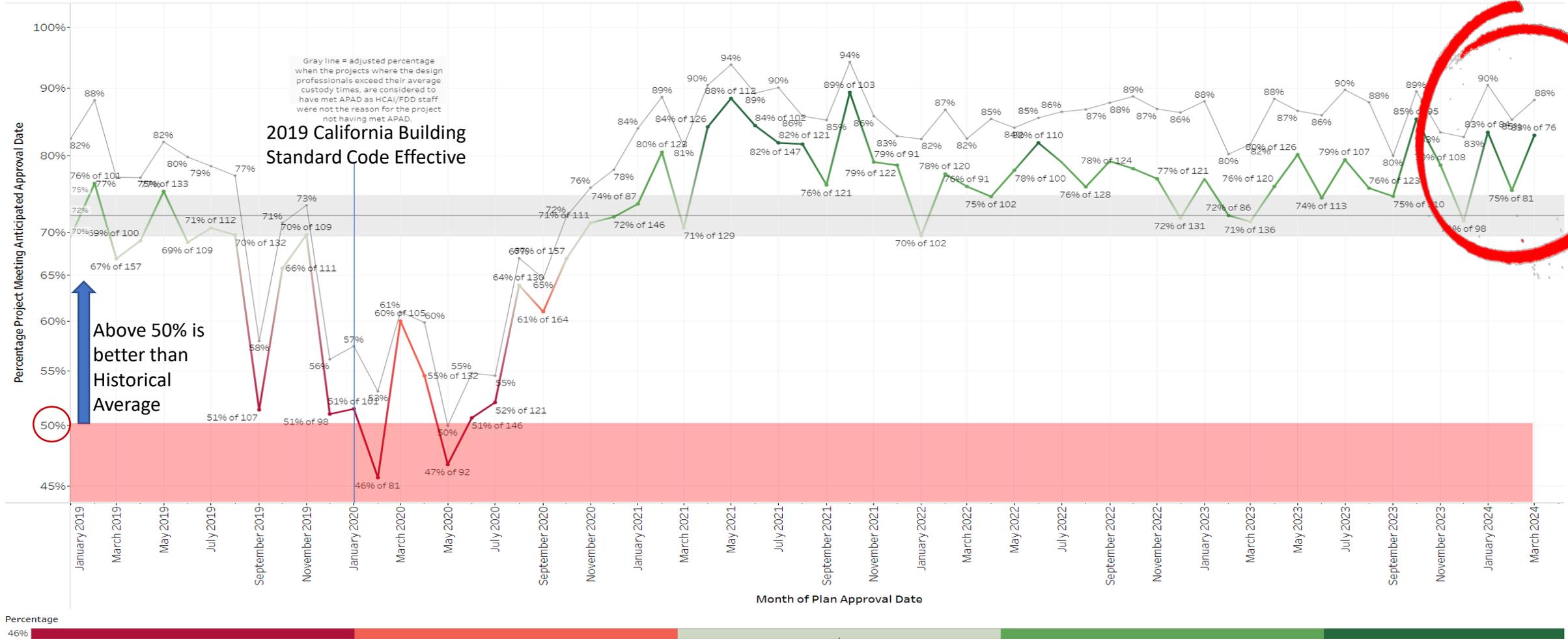


Workload in Construction Costs for Projects Over Time

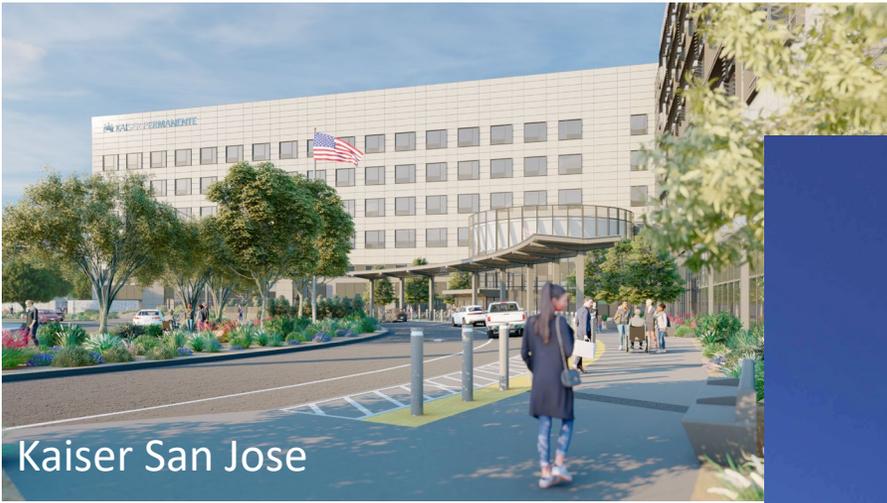


Anticipated Plan Approval Date

Year over Year Comparison of Records Meeting or Beating APAD (Data as of 4/12/2024 7:35:07 AM):



Percentage
46%



Kaiser San Jose



UC Davis MC



UC San Francisco MC



Kaiser Roseville



Kaiser Railyards

January 1, 2024 - Seismic Compliance Required Submittals

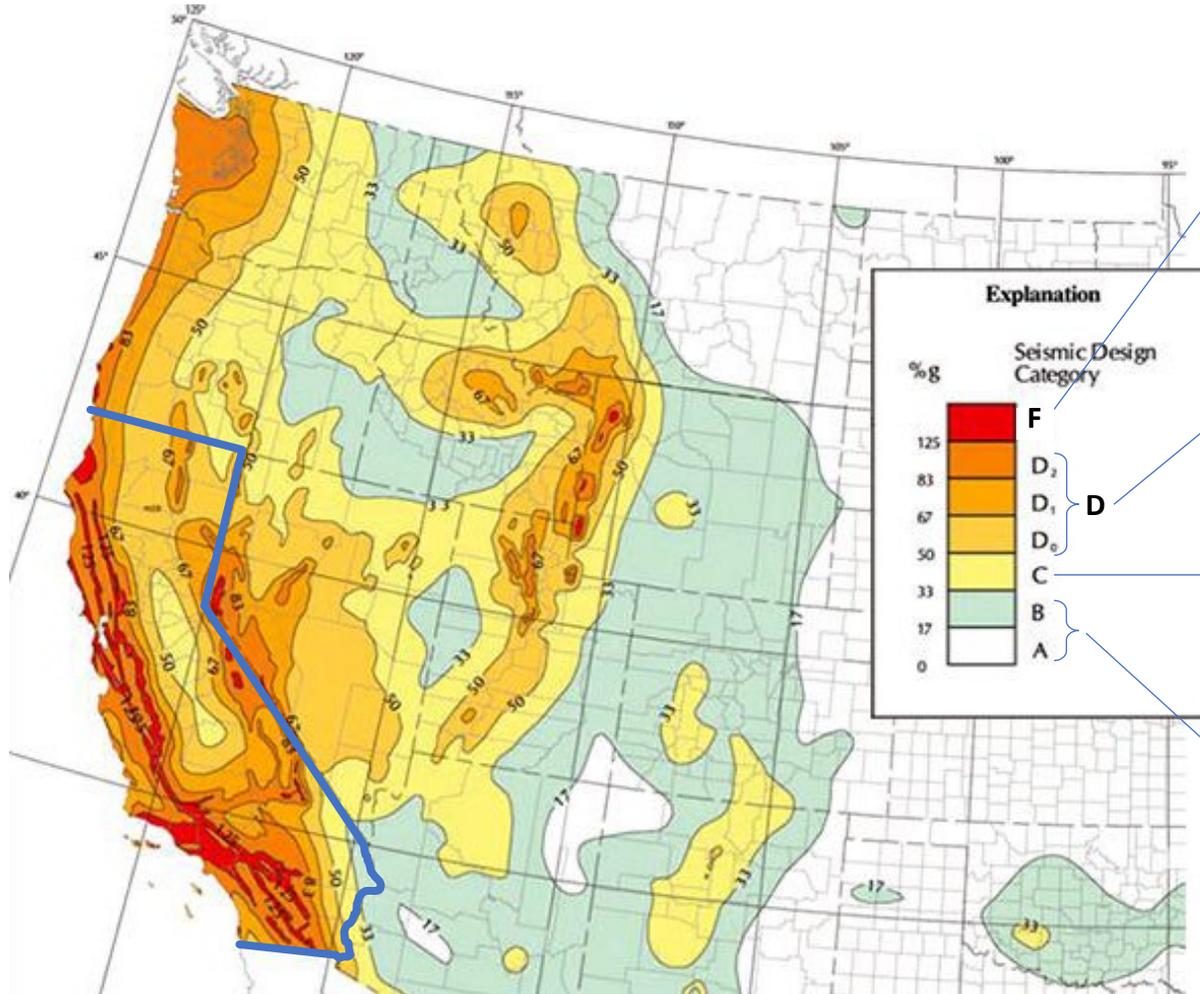
NPC Submittals (Required by California Administrative Code Chapter 6)

- NPC 3 compliance construction final document *[If GAC building is NPC 2 and located in extremely high seismic site – Seismic Design Category F]*
- NPC 4D Evaluation report including Operational Plan or NPC 4 Evaluation report
- NPC 5 Evaluation report including 72hr fuel evaluation and Water Rationing Plan
- Letter of Intent stating GAC services in the building will be removed by 1/1/2030 *[For GAC buildings planned to be removed from GAC services by 1/1/2030]*

AB 1882 Submittals

- Licensed GAC Services Reporting Application *[All buildings under HCAI jurisdiction]*
- Signage Application *[All GAC Buildings]*

Seismic Design Category F (CBC)

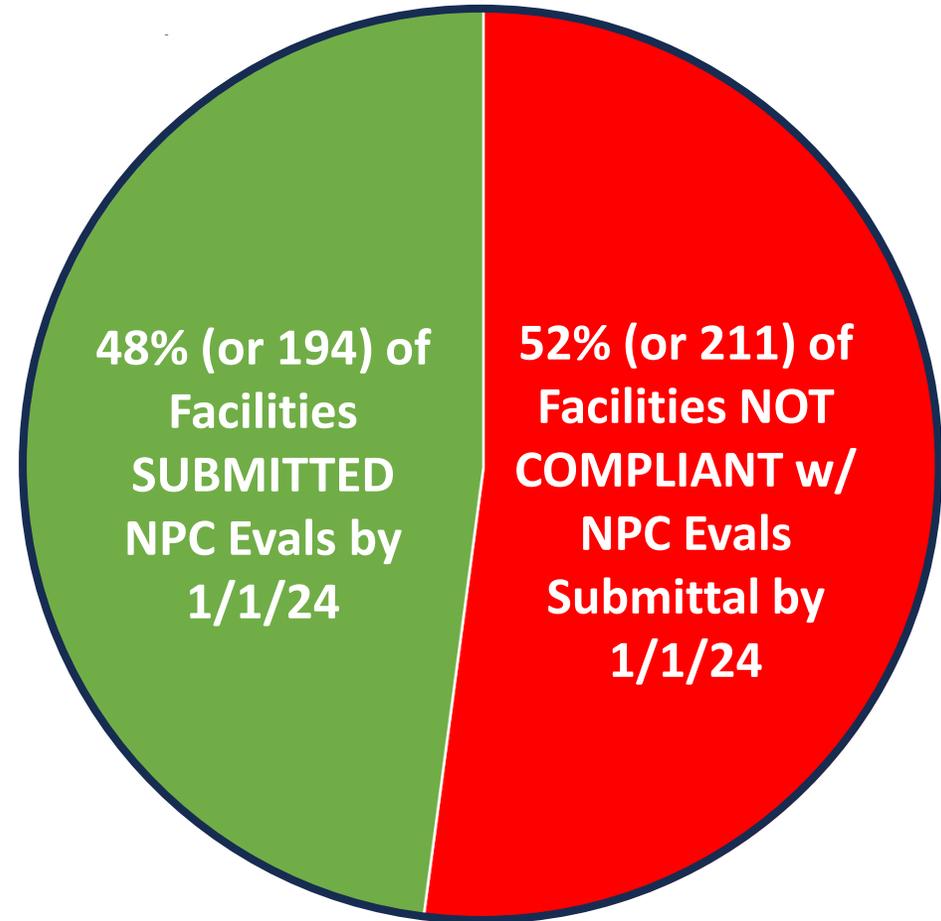


- Very High seismic hazard areas (red) are most likely to experience violent ground-shaking, intense enough to destroy buildings, as they are located near a major fault.
- High seismic hazard areas (orange) could experience very strong shaking capable of producing great damage in poorly built structures.
- Moderate seismic hazard areas (yellow) may experience strong shaking during earthquakes which can cause considerable damage in poorly built structures.
- Low seismic hazard areas could experience moderate intensity shaking.

January 1, 2024 - Seismic Compliance Required Submittals

Non-Structural Performance (NPC) evaluations

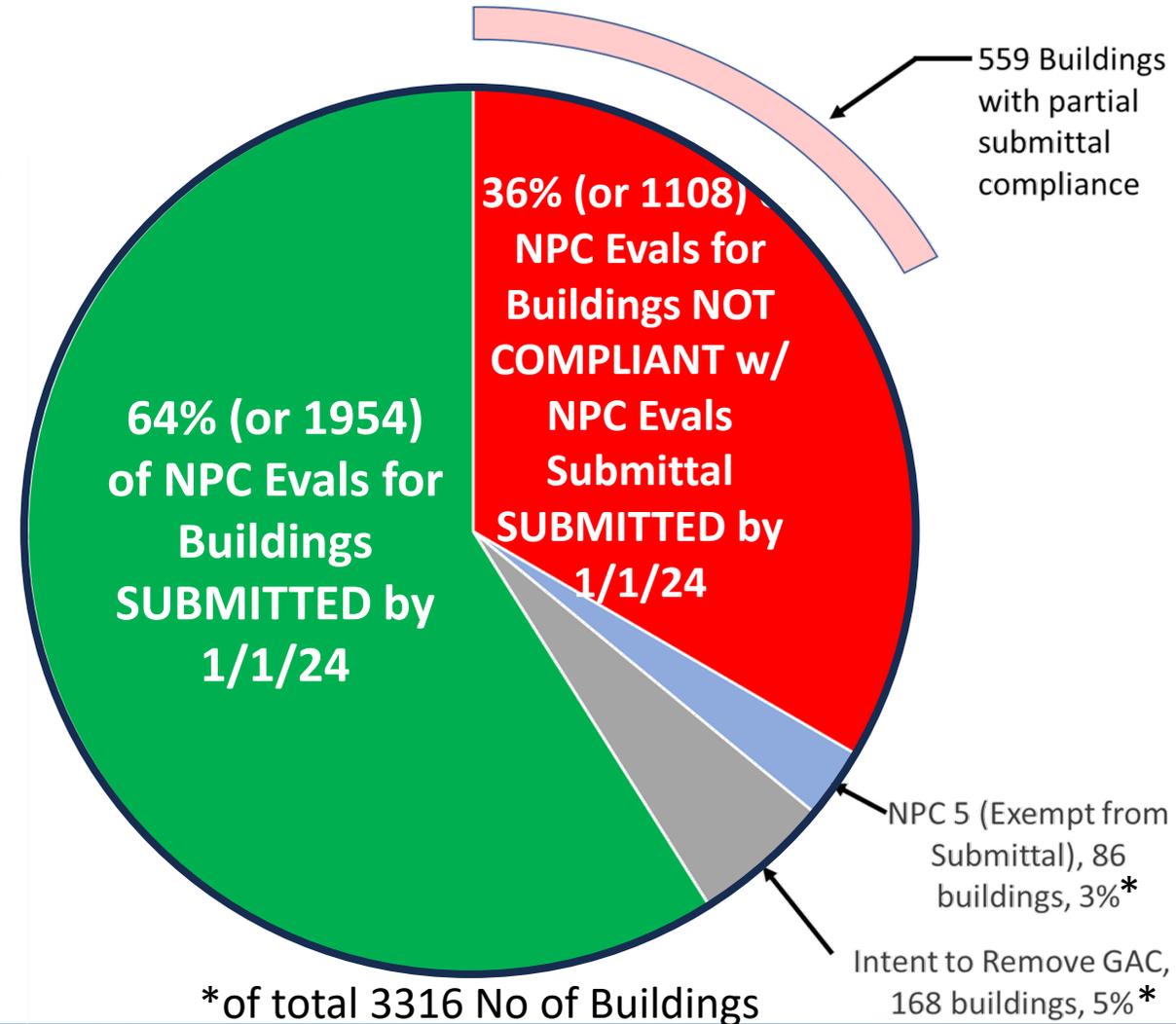
- 405 Hospital Facilities Required to submit NPC evaluations



January 1, 2024 - Seismic Compliance Required Submittals

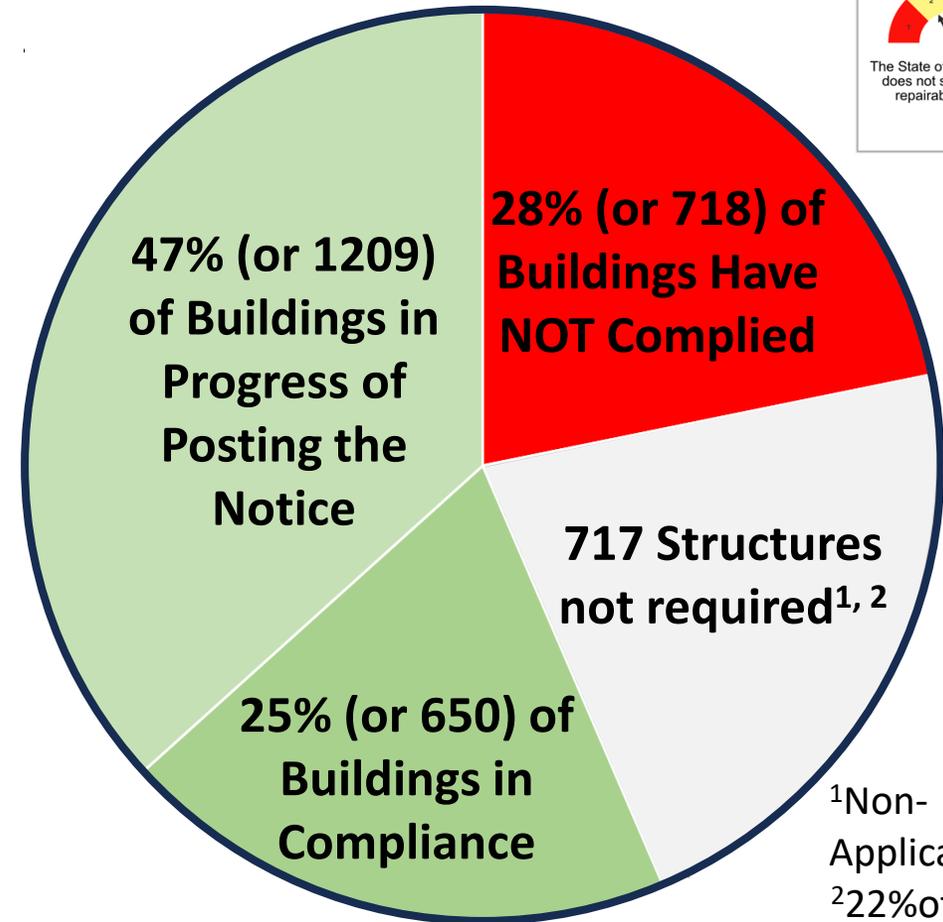
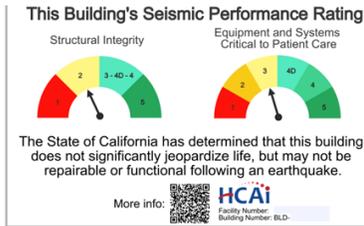
Non-Structural Performance (NPC) evaluations

- 3062 Hospital **Buildings** required to submit evaluations



January 1, 2024 – Notice of Non-Compliance w/ the Seismic Safety Requirements*

- 2577 Hospital **Buildings** required to be posted noticing the patients or the public



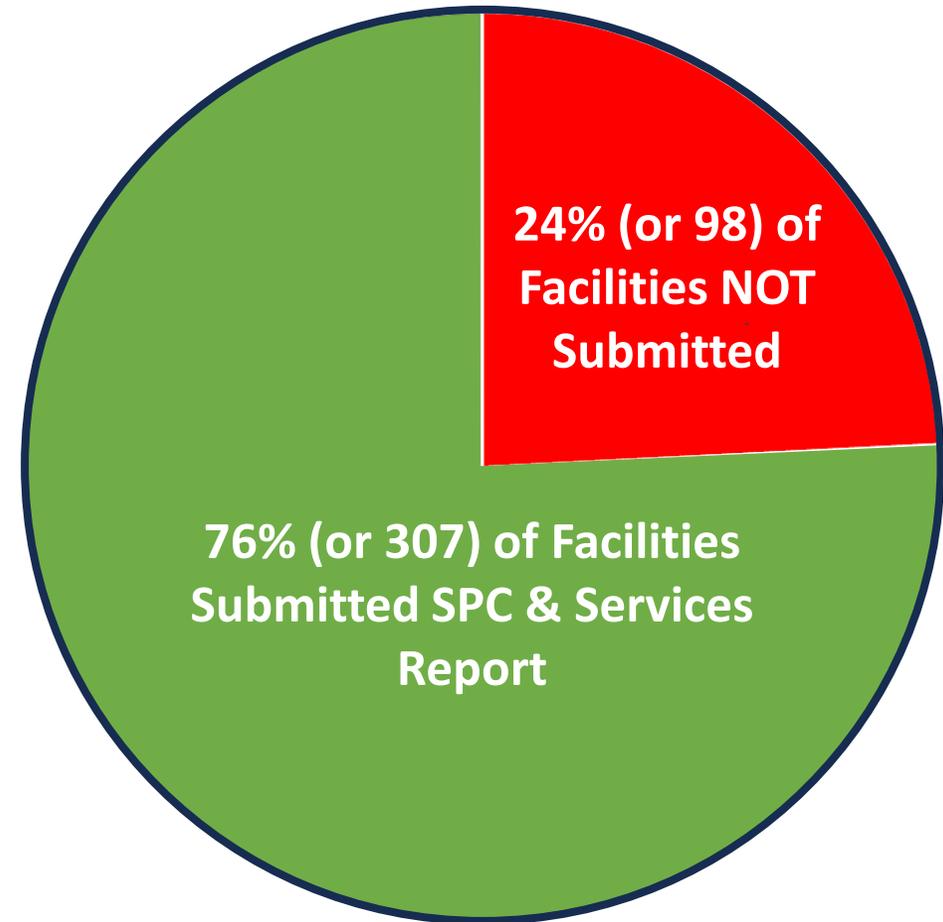
¹Non-Applicable/Exempt
²22% of total 3316 No of Buildings

*AB 1882, Chapter 584, Stats, 2022

January 1, 2024 – Reporting Requirements of SPC & Services for ea. Building *

Required annual status update on the SPC ratings of the building and the services provided in each hospital building on the hospital campus

- 405 Hospital Facilities required to submit annual status update



*AB 1882, Chapter 584, Stats, 2022

Building Safety & Finance

- Building & Construction Projects
- eServices Portal (eSP)
- Forms, Training, and Resources
- Facility Detail
- Preapproval Programs
- Codes and Regulations
- Seismic Compliance and Safety
- Hospital Inspection Services



of Health Care Access and Infor
ewide Health Planning and Development. HCAI is committed t

← Back to Building Safety and Finance

Facility Detail

Click on the **Facility List Drop-down** below and scroll to find and select a facility. Or click the drop-down and begin typing a facility name or number to filter the list. Data is updated every 2 weeks.

New: AB 2190 Quarterly Reports are now available.

For accessible copies of facility site plans [email Seismic Compliance Unit](#).

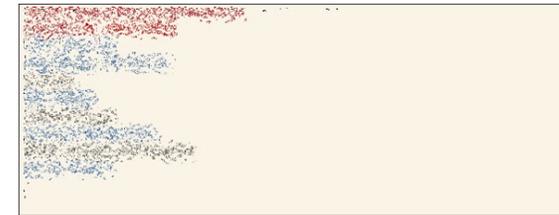
- Facility Info
- Building List/Seismic Info
- Building Services**
- Instrumented Buildings
- AB2190 Report
- Unauthorized Construction
- Building Operational Plan

Show facilities:

- (All)
- Do not have AB 2190 Extensions
- Have AB 2190 Extensions

Facility List Drop-down

hospital



Plan Review Supervisor:
Diana Navarro (213) 620-6506
Diana.Navarro@hcai.ca.gov

Regional Compliance Officer:
Michael Marrs (916) 284-2672
Michael.Marrs@hcai.ca.gov

Compliance Officer:
Thomas Shanks (818) 470-6934
Thomas.Shanks@hcai.ca.gov

District Structural Engineer Name:

© 2023 Mapbox © OpenStreetMap

*Click on the dot to view in Google Maps.

[Back to Main](#)

Applicable Year

2023

Hospital

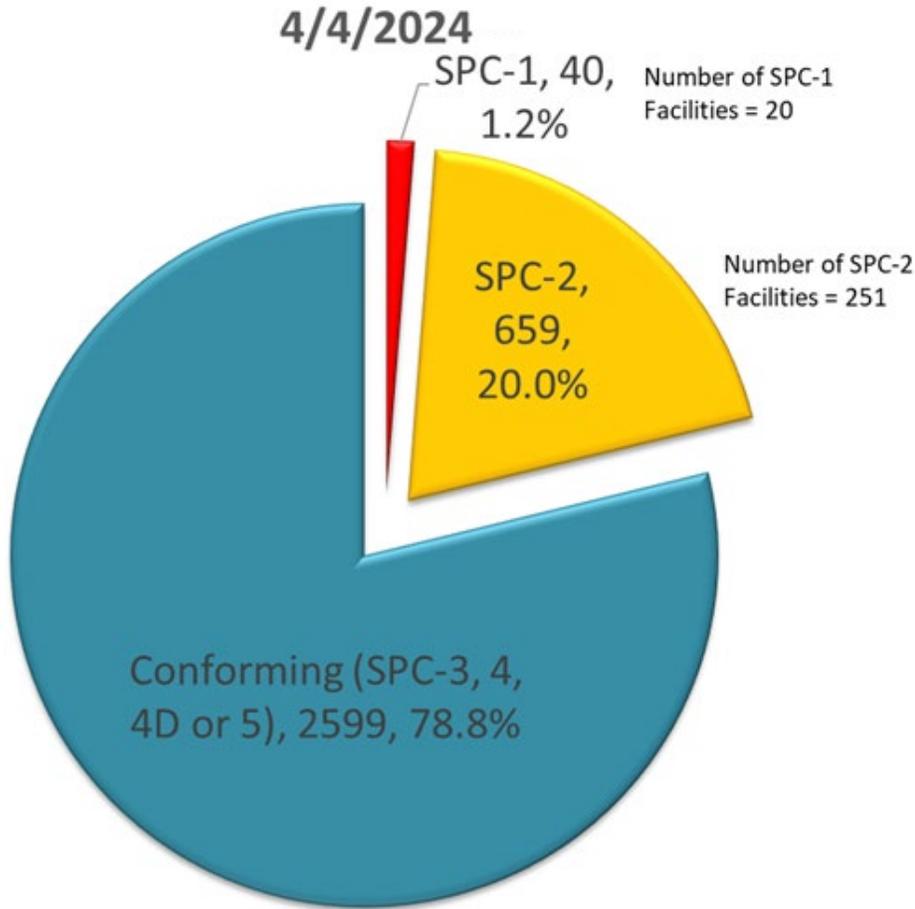
Bldg Num	Bldg Name	Applicable Year	Nursing Med Surg	Surgical	Anesthesia PACU	Clinical Lab	Imaging Radiological Diagnostic Imagin	Pharmacy	Dietetic	Administrative	Sterile Processing	General Storage	Morgue	Employee Dressing	Housekeeping EVS	Laundry Linen	Special Procedures	ICU CCU PICU	Burn Unit	Neonatal Intensive Care Unit	Pediatric Adolescent Nursing Unit	Psychiatric Nursing	Obstetrics Perinatal Unit	Emergency	Nuclear Medicine	Rehabilitation Therapy	Physical Rehabilitation Nursing Unit	Renal Dialysis	Respiratory	Intermediate Care	Outpatient Services	Skilled Nursing Unit	Central Plant Utility Bldg	Canopies Corridor Buildings Tunnels	Non GAC Uses	
BLD-01130	North Tower - East Building	2023		X		X																														SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...
BLD-01131	North Tower - Central Building	2023					X		X									X										X							SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...	
BLD-01132	North Tower - West Building	2023			X					X																									SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...	
BLD-01133	Inter-Hospital Passageway	2023																											X					SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...		
BLD-01134	South Tower	2023	X	X		X		X	X	X					X		X																		SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...	
BLD-01135	Rehabilitation Center	2023																						X					X						SPC: 3 NPC: 2	
BLD-01136	Emergency / Radiology	2023				X	X		X															X	X										SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...	
																																			SPC: 2 NPC: 2	



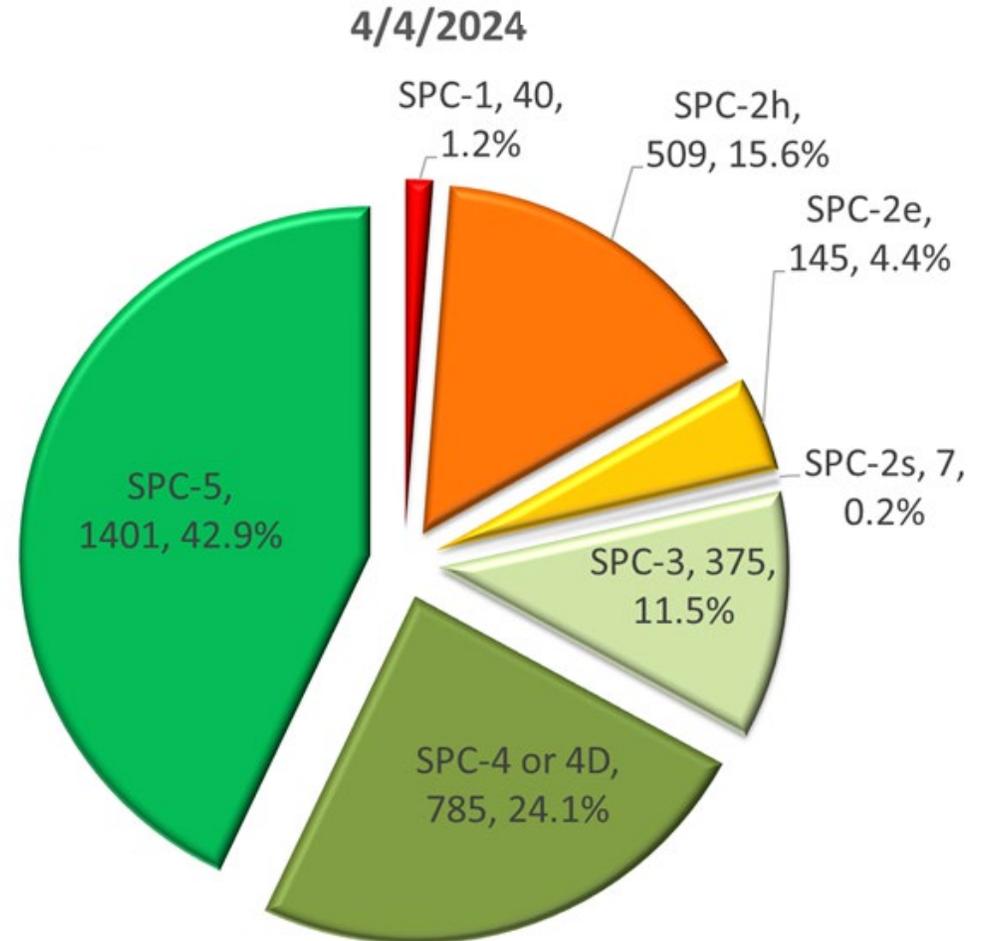
SPC = Structural Performance Category
 NPC = Nonstructural Performance Category
 SPC and NPC are applicable to Hospital Buildings only
 3s, 4s and 5s indicate SPC/NPC rating self-reported by the hospital and not verified by OSHPD

[Download PDF](#)

Seismic Compliance (SPC)

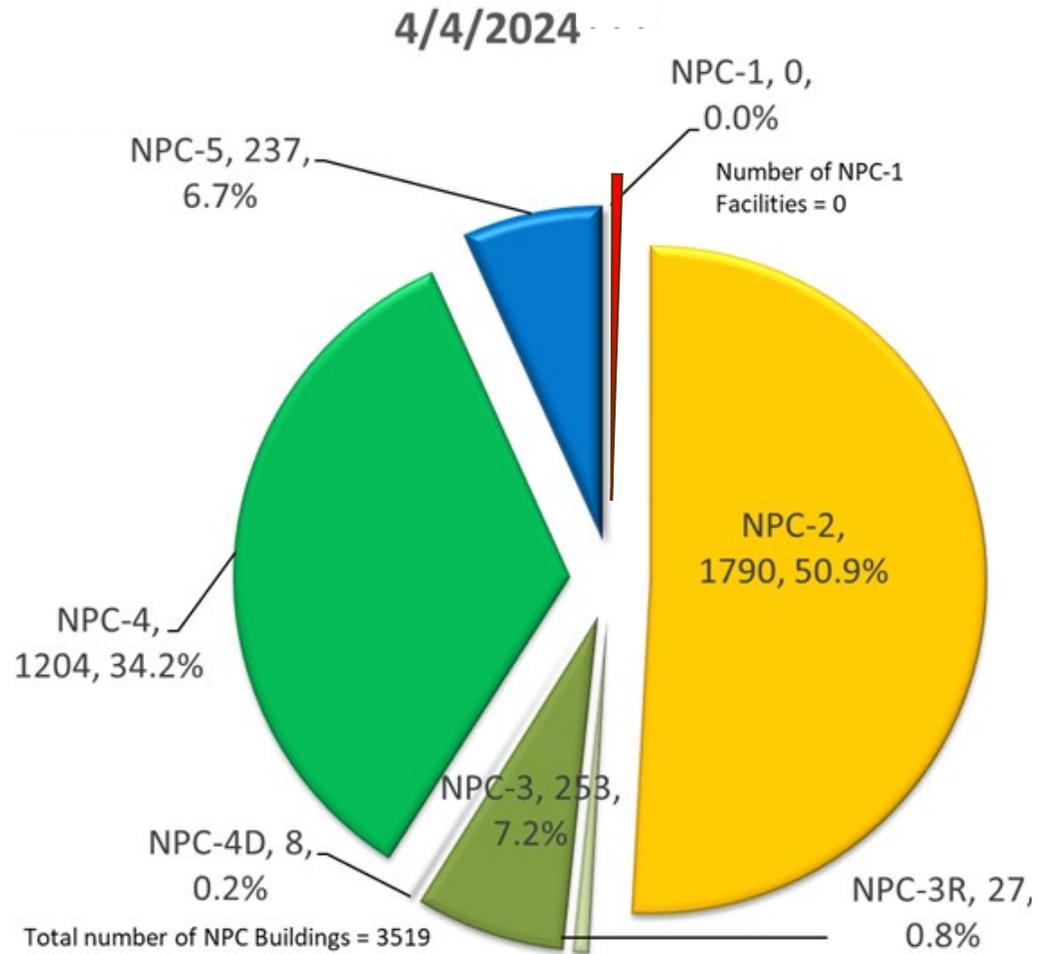


Total number of SPC Buildings = 3260 in 412 Facilities

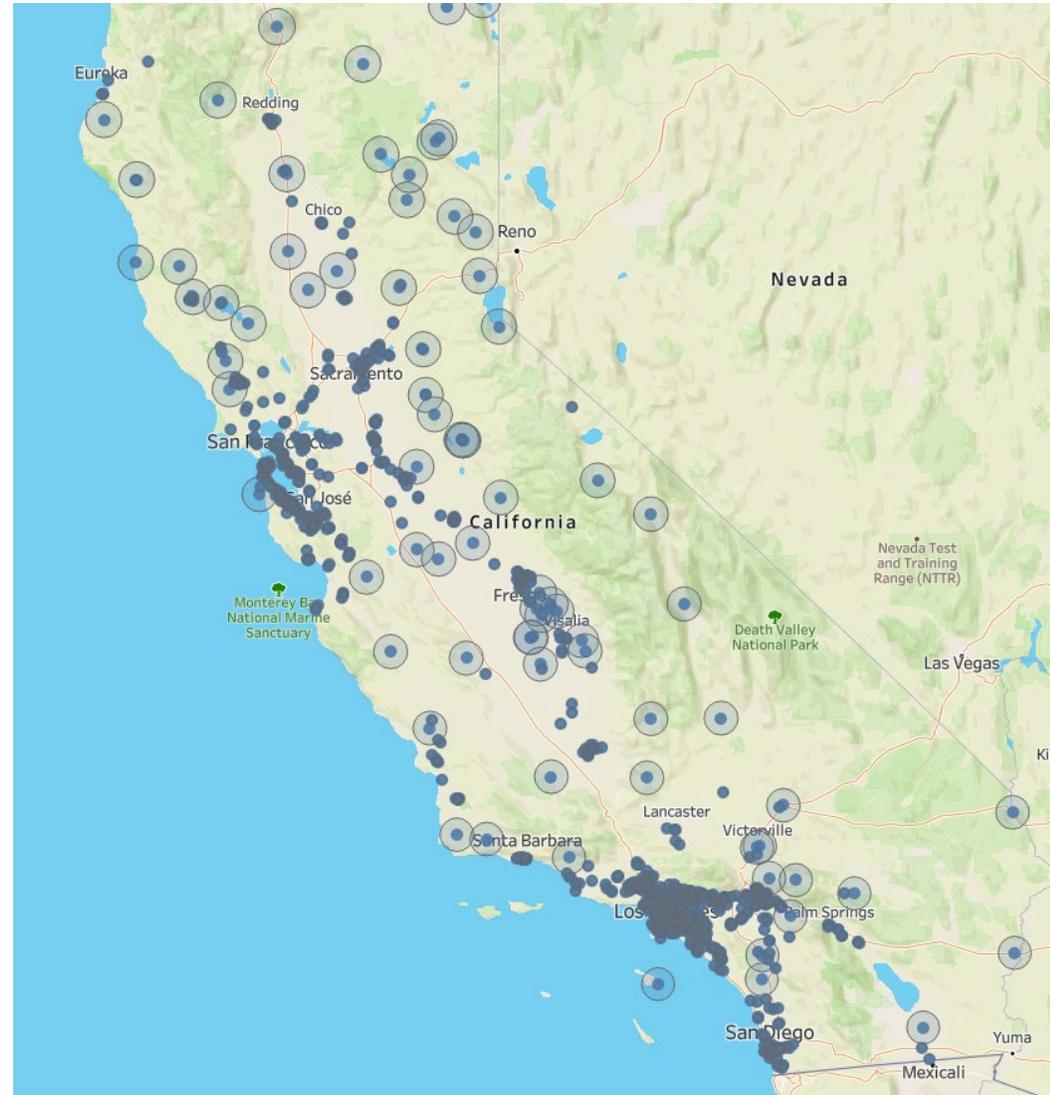


Total number of SPC Buildings = 3260 in 412 Facilities

Seismic Compliance (NPC)



Small and Rural Hospital Relief Program



- \$2.5M transferred into Fund 3391 total to date
- 36 Applications Received
- 23 Eligibility Approved, 8 Pending Finalization, one not eligible
- **\$460K awarded to date**

Outreach Efforts

June 13, 2022	Targeted E-mail Announcement “HCAI Launches Small and Rural Hospital Relief Program” Sent to 102 hospitals in California that meet at least one eligibility criterion for technical assistance.
June 18, 2022	Webinar: Presented the program to healthcare architects and administrators in the American Institute of Architects, Central Valley (AIACV) Chapter
July 6, 2022	Targeted E-mail Announcement Reminder “The Small and Rural Hospital Relief Program Provides Assistance in Reaching Seismic Compliance” Sent to 102 hospitals in California that meet at least one eligibility criterion for technical assistance (with the SRHRP information sent to all Small and Rural Hospitals Administrators).
December 14, 2022	Presentation: California Critical Access Hospital Network
April 10, 2023	Targeted E-mail Invitation* “Small and Rural Hospital Relief Program to Start Accepting Grant Applications on April 17” Sent to 102 hospitals in California that meet at least one eligibility criterion for technical assistance.
April 18, 2023	E-Mail Invitation Reminder* “Small and Rural Hospital Relief Program Now Accepting Grant Applications”
October 2, 2023	E-mail Webinar Announcement* “Small and Rural Hospital Relief Program (SRHRP)”
October 11, 2023	E-mail Webinar Reminder* “Small and Rural Hospital Relief Program (SRHRP)”
October 18, 2023	Webinar: Small and Rural Hospital Relief Program (SRHRP) by HCAI Hospital Building Safety Board
March 27, 2024	Webinar: Small and Rural Hospital Relief Program (SRHRP) to the Association of Medical Facility Professionals (AMFP)

January 13, 2022	HBSB SNSR Meeting <i>Presentation-Discussion-Public Input</i> Introduce SB 395 as Statute and HCAI Implementation Plan
April 28, 2022	HBSB Meeting <i>Overview-Approval-Public Input</i> HBSB-SNSR January 13, 2022 Meeting Report and OSHPD Program Update
June 22, 2022	HBSB SNSR Meeting <i>Presentation-Discussion-Public Input</i> Policy Intent Notice (PIN) 71, Compliance Plan Requirements for Participants in the Small and Rural Hospital Relief Program
August 11, 2022	HBSB Meeting <i>Overview-Approval-Public Input</i> HBSB-SNSR June 22, 2022 Meeting Report and OSHPD Program Update
November 7, 2022	HBSB SNSR Meeting <i>Presentation-Discussion-Public Input</i> Title 24, California Code of Regulations, California Building Standards Code, 2022 Intervening Code Cycle Change Proposals, for Small and Rural Hospital Relief Program
December 7-8, 2022	HBSB Meeting <i>Overview-Approval-Public Input</i> OSHPD Program Update including the Seismic Compliance Unit and Small and Rural Hospital Relief Program
April 11, 2023	HBSB SNSR Meeting <i>Presentation-Discussion-Public Input</i> OSHPD Seismic Compliance Unit Update
April 20, 2023	HBSB Meeting <i>Overview-Approval-Public Input</i> HBSB-SNSR November 7, 2022 Meeting Report and OSHPD Program Update
August 17, 2023	HBSB Meeting <i>Overview-Approval-Public Input</i> HBSB-SNSR April 11, 2023 Meeting Report and OSHPD Program Update

AB 2511 – 96 Hours Emergency Power

HCAI efforts for SNFs to Comply Successfully

- October/November 2022
 - HCAI Policy Intent Notice (PIN)
 - Endorsed by 3 HBSB Committees (Technology, Energy Conservation, and Codes and Processes, 11/1/2022)
 - Ready for Publication
- December 2022
 - HCAI publishes Policy Intent Notice
 - 12/1, HCAI submits proposed building standards/regulations to the CBSC (2022 Intervening building Code Cycle)
- January 1, 2023
 - eSP augmentations operational to accept project submittals
 - eSP augmentations to monitor implementation progress
 - AB 2511 requirements become enforceable
 - SNF projects submitted to HCAI
- March 2023
 - HCAI published **Advisory Guide (How-To)**
- January 1, 2024
 - Final deadline for SNFs to comply



Facility Assessment Submittals

	Qty	Assessment State
	399	No Assessment
759	10	Being Submitted
	2	Submitted – Returned to Client
	67	Submitted – Remarked & Returned to Client
	30	Submitted – In Review
	2	Re-Submitted – In Review
	6	Submitted – Pending Determination
	618	HCAI Non-Compliant
	2	HCAI Compliant - Awaiting CDPH Concurrence
	22	HCAI Compliant – w/ CDPH Concurrence
		1158

759 submitted, 22 determined to be compliant

Advisory Notice to Health Facilities, IORs, & Approved Agencies



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



January 16, 2024

All Health Facilities, Inspection Services Companies,
Approved Agencies, and Inspectors of Record under HCAI
Jurisdiction

RE: HCAI/OSHPD Inspection Services Unit (ISU) **Advisory Notice**

HCAI's Inspection Services Unit (ISU) is aware that Inspection Services Companies, IORs, and Approved Agencies continue to enter into contractual agreements that are not consistent with acceptable practices identified in the regulations to preserve the objectivity of these quality assurance entities. These ongoing and growing practices are in violation of the state's building regulations. **This advisory notice provides advanced warning that HCAI will take decisive action to correct this practice when it is discovered. Such action may result in a project delay, stop work order, revocation of the building permit, IOR certificate suspension / revocation, and/or cancellation of Approved Agency's Pre-Approved status in the HCAI OPAA Program.**

The CALIFORNIA BUILDING CODE (CBC) and CALIFORNIA ADMINISTRATIVE CODE (CAC), CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24 (T24) requires the health facility, owner, or governing board or authority employ approved agencies for special inspections and tests during construction and identified on the Test, Inspection and Observation (TIO) program. The regulations make no allowances for other entities to employ approved agencies or special inspectors for this work.

Consequently, HCAI will not permit any agreements that create a contract for approved agency services or special inspections by any entity not specified in 1701A.3. HCAI will strictly enforce 1701A.3 to ensure projects are not compromised due to a conflict of interest, impacting the objectivity and independence of the entities engaged in the testing and inspection for projects. Refer to code excerpt shown below.

*CALIFORNIA BUILDING CODE (CBC)
CHAPTER 17A
SPECIAL INSPECTIONS AND TESTS*

Page 1 of 2

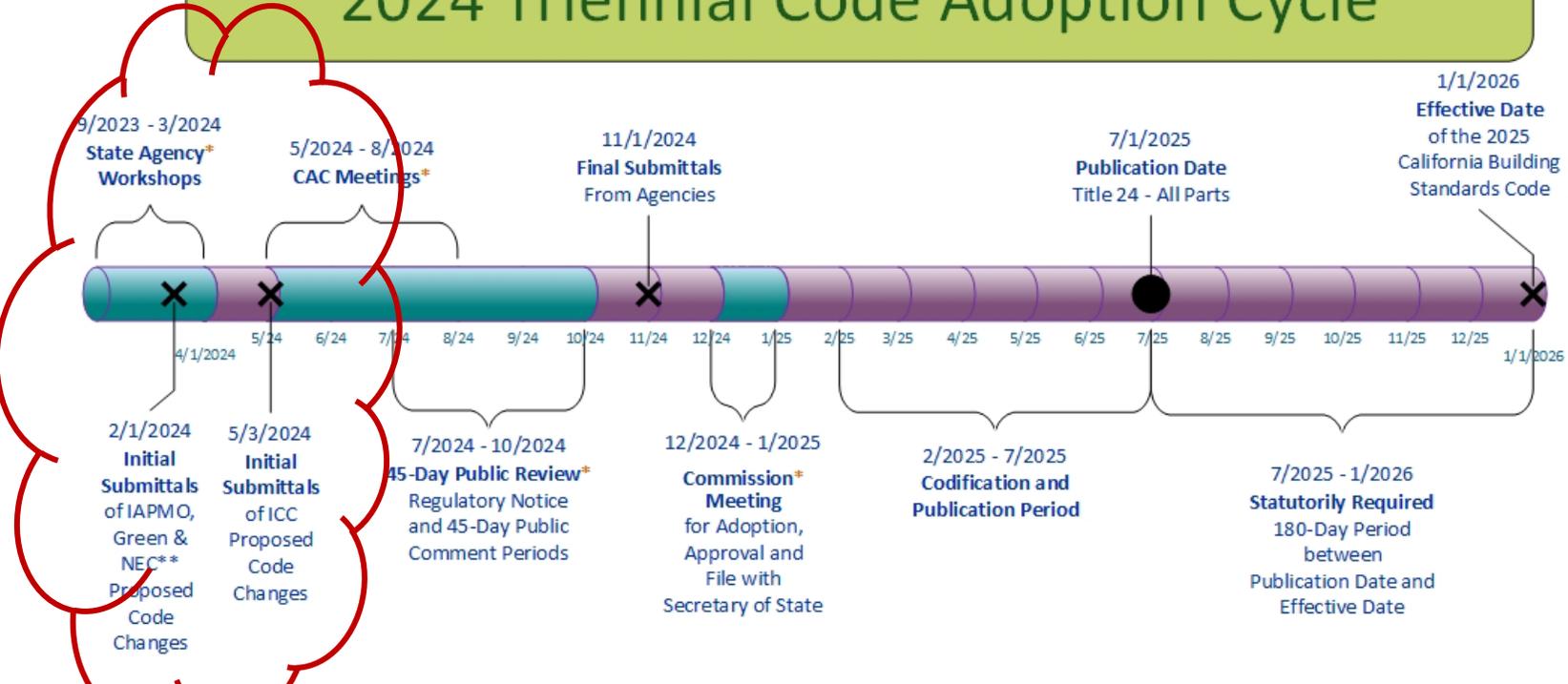
2024 CBSC Triennial Timeline



California Building Standards Commission

2025 California Building Standards Code, Title 24
Effective January 1, 2026

2024 Triennial Code Adoption Cycle



Code Advisory Committees (CAC):
 ACCESS – Accessibility
 BFO – Building, Fire & Other
 GREEN – Green Building
 HF – Health Facilities
 PEME – Plumbing, Electrical, Mechanical & Energy
 SDLF – Structural Design/Lateral Forces

Model Code Publishers:
 ICC – International Code Council
 IAPMO – International Association of Plumbing and Mechanical Officials
 NFPA – National Fire Protection Association
 **NEC resubmittal if necessary

- 2025 edition of Title 24
- ✓ Sept. 28, Coordinating Council
- ✓ Aug. 2023, Submitted CEC
- Feb. 2024, Submit CMC and CPC
- May 2024, CAC, CBC Vol. 1 & 2, CEBC.
- Effective Date: Jan. 1, 2026

* Public Participation Opportunity

dgs.ca.gov/BSC
(916) 263-0916

Rev. 02/2022
All dates are subject to change



TABLE 1604.5
RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

RISK CATEGORY	NATURE OF OCCUPANCY
I	<p>Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to:</p> <ul style="list-style-type: none"> • Agricultural facilities. • Certain temporary facilities. • Minor storage facilities.
II	<p>Buildings and other structures except those listed in Risk Categories I, III and IV.</p>
III	<p>Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:</p> <ul style="list-style-type: none"> • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing one or more public assembly spaces, each having an occupant load greater than 300 and a cumulative occupant load of these public assembly spaces of greater than 2,500. • Buildings and other structures containing Group E or Group I-4 occupancies or combination thereof, with an occupant load greater than 250. • Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500. • Group I-2, Condition 1 occupancies with 50 or more care recipients. • Group I-2, Condition 2 occupancies not having emergency surgery or emergency treatment facilities. • Group I-3, Condition 1 occupancies. • Any other occupancy with an occupant load greater than 5,000.^a • Power-generating stations with individual power units rated 75 MW_{AC} (megawatts, alternating current) or greater, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV. • Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: <ul style="list-style-type: none"> • Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the <i>International Fire Code</i>; and • Are sufficient to pose a threat to the public if released.^b

2024 IBC



308.3 Institutional Group 1-2.

Institutional Group 1-2 occupancy shall include buildings and structures used for *medical care* on a 24-hour basis for more than five persons who are *incapable of self-preservation*. This group shall include, but not be limited to, the following:

- *Foster care facilities*
- *Detoxification facilities*
- *Hospitals*
- *Nursing homes*
- *Psychiatric hospitals*

308.3.1 Occupancy conditions.

308.3.1.1 Condition 1.

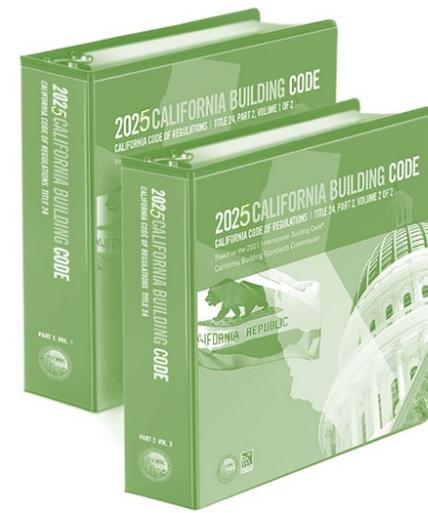
- This occupancy condition shall include facilities that provide nursing and *medical care* but do not provide emergency care, surgery, obstetrics or in-patient stabilization units for psychiatric or detoxification, including but not limited to *nursing homes* and *foster care facilities*.

308.3.1.2 Condition 2.

- This occupancy condition shall include facilities that provide nursing and *medical care* and could provide emergency care, surgery, obstetrics or in-patient stabilization units for psychiatric or detoxification, including but not limited to *hospitals*.

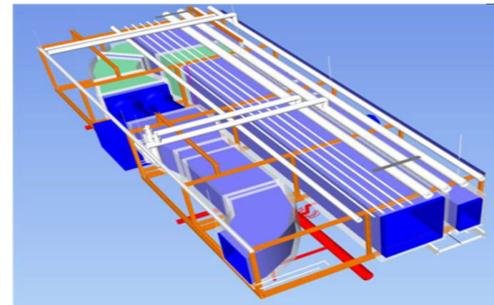
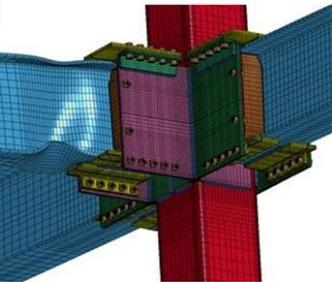
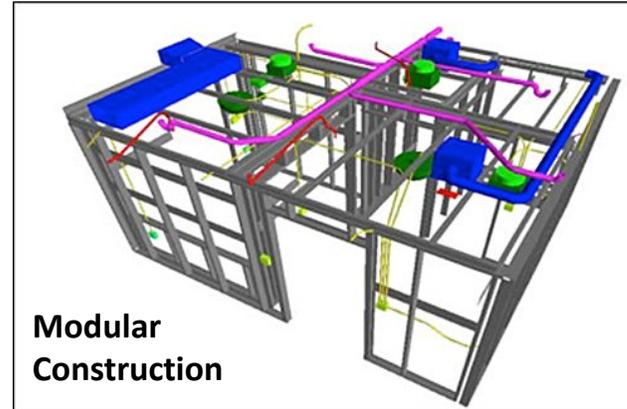
TABLE 1604.5
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RISK CATEGORY	NATURE OF OCCUPANCY
I	<p>Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to:</p> <ul style="list-style-type: none"> • Agricultural facilities. • Certain temporary facilities. • Minor storage facilities.
II	Buildings and other structures except those listed in Risk Categories I, III and IV.
	<p>Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:</p> <ul style="list-style-type: none"> • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing one or more public assembly spaces, each having an occupant load greater than 300 and a cumulative occupant load of those public assembly spaces of greater than 2,500.
III	<ul style="list-style-type: none"> • Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500. • <i>[OSHPD 2] Skilled nursing facilities, intermediate care facilities, Group I-2 occupancy with 50 or more care recipients.</i> • <i>[OSHPD 5] Acute psychiatric hospitals, Group I-2 occupancy with 50 or more care recipients.</i> • Group I-3, Condition 1 occupancies.
	<p>(megawatts, alternating current) or greater, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV.</p> <ul style="list-style-type: none"> • Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: <ul style="list-style-type: none"> • Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the International Fire Code <i>California Fire Code</i>; and • Are sufficient to pose a threat to the public if released.^b



HBSB Seminar Offsite Fabrication & Preassembly

HCAI Pre-Approved Fabricated Components & Systems





Item #14

Inspection Services Unit (ISU) Update

- Update on ISU accomplishments year-to-date
- Discussion and public input

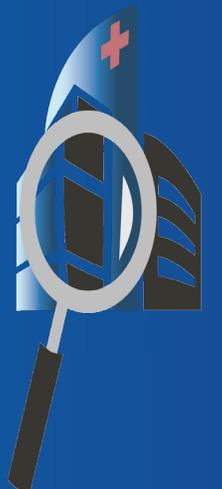
*Facilitator: Joe LaBrie, SE, Regional Compliance Officer
(or designee)*



Inspection Services Unit (ISU) 2024 Activity Update

April 18, 2024

Inspection Services Unit



Inspection Services Unit (ISU)

ISU North



Colosi, Monica@HCAI

Compliance Officer, Health Facilities Con...



Lachica, Michelle@HCAI

Associate Governmental Program Analyst



Schrenk, John@HCAI

Compliance Officer, Health Faciliti.



LaBrie, Joe@OSHPD

Regional Compliance Officer



Rucobo, Suzy@HCAI

Associate Governmental Program Analyst



Davis, Chris@HCAI

District Structural Engineer



Tran, Hoa@HCAI

Compliance Officer, Health Facilities Con...



Rodgers, Patrick@HCAI

Senior Structural Engineer



Yee-Oyoung, Janice@HCAI

Compliance Officer, Health Facilities Con...



Pan, James@HCAI

District Structural Engineer



Harrison, Jason@HCAI

Compliance Officer, Health Facilities Con...



Graves, Darren@HCAI

Compliance Officer, Health Facilities Con...



Lyons, Bob@HCAI

District Structural Engineer



2023 ISU Year End Goal Setting

- Los Angeles: November
- Sacramento: December



eTIO Development

- ISU support IT and Consultant for functionality requirements
- Weekly meetings to exchange key development information
- Exciting vision coming together



Hospital Inspector Certification Exams in April

- Sacramento: 19 Examinees
- Los Angeles: 36 Examinees
- **TOTAL: 55**



IOR Recertification Training & Exams in April

- Sacramento: 38 Examinees
- Los Angeles: 81 Examinees
- **TOTAL: 119**



CO Academy

- Program Manager: John Schrenk
- Early stages of program development



CO Monthly Meetings

- Present on topics and engage in group discussion
- Goal to identify common field challenges and promote consistency
- Compliment to quarterly all field staff in-person meetings



Plan Review Support

- NMA & ACD Reviews for projects in construction
- Project Reviews for projects in submitted for plan review



FCU Region Assignments

- Ongoing support of Regions for projects in construction
- Matrix management of resource to improve coverage in the field



Field Practice Advisory Notices



- HCAI Advisory Notice: “Conflicts of Interest”
- Multiple meetings with Owners & Inspection Services Companies

ISU IOR Supplemental Monitoring



- 10 ISU Members making regular, announced, site visits
- In depth discussions and monitoring of IOR performance
- Randomly selected throughout the state



Other Efforts

- IOR Utilization
- ISU Training Certificate added to Professionals Record
- Code Change Proposal
- ISU Preconstruction and Construction Advisory Seminars
- HBSB Collaboration
- DPOR Training & Outreach w/ CAB/AIA
- Enhanced IOR Monitoring with “+Training”
- eTIO Training
- Field Brief Advice
- Field Operation Manual
- Field Staff Quality/Consistency Monitoring & Training
- HICE Exam Automation





Item #15

Fire Prevention Unit (ISU) Update

- Update on FPU accomplishments year-to-date
- Discussion and public input

*Facilitator: Nanci Timmins, Chief Fire and Life Safety Officer
(or designee)*



HBSB
Full Board Meeting
FPU Update
April 2024

Nanci Timmins
Chief Fire and Life Safety Officer

Fire Prevention Unit



Support
Staff
Vacant

Fire Prevention Unit

FLSO II

FLS TRAINING PROGRAM

FLSO I RECRUITMENT

2025 CALIFORNIA BUILDING STANDARDS CODES

Fire Prevention Unit

STAKEHOLDER TRAINING

FIRE PREVENTION OFFICERS TRAINING

CAFAA

ICC COMMITTEES

SFM COLLABORATION

Thank you!

Nanci.Timmins@hcai.ca.gov

The ability to learn is the
most important quality a
leader can have.

Padmasree Warrior

www.EBOOKSANTIC.COM

Item #16

Structural Services Section Update

- Update on Structural Services Section accomplishments year-to-date
- Discussion and public input

*Facilitator: Roy Lobo, PhD, SE, Principal Structural Engineer
(or designee)*

Office of Statewide Hospital Planning and Development

California's Building Department for Hospitals

STRUCTURAL SERVICES SECTION UPDATE

Roy Lobo, Ph.D., S.E., Principal Structural Engineer

Ali Sumer, Ph.D., S.E., Supervisor Seismic Compliance Unit

HBSB Full Board Meeting

April 18, 2024

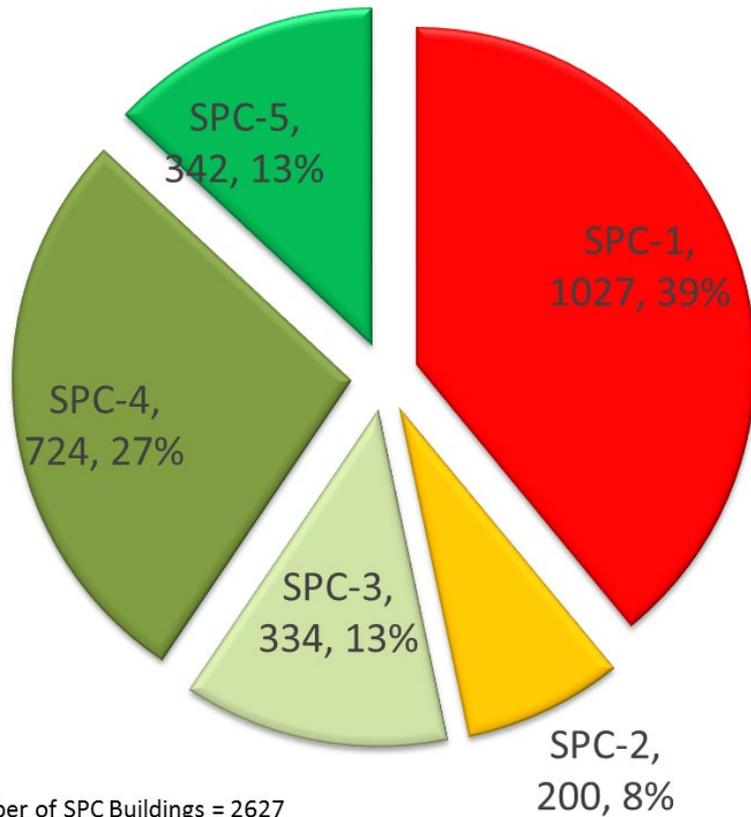
Seismic Compliance Update

(4/18/2024)

Structure Performance Categories

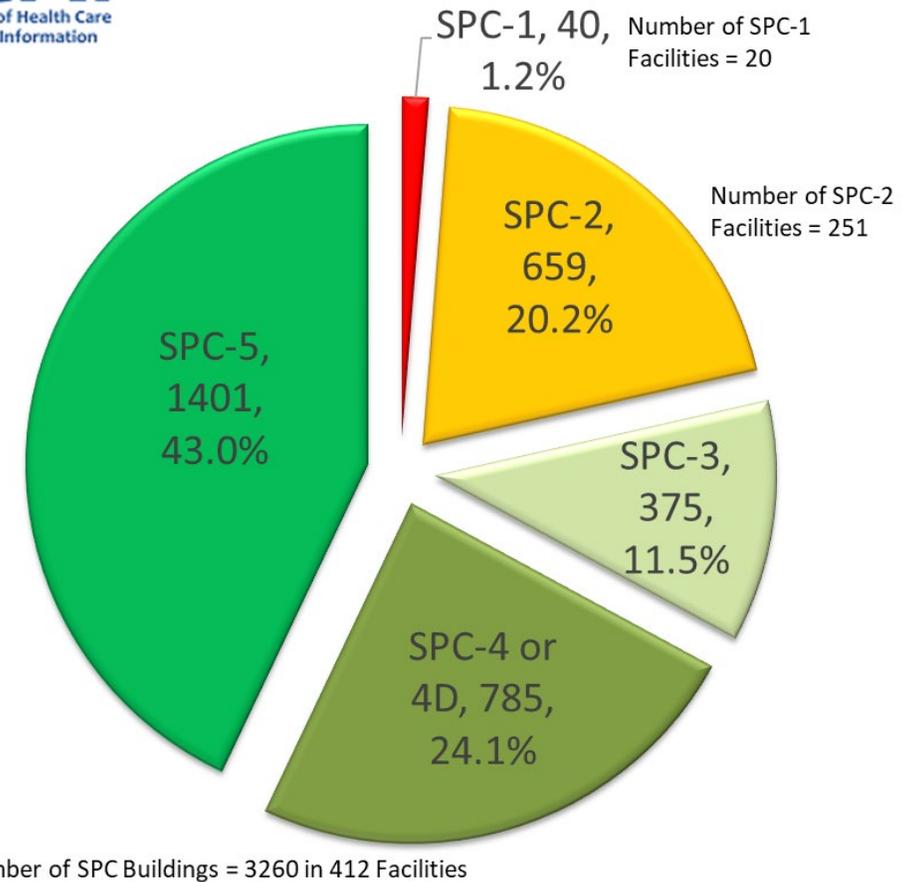
OSHPD

2001*



HCAi
Department of Health Care
Access and Information

4/4/2024**



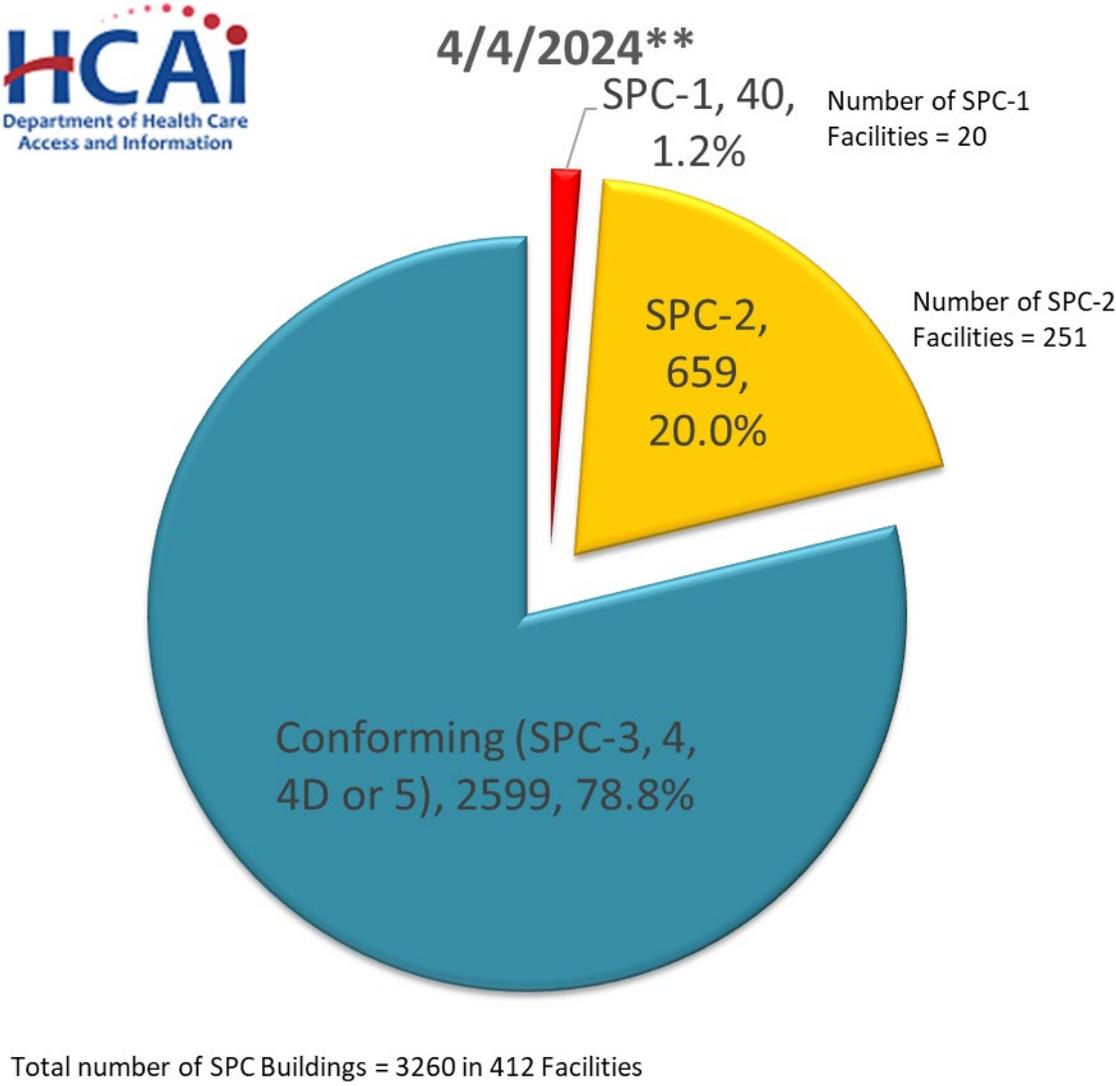
* Based on 2001 Hospital Survey Results based on hospital "self-report" and then "state-of-the-art" FEMA 178 standards from 1996

** SPC-5 includes buildings currently under construction

For SPC - "Not Assigned" is for non-building structures such as equipment yards, cooling towers etc that are still under construction

[OSHPD's Website Visualization](#)

Structure Performance Categories Today



Seismic compliance documents/applications required to be submitted to HCAI/OSHPD by 1/1/2024:

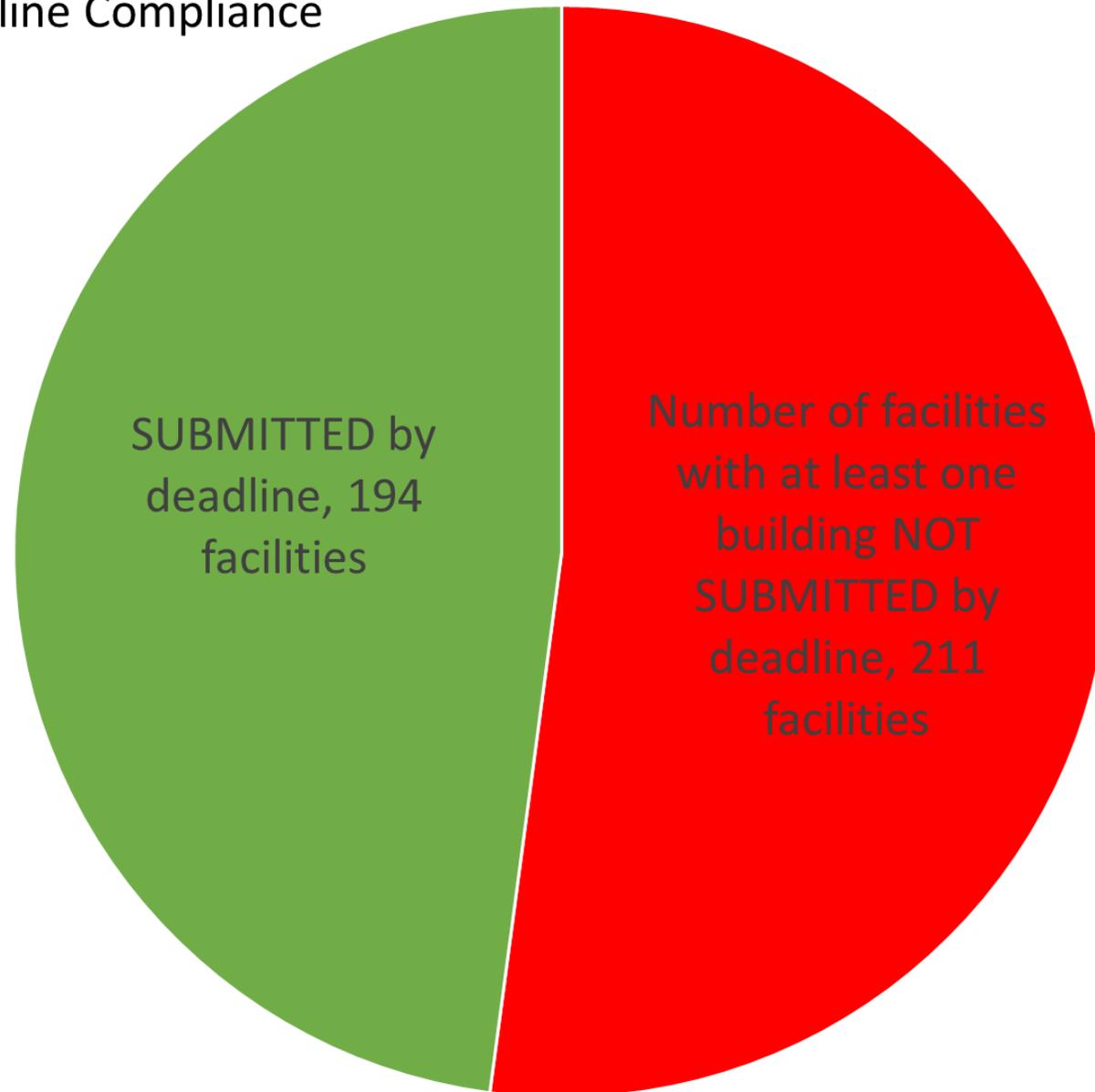
NPC Submittals (Required by California Administrative Code Chapter 6)

- NPC 3 compliance construction final document *[If GAC building is NPC 2 and located in extremely high seismic site]*
- NPC 4D Evaluation report including Operational Plan or NPC 4 Evaluation report
- NPC 5 Evaluation report including 72hr fuel evaluation and Water Rationing Plan
- Letter of Intent stating GAC services in the building will be removed by 1/1/2030 *[For GAC buildings planned to be removed from GAC services by 1/1/2030]*

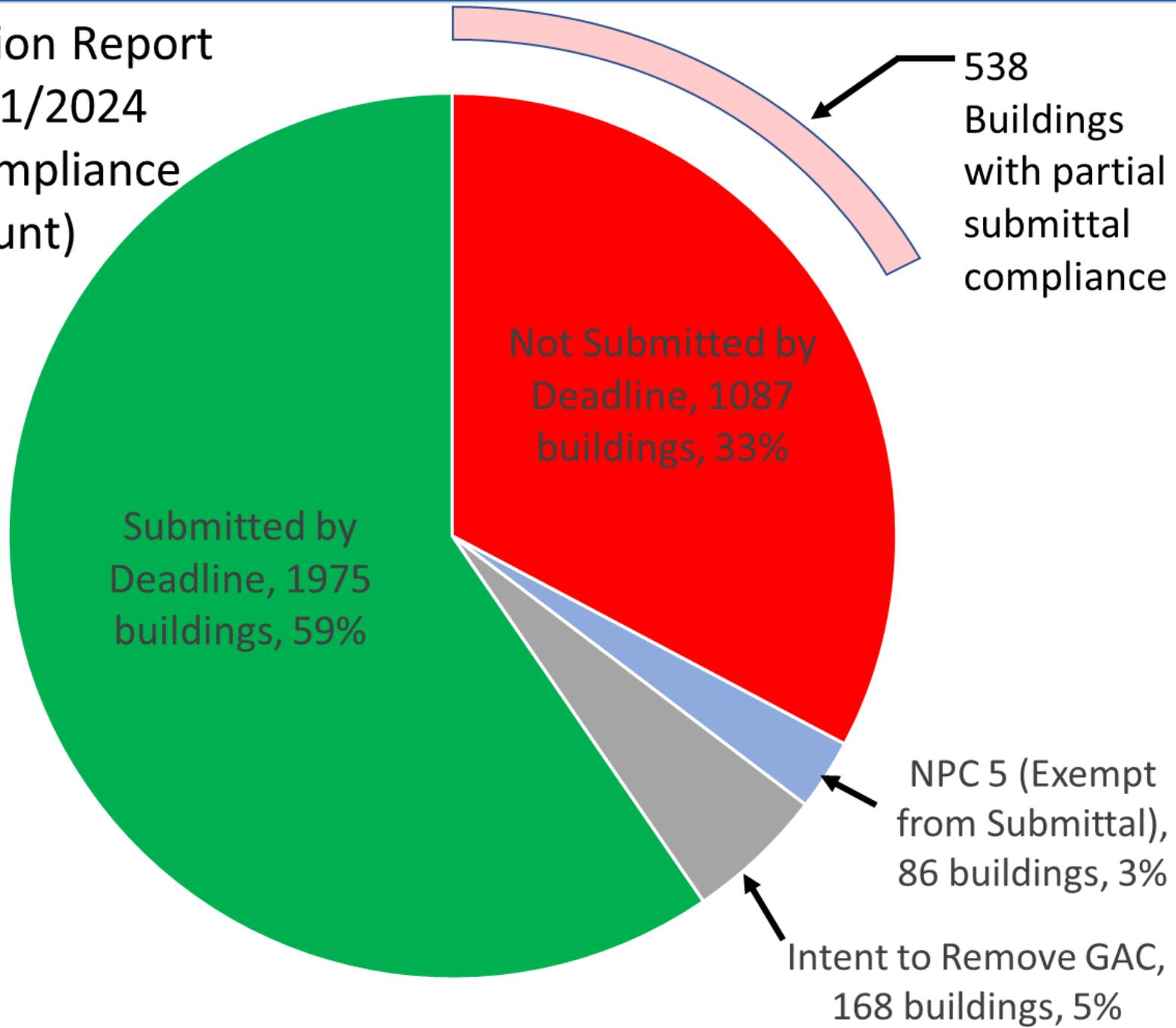
AB 1882 Submittals

- Licensed GAC Services Reporting Application *[[All buildings under HCAI jurisdiction]*
- Signage Application *[All GAC Buildings]*

NPC Evaluation Report Submittal
1/1/2024 Deadline Compliance
(Facility Count)

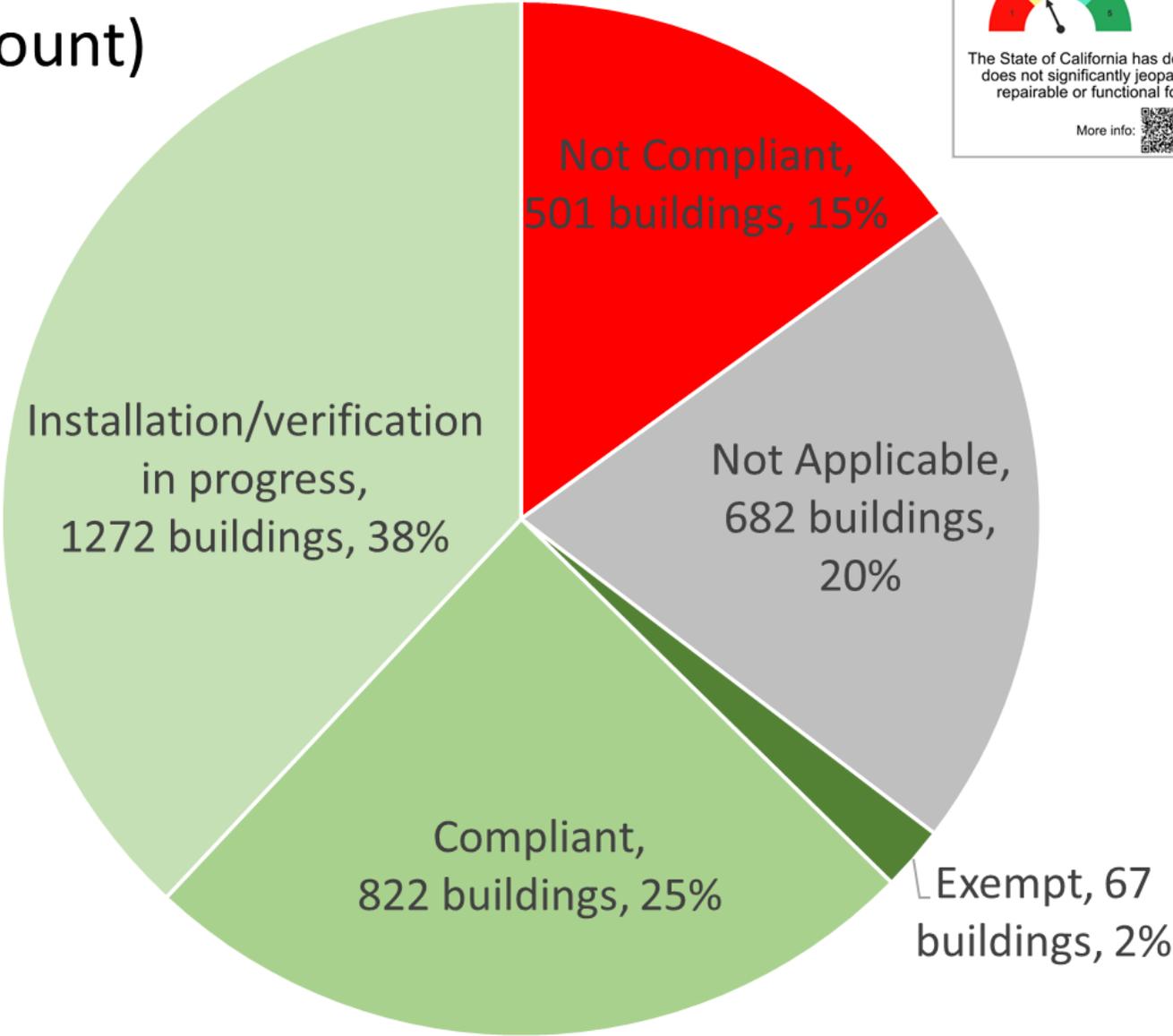


NPC Evaluation Report
Submittal 1/1/2024
Deadline Compliance
(Building Count)



AB 1882 Signage Compliance (Building Count)

4/7/2024



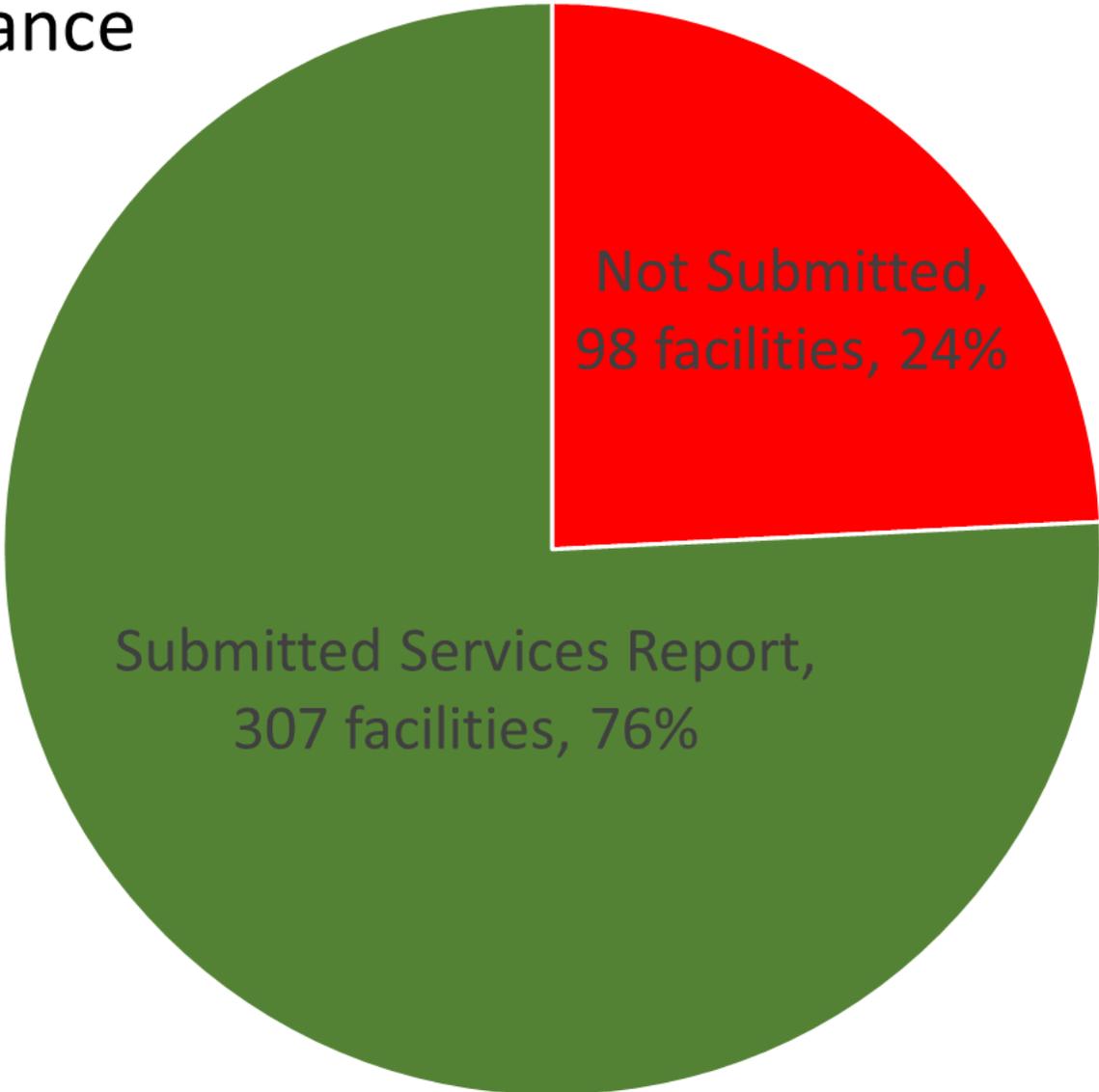
This Building's Seismic Performance Rating

Structural Integrity Equipment and Systems Critical to Patient Care

The State of California has determined that this building does not significantly jeopardize life, but may not be repairable or functional following an earthquake.

More info: Facility Number: Building Number: BLD-

AB 1882 Services
Reporting Compliance
(Facility Count)
3/7/2024



AB 2190 – SPC 1 Extension Program

- AB 2190 is a seismic compliance program unlike many of its predecessors. While deadlines have been the primary characteristic of all extension programs adopted from SB 1953 onward, AB 2190 includes enforcement mechanisms seldom available to HCAI.
- Fixed dates are set as milestones subject to fines for failure to meet. Milestones proposed by the facility and accepted and enforced by HCAI include plan approval, permit issuance, construction commencement and completion, along with a minimum of two construction milestones.

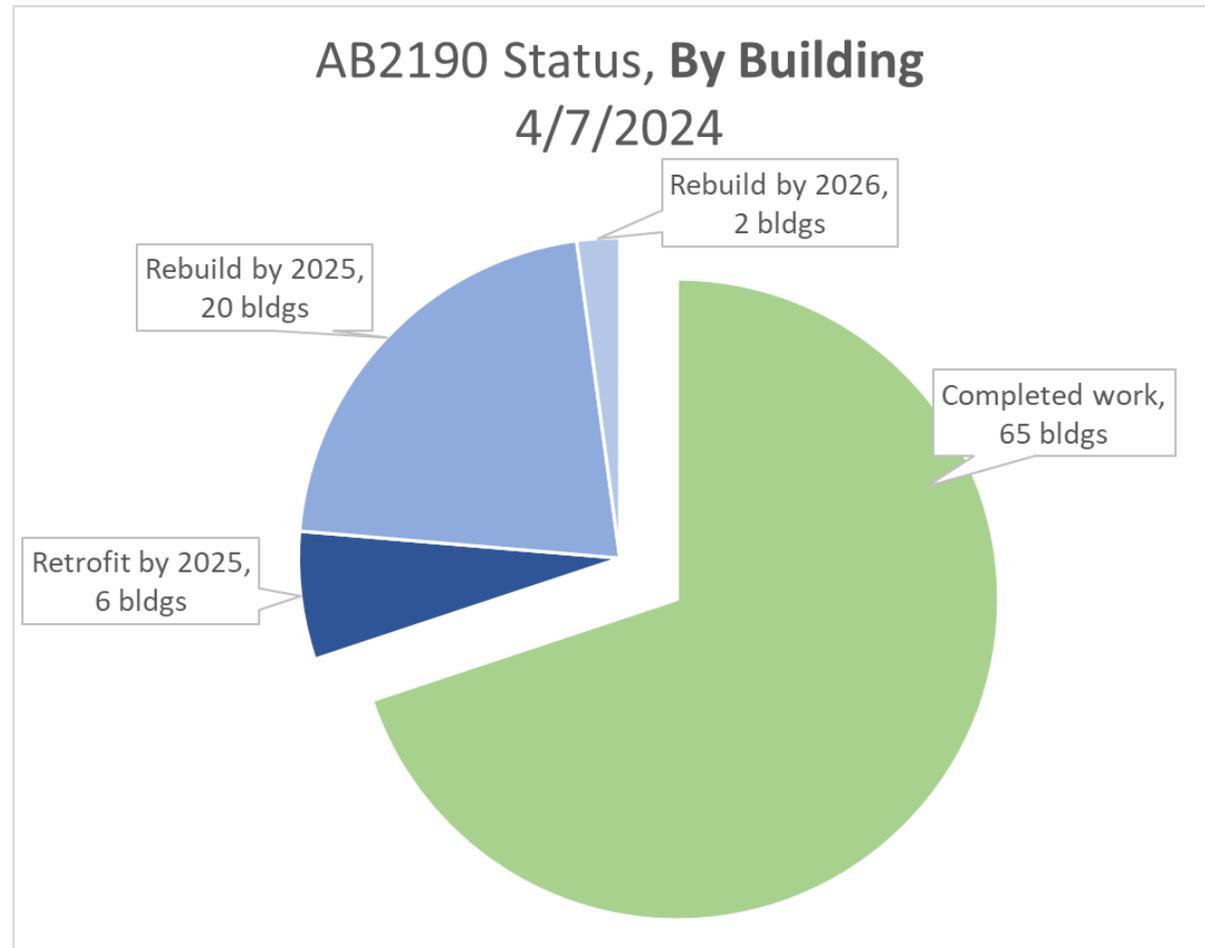
AB 2190 Extension Categories

AB 2190 Retrofit	Completion by July 1, 2022
AB 2190 Replace	Completion by July 1, 2022
AB 2190 Rebuild:	Completion by January 1, 2025

Facility Specific Extensions:

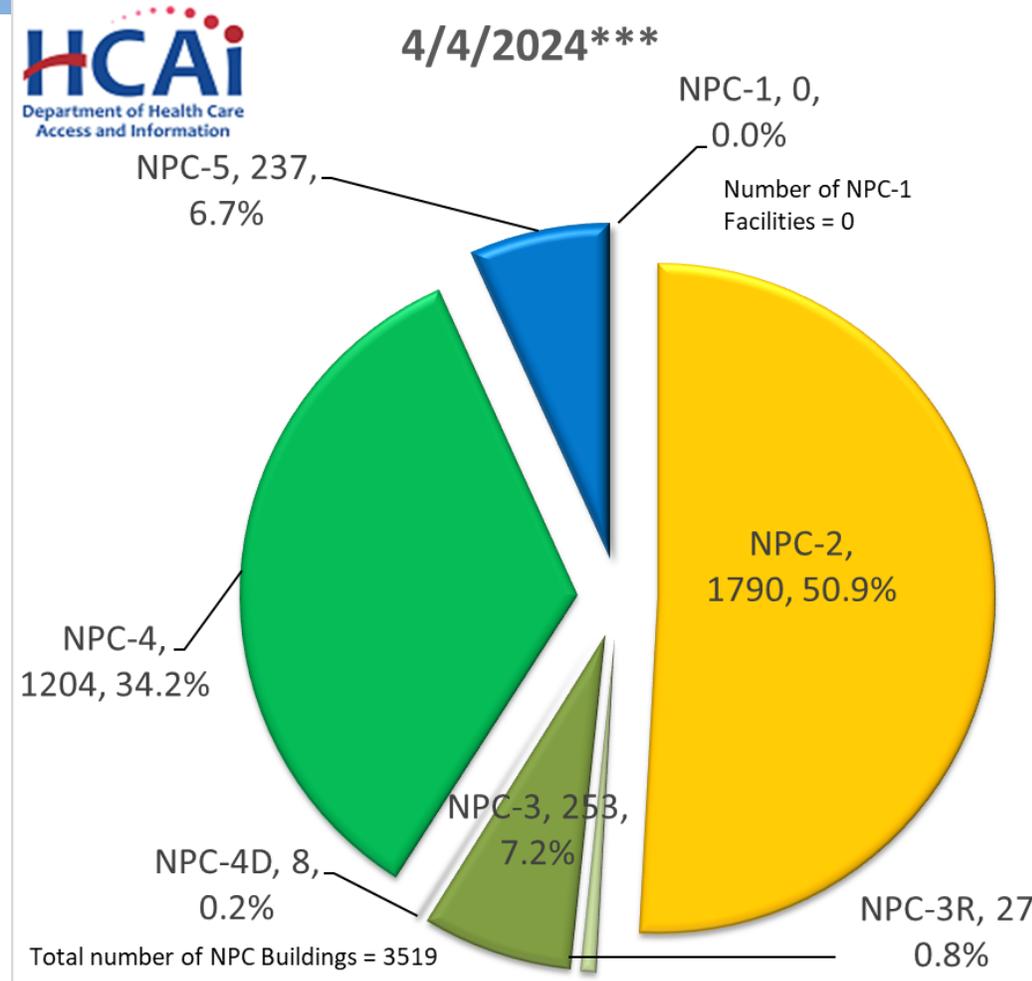
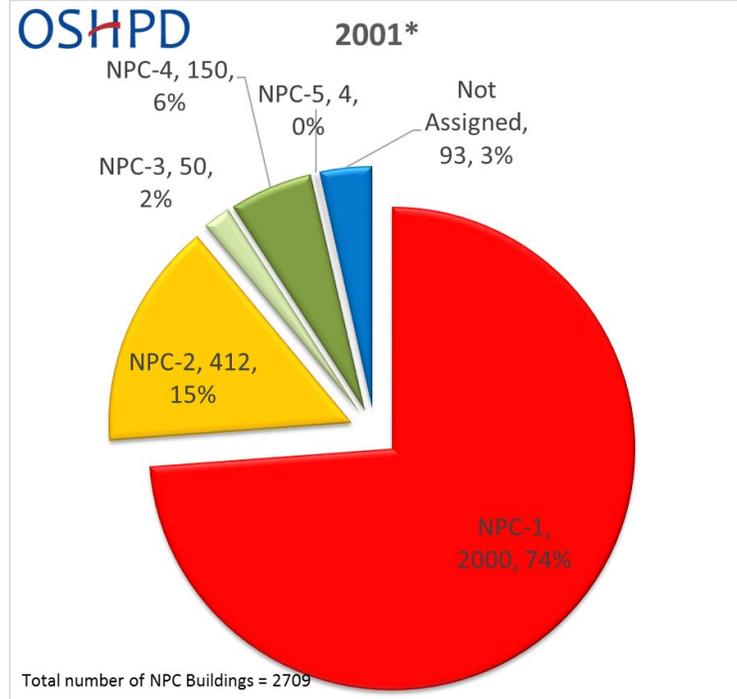
AB 1527 Seton	Completion by July 1, 2023
SB 564 Santa Clara Valley/ O'Connor	Completion by July 1, 2023
AB 1471 Santa Clara Valley	Completion by July 1, 2026
AB 2404 Pacifica	Completion by January 1, 2025

AB 2190 Status



Total: 93 Buildings

Nonstructural Performance Categories



No more NPC-1 !!!!

***Includes buildings under construction, tunnels and equipment yards
For NPC - "Not Assigned" are for buildings and nonbuilding structures either under construction or where the nonstructural performance category has not been verified
Buildings under construction or just built are assigned a preliminary NPC of 4

10512 Plumas District Hospital

Bldg Num	Bldg Name	Classification & Status	RACs Date	NPC Date	Building Code	Year Built	Stories	Height in Feet	Instrumented	Construction Type	Sprinklers	AB1882 Signage	
BLD-01351	Original Building	OSHPD 1, In Service	1/1/2030	1/1/2030 *	1955 Uniform Building Code (UBC)	1958	1	13	No			Compliant	SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthquake
BLD-01353	1976 Addition	OSHPD 1, In Service		1/1/2030 *	1973 California Building Code (CBC)	1977	1	Unknown	No			Compliant	SPC: 4 NPC: 2
BLD-01354	South Addition	OSHPD 1, In Service		1/1/2030 *	1982 California Building Code (CBC)	1994	1	Unknown	No			Compliant	SPC: 4 NPC: 2
BLD-06957	Skill Facility	Facility Seismic Design Parameters for New Buildings		Facility Seismic Design Parameters for Existing Buildings		ASCE 7-16 Tsunami Design not required							SPC: N/A NPC: N/A
										AB 2190 Quarterly Report			

SPC = Structural Performance Category
 NPC = Nonstructural Performance Category
 SPC and NPC are applicable to Hospital Buildings only
 3s, 4s and 5s indicate SPC/NPC rating self-reported by the hospital and not verified by OSHPD

Risk Bsd = Risk Based SB 90 extension
 Fin Hdsp = Financial Hardship based SB 90 extension
 Com Acc = Community Access based SB 90 extension
 GAC = General Acute Care
 RACs = Removal Acute Care Services

Retrofit = Building will be retrofitted
 Rebuild = GAC services will be moved to new building/s
 Replace = GAC services will be moved to existing SPC 2 or higher building/s
 Remove = GAC services will be removed from building
 CO/CF = Certificate of Occupancy/Certificate of Substantial Compliance/
 Construction Final indicating terms of extension have been met.

* See California Administrative Code, Chapter 6, Section 1.5.2:

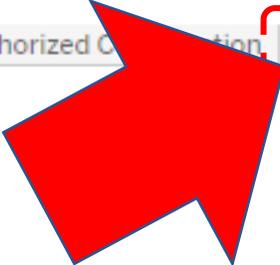
- By January 1, 2024, the hospital owner shall submit to the Office a complete nonstructural evaluation up to NPC 4 or 4D and NPC 5, for each building.
- By January 1, 2026, the hospital owner shall submit to the Office construction documents for NPC 4 or 4D and NPC 5 compliance that are deemed ready for review by the Office, for each building that will continue to provide acute care services beyond January 1, 2030.
- By January 1, 2028, the hospital owner shall obtain a building permit to begin construction, for NPC 4 or 4D and NPC 5 compliance of each building that the owner intends to use as a general acute care hospital building after January 1, 2030.

To download building data, select this page by clicking on the facility name at the top. Then use the "Download Data" option in the toolbar below.

Applicable Year
2023

12295 Sharp Coronado Hospital and Healthcare Center

Bldg Num	Bldg Name	Applicable Year	Nursing Med Surg	Surgical	Anesthesia PACU	Clinical Lab	Imaging Radiological Diagnostic Imaging	Pharmacy	Dietetic	Administrative	Sterile Processing	General Storage	Morgue	Employee Dressing	Housekeeping EVS	Laundry Linen	Special Procedures	ICU CCU PICU	Burn Unit	Neonatal Intensive Care Unit	Pediatric Adolescent Nursing Unit	Psychiatric Nursing	Obstetrics Perinatal Unit	Emergency	Nuclear Medicine	Rehabilitation Therapy	Physical Rehabilitation Nursing Unit	Renal Dialysis	Respiratory	Intermediate Care	Outpatient Services	Skilled Nursing Unit	Central Plant Utility Bldg	Canopies Corridor Buildings Tunnels	Non GAC Uses	
BLD-02081	Main Tower	2023	X	X	X	X	X	X		X	X	X		X				X									X		X	X	X					SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...
BLD-02082	ICU Building (Emergency Department Building)	2023	X														X						X												SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...	
BLD-02083	Ancillary Building	2023				X		X		X	X																					X			SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthqu...	
BLD-02827	Prospect Place Canopy	2023																														X			SPC: 5 NPC: 4	



12364 Sharp Memorial Hospital Operational Plans

Click to see Operational Plan

Bldg Num	Bldg Name	Classification & Status	
BLD-03755	Corridor 2 - North	OSHPD 1, In Service	SPC: 4 NPC: 4D-L1 Click to see Operational Plan
BLD-03756	Corridor 2 - Middle	OSHPD 1, In Service	SPC: 4 NPC: 4D-L1 Click to see Operational Plan
BLD-03757	Corridor 2 - South	OSHPD 1, In Service	SPC: 4 NPC: 4D-L1 Click to see Operational Plan
BLD-03758	Corridor 2 - Long Term Care	OSHPD 1, In Service	SPC: 4 NPC: 4D-L1 Click to see Operational Plan

Building Safety & Finance

→ Building & Construction Projects

→ eServices Portal (eSP)

→ Forms, Training, and Resources

→ Facility Detail

→ Preapproval Programs

→ Codes and Regulations

→ Seismic Compliance and Safety

→ Hospital Inspection Services

→ Construction Financing

→ Distressed Hospital Loan Program

→ Hospital Building Safety Board (HBSB)

Seismic Compliance and Safety

Program Overview

Senate Bill 1953 (SB 1953) was introduced on February 25, 1994. It was signed into law on September 21, 1994 and filed by the Secretary of State on September 22, 1994. The bill was an amendment to and furtherance of the Alfred E. Alquist Hospital Seismic Safety Act of 1982 (Alquist Act). SB 1953 (Chapter 740, 1994), is now chaptered into statute in Sections 130000 through 130100 of the Alfred E. Alquist Hospital Facilities Seismic Safety Act, and part of the California Health and Safety Code. The regulations developed as a result of this statute are deemed to be emergency regulations and became effective upon approval by the California Building Standards Commission and filing with the Secretary of State on March 18, 1998. See an overview of the SB1953 Program.

The HCAI Office of Statewide Hospital Planning and Development (OSHPD) formed the Seismic Compliance Unit (SCU) after the passage of Senate Bill 1953 (SB 1953). This Unit is comprised of structural engineers and senior architects responsible for review and approval of the following submittals to OSHPD:

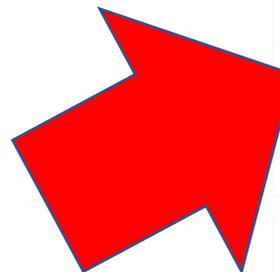
- Compliance Plans
- Design criteria and approvals of voluntary seismic compliance projects
- HAZUS Assessments
- Seismic Compliance Extensions
- Seismic Evaluation Reports (structural and non-structural)
- SPC-4D Regulations

Hospital Seismic Safety (AB 1882)

AB 1882 seeks to raise awareness of a hospital's seismic compliance through public notices, hospital campus postings, and annual status updates.

Learn More

AB 1882 FAQ's



Apply for Seismic Compliance Projects

Learn about the Seismic Compliance Unit (SCU) application process.

Learn More

SEISMIC COMPLIANCE FAQ'S

Apply for Seismic Compliance Extensions

Learn about Seismic Safety Law extensions and how to apply for them.

Learn More

LIST OF APPROVED EXTENSION REQUESTS

FAQ's

Frequently Asked Questions on Seismic Compliance topics.

View FAQ's

Changes to Seismic Safety Law

Learn about the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1982 and subsequent legislative changes.

Learn More

Structural Performance Categories (SPC)

Learn about Structural Performance Categories (SPC) ratings and definitions.

Learn More

SPC FAQ'S

Non-Structural Performance Categories (NPC)

Learn about the Non-Structural Performance Categories (NPC) ratings and definitions.

Learn More

NPC FAQ'S

Emergency Response Operations

The HCAI Emergency Operation Center (EOC) is activated when a significant disaster occurs.

Learn More

Contact Us

Need help? Contact us!

Contact the SCU

OSHPD CONTACTS & DIRECTORY

Additional Resources

Webinars, Dashboards, Reports, Data, Ground Motion Maps, Regulations and Codes, CANs and PINs.

View Resources

PCS: Prefabricated Components and Systems

New Preapproval Program

- 5 applications received.
- 2 approved, 3 in review.
- 4 more in discussions

OSHPD Preapproved Prefabricated Components and Systems (PCS) Number	Manufacturer	Product Name	Approval Date	Version Number	Comments
PCS-0002	Simpson Strong-Tie	Simpson Strong-Tie Yield Link Moment Connection	6/15/2022	v1.0	See Attachment
PCS-0003	SurePods	SurePods Prefabricated Bathroom Pods	3/21/2022	v1.0	See Attachment
PCS-0004	DuraFuse Frames, LLC	DuraFuse Frames	In Review		
PCS-0005	FyfeFRP, LLC	Tyfo FRP Systems	In Review		
PCS-0006	Taylor Devices, Inc.	Taylor Damped Moment Frame	In Review		

Showing 1 to 5 of 5 entries ◀ Previous Next ▶

SCU Webinars

2023 Webinars:

- June *NPC 3, 4, 4D and 5 Requirements and AB 1882 Hospital Public Notices*
NPC 5 Water Rationing Plan
- Aug AB1882 Hospital Public Notices
- Oct Small and Rural Hospital Relief Program
- Nov 1/1/2024 Seismic Compliance Deadline

2024 Webinars:

- Mar Small and Rural Hospital Relief Program (Association of Medical Facility Professionals)
- (Date: TBD) Webinar covering SPC 2 to SPC 4D upgrade
- (Date: TBD) NPC Projects
- (Date: TBD) AB1882 Refresher

HCAI Website: Application

- Plan requirements have been simplified per PIN 71 document:

[PIN 71 Small and Rural Hospital Relief Program 060122.pdf \(ca.gov\)](#)

- Grant application portal for SRHRP

<https://funding.hcai.ca.gov/>



How to Apply

- Go to <https://funding.hcai.ca.gov/>
- Click on “Create an Account”.
- Setup your profile and click “Submit”.



Apply Here Applications - In Progress/Submitted Awards Payments & Deliverables Messages

Profile

 Jeremy Marion

My Security Settings

Change Password

Change Email

Select your user type. (Choose all that apply) *

- Healthcare Professional
- Student
- Organization for seismic construction funding
- Organization for healthcare workforce support

Are you applying for other Grants Programs (Health Professions Career Opportunity & Behavioral Health Programs)?

When setting up your profile, be sure to check only this box!

How to Apply continued



- Click on the “Small and Rural Hospital Relief Program” link.
- Then click the “Apply” button.



Apply Here	Applications - In Progress/Submitted	Awards	Payments & Deliverables	Messages
----------------------------	--	------------------------	---	--------------------------

Open grant applications matching your Profile are displayed below. To find additional applications, please change the applicable user types in your Profile. To find applications already started or submitted, go to the Applications In Progress/Submitted tab.

Program	Release Date	Due Date	Who Can Apply
Small & Rural Hospital Relief Program	04/17/2023 12:00 PM	12/31/2029 11:30 PM	Organization seismic construction

[View details](#)



Application Release Date

04/17/2023 12:00 PM

Close Date

12/31/2029 11:30 PM

[Apply](#)



Small and Rural Hospital Relief Program



What's Next?

- Financial forecast estimates ~\$2.6 million available the first year, issued to SRHRP quarterly.
 - Expect grants to cover a percentage of budget per project scope.
- Applications are currently being accepted on an ongoing basis.
- OHFLI grant award notices went out for the first handful of awardees.
- Future awards will be made on a quarterly cycle.
- OHFLI is currently automating its award documentation process. Future awardees will be able to approve and sign Grant Agreements electronically through AdobeSign.
- 2023-24 Budget Act designated one-time additional funding of \$50 million.

SRHRP Grant Awardees (As of March 2024)

Awarded for completed
MTCAP Programs –
schemes, sampling &
reports to inform
pending retrofit projects

- George L Mee Memorial Hospital



Mee Memorial Hospital

\$280,000 Award

- Kern Valley Healthcare District



KVHD Kern Valley
Healthcare District



Where Healthcare and Community Connect

\$180,000 Award

What's Next?

- 2023-24 Budget Act designated one-time additional funding of \$50 million.
 - We are revamping our outreach to encourage submission of larger construction projects now that we have a more impactful source of funding.
 - Funding is not yet received and is at risk of being accessed for a 2024-25 budget shortfall solution.

Structural Support Unit Update

Overview

- OSHPD preapproved programs
- Structural/Nonstructural California amendments
- Geotechnical reviews
- Seismic instrumentation
- Structural training and support to the regions
- Management of contract out plan reviews
- Other Activities

Types of Preapprovals

Preapproval Programs

HCAi Office of Statewide Hospital Planning and Development (OSHPD) has five distinct preapproval programs that operate under the Structural Support Unit (SSU) and Inspection Services Unit (ISU).

OSHPD Preapproved Agency (OPAA)

Preapproval of Agencies that provide Structural Tests and Special Inspection services used in California healthcare facility construction.

[LEARN MORE](#)

[VIEW PIN 58](#)

OSHPD Preapproved Details (OPD)

Preapproved standard architectural and engineering details developed by HCAi/OSHPD for use in California healthcare facility construction.

[LEARN MORE](#)

[VIEW PIN 51](#)

OSHPD Preapproval of Manufacturer's Certification (OPM)

Preapproval of seismic design of supports and attachments for nonstructural components used in California healthcare facility construction.

[LEARN MORE](#)

[VIEW PIN 62](#)

OSHPD Special Seismic Certification Preapproval (OSP)

Preapproval of special seismic certification of non-structural components used in California healthcare facility construction.

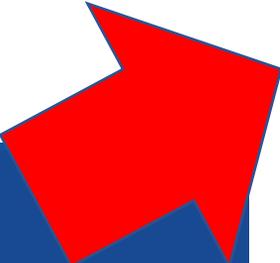
[LEARN MORE](#)

[VIEW PIN 55](#)

OSHPD Preapproved Prefabricated Components and Systems (PCS)

Preapproval of prefabricated components and systems used in California healthcare facility construction.

[LEARN MORE](#)



OSP – Special Seismic Certification Preapproval

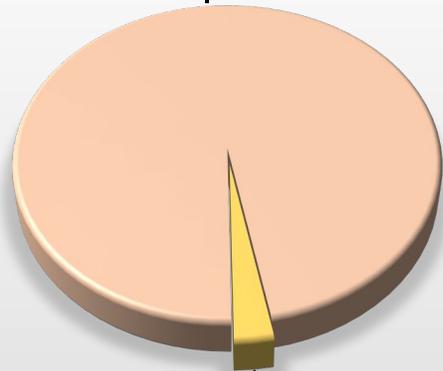
(Equipment Qualified by Shake Table Testing)



OSP Status (April 2024)

Current OSP Status

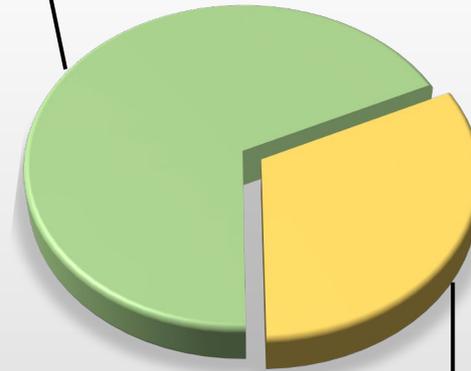
Total OSPs Available
for Public Use
778



Total Current
Submittals 22

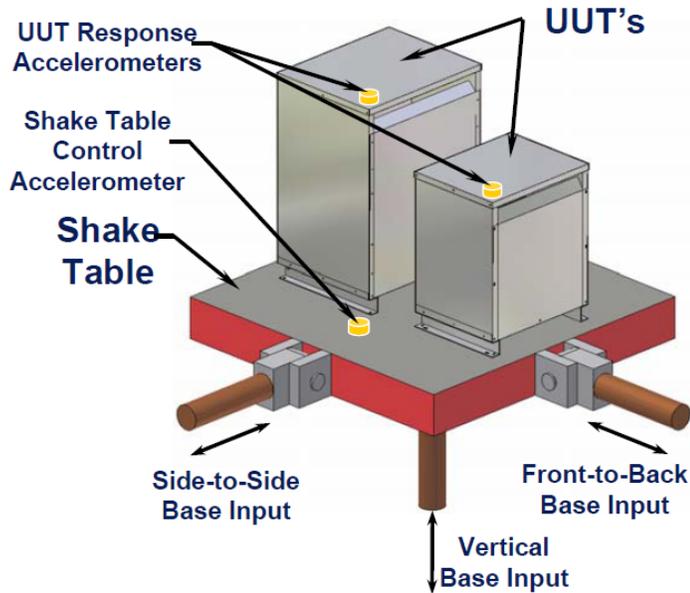
Current OSP Submittal Status

Remarked
15

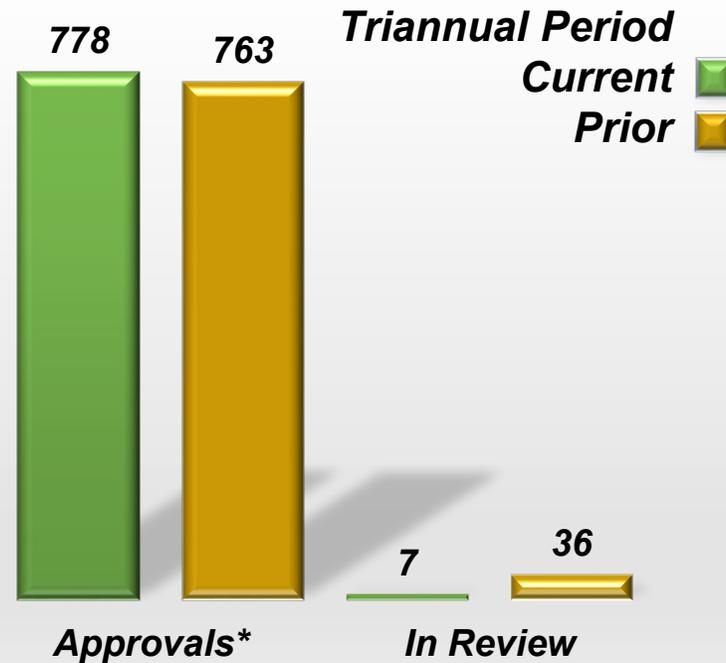


In Review 7

OSP Triannual Status Comparison (Dec 2023 – April 2024)



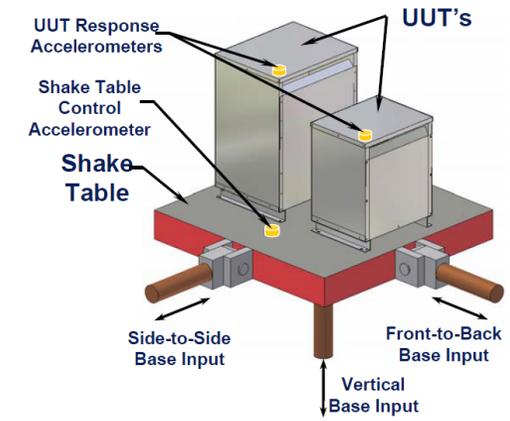
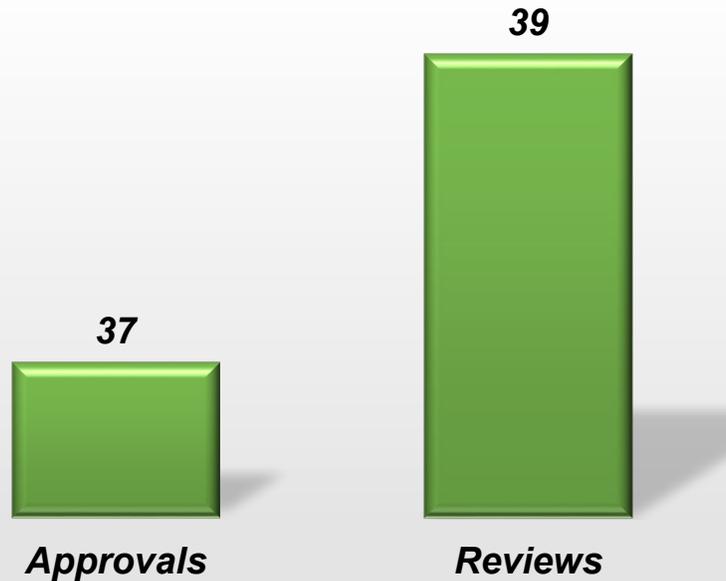
OSP Status per Triannual Period



**Most OSP submittals are renewals, resulting in only a slight increase in the cumulative total.*

OSP Triannual Period Workload

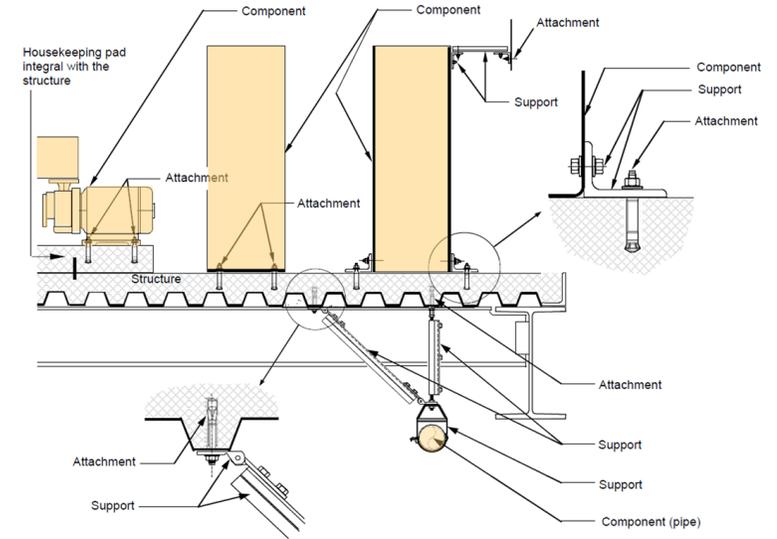
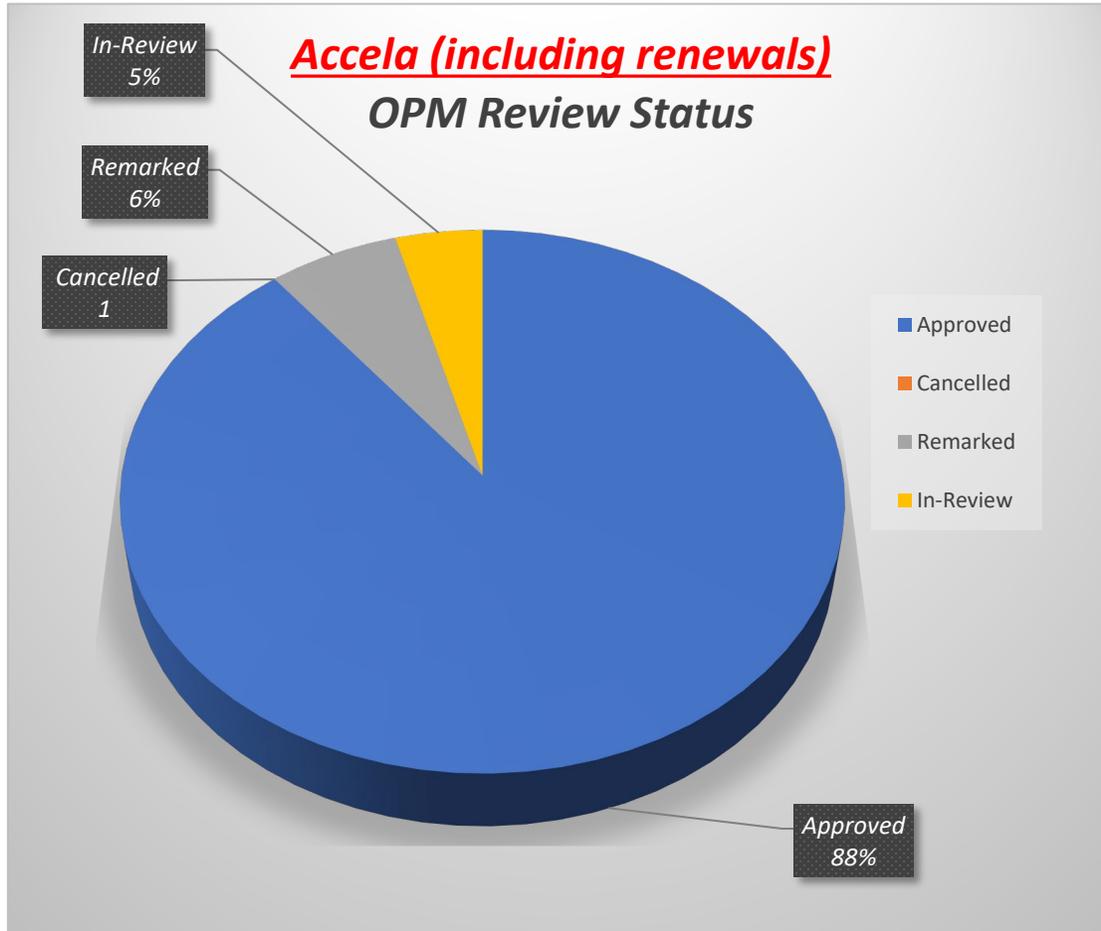
Total OSP Activity Over Triannual Period



OSP Workload over Triannual Period

(Dec 2023 – April 2024)

OPM Status – eSP Submittals Only



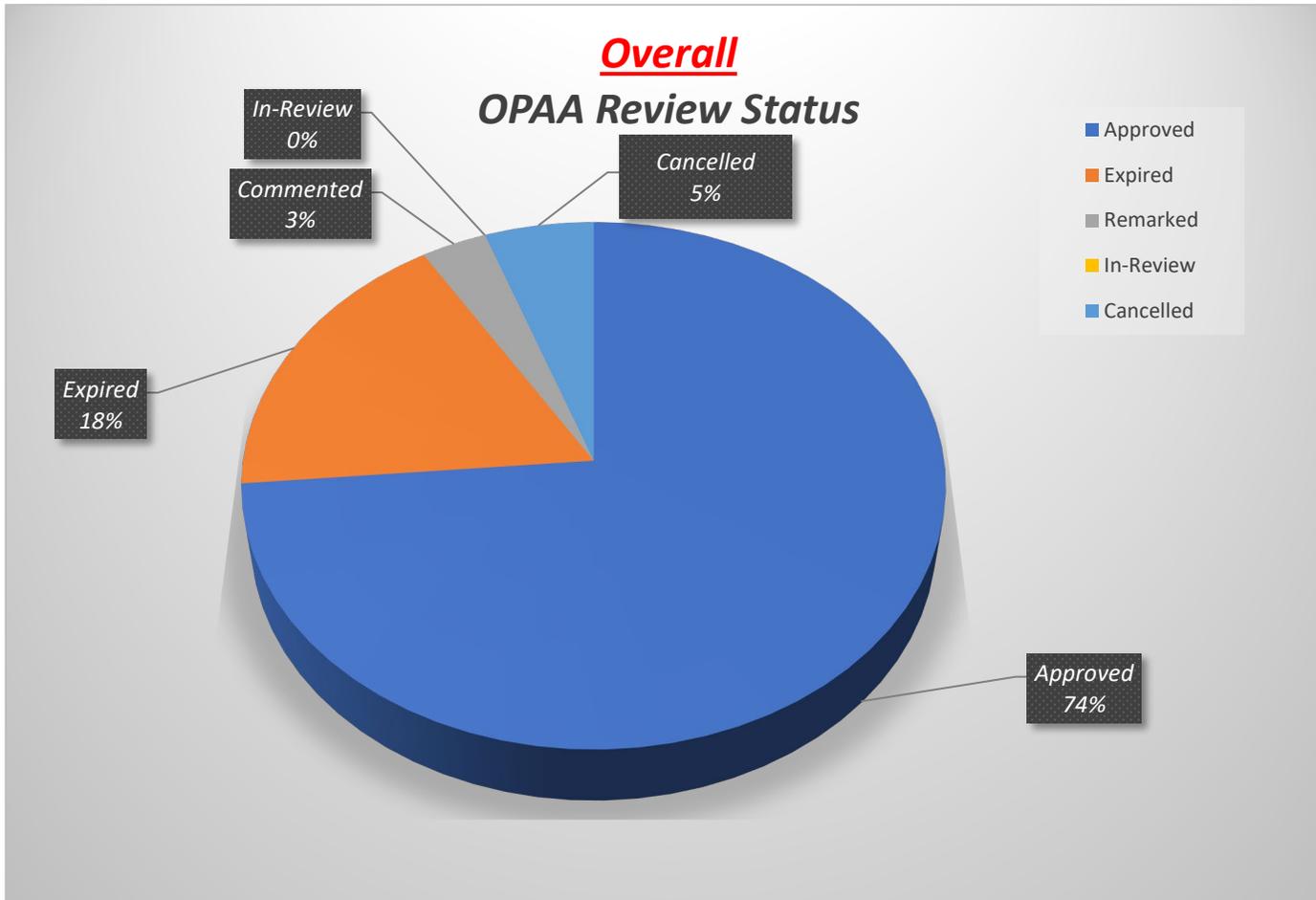
Apr 2024

TOTAL	341
Approved	301
Cancelled	3
Remarked	21
In-Review	16

Nov 2023

TOTAL	271
Approved	238
Cancelled	5
Remarked	17
In-Review	11

OPAA Review Status



April 2024

OPAA Review Status

Total	91
Approved	67
Expired	16
Remarked	3
In-Review	0
Cancelled	5

November 2023

OPAA Review Status

Total	88
Approved	63
Expired	19
Remarked	5
In-Review	0
Cancelled	1

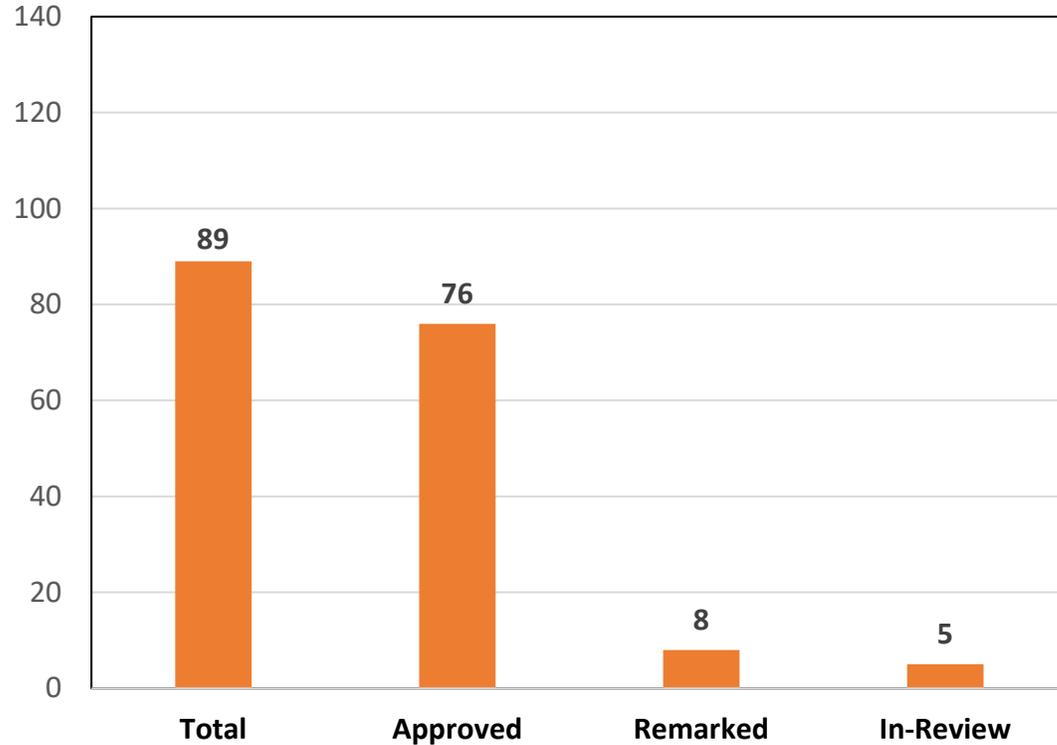
Geotech Report Review Process

- ❑ Evaluating seismic hazard based on regional seismicity and faulting, ground motion studies specific to the site, assessment of hazards related to liquefaction (such as lateral spreading), landslides, floods, and more.
- ❑ Permanent/temporary shoring designs, piles and micropiles, soil nails, foundation design, soil improvements techniques, and other geotechnical issues

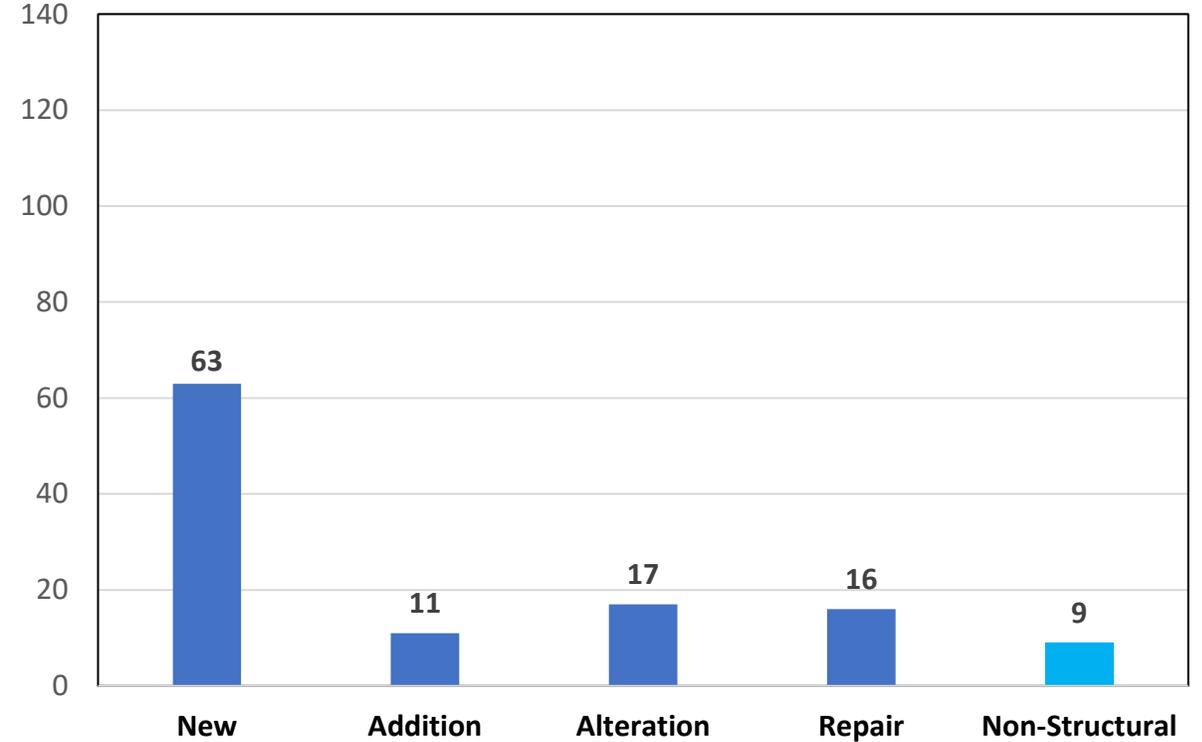
The review process for Geotech reports takes about four weeks to complete.

Geotech Report Review Progress (December 2023)

Geotech Reports Review Process (2022 - 2023 Projects)

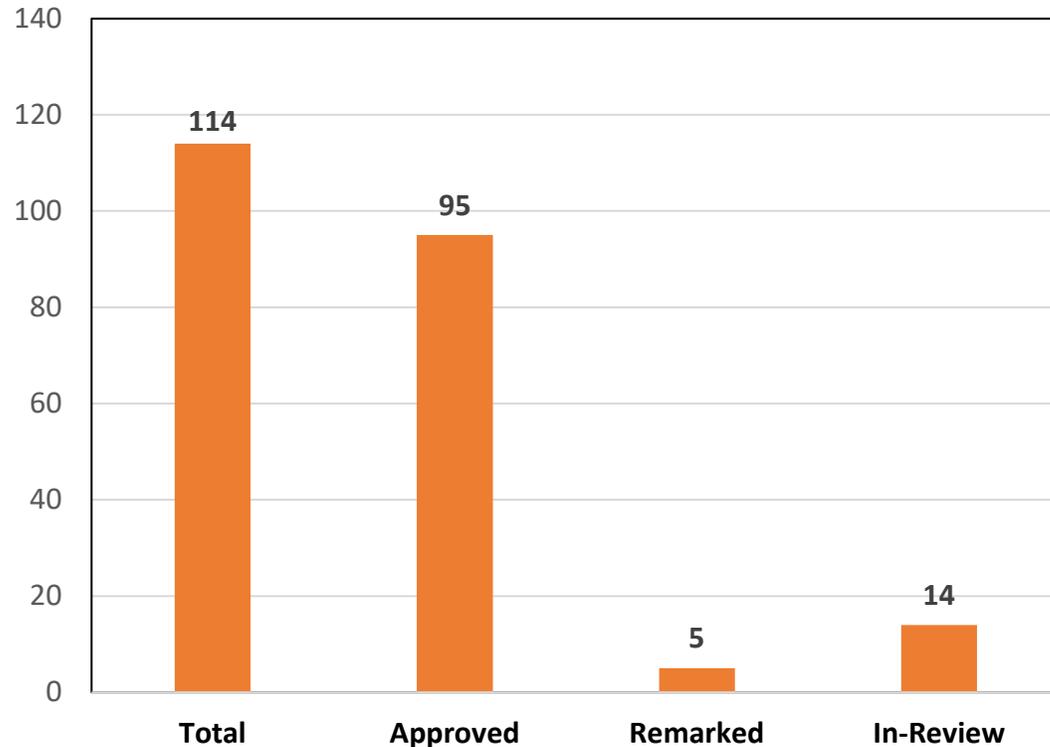


Construction Type (2022 - 2023 Projects)

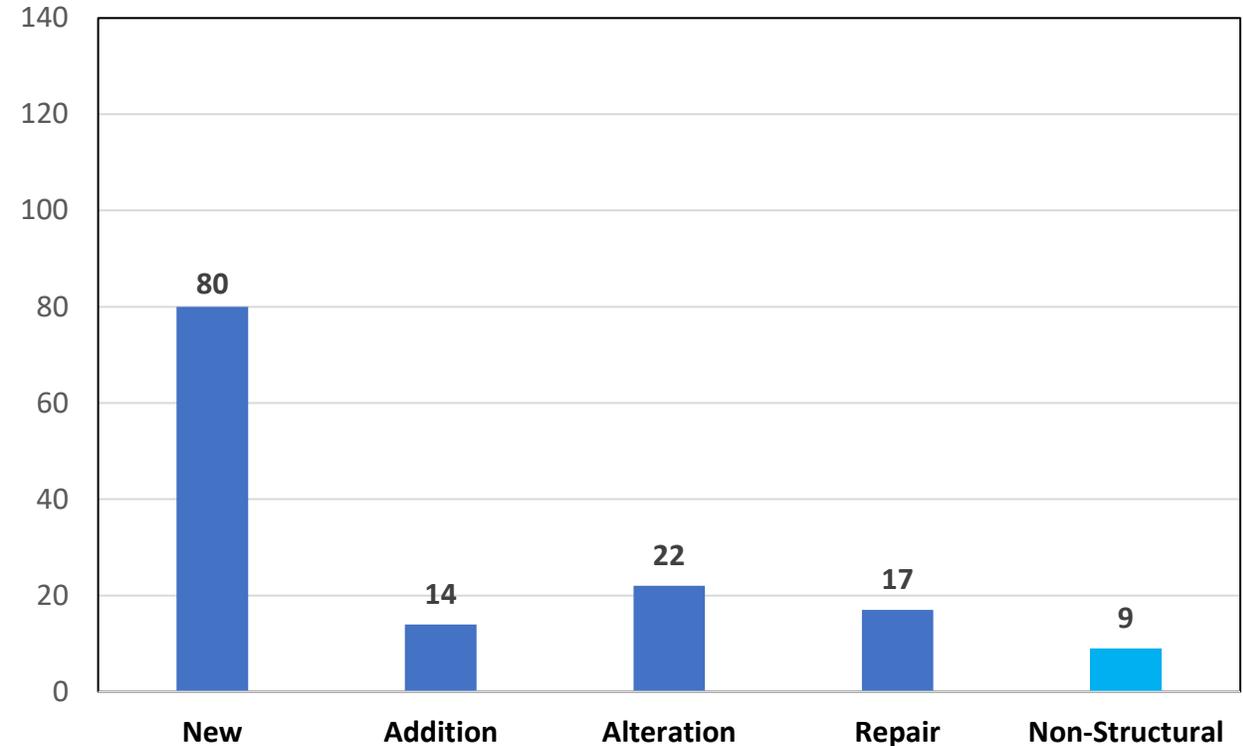


Geotech Report Review Progress (April 15, 2024)

Geotech Reports Review Process (2022 - 2024 Projects)



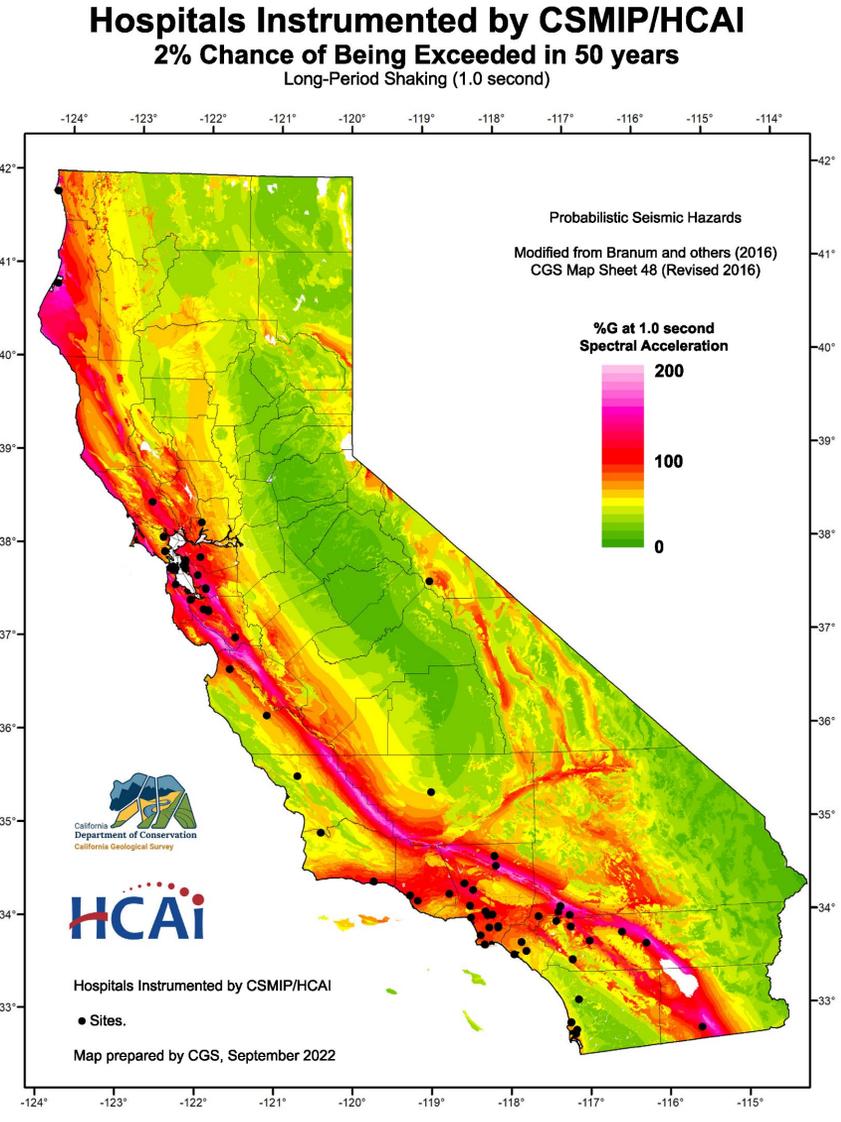
Construction Type (2022 - 2024 Projects)



On average, there is a submission of one new or revised geotechnical report per week.

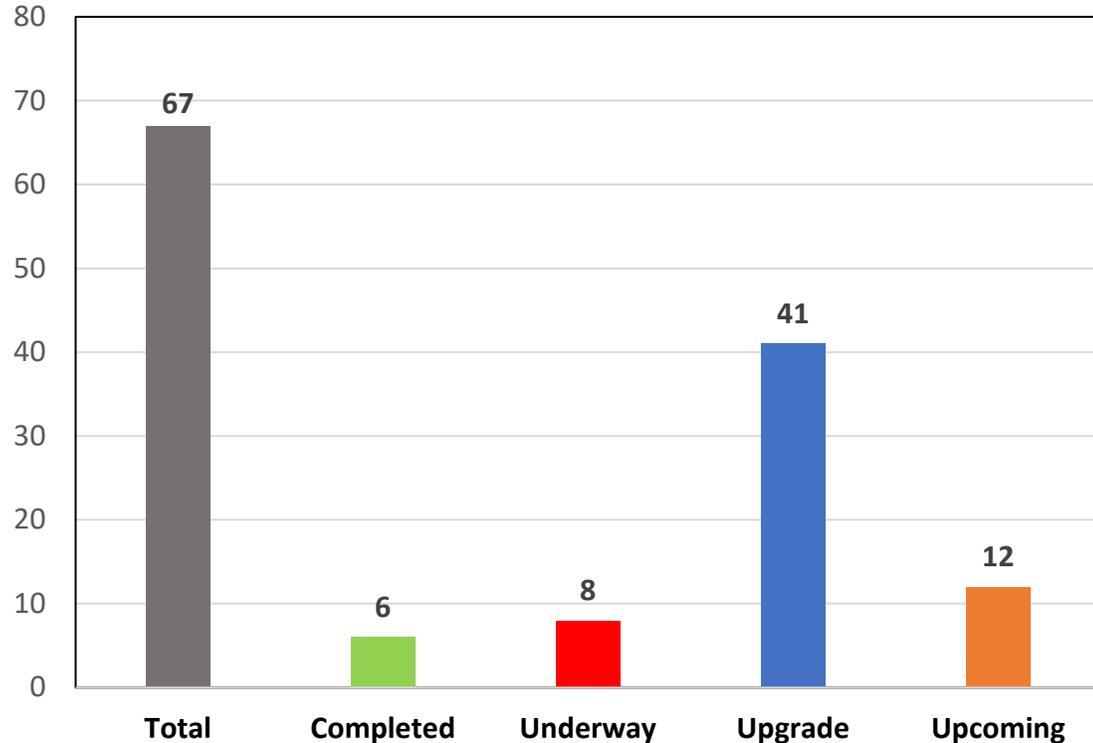
Seismic Instrumentation of Hospitals

Hospital buildings are often situated near active faults and are in areas with high or very high seismic risk.

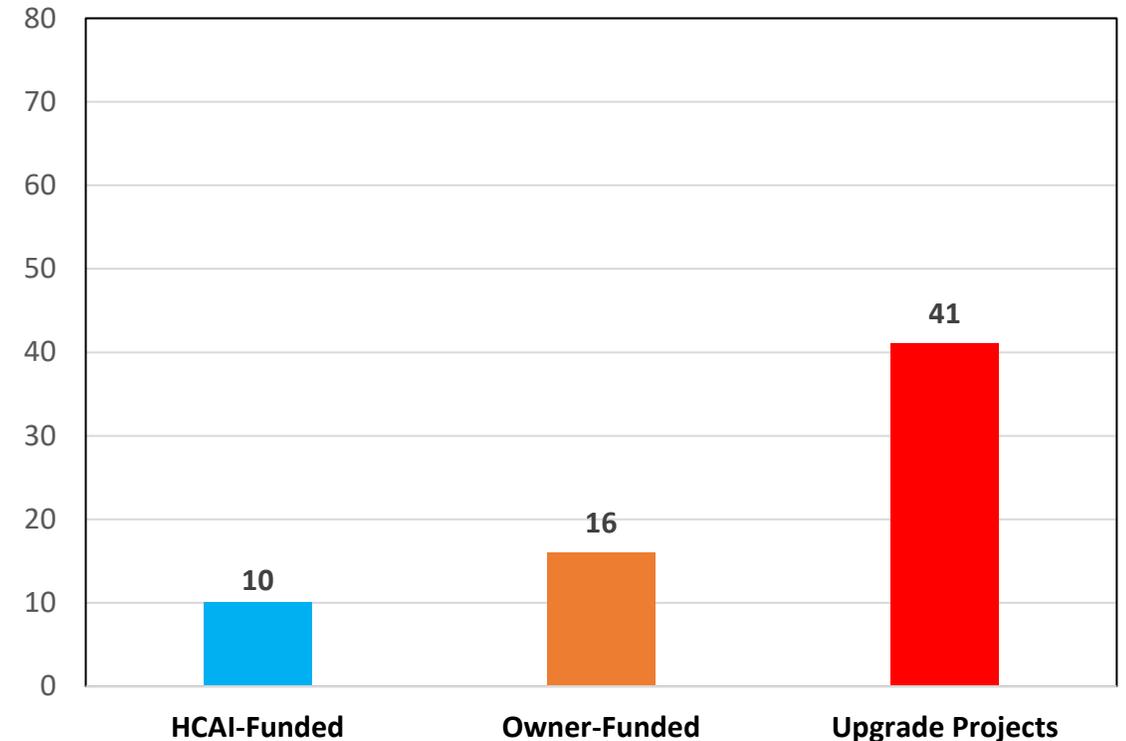


Seismic Instrumentation Progress (FY 20 – 26)

Instrumentation Projects (FY20-26)



Instrumentation Projects (FY20-26)

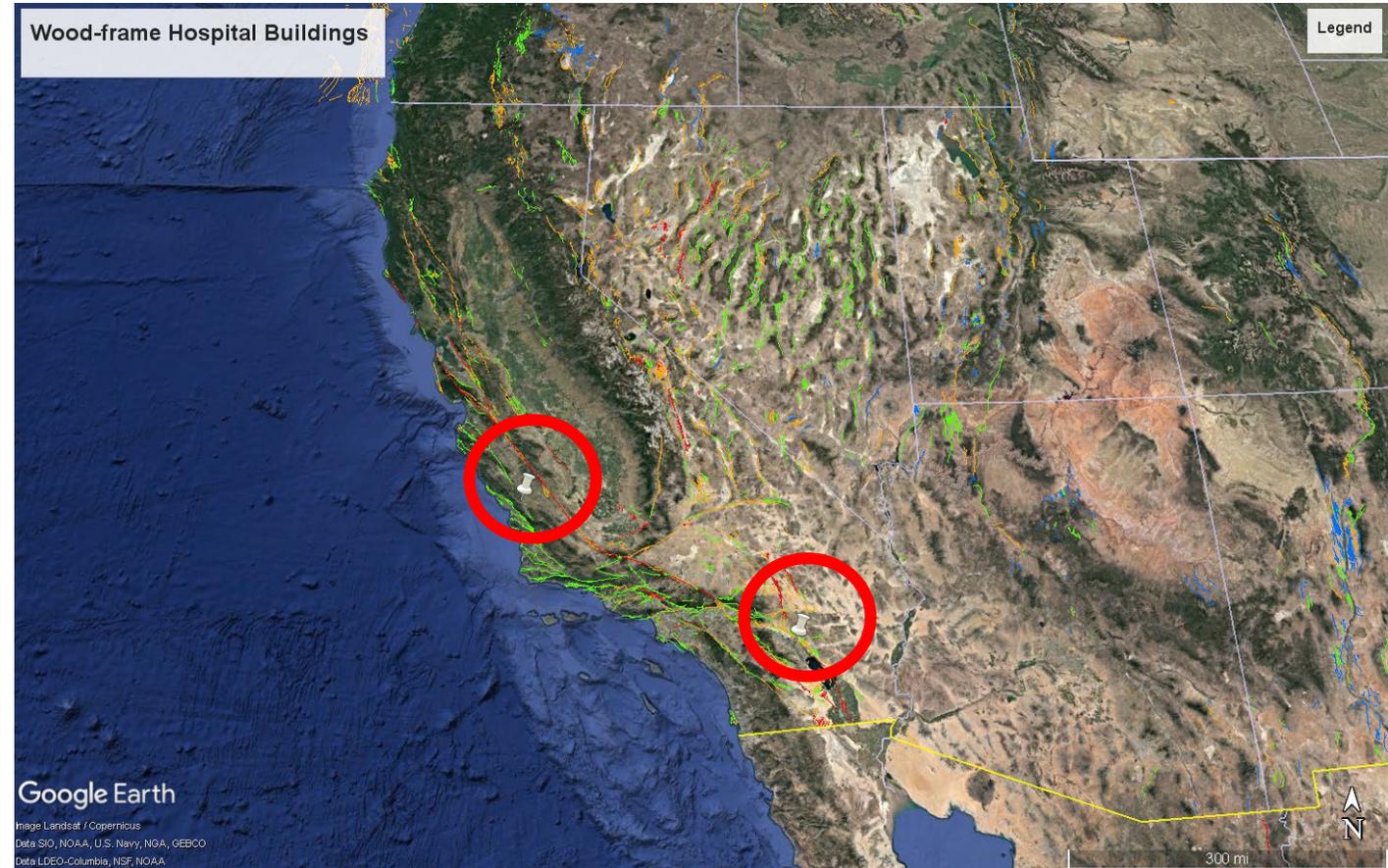


Most of the instrument projects were financed by the hospital owners and are for steel and concrete buildings.

Instrumentation of Wood-Frame Hospital Buildings



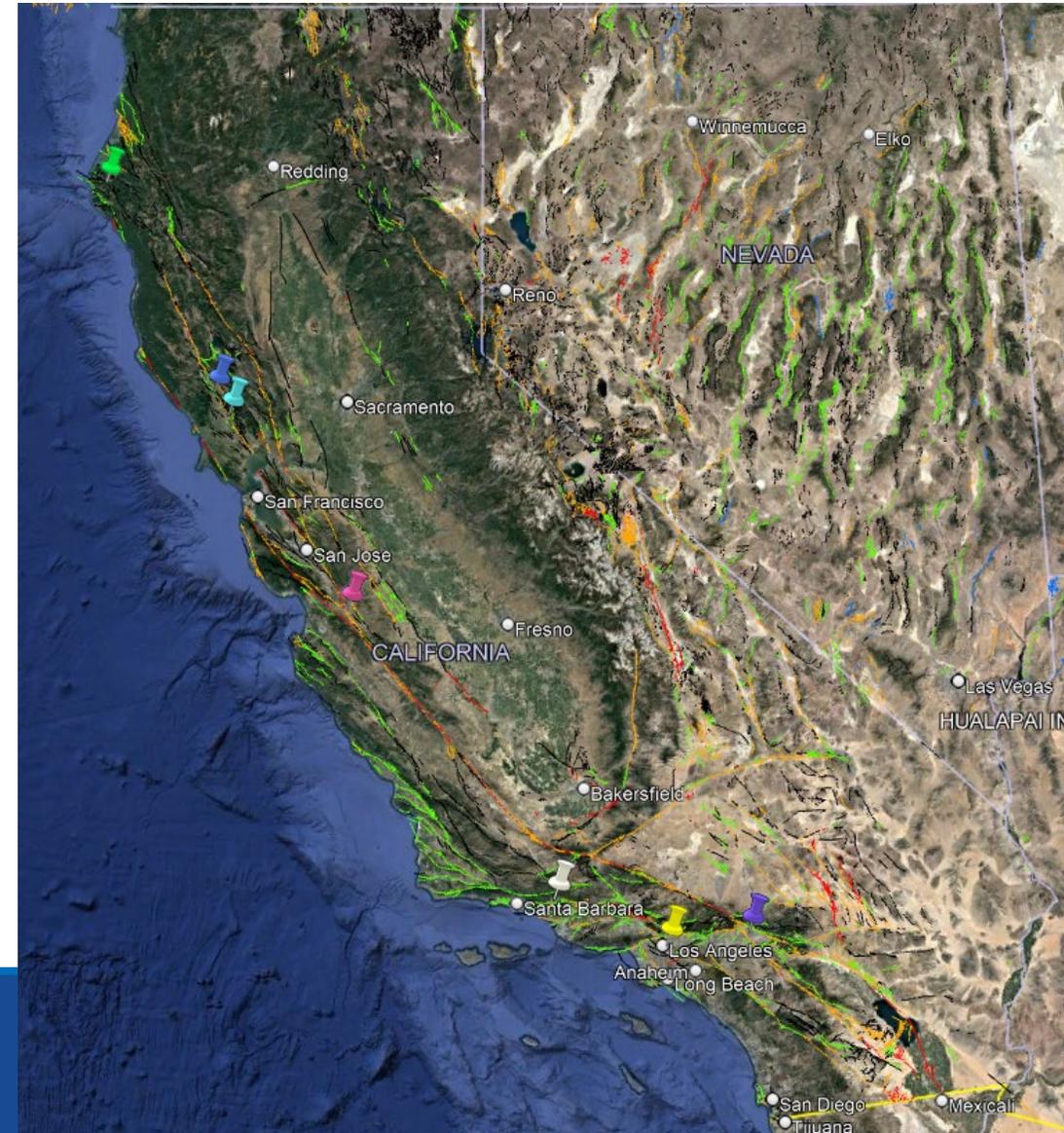
- Predominantly single-story facilities
- Built era varies from 1902 to 2023
- There are only two instrumented wood-frame hospital buildings:
 - John F. Kennedy Memorial Hospital (Indio), and
 - Tenet Health Central Coast Twin Cities Community Hospital (Templeton)



Candidate Wood-Framed Buildings

- Per recommendation of the HBSB Instrumentation Committee in January 2024 meeting, seven buildings are identified for seismic instrumentation (to be funded by HCAI).

Providence Redwood Memorial Hospital	Fortuna	BLD-00529	1955	Original Hospital Building	02 - Wood, Commercial, Industrial	2.12
Healdsburg Hospital	Healdsburg	BLD-00919	1972	Main Hospital Building	01 - Wood, Light Frame	2.242
Providence Santa Rosa Memorial Hospital	Santa Rosa	BLD-01529	1961	Original Hospital Building	01 - Wood, Light Frame	2.364
Hazel Hawkins Memorial Hospital	Hollister	BLD-01458	1960	Original Hospital Building	02 - Wood, Commercial, Industrial	2.295
Community Memorial Hospital - Ojai	Ojai	BLD-00606	1960	Hospital Building	01 - Wood, Light Frame	1.873
Monterey Park Hospital	Monterey Park	BLD-00946	1971	Original Hospital Building	01 - Wood, Light Frame	1.948
Community Hospital of San Bernardino	San Bernardino	BLD-01851	1969	Wings 700/800/900	01 - Wood, Light Frame	2.294



Contract Management

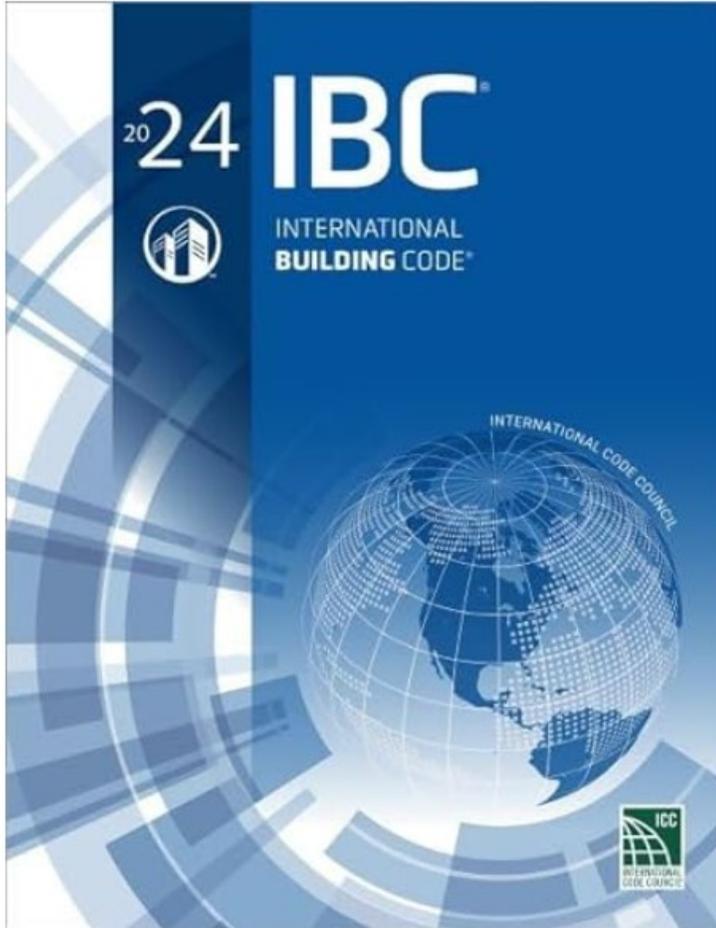
Contracted out Projects

- Harbor UCLA – 9 Story Tower, 543,000 sq ft
- UCSF Parnassus Heights – 16 Story Tower, 835,000 sq ft
- UC Davis Medical Center – 14 Story Tower, 907,000 sq ft
- Kaiser San Jose – 6 Story Building, 642,000 sq ft
- Kaiser Railyards Medical Center – 8 Story Tower

Contract Management

- RFQ – Contract out structural plan services sent out in December '23, for three year retainer contracts not to exceed 4.5 million dollars.
- 6 – Firms awarded retainer contacts to provide contract out structural plan review services.

2025 California Building Code, Title 24

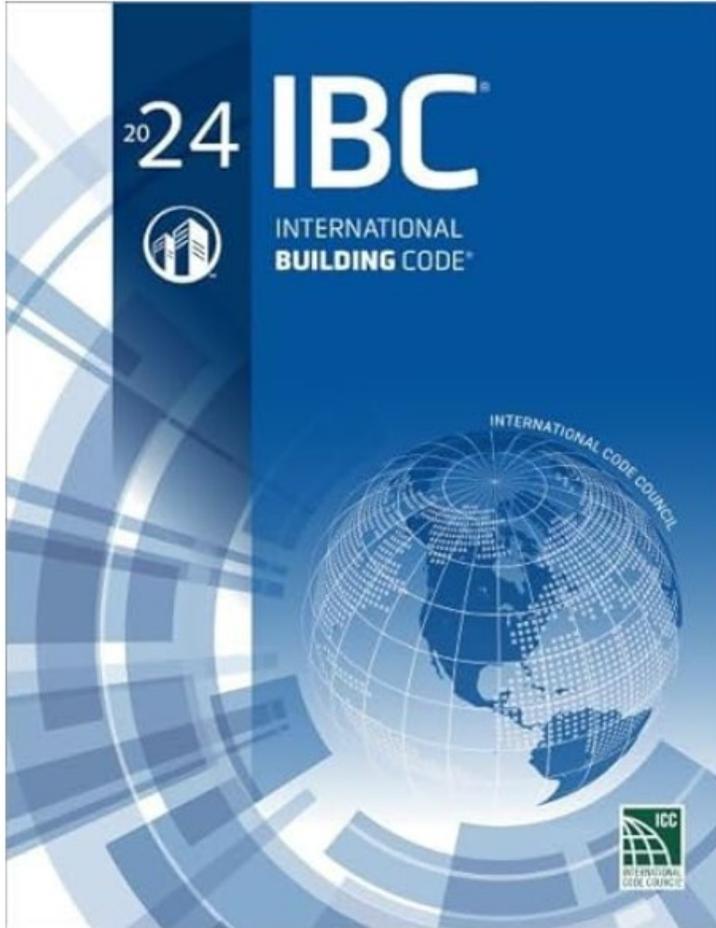


Repeal adoption of the 2021 International Building Code (IBC)

Adopt 2024 IBC. Carry forward or repeal existing amendments.

Amend as necessary to create the 2025 California Building Code, Part 2, Title 24.

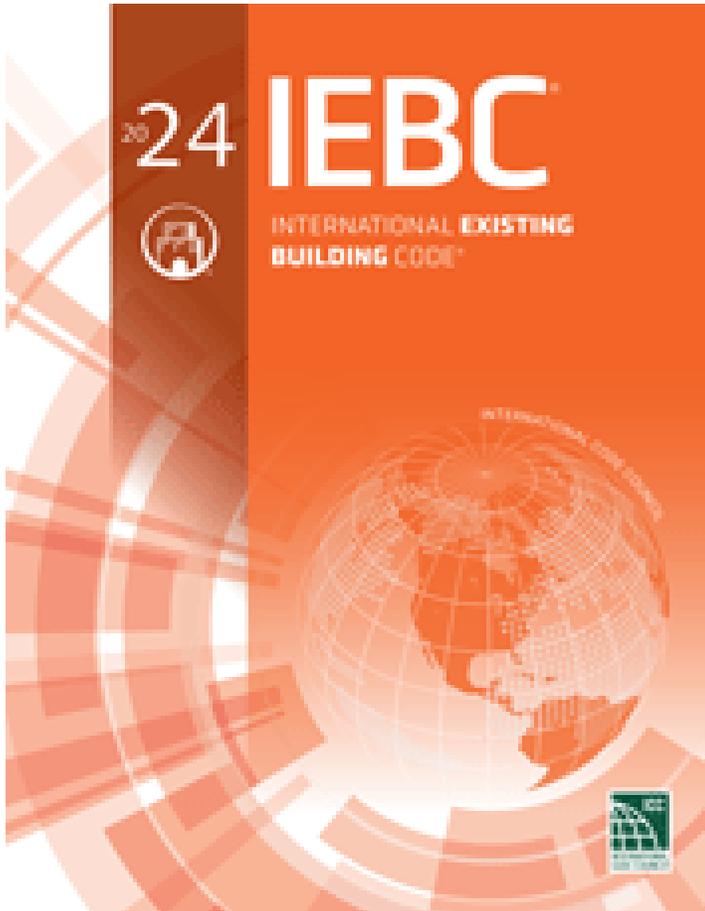
2025 California Building Code, Title 24



Major Changes/Impacts:

- Retained existing risk categories for OSHPD 1R, 2 and 5 buildings
- ASCE 7-22 has a new force equation for design of nonstructural components. Impact use of existing OPMs and OSP.
- Peer review is required for wind tunnel testing.
- Deleted Table 1705 A.2.1 Steel special inspections. To be substituted with a new PIN.
- Permit use of bolted steel moment frame connections for the main lateral force resisting system.

2025 California Existing Building Code, Title 24



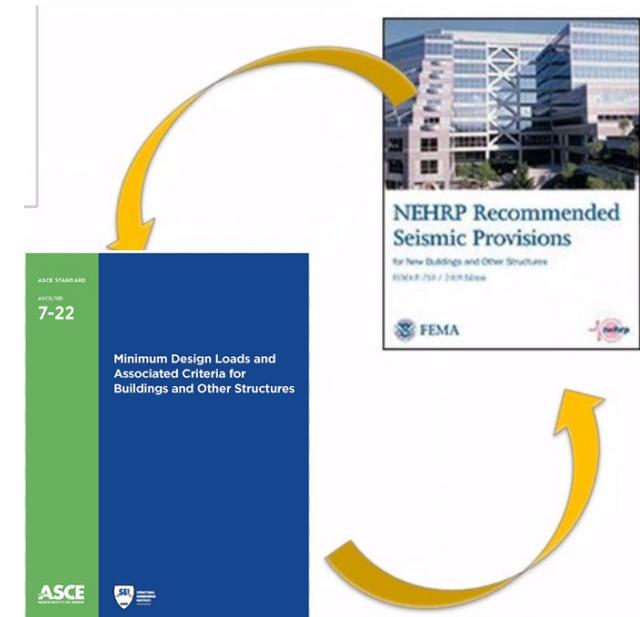
Repeal adoption of the 2021 International Existing Building Code (IEBC)

Adopt 2024 IEBC. Carry forward or repeal existing amendments.

Amend as necessary to create the 2025 California Existing Building Code, Part 10, Title 24.

Other Activities

- Participation in national codes and standards committees
 - BSSC
 - 2026 NEHRP (PUC)
 - Functional Recovery Task Committee (FRTC)
 - ASCE 7-28
 - Main Committee
 - Seismic subcommittee
 - Future conditions subcommittee
- Research and Development
- Presentations to Stakeholders



Presentations to Industry and Stakeholders

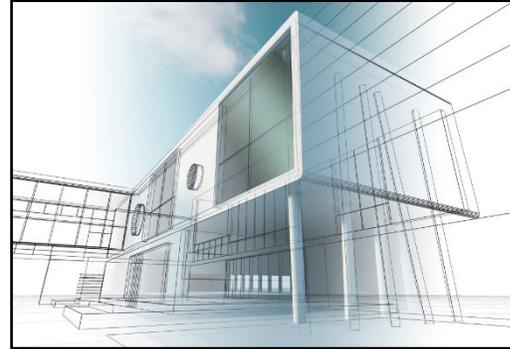
- Presentations to the public and stakeholders on AB 1882 requirements, NPC requirements and seismic compliance deadlines
- Presentation to the Association of Medical Facility Professionals - Small and Rural Hospital Relief Program
- Presentations to SEAOC common flaws engineers make in their designs and calculations
- Presentations to the SEAOC Seismology committee on Innovative systems and functional recovery

Item #13

Building Standards Unit (BSU) Update

- Update on BSU accomplishments year-to-date
- Discussion and public input

Facilitator: Mia Marvelli, Architect, Supervisor (or designee)



Building Standards Unit Update

April 18, 2024

Building Standards Unit



Marvelli, Mia@HCAI
Supervisor, Health Facilities Review
HCAI



Enright, Lawrence
Senior Mechanical Engineer



Schnick, Jamie
Senior Electrical Engineer



Campbell, Lori@HCAI
Staff Services Manager I



Pamma, Simrit@HCAI
Staff Services Analyst (General)



Wu, Clara@HCAI
Compliance Officer, Health Facil...



Coleman, Paul@HCAI
Senior Architect

NEW



Smith, Teresa@HCAI
Seasonal Clerk
HCAI

BSU Recruitment:

Senior Architect

Building Standards Unit Role

Architectural, Mechanical and Electrical Technical Lead Support for all Regions

- ✓ Plan Review Quality Assurance
- ✓ CPR/AMC Assistance
- ✓ Staff Training
- ✓ Liaison to CDPH
- ✓ Address Technical Questions from Design Professionals

Public Outreach and Support

- ✓ Publish CANs/PINs/SoP's, Guides, etc.
- ✓ Conduct Webinars
- ✓ Monitor National Codes and Standards development
- ✓ Propose Title 24 Code changes
- ✓ Coordinate/Collaborate with State Agencies

✓ *Assist Executive Office with Legislative Analysis*

STATE AGENCY COORDINATION



State Agency Coordination

California Department of Public Health

- ✓ Bi-weekly mtgs address outstanding items
- ✓ Title 22 Rewrite ongoing (assisting)
- ✓ Coordinate Title 24 code changes
- ✓ AB 2511 SNF REVIEWS
- ✓ Water Rationing Plans
- ✓ Methods of Procedures Guidance
- ✓ Processes for survey discovery of unauthorized projects
- ✓ Functional Program Rewrite
- ✓ Dietary Functional Program/Guide – Live
- ✓ COVID Reset coordination/Program Flex
- ✓ Indoor Air Quality Unit

Mental Health Services Oversight and Accountability Commission

[SB 326 \(2023\)](#) Behavioral Health Services Act

Emergency Psychiatric Assessment, Treatment, and Healing ([EmPATH](#))



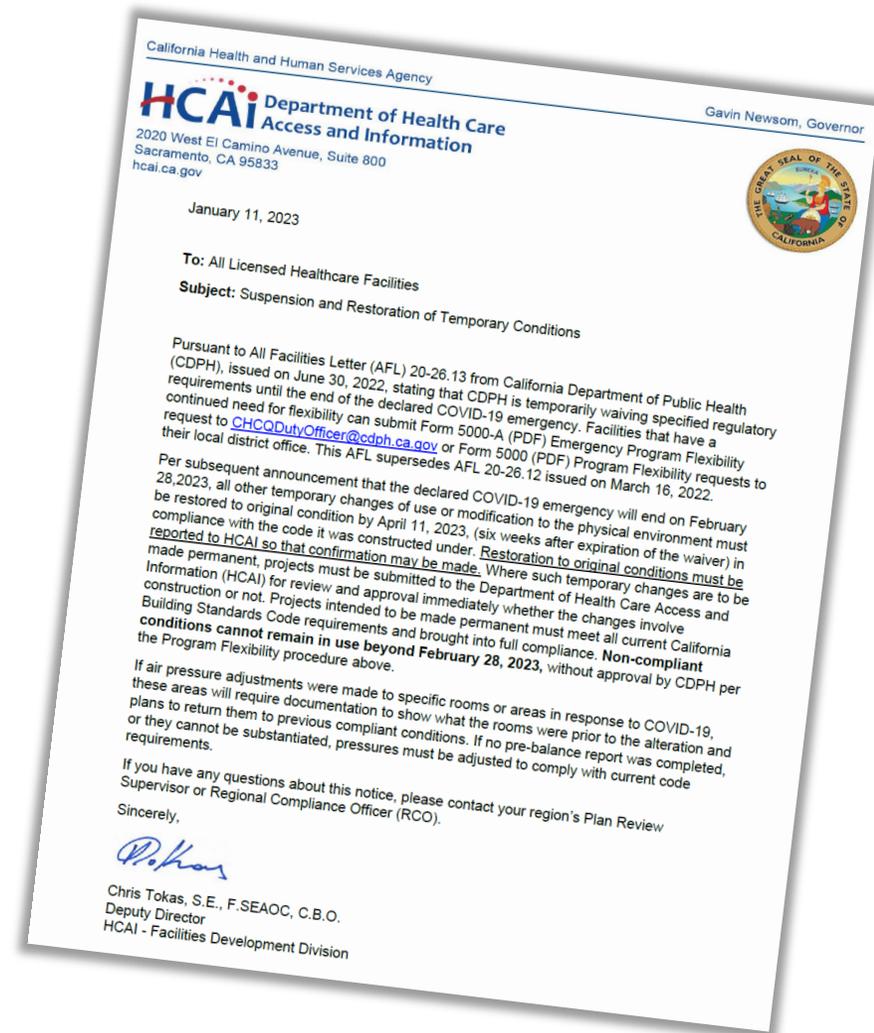
Coordinate with CDPH

- ❑ Through bi-weekly meetings with CDPH leadership to resolve topics between HCAI and CDPH.
- ❑ Through monthly HCAI LA regions/CDPH District Offices (DO) meetings and ad-hoc meetings with CDPH DOs to address functional programs and AMCs related questions or concerns.
- ❑ We also coordinate with CDPH for the implementation of new requirements such as emergency water supply related to NPC-5 compliance and compliance with AB 2511 that requires SNF to provide additional alternative source of power.

COVID Reset

Suspension and Restoration of Temporary Conditions

- ✓ End of PHE was February 28, 2023
 - ✓ Non-compliant use of temporary spaces stops
- ✓ Restoration of physical environment: April 11, 2023
 - ✓ Restoration to original conditions must be reported to HCAI so that confirmation may be made.
- ✓ Temporary changes are to be made permanent, projects must be submitted to HCAI for review and approval.
- ✓ Projects must meet current California Building Standards Code requirements and brought into full compliance.
- ✓ Non-compliant conditions cannot remain in use beyond February 28, 2023, without approval by CDPH per the Program Flexibility procedure above.
- ✓ OSHPD is working with CDPH for Program Flex reviews



OUTREACH

AIA CV Academy of Architecture for Health

- AIA Central Valley Chapter – monthly meetings

Remodel CAN

Recent Title 24 code changes

Alternate Method of Compliance process - RCO field staff



National Codes and Standards Participation

- ASHRAE: SSPC 170, Ventilation of Health Care Facilities (Lawrence Enright)
- National Fire Protection Association
 - NFPA 70, National Electrical Code, Health Facilities backup power and microgrids
 - NFPA 99
- Federal Guidelines Institute: (Eric Jacobsen and Richard Tannahill)
 - Design and Construction of Hospitals, Imaging Class 1-3 and Treatment, Procedure and OR
- International Code Council, Committee on Healthcare

Industry Conferences



Healthcare Microgrids To the Rescue

Evolving codes

Challenges and benefits using Microgrids

Emergency Energy Source

Jan. 30-31, 2024

KAISER PERMANENTE SAN MARCOS CAMPUS HEALTHCARE MICROGRID AS INSTALLED



Bloom Energy
Fuel Cells



Campus Main Service/
Microgrid Gear



(2) Emergency
Generators



Industry Conferences

How California is Making Microgrids Work



Ratan B. Milevoj

Vice President, Innovation &
Assistant Chief Strategy Officer
Valley Children's Healthcare



Jamie Schnick

Senior Electrical Engineer,
HCAI



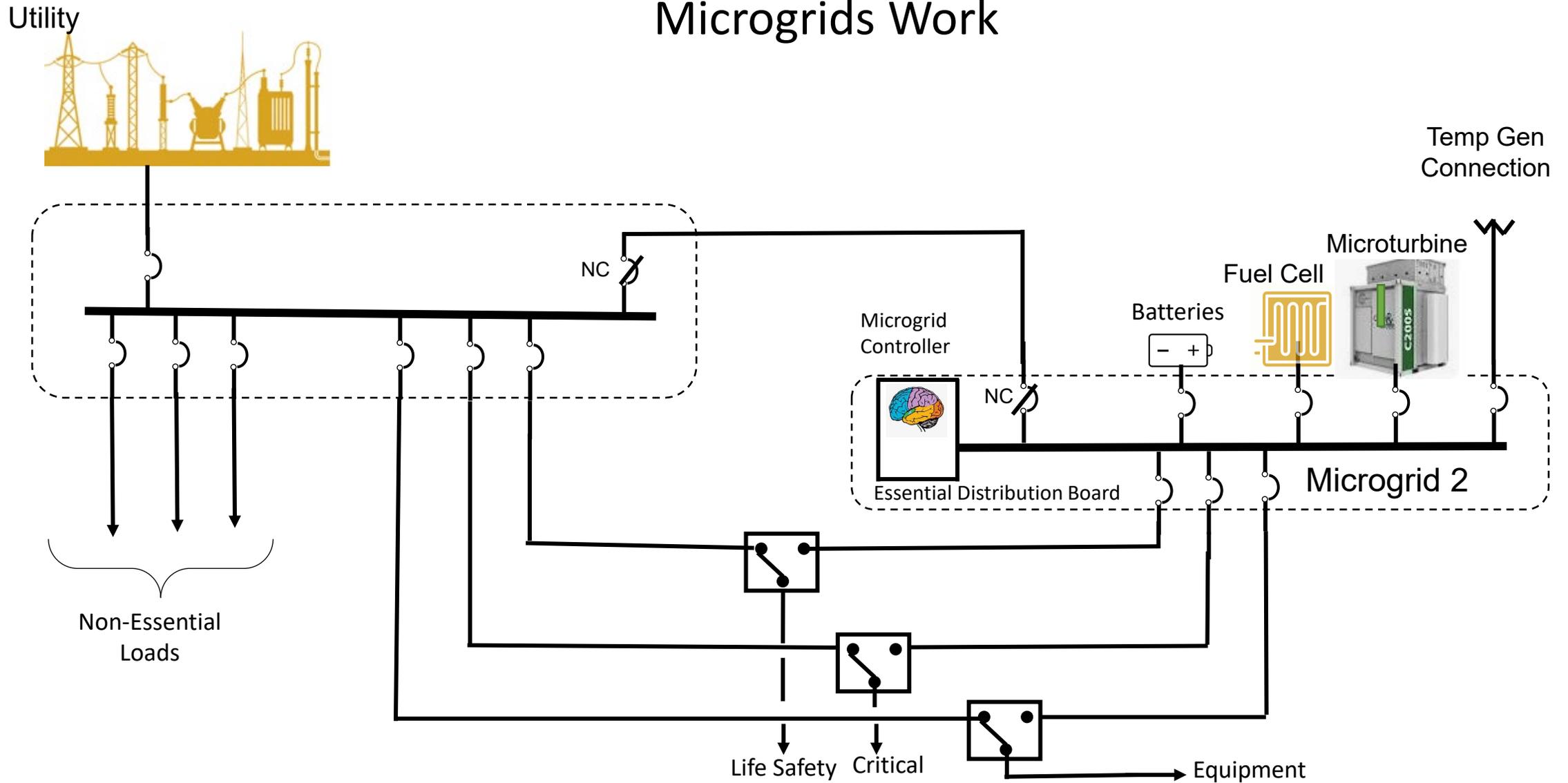
Walt Vernon

CEO Mazzetti



Check-in Code: PDC1035

How California is Making Microgrids Work



Industry Conferences



HEALTHCARE
FACILITIES
symposium and expo

September 2024

Request to Speak:

Health Care Microgrids can Lower
Utility Costs, Meet Sustainability
Goals and Increase the Resilience of
your Facility

Jamie Schnick

Senior Electrical Engineer,
HCAI

CANs/PINs/Guides/Webinars

Published

- PIN 74 SNF Alternative Fuel Source - **updated**
- Design Guide for Planning and Preparing for Disasters
- Design Guide for Working on Projects under OSHPD Jurisdiction (Tips from Experts)

Coming Soon

- CAN 2-102.6 Remodel
- CAN 2-108 Temp. Structures and Uses (adding Tents)
- OSHPD 6 –Chem Dependency Recovery Hospitals
- Wiring for Class 2 Powered Life Safety and Critical Branch Lighting Systems
- Medications Dispensing Units
- Bedpan Washers
- Nurse call systems

Title 24
California Building
Standards Code
Update



Timeline

- ✓ **2022 edition Supplement (blue pages) goes into effect July 1, 2024**
- ✓ **2025 Edition of Title 24 (2024 Triennial Code Cycle)**
 - Aug. 2023, Submit Electrical to CBSC
 - Feb. 2024, Submit Mech and Plumb. to CBSC
 - May 2024, Submit Admin, Building Vol. 1 & 2, Existing to CBSC

OSHPD Timeline and HBSB Meetings

DUE TO CBSC

Feb. 2024
Submit CMC and CPC

May 2024
Submit CAC, CBC, Vol. 1 & 2,
and CEBC

REVIEWED BY HBSB/COMMITTEE

Sept. 14, 2024 (Codes and Process) CEC
Jan. 10, 2024 (Codes and Process) CMC and CPC

Feb. 21, 2024 (Codes and Process) CAC, CBC Vol. 1

Mar. 6, 2024 (Struct & Non-Struct) CAC, CBC Vol. 2 and CEBC

Apr. 18, 2024 HBSB Full Board meeting



May 8, (Codes and Process) FLS (SFM) related items



CBSC Code Advisory Committee dates

GREEN — MARCH 18-19, 2024	+
PEME — MARCH 25-26, 2024	+
ACCESS — JUNE 4-5, 2024	+
BFO — JULY 9-11, 2024	+
SDLF — JULY 16-17, 2024	+
HF — JULY 30, 2024	+



Familiar faces:

- Connie Christensen-HF Ex-Officio
- Gary Dunger-HF
- Belinda Young-HF
- Bill Zellmer-HF & ACCESS



CBSC Public Comment Periods

45-Day Public Comment Period

PEME	May 17 – July 1
SDLF/BFO/HF	July 26 – September 9

SUBSCRIBE TO CBSC'S MAILING LIST

Stay in touch with CBSC and receive meeting and public comment period notices, information bulletins, quarterly newsletters and more! Add your email address to our mailing list by visiting [DGS' govDelivery Subscription Service](#) webpage. After submitting your email, be sure to select the "CBSC Communications" topic on the next page. View our [Privacy Policy](#) for more information.

www.dgs.ca.gov/BSC/Contact

CBSC Rulemaking page www.dgs.ca.gov/BSC/Rulemaking/2024-Triennial-Cycle

- Any Questions?
- Any Additional Thoughts or Discussion?



Updates:

Healthcare Microgrids

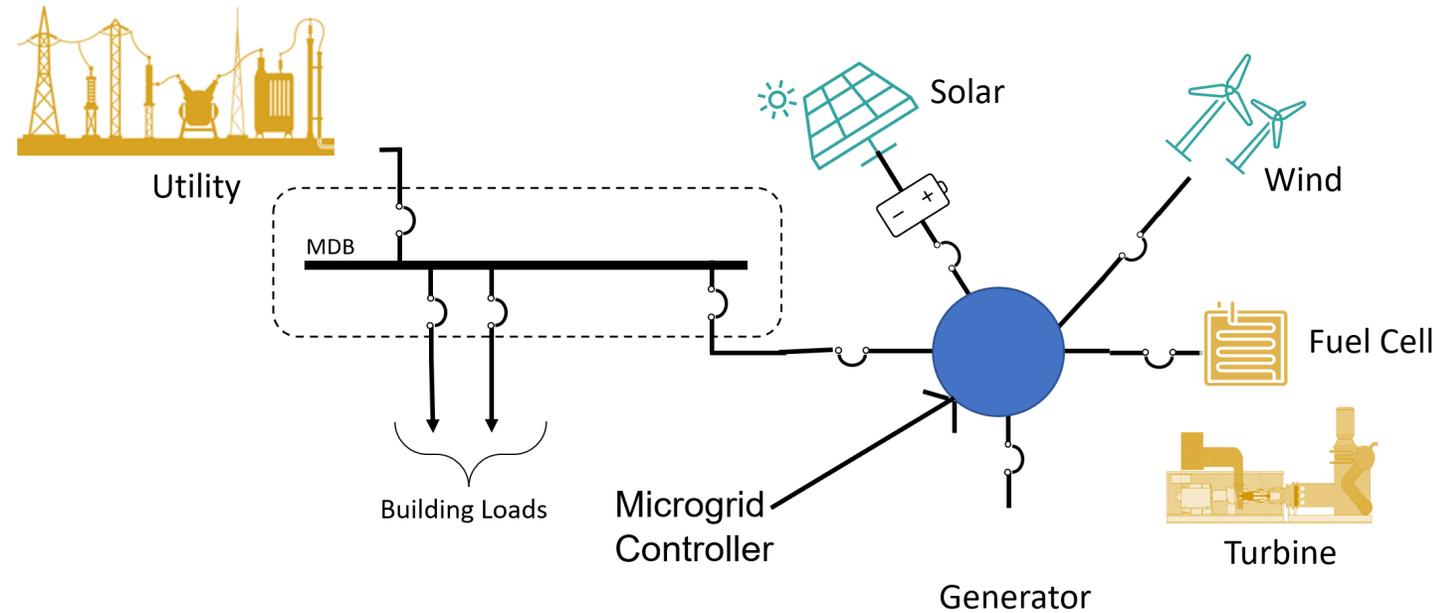
By Jamie Schnick

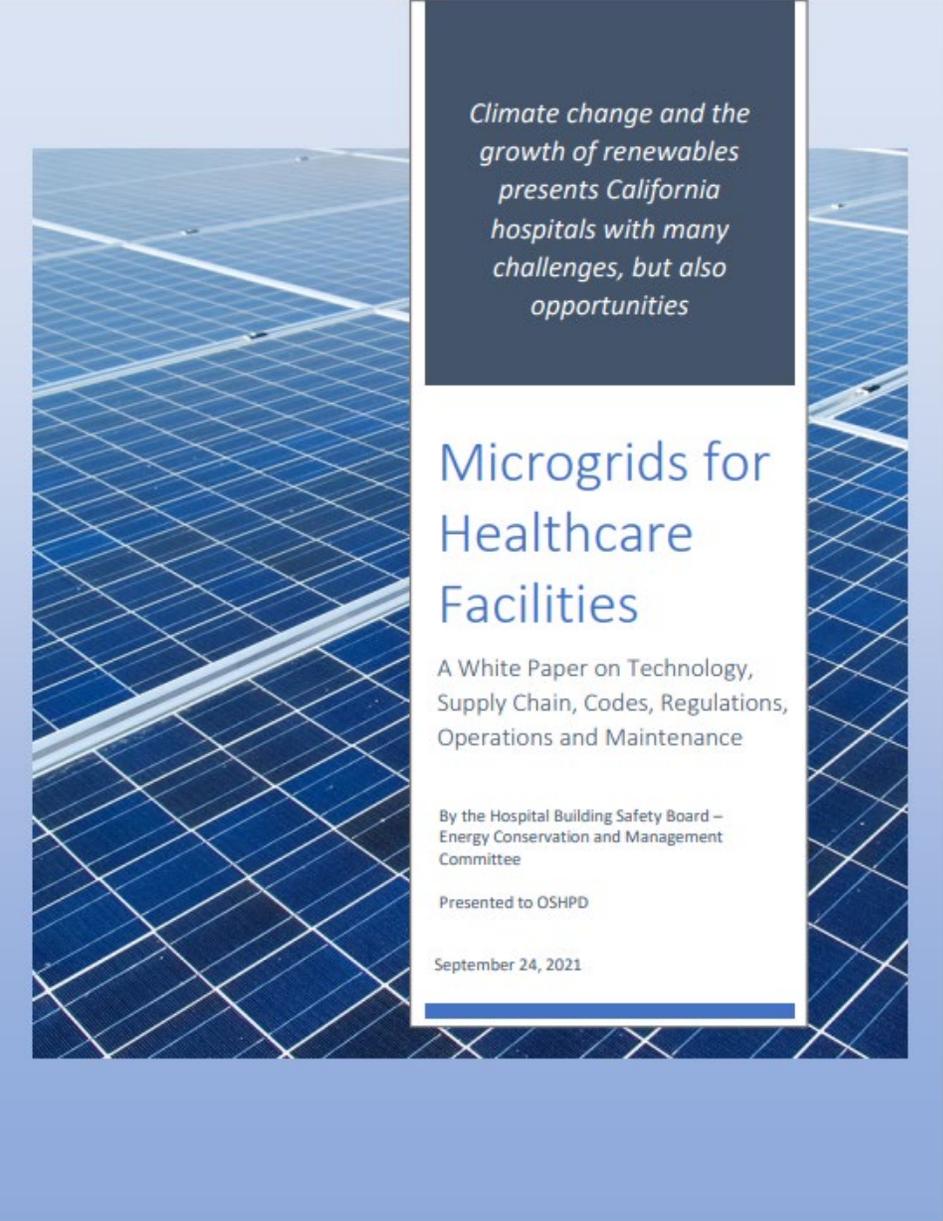
Jamie.Schnick@hcai.ca.gov

(213) 807-7651

HEALTHCARE MICROGRIDS

1. CA Health Care Microgrid Projects
On-line
2. National Conference Presentations.
3. NFPA 99 and NFPA 70 Microgrid
Focus group's
4. Off-Grid focus group





Climate change and the growth of renewables presents California hospitals with many challenges, but also opportunities

Microgrids for Healthcare Facilities

A White Paper on Technology, Supply Chain, Codes, Regulations, Operations and Maintenance

By the Hospital Building Safety Board – Energy Conservation and Management Committee

Presented to OSHPD

September 24, 2021

Normal Power

- No issues

Essential Power

- CMS requires Generators
- OSP for Green DER's
- 96 hrs of on-site fuel storage
- Codes allow for normal disallow for EPS
- Proof of concept

THE MISSION

OSHPD microgrid task force

To get the word out that Microgrids can be implemented NOW.

To help speed up and simplify the processing of Microgrid projects.

- Early discussions
- Consistent team/approach to review
- Sharing knowledge

To help with the process of delivering Microgrids as Emergency Power Sources (EPS's) for California Healthcare Facilities that are:

- Code compliant
- At least as reliable as the current go to EPS's - Diesel Generators.

CMS Categorical Waiver for Healthcare Microgrid Systems to be used as EPS for Hospitals and SNFs. (sub-acute SNFs excluded)

Categorical Waiver – Health Care Microgrid Systems (HCMSs)

Title	Categorical Waiver –Health Care Microgrid Systems (HCMSs)
Memo #	QSO-23-11-LSC
Posting Date	2023-03-31
Fiscal Year	2023
Summary	<p>Various CMS regulations governing certain providers and certified suppliers require compliance with the 2012 edition of the National Fire Protection Association (NFPA) Health Care Facilities Code (NFPA 99). • 2012 edition of NFPA 99 requires emergency power for an essential electric system (EES) to be supplied by a generator or battery system. • 2021 edition of the NFPA 99 permits emergency power for an EES to be supplied by sources other than a generator or battery system, including a health care microgrid system (HCMS) • HCMSs are small-scale electrical grids where the sources of electricity can be provided by clean energy technologies (e.g., fuel cells, solar, wind, energy storage, etc.). • Except as noted below, CMS is issuing a categorical waiver permitting new and existing health care facilities subject to CMS requirements to utilize alternate sources of power other than a generator set or battery system only if in accordance with the 2021 edition of the NFPA 99, 2023 edition of the National Electric Code (NFPA 70), and associated references. • The categorical waiver excludes long-term care (LTC) facilities that provide life support as the LTC requirements at 42 CFR 483.90(c)(2) requires these facilities to have an emergency generator without exception.</p>



Demonstration Projects

5 SNF's in Northern California,

Kaiser San Marcos

Kaiser Ontario

Valley Childrens Healthcare

100% Alternate
Power source at
SNF to back up
entire facility to
meet AB2511
requirements

Existing
generators to
remain

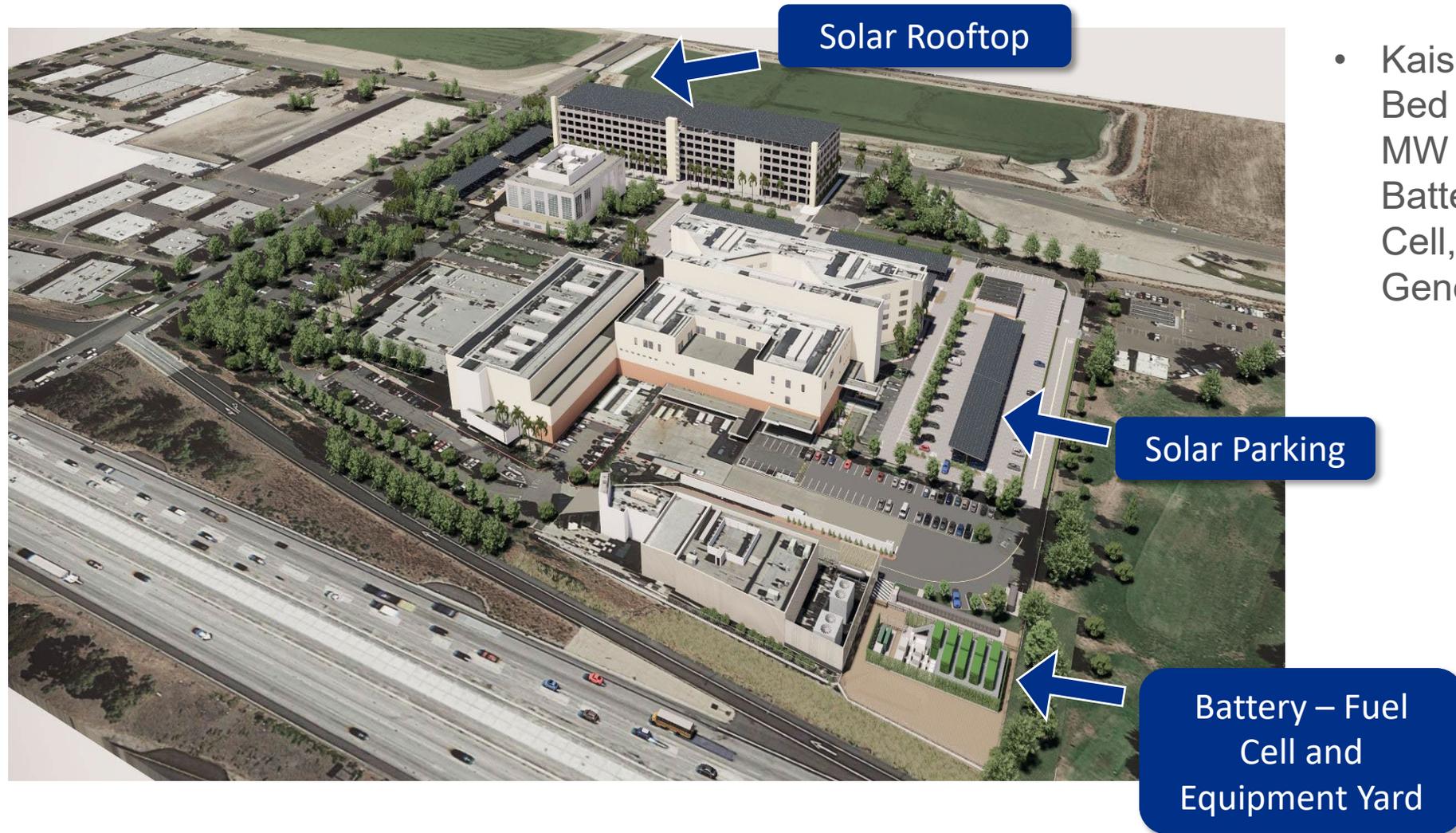


KAISER PERMANENTE SAN MARCOS CAMPUS

- ▲ New Hospital/CP
- ▲ 1.7 MW Fuel Cell
 - ▲ 100% back up power
- ▲ Emergency Generators



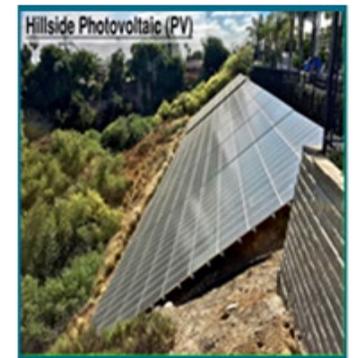
Demonstration Project: Kaiser Ontario



- Kaiser Ontario – 224 Bed Facility Project: 2 MW Solar, 9 MWH Battery, 1 MW Fuel Cell, 6 MW Diesel Generators

IMPLEMENTING ONE OF THE LARGEST RENEWAL ENERGY MICROGRID

- Solar PV - 1.32MW
- Fuel Cell - 2.2 MW
- Battery - 1.4 MWH





Healthcare Microgrids to the Rescue

Jamie Schnick/Duc Bui/Rocky Tanner



How California is Making Microgrids Work

Walt Vernon/Ratan Milevej/Jamie Schnick



HEALTHCARE
FACILITIES
symposium and expo

Health Care Microgrids offer the opportunity to simultaneously lower utility costs, reduce facilities' carbon footprints and provide much needed resilience.

Jamie Schnick/Duc Bui/Rocky Tanner/Rame Hemstreet

Healthcare Microgrids in the Codes

- 1) 2021 NFPA 99 (The term “Health Care Microgrid” 1st introduced)
- 2) 2023 NEC (Added Healthcare Microgrids as acceptable EPS)
- 3) 2022 CEC Intervening Code Updates (Pulled content from 2023 NEC into CA code “18 month early – adoption” date July 1, 2024)
- 4) 2026 NEC Public Inputs In process – Task force has taken 1st pass at PI’s
- 5) 2024 CEC Triennial updates – Have been submitted to the CAC with 1st review
- 6) 2027 NFPA 99 Public input – Task force developing initial PIs

Healthcare Microgrids in the Codes

2021 NFPA 99 (The term “Health Care Microgrid” 1st introduced)

6.7.1.6 Health Care Microgrid.

A health care microgrid in accordance with section **6.10** shall be permitted to serve as the EPS for all or part of an essential electrical system

6.10.7 Commissioning Plan.

Health care microgrid systems shall be commissioned in accordance with their sequence of operations.

Healthcare Microgrids in the Codes

2023 NEC (Added Healthcare Microgrids as acceptable EPS)

517.30 (A) Two Independent Sources.

Essential electrical systems (EES) shall have (2) or more independent sources or set of sources sized to supply the entire EES.....

517.30 (B) Power sources for EES

...

EES shall be permitted to be supplied by a health care microgrid that also supplies nonessential loads. The health care microgrid shall be permitted to share distributed resources with the normal system. Health care microgrid systems shall be designed with sufficient reliability to provide effective facility operation consistent with the facility emergency operations plan. Health care microgrid system components shall not be compromised by failure of the normal source.

Healthcare Microgrids in the Codes

2022 CEC Intervening Code Updates adoption date July 1, 2024

517.30 & 517.41 Sources of Power.

(B) Types of Power Sources.

(B.1) [OSHPD 1, 3, 4 & 5] Power Sources for the EES. *Power sources for the EES shall be permitted to be any of those specified in 517.30(B)(1) through 517.30(B)(4). One on-site power source (or set of sources) that is sized to supply the entire EES shall meet the on-premises fuel or battery stored energy requirements specified in Article 700.12.*

(4) Health Care Microgrid. *EES shall be permitted to be supplied by a Health Care Microgrid that also supplies nonessential loads. The EES Health Care Microgrid shall be permitted to share distributed resources with the normal source. EES Health Care Microgrid systems shall be designed with sufficient reliability to provide effective facility operation consistent with the facility emergency operations plan. EES Health Care Microgrid system components shall not be compromised by failure of the normal source. EES Health Care Microgrids shall meet the installation and commissioning requirements set forth in NFPA 99 Article 6.10.*

Healthcare Microgrids in the Codes

2026 NEC Public Inputs In process (mid process)

- Approximately 50 Public Input Comments related to microgrids
- Lots of vocabulary work to get away from normal and emergency (alternate) and instead use off site and on site
- Took a run at capacity of systems
- Lots of fine tuning to address dual function of EPS and 24/7 status of new approach to Essential power requirements

Healthcare Microgrids in the Codes

2024 CEC Triennial updates – Have been submitted and 1st review with CBSC

(A.1) [OSHPD 1, 3 (Surgical Clinics only), 4 & 5] Two Independent Power Sources. The Essential Electrical System (EES) shall be served by two or more independent sources (or sets of sources).

Clearly indicate all EES components on the design documents.

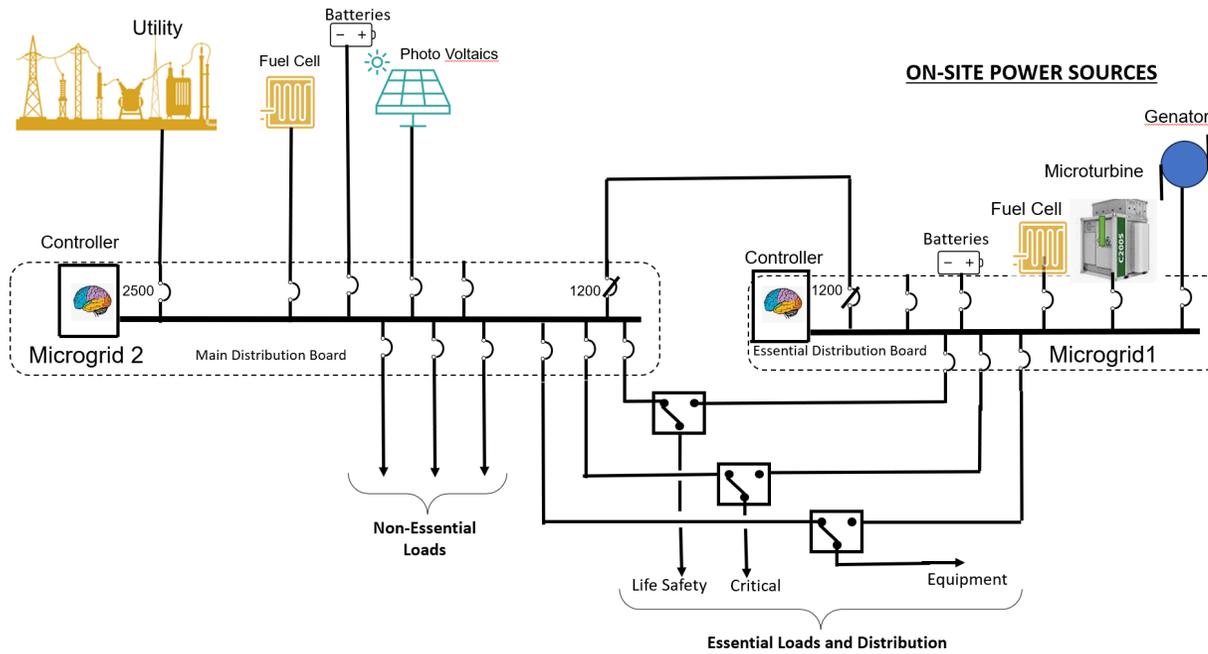
The two independent sources (or sets of sources) shall be located to reduce the likelihood of simultaneous interruption of EES components and non-EES components.

1) (D) [OSHPD 1, 4, & 5]: Temporary Source of Power for Maintenance or repair of the Alternate Source of Power. The Essential Electrical System (EES) shall include permanent switching means to connect temporary or permanent on-site resources

Healthcare Microgrids in the Codes

2027 NFPA 99 - Public Inputs In process (beginning of process)

- Walt Vernon has assembled a task force
- In the process of developing sub-committee comments
- More work on language to eliminate normal/alternate/primary power/generators
- In general attempting to modify code to not be so reliant on diesel generators as EPS.
- Considering replacing “sources” with Power production equipment”
- Revisiting some of NEC Public inputs



Normal Power

- No issues

Essential Power

- ~~CMS requires Generators~~
- OSP for Green DER's
- 96 hrs of on-site fuel storage
- ~~Codes allow for normal disallow for EPS~~
- ~~Proof of concept (Design Modeling & CX)~~

NEXT GENERATION SYSTEMS

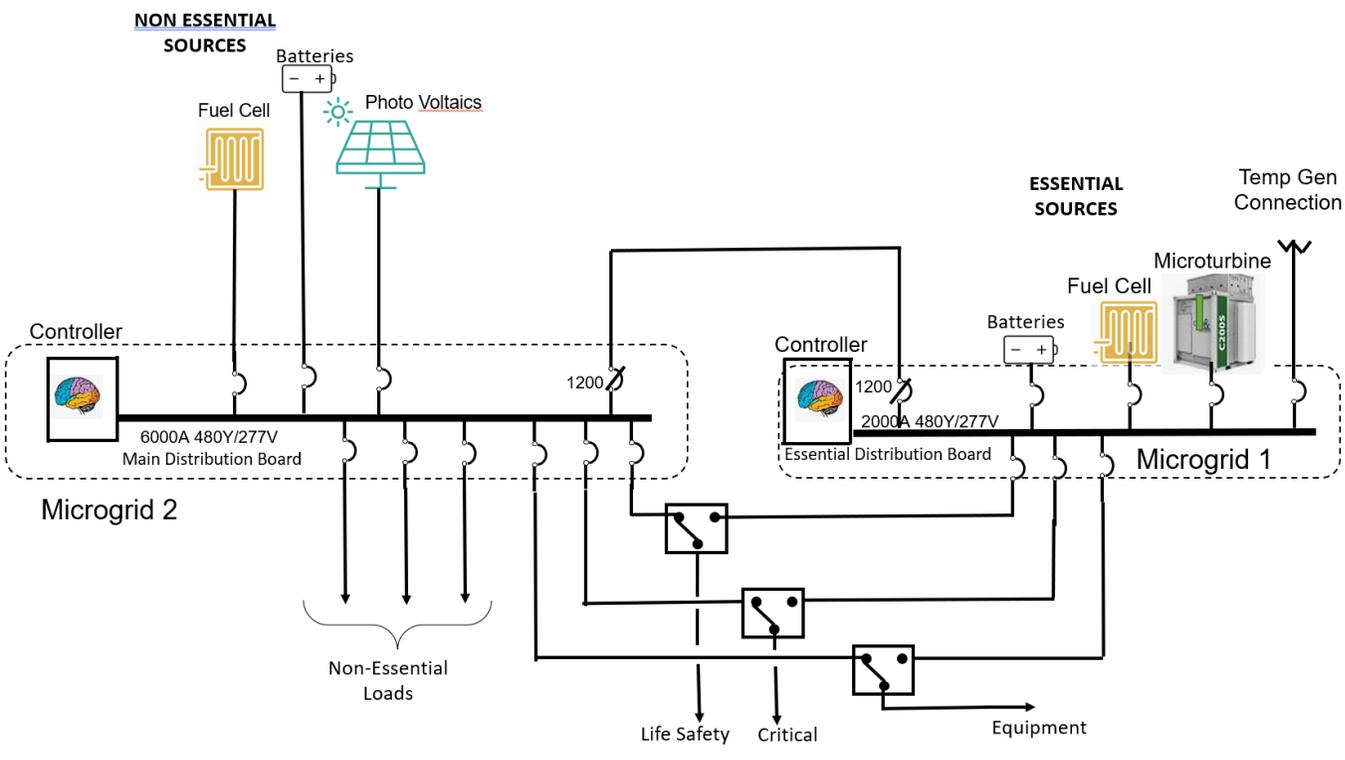
- ❑ Integrated reciprocating engine - natural gas or hydrogen
- ❑ Heat recovery
- ❑ Controls
- ❑ Electrical distribution single point of connection
- ❑ UL Listed
- ❑ 55dB
- ❑ Shaker table testing scheduled for June/Berkley



COMPRESSED NATURAL GAS

- ❑ 4000psi
- ❑ Regulator 4000 PSI – 5 PSI
- ❑ Multiple Sizes and shapes





HCAI “Off-Grid”

Hospital - Focus Group

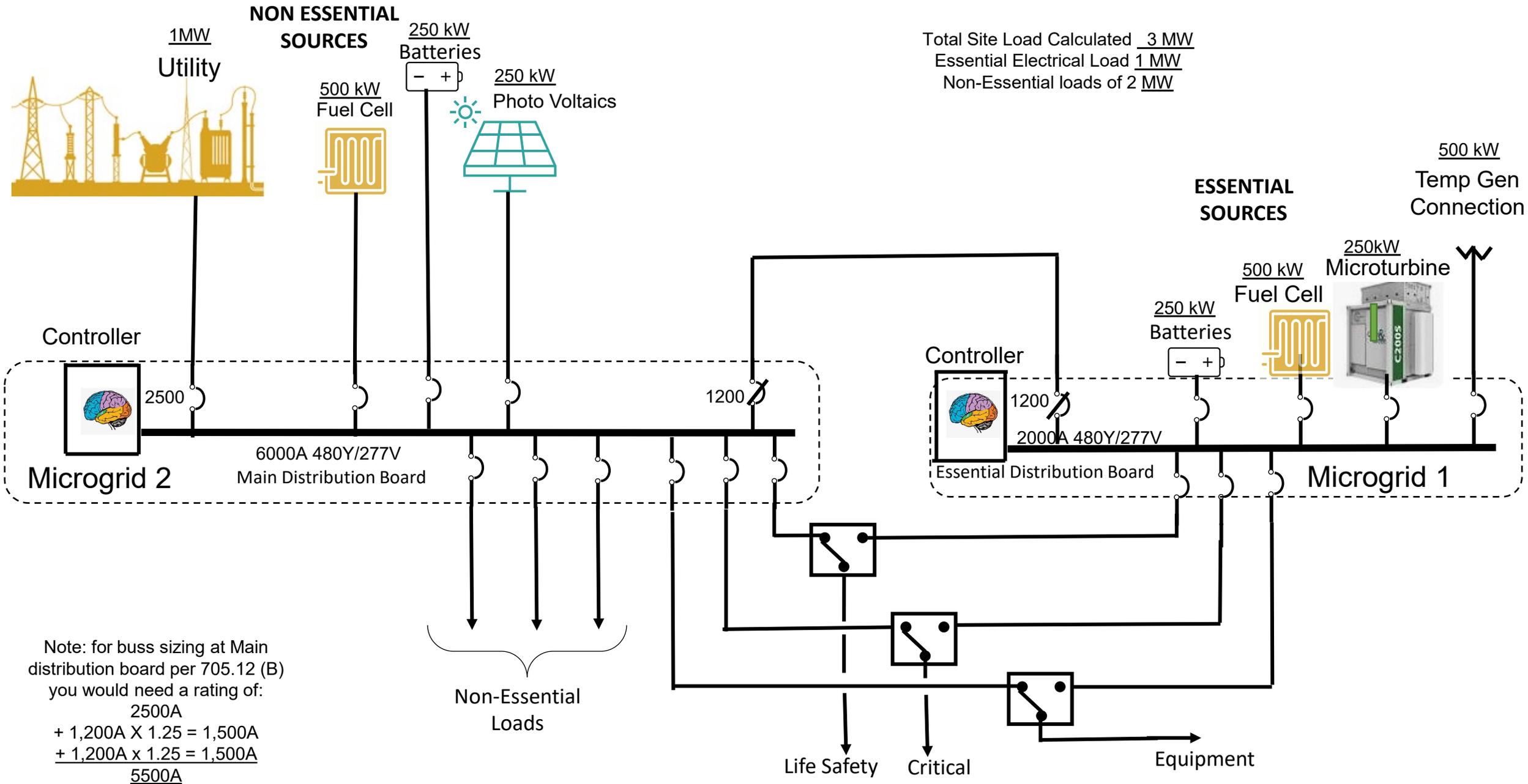
- 1) Walt Vernon – Mazzetti Engineers
- 2) Dr David Bliss – Faraday Microgrids
- 3) Marc Hoffman - Innovus
- 4) Jamie Schnick - HCAI

Initial Discussions

- 1) Utilities in CA are built to minimum seismic standards
- 2) Utilities have incredibly high spinning reserves (stiffness to source) which will be tough to replicate
- 3) Power Quality can be an issue with microgrids if not designed correctly
- 4) Hybrid Microgrids (with some prime mover) most likely 1st to be built
- 5) Resources that serve entire site load can also be 1N of essential power
- 6) Commissioning and annual testing will be required



QUESTIONS?



Note: for buss sizing at Main distribution board per 705.12 (B) you would need a rating of:

$$2500A$$

$$+ 1,200A \times 1.25 = 1,500A$$

$$+ 1,200A \times 1.25 = 1,500A$$

$$5500A$$

Item #17

Comments from the Public/Board Members on Issues not on this Agenda

The Board will receive comments from the Public/Board Members. Matters raised at this time may be taken under consideration for placement on a subsequent agenda.

Facilitator: Louise Belair (or designee)

Item #18 Adjournment

The next Full Board Meeting is August 15, 2024, in the Los Angeles HCAI Office.