

Nonstructural Performance Category (NPC) Compliance

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March 18th, 2025

Recent / Upcoming HCAI Seismic Webinars

- February 20, 2025 - Seismic Grant: Small and Rural Hospital Relief Program
- March 4, 2025 - Seismic compliance plan and delays beyond the 2030 deadline
- March 18, 2025 - NPC compliance
- March 27, 2025 - Water rationing plan
- April 2, 2025 - SPC compliance

Outline

- Background

(for more detailed NPC background info, see the [past webinar](#) two years ago titled “NPC 3, 4, 4D and 5 Requirements and AB 1882 Hospital Public Notices” on June 20, 2023)

- Current inventory

- NPC deadlines and reporting compliance

- NPC reports’ summary pages

- NPC 5

(not covered here, see the past NPC 5 webinar two years ago and the upcoming March 27, 2025 presentation for updates)

- Lots of frequently asked question (FAQ) items.

Please visit: <https://hcai.ca.gov/facilities/building-safety/resources/seismic-faqs/>

- A13 NPC upgrade construction guide

Please visit: <https://hcai.ca.gov/facilities/building-safety/resources/training-education/>

The Hospital Facilities Seismic Safety Act (HFSSA) § 129680 requires that hospitals “shall be designed and constructed to resist, insofar as practical, the forces generated by earthquakes, gravity, and winds.”

HFSSA § 130005 (f) states, “The office, in consultation with the Hospital Building Safety Board (HBSB), shall develop regulations to identify the most critical nonstructural systems and to prioritize timeframes for upgrading those systems that represent the greatest risk of failure during an earthquake.”

Hospital Functionality

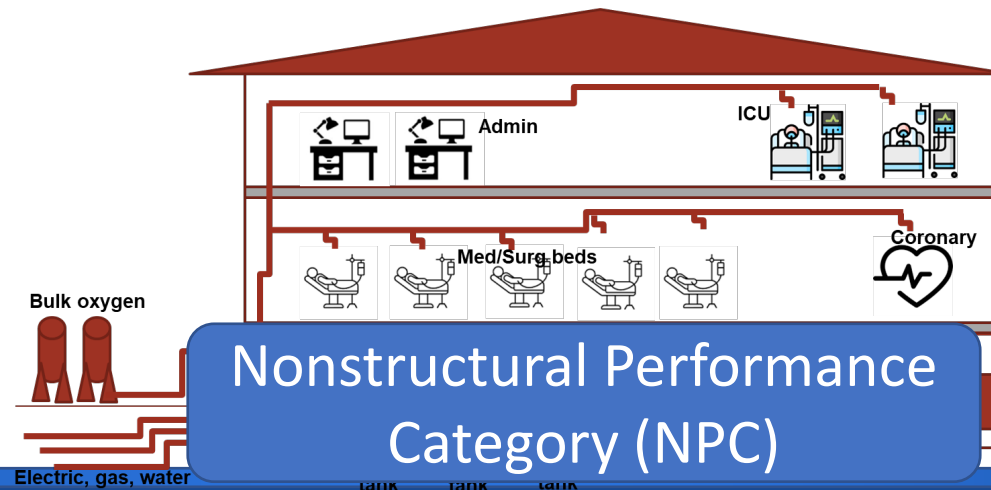
STRUCTURAL

Beams, Columns, Shear Walls, Slabs, Foundations



NONSTRUCTURAL

Cladding, Partitions, Ceilings, Equipment, Pipes, Furnishings, Contents, Elevators, Stairs, etc



STAFF



Nonstructural Performance Categories



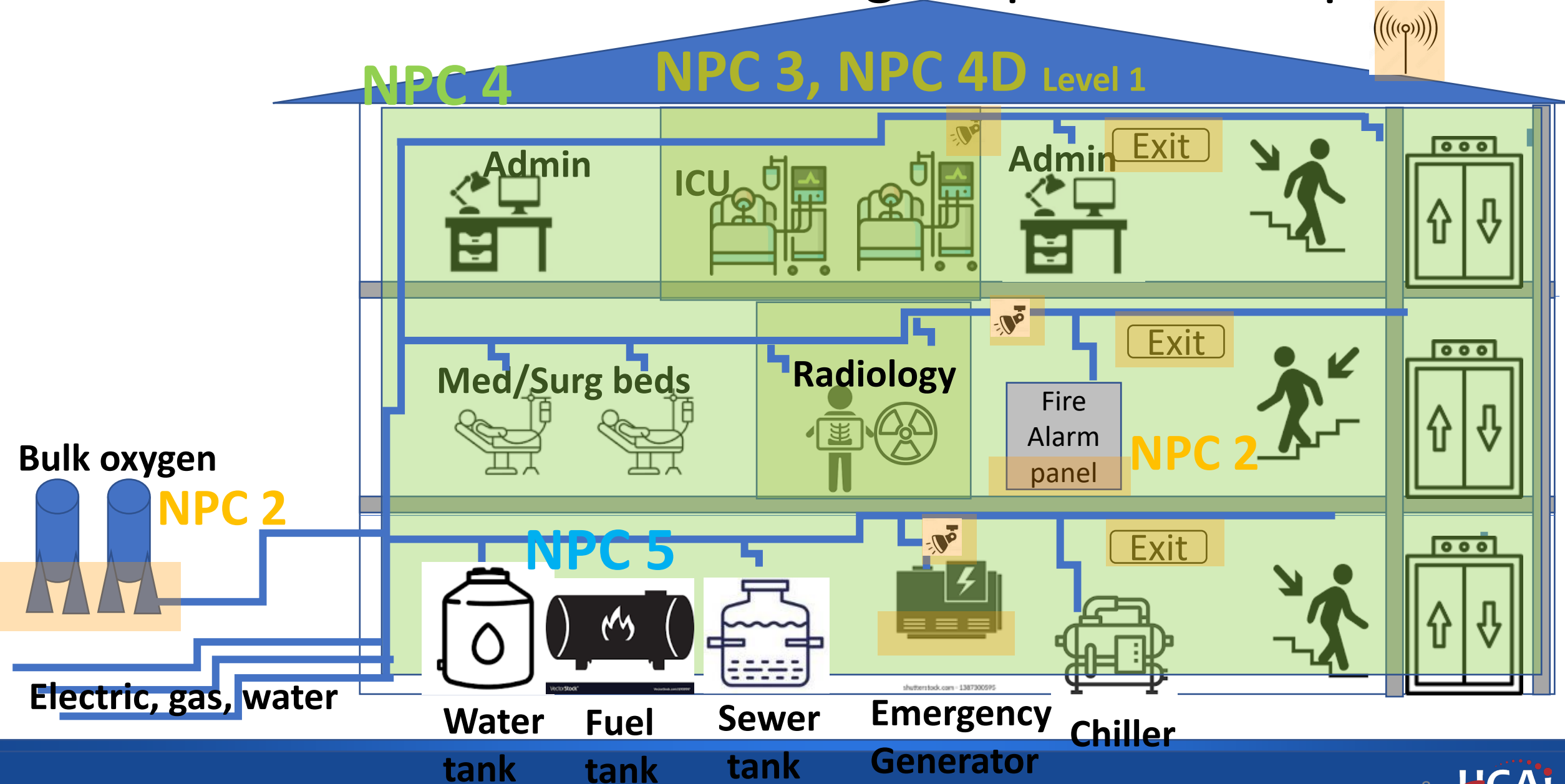
Photos: EERI Hospital Team



Rating	Brief / Simplified Description (See 2022 CAC Chapter 6 Table 11.1 for full description and requirements)
NPC - 1	Buildings with equipment and systems not meeting the bracing and anchorage requirements of any other NPC.
NPC - 2	Buildings in which essential systems vital to the safe evacuation of the building are anchored and braced to minimum code requirements. Essential systems vital to the save evacuation of the building include communications, emergency power supply, bulk medical gas, fire alarms and emergency lighting equipment and signs in means of egress.
NPC - 3	The building meets the criteria for NPC "2" and in critical care areas, clinical laboratory service spaces, pharmaceutical service spaces, radiological service spaces, and central and sterile supply areas, and certain components meet the bracing and anchorage requirements of Part 2, Title 24
NPC – 4D	Building meets the criteria for NPC - "3" + Operational Plan. There are 3 levels.
NPC - 4	Building meets the criteria for NPC - "3" and all architectural, mechanical, electrical systems, components and equipment, and hospital equipment meet the bracing and anchorage requirements of Part 2, Title 24.
NPC - 5	Building meets the criteria for NPC - "4" or 4D and has onsite supplies of water and holding tanks for sewage and liquid waste sufficient for 72 hours of emergency operations, and provides radiological service and onsite fuel supply for 72 hours of acute care service.

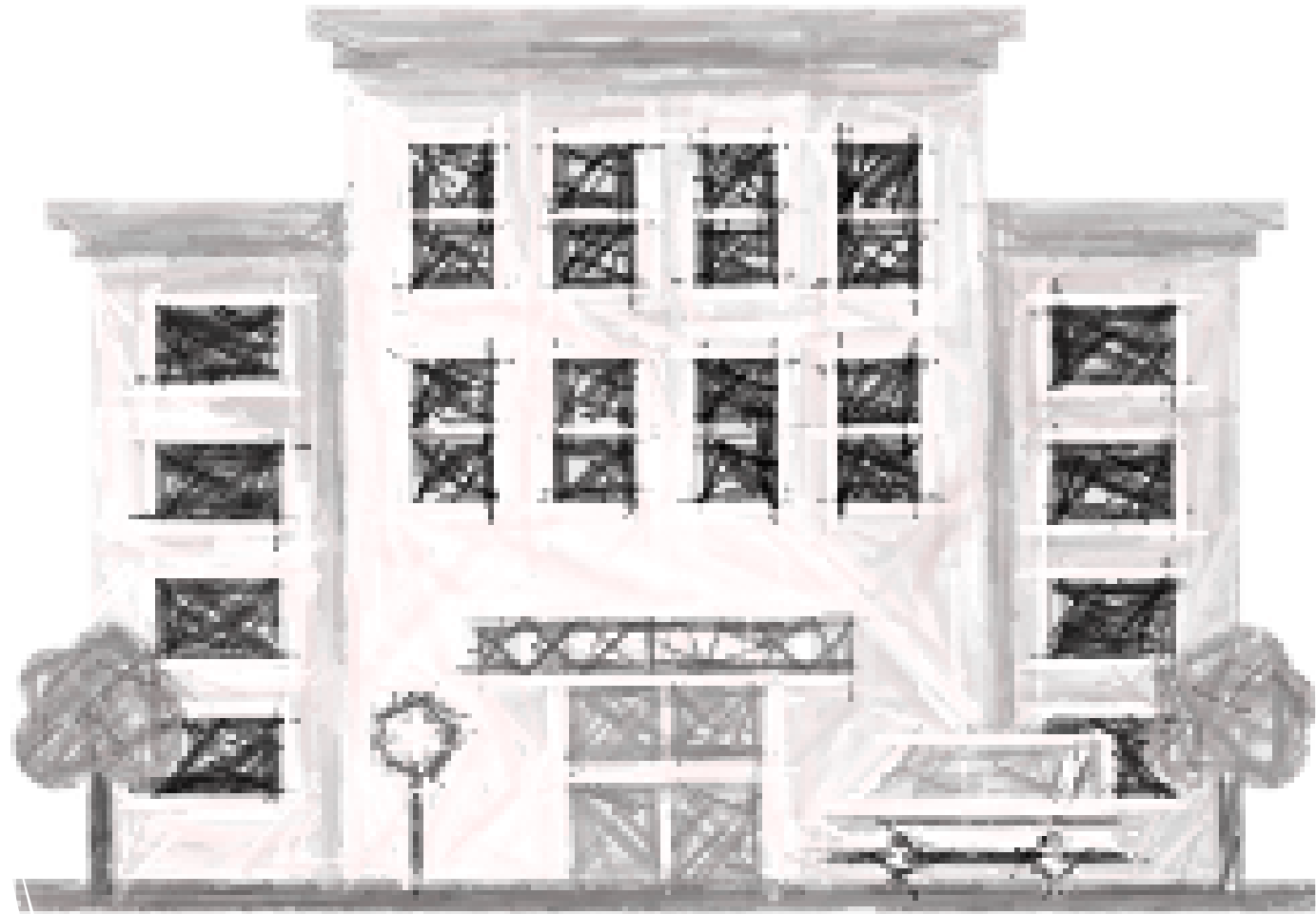
(See 2022 CAC Chapter 6 Table 11.1 for details)

Nonstructural Perf. Cat. Building Simplified Example



Descriptions here are simplified/reduced, please see 2022 CAC Chapter 6 Table 11.1 for further details

NPC 4D



NPC 4D

- See 2022 California Administrative Code Chapter 6, Section 11.2.3
- The building meets the criteria for NPC “3” and for systems listed in Levels 1 to 3, meets the bracing and anchorage requirements of Part 2, Title 24
- There are three levels:
 - NPC 4D Level 1
 - NPC 4D Level 2
 - NPC 4D Level 3
- For Level 1, 2 or 3 : Operational Plan is required

NPC 4D Operational Plan

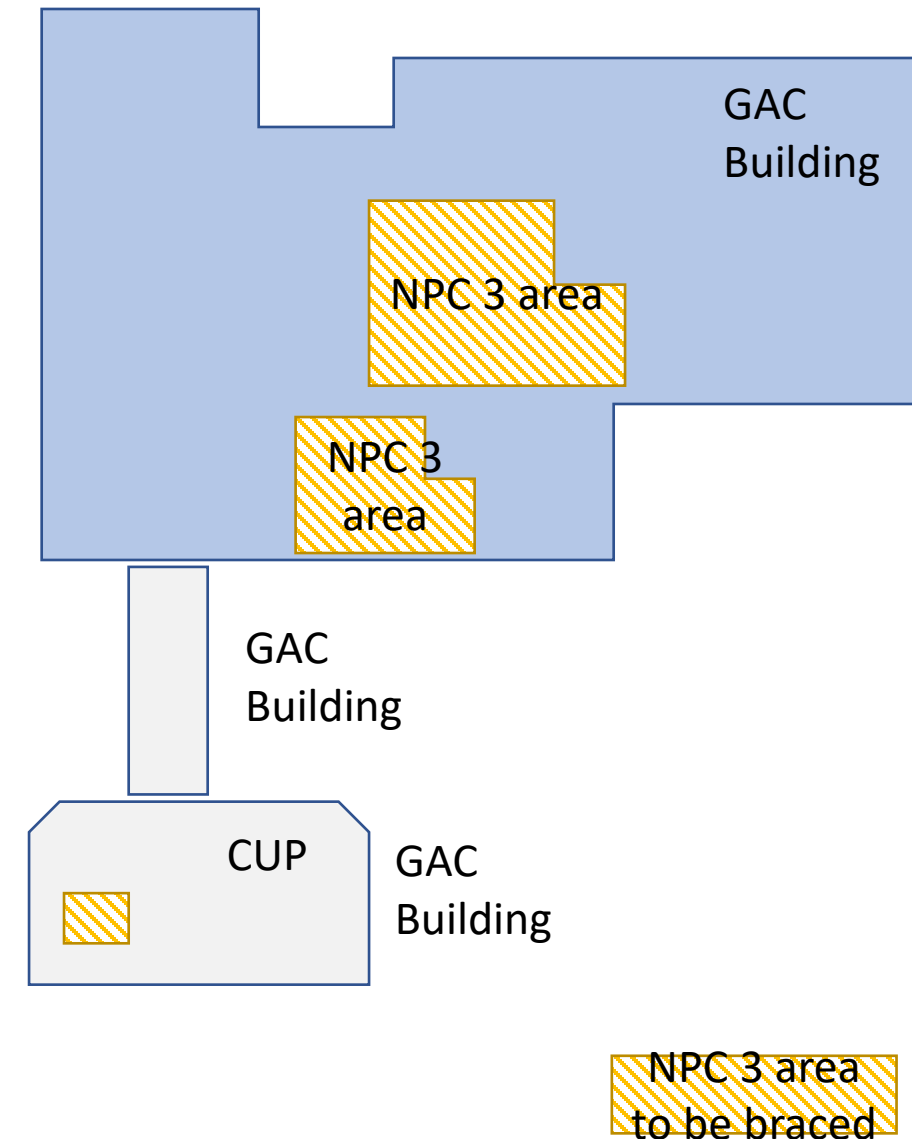
- Operational Plan (Operational Plan) for Levels 1, 2, and 3 areas required for continuous operations.
- The facility must prepare an owner-approved Operational Plan specifying how it will repair nonstructural damage and bring systems and services back online, or provide them in an alternative manner to accommodate continuation of critical care operations.
- This plan may include any other units or departments that hospitals may wish to keep operational for a minimum of 72 hours after a seismic event or other natural or human-made disaster.
- The Operational Plan shall be filed with the Office and shall include an executive summary, a detailed narrative of management of utilities, provisions, sustainability, and alternate means.
- Operational Plan document will be published on HCAI website

NPC 4D Operational Plan - suggestions

- Recommend not including sensitive information in the operational plan such as phone numbers of staff etc.
- It is acceptable to provide two pdf files of operational plan, one comprehensive for review, one “reduced/redacted” for HCAI website publication.
- It is acceptable not to show shut-off valve locations in the “reduced” version for security reasons.

NPC 4D – Level 1

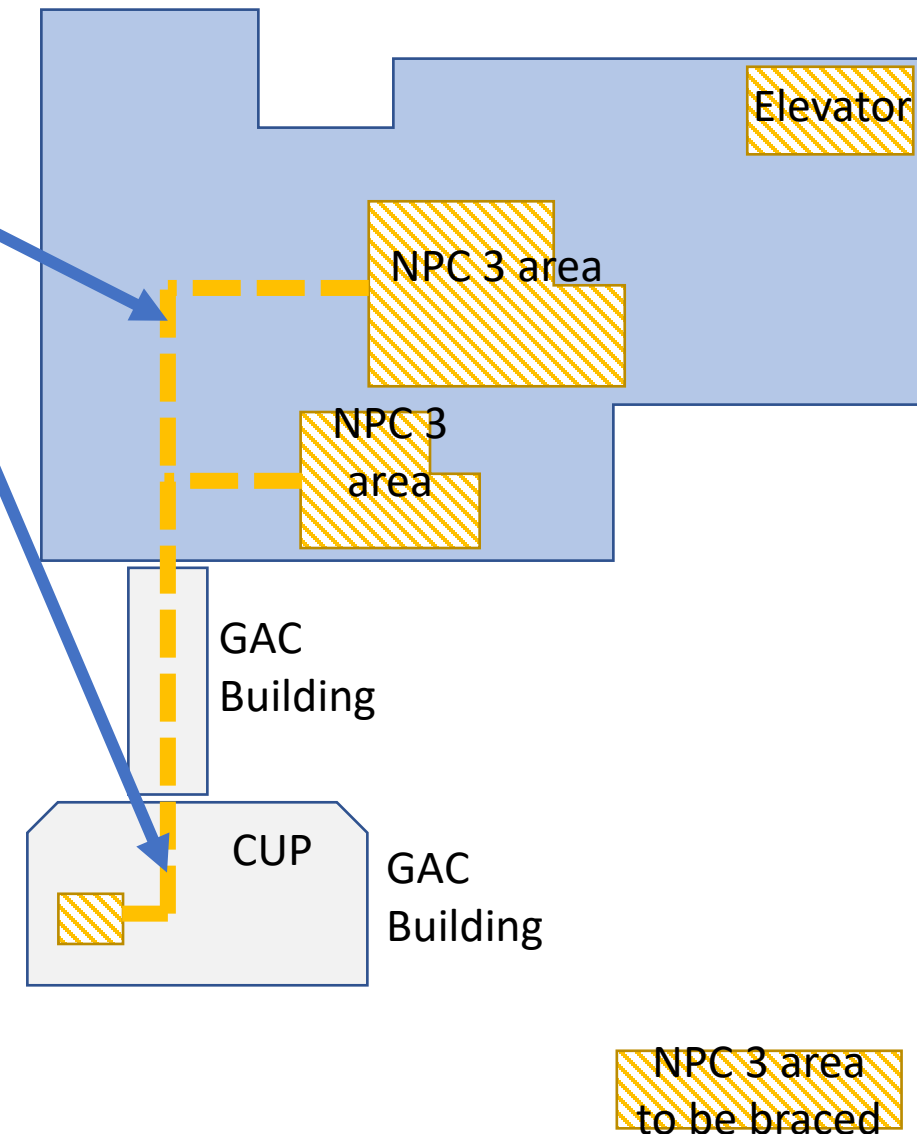
- Level 1 is the minimum requirement.
- *Level 2 and 3 are optional. These levels may be required depending on the Operational Plan.*
- Level 1 is essentially NPC 3 + Operational Plan
- Equipment as listed in the 1995 CBC Table 16A-0, including equipment in the physical plant that service these areas.



NPC 4D – Level 2

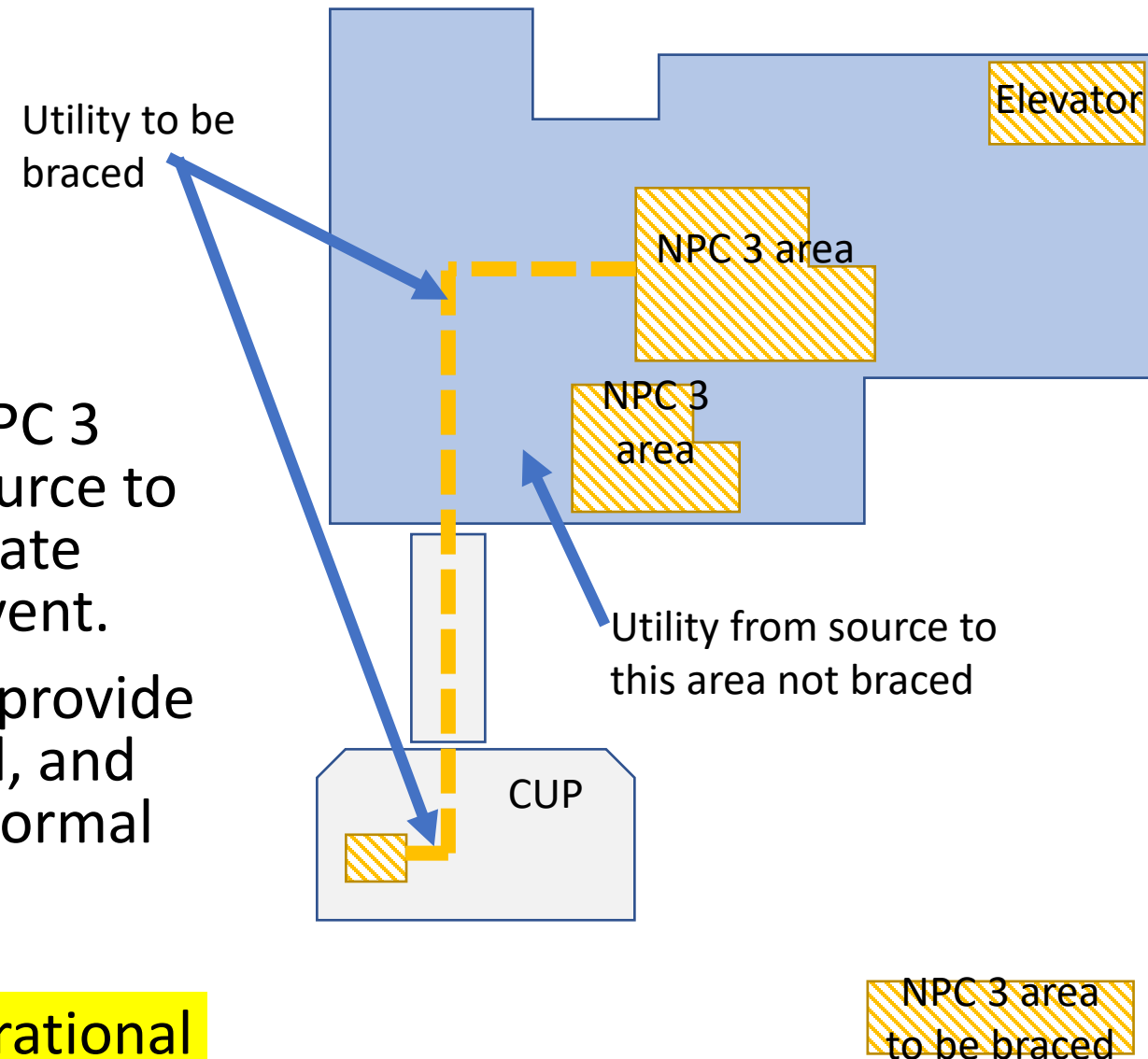
- Includes Level 1 and all services and utilities **from the source to Level 1 areas** necessary to accommodate continuation of operations after an event.
- Elevator(s) selected to provide service to patient, surgical, obstetrical, and ground floors during interruption of normal power needed, to meet the structural requirements of Part 2, Title 24.
- Operational Plan

All dashed line utility to be braced



NPC 4D – Between Level 1 and Level 2

- Informally referred as **Level 1+**
- Includes Level 1 and some selected NPC 3 area services and utilities from the source to Level 1 areas necessary to accommodate continuation of operations after an event.
- None or some elevator(s) selected to provide service to patient, surgical, obstetrical, and ground floors during interruption of normal power needed, to meet the structural requirements of Part 2, Title 24.
- The final rating is still **Level 1 but Operational Plan gets easier to manage.**



NPC 4D – Level 3

- Level 3 includes Level 2, and all systems and equipment are anchored and braced so that additional services, as determined by the hospital in its Operational Plan, are functional and available to the public after a seismic event.

NPC 4

- Brace/evaluate all* (*see the next slide) architectural, equipment etc. per CAC Chapter 6 Table 11.1
- NPC 3 areas - exceptions don't apply.
- If project already has OSHPD project # (closed in compliance), no re-evaluation of the OSHPD project scope components required.
- **No operational plan required**

NPC 4 – Is it really bracing all architectural items including walls? → No, not everything..

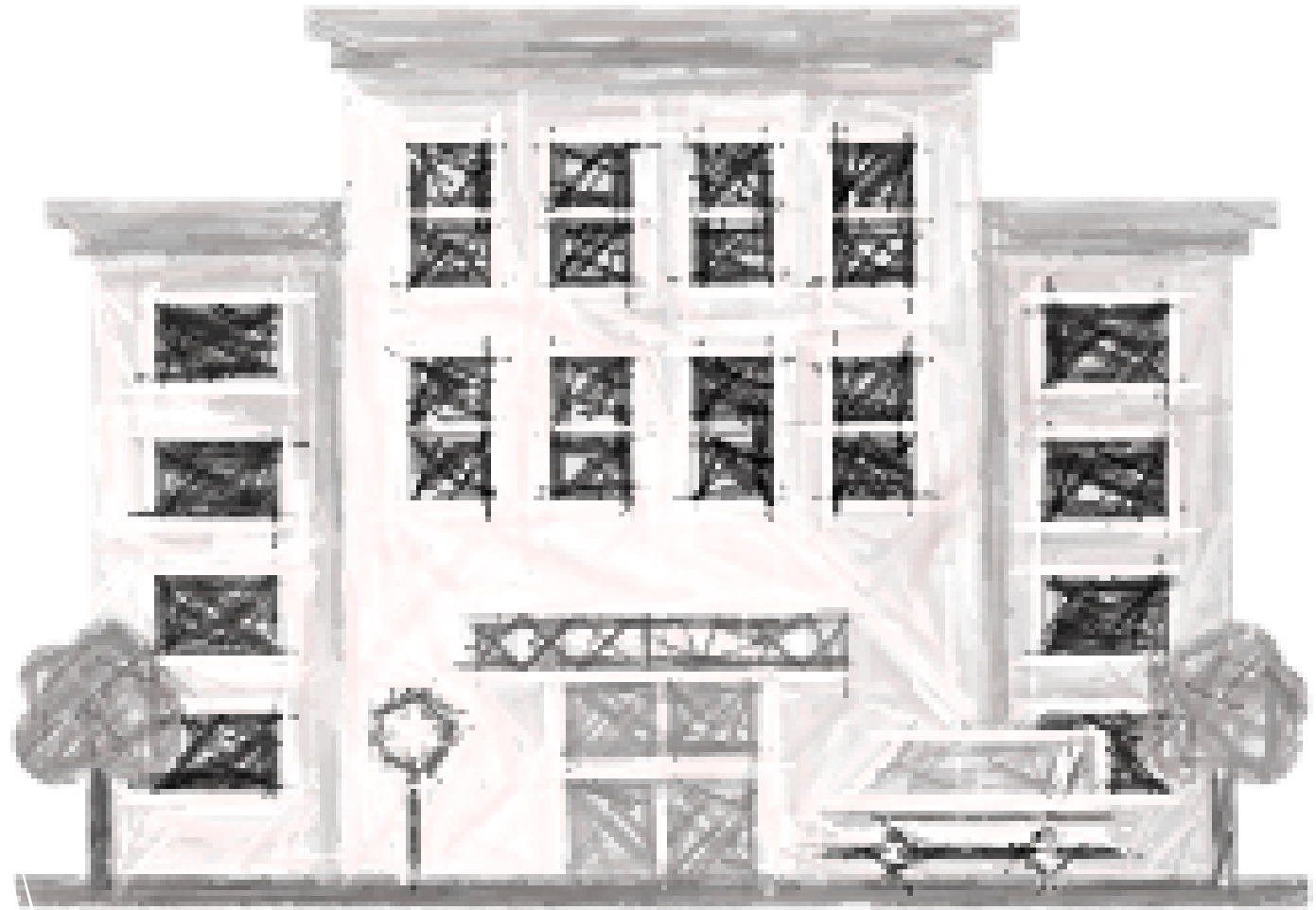
2022 California Administrative Code Table 11.1 Footnote 2

For the purposes of NPC 3 and NPC 4 or NPC 4D in SPC 2, SPC 3, SPC 4 or SPC 4D, buildings, all enumerated items within Table 11.1 shall meet the requirements of the 1998 CBC, Section 1630B or equivalent provision in later version of the CBC, by the specified timeframe. The adequacy of anchorage and bracing may be limited to the connection of the component or equipment to the support when the total reaction at the point of support (including the application of F_p) less than or equal to the following limits:

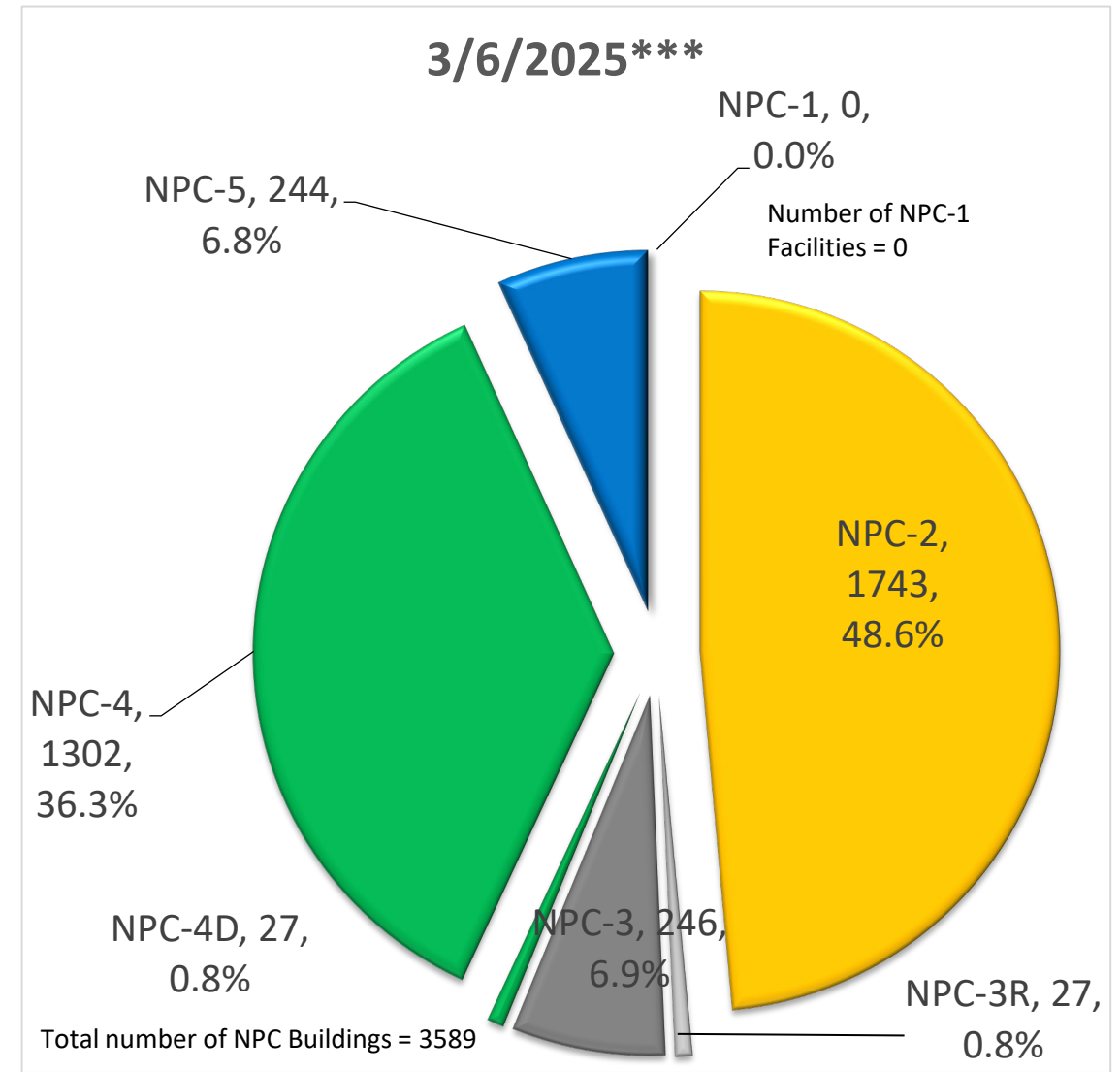
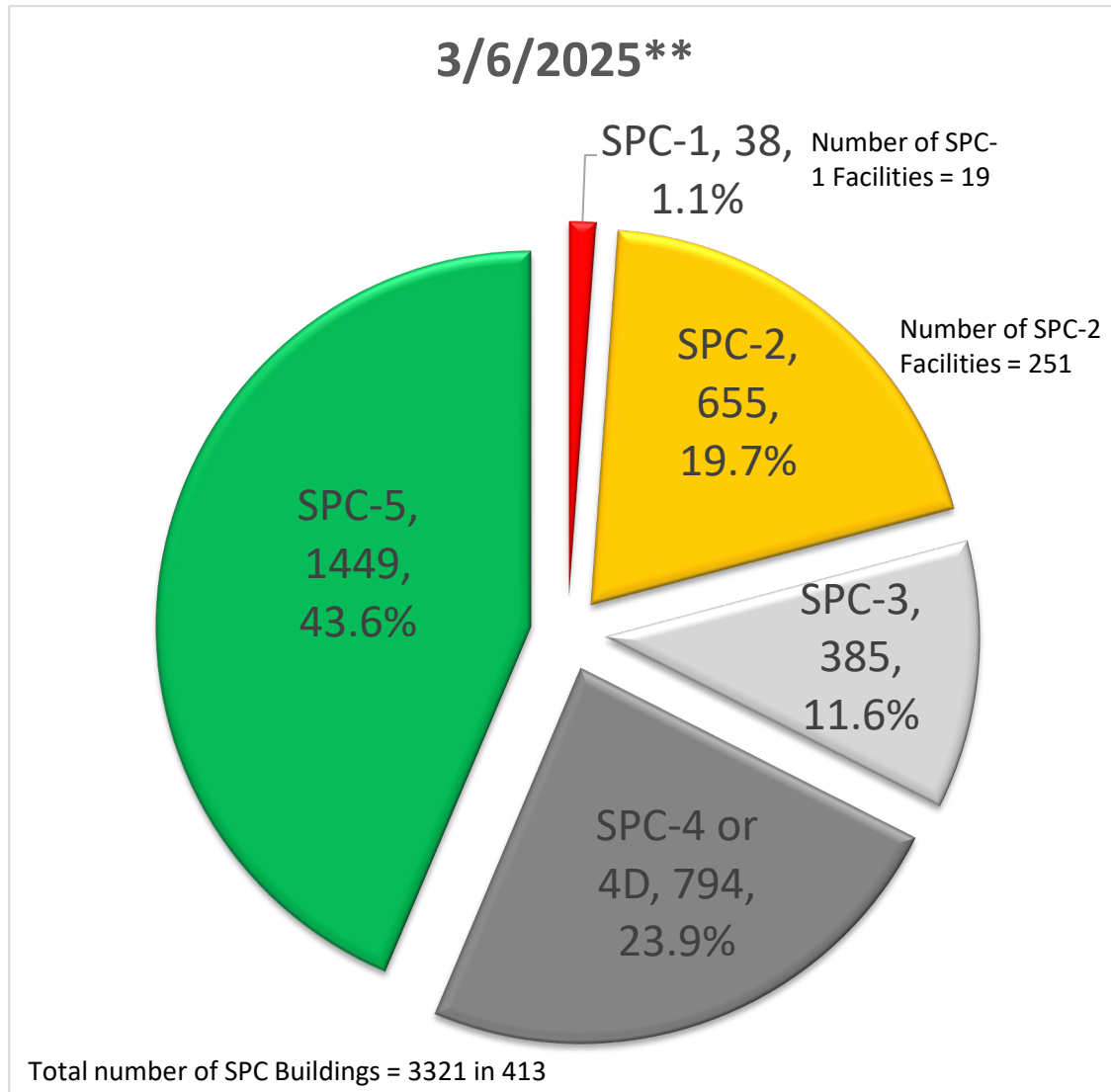
1. 250 pounds for components or equipment attached to light frame walls. For the purposes of this requirement, the sum of the absolute value of all reactions due to component loads on a single stud shall not exceed 250 pounds.
2. 1,000 pounds for components or equipment attached to roofs, or walls of reinforced concrete or masonry construction.
3. 2,000 pounds for components or equipment attached to floors or slabs-on-grade.

Exception: If the anchorage or bracing is configured in a manner that results in significant torsion on a supporting structural element, the effects of the nonstructural reaction force on the structural element shall be considered in the anchorage design.

Hospital Building Inventory



SPC / NPC ratings of 3300 General Acute Care Buildings



How to find NPC Status and more...

<https://hcai.ca.gov/facilities/building-safety/facility-detail/>

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

Show facilities:

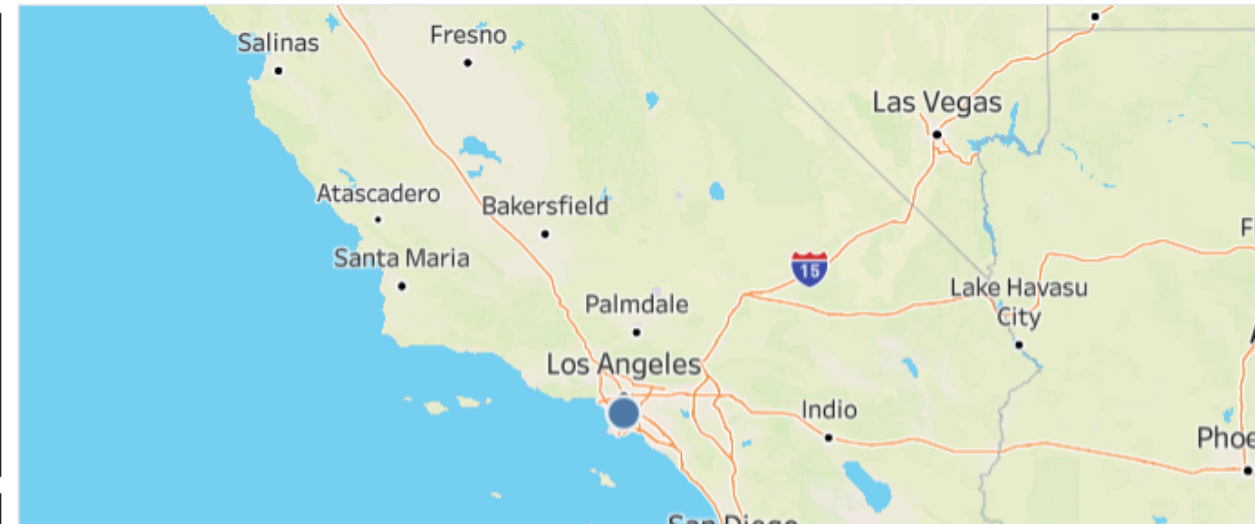
- ☒ (All)
- ☐ Do not have AB 2190 Extensions
- ☐ Have AB 2190 Extensions

Facility List Drop-down

12259 Martin Luther King Jr. Community Hospital

12259 Martin Luther King Jr. Community Hospital
(HCAI ID: 106191230)
1680 East 120th Street
Los Angeles, CA-90059
County: Los Angeles
License Type: General Acute Care
MSSA Designation: Urban
HCAI Geographic Region: North Los Angeles Region

Plan Review Supervisor:



Building SPC / NPC



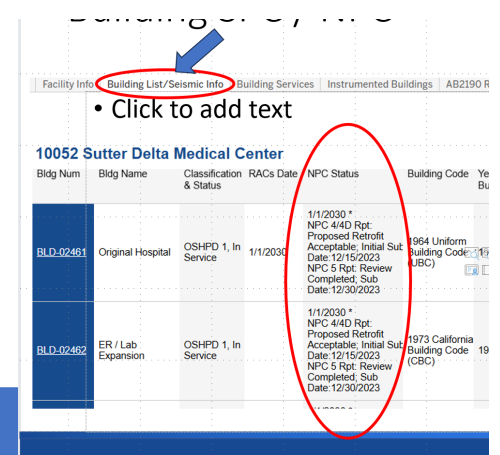
Facility Info **Building List/Seismic Info** Building Services Instrumented Buildings AB2190 Report Unauthorized Construction Building Operational Plan Building Compliance Plan

[Back to Main](#)

10052 Sutter Delta Medical Center

Bldg Num	Bldg Name	Classification & Status	RACs Date	NPC Status	Building Code	Year Built	Stories	Height in Feet	Instrumented	Construction Type	Sprinklers	AB1882 Signage	
BLD-02461	Original Hospital	OSHDP 1, In Service	1/1/2030	1/1/2030 * NPC 4/4D Rpt: Proposed Retrofit Acceptable; Initial Sub Date:12/15/2023 NPC 5 Rpt: Review Completed; Sub Date:12/30/2023	1964 Uniform Building Code (UBC)	1967	1	11	No			Compliant	SPC: 2 NPC: 2 This building does not significantly jeopardize life, but may not be repairable or functional following an earthquake
BLD-02462	ER / Lab Expansion	OSHDP 1, In Service		1/1/2030 * NPC 4/4D Rpt: Proposed Retrofit Acceptable; Initial Sub Date:12/15/2023 NPC 5 Rpt: Review Completed; Sub Date:12/30/2023	1973 California Building Code (CBC)	1979	1	Unknown	No			Compliant	SPC: 4 NPC: 2

NPC Status items explained:



NPC Status	Description
Not Submitted	NPC 4/4D/5 evaluation report not submitted
Awaiting Review	The report submitted, or resubmitted for backcheck, it is queued for review
In Review	The submitted report triaged in, and now it is in review
Review Completed	The report submitted, review completed, HCAI comments were sent to the facility. Please respond to the comments.
Proposed Retrofit Acceptable	The report submitted to HCAI, reviewed, and the scope is accepted. A letter was sent, stating the acceptance. Next, the scope needs to be constructed.
Intent to Remove GAC	The facility formally provided a letter, stating that the facility intends to remove (or relocate) the GAC services from this building by 2030.

NPC/SPC info for all facilities

- Seismic Compliance and Safety main page:

<https://hcai.ca.gov/facilities/building-safety/seismic-compliance-and-safety/>

- ALL 400+ facilities NPC/SPC status is in this pdf: see [Seismic Compliance SPC and NPC status](#) (the list gets updated every two weeks)

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 1983](#) (Alquist Act, SB 1953 (Chapter 740, 1994)), is now chaptered into statute in Sections 130000 through 130070 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.](#)

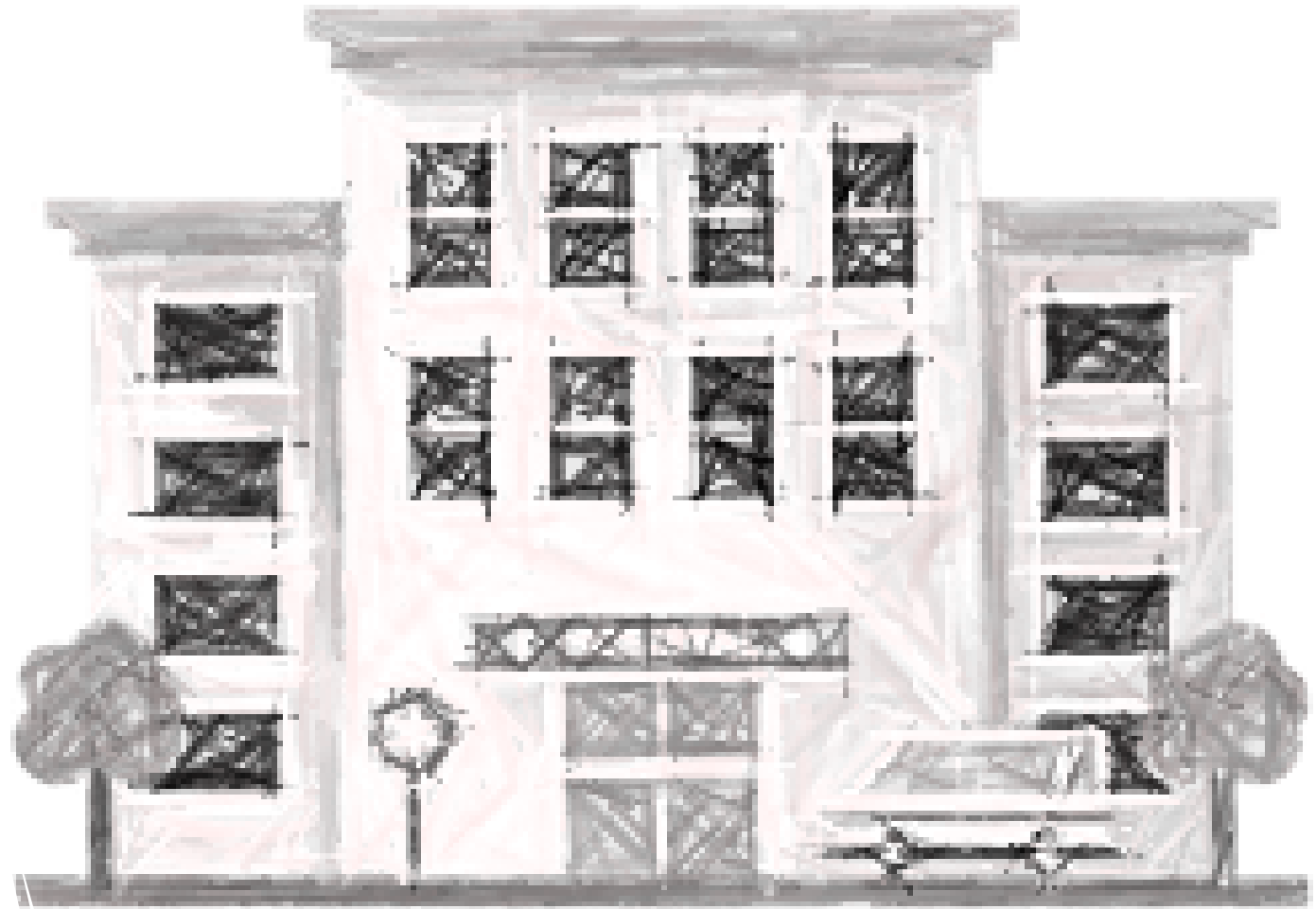
The HCAI Office of Statewide Hospital Planning and Development (OSHPD) formed the Seismic Compliance Unit (SCU) in 1974 pursuant to the provisions of Senate Bill 1953 (SB 1953). This Unit is comprised of structural engineers and senior architects responsible for the review and approval of the following submittals to OSHPD:

Click here to see [Seismic Compliance SPC and NPC status](#) and [more](#) for all facilities

- Compliance Plans
- Design criteria and approvals of voluntary seismic compliance projects
- [HAZUS Reassessments](#)

Extensions for Hospital Buildings as of 1/6/2025																
County Code	Facility Name	Building No.	Building Name	Building Status	SAC Agency	SPC Extensions						NRC Extensions	NRC #/AD Status, Submittal Date	NRC S Status, Submittal Date	AD 1882 Status	
						SB 906 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status					
05 - Alameda	11103 Alameda Hospital	912-01278	Original Hospital	SB 906 Extension Status	AD 1841/6 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status	05/25/2024	N/A				The building does not significantly impact AD 1882 but may not be eligible for functional following an earthquake.
05 - Alameda	11210 Alameda Hospital	912-01279	Original Wing	SB 906 Extension Status	AD 1841/6 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status	05/25/2024	N/A	Rpt. Review Completed 12/29/2023	Rpt. Review Completed 06/25/2024		The building does not significantly impact AD 1882 but may not be eligible for functional following an earthquake.
05 - Alameda	11210 Alameda Hospital	912-01280	West Wing	SB 906 Extension Status	AD 1841/6 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status	05/25/2024	N/A	Rpt. Review Completed 12/29/2023	Rpt. Review Completed 06/25/2024		
05 - Alameda	11210 Alameda Hospital	912-01281	South Wing	SB 906 Extension Status	AD 1841/6 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status	05/25/2024	N/A	Rpt. Review Completed 12/29/2023	Rpt. Review Completed 06/25/2024		
05 - Alameda	11210 Alameda Hospital	912-01282	Radiology Addition	SB 906 Extension Status	AD 1841/6 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status	05/25/2024	N/A	Rpt. Review Completed 12/29/2023	Rpt. Review Completed 06/25/2024		
05 - Alameda	11210 Alameda Hospital	912-01283	Medical Gas Storage	SB 906 Extension Status	AD 1841/6 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status	05/25/2024	N/A	Rpt. Review Completed 12/29/2023	Rpt. Review Completed 06/25/2024		
05 - Alameda	11210 Alameda Hospital	912-01284	Compassion Shed	SB 906 Extension Status	AD 1841/6 Extension Status	AD 1841/6 Extension Status	SB 499 Extension Status	SB 90 Extension Status	AD 2300 Extension Status	SB 906 Extension Status	05/25/2024	N/A	Rpt. Review Completed 12/29/2023	Rpt. Review Completed 06/25/2024		

NPC Deadlines



NPC 3 Compliance Deadlines

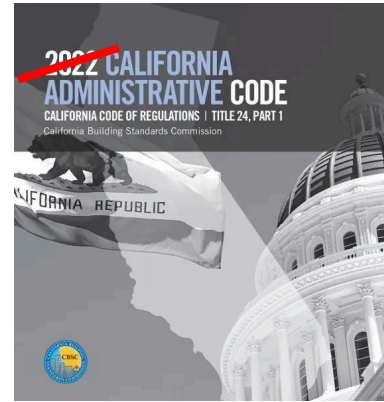
Seismic Design Category D – January 1, 2030 (high seismic area)

Seismic Design Category F – January 1, 2024 (very high seismic area)

Out of 1743 NPC 2 buildings, there are 40 NPC 2 buildings with Seismic Design Category F deadline (as of 3/16/2025) About 24 of those are mostly done and in process of resolving. 16 buildings in 9 facilities needs action immediately.

(See 2022 CAC Chapter 6 Table 11.1)

2025

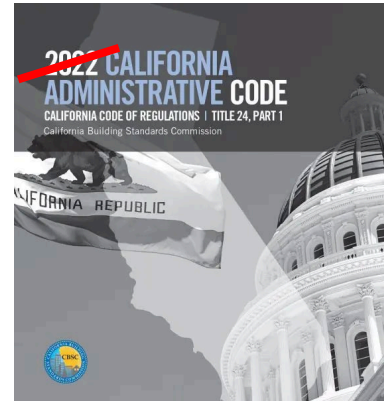


NPC Compliance Timeframe

- For any general acute care hospital be use as a GAC hospital building after January 1, 2030:
 - **By January 1, 2024**, submit a complete nonstructural evaluation to HCAI for each building up to NPC-4 / NPC-4D and NPC 5.
 - **By January 1, 2025**, submit a complete nonstructural evaluation to HCAI for each building up to NPC-4 / NPC-4D and NPC 5 if seeking delay to 2030 under AB 869. This deadline is only for AB 869 eligible facilities.
 - **By January 1, 2026**, submit a Seismic Compliance Plan to HCAI ready for review. **March**
 - **By ~~January 1, 2026~~**, submit to HCAI construction documents ready for review by the Office.



2025



NPC Compliance Timeframe

- For any general acute care hospital be use as a GAC hospital building after January 1, 2030:

March

- **By ~~January 1, 2028~~, obtain a building permit to begin construction.**

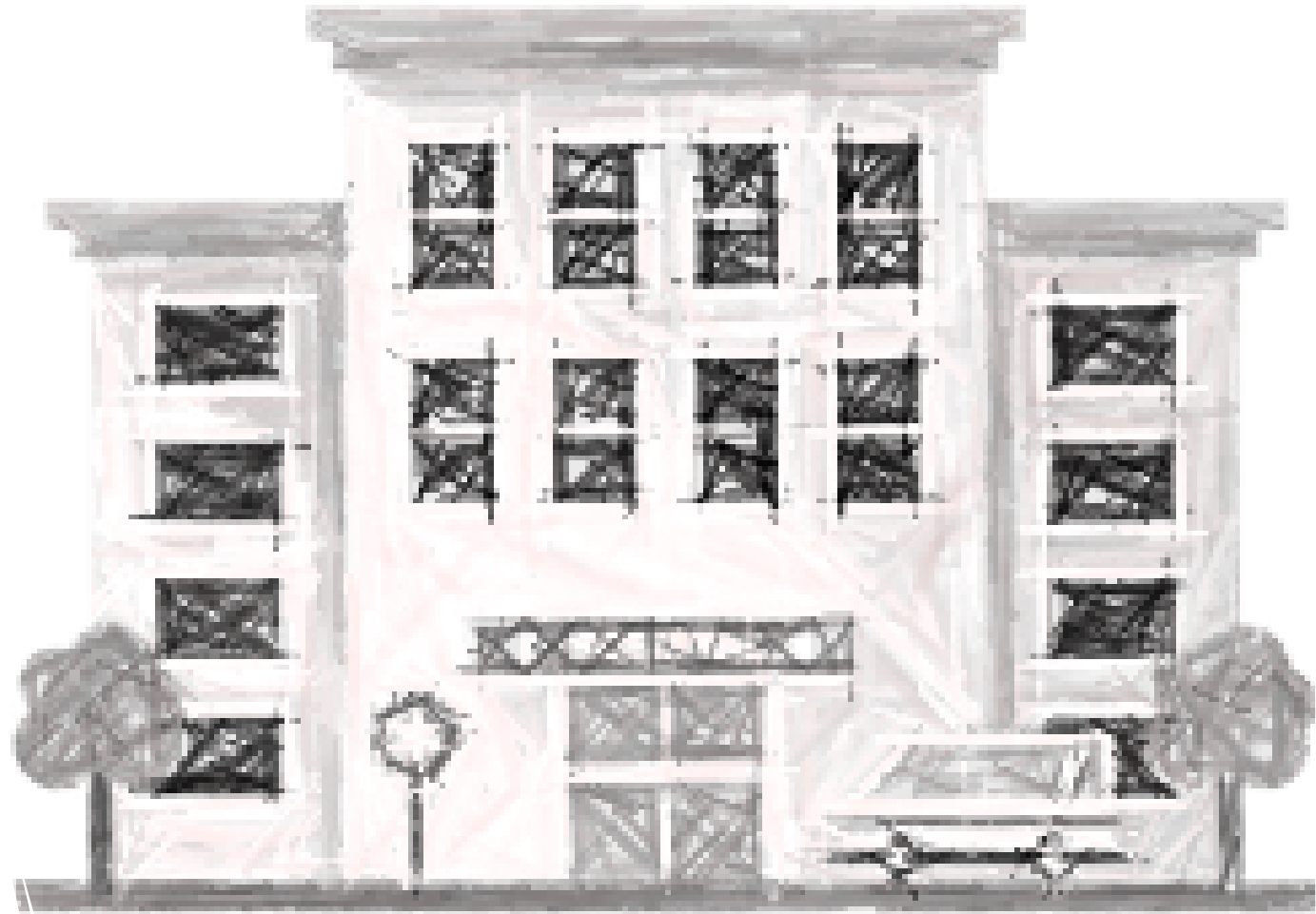
Hospitals not meeting this deadline shall not be issued a building permit except for:

- Seismic compliance
- Maintenance
- Emergency repairs

See exceptions in 2022 CAC Chapter 6 Section 1.5.2.

- **By January 1, 2030, the GAC building shall achieve NPC-5 rating (except AB 869 eligible facilities)**

Reporting NPC compliance to HCAI



NPC reporting in Seismic Compliance Plan

By January 1, 2026, submit Seismic Compliance Plan to HCAI ready for review by the Office.

Input NPC milestones related to 3/1/2026 construction document submittal, 3/1/2028 obtaining permit, and construction progress and final in the seismic compliance plan application.

Add NPC 4/4D and NPC 5 milestone items separately. See the next slides for how to do it.

Seismic Compliance Plan Application

- Seismic compliance plan applications are projects which are submitted to HCAI via the [*eServices Portal \(eSP\)*](#).
- For step-by-step instructions on how to submit a seismic compliance plan application see [User Guide 21 Application for Seismic Compliance Plan Review](#).

**e-Services
Portal
User
Guide**

**APPLICATION FOR
SEISMIC
COMPLIANCE PLAN**

VERSION 1.0

**Section
21**

Overview of Seismic Compliance Plan

There are two main tables



- **Compliance Method:** Outlines method of compliance for each building
- **Building Milestones:** Outlines critical and regular milestones for each building

The rest of the application is about facility ownership, applicant contact info, etc.

Overview of Seismic Compliance Plan: Compliance Method

- Compliant
- Demolish building
- Relocate services to other existing compliant building
- Replace services to NEW building
- SPC retrofit
- NPC retrofit
- SPC and NPC retrofit

Facility will see
HCAI comments
here

<input type="checkbox"/>		Building No.	Building Name	Current SPC Rating	Current NPC Rating	Compliance Type	Narrative	Seismic Compliance Related Project Numbers	HCAI Note	
<input type="checkbox"/>		BLD-00317	Cancer Research Institute (Ezralow Tower)	3	3					<div>Actions ▼ Edit</div>
<input type="checkbox"/>		BLD-03689	Topping Tower	5	2					<div>Actions ▼</div>

Edit Selected

Overview of Seismic Compliance Plan: Building Milestones (max 10 per building)

- Compliant Building
- Evaluation Report Submittal
- Material Testing Report Submittal
- Construction Project Submittal
- Permit Issuance
- Construction Commencement
- Construction Milestone
- Construction Final
- NPC 4/4D Construction Document Submittal
- NPC 4/4D Permit Issuance
- NPC 5 Construction Document Submittal
- NPC 5 Permit Issuance
- N/A

- i. Completed
- ii. In Progress
- iii. Not Started

Facility will see
HCAI comments
here

BUILDING MILESTONES

Edit

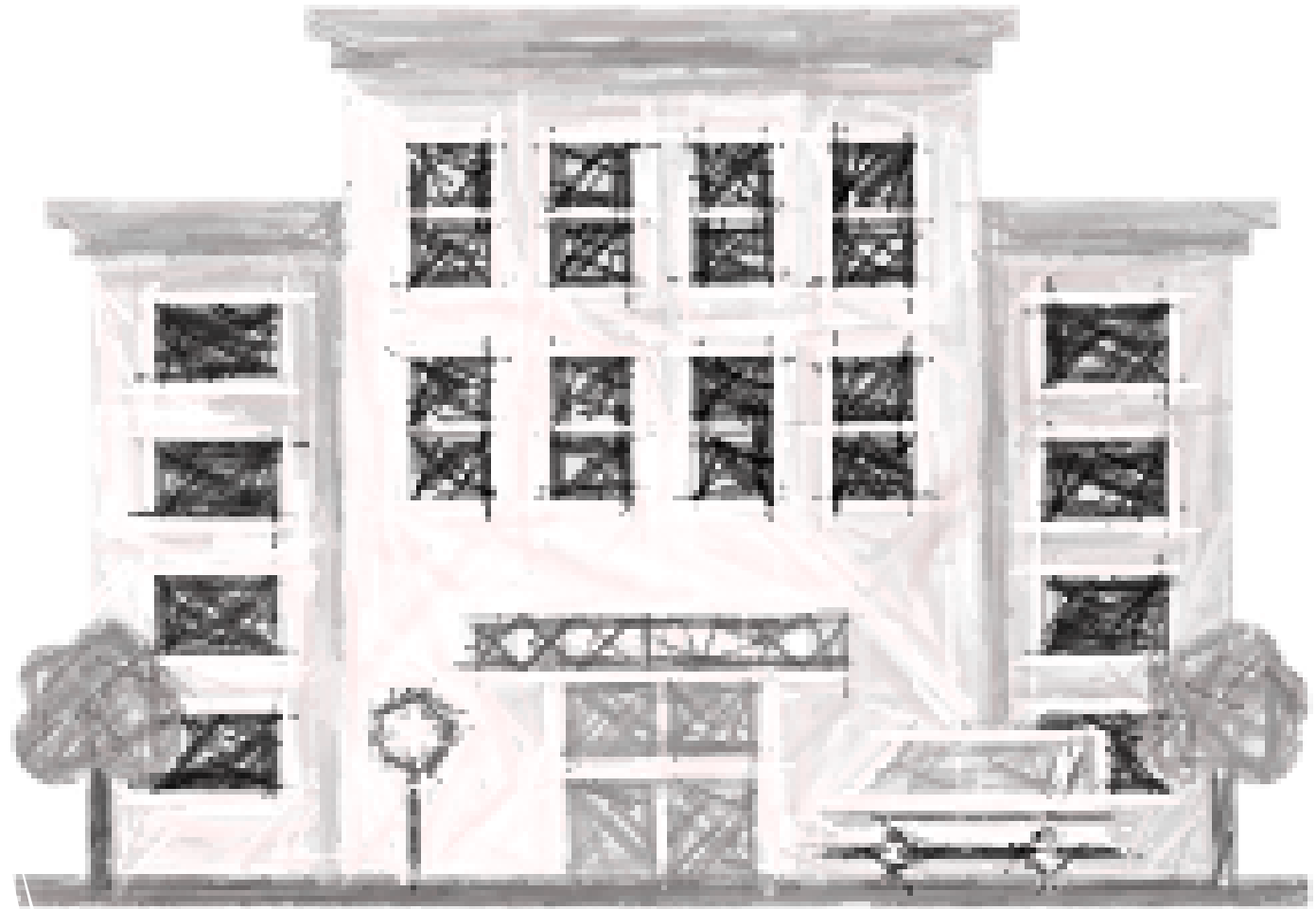
Building No.	Milestone Type	Description	Critical Milestone	Completion Date	Status	Related Project Numbers	HCAI Note	HCAI Determination
BLD-00317	Evaluation Report Submittal	NPC 5 Evaluation report submitted in December 21, 2023	No	12/22/2023	Completed	SRU-2023-00863		

NPC reporting in Seismic Compliance Plan

- For NPC 4 or NPC 4D milestones, input the following to all applicable buildings:
 - NPC 4/4D construction project submittal
 - NPC 4/4D permit issuance
 - Construction Final
- NPC 5 milestones apply to all buildings, but there is no need to repeat it for all buildings. For NPC 5, input the following to **ONLY ONE BUILDING**:
 - NPC 5 construction project submittal
 - NPC 5 permit issuance
 - Construction Final

You may choose a simple building (such as canopy, shed etc.) to put this info. The system will recognize this info for all facility.

NPC Requirements Based on Building Permit Year



Requirements for NPC 3, NPC 4 and NPC 4D

Approx. Year	Original Permitting Agency ²	Self Declaration ⁶	Equipment Inventory ¹	Distribution Systems Evaluation	Fire Sprinkler Evaluation	Calculations and Testing
Prior to 1973	Local	NA	R	R	R	Yes ⁵
1973 to 1982	OSA ²	NA	R	R	R	Maybe ⁴
1982 to 1994 (1994 NFPA-13)	OSHDP ³	Required	NR	NR	See FAQ #29	NR
1994 (1994 NFPA-13) to Present	OSHDP ³	Required	NR	NR	NR	NR

R = Requires evaluation

NA = Not Allowed

NR = Not Required

¹ Not required for complete gut and remodel (floor to floor) projects done under HCAI. Partial remodel requires equipment inventory

² Refers to project numbers starting one letters and four number (example H1001)

³ Refers to project numbers starting two letters and six numbers (example HL860034)

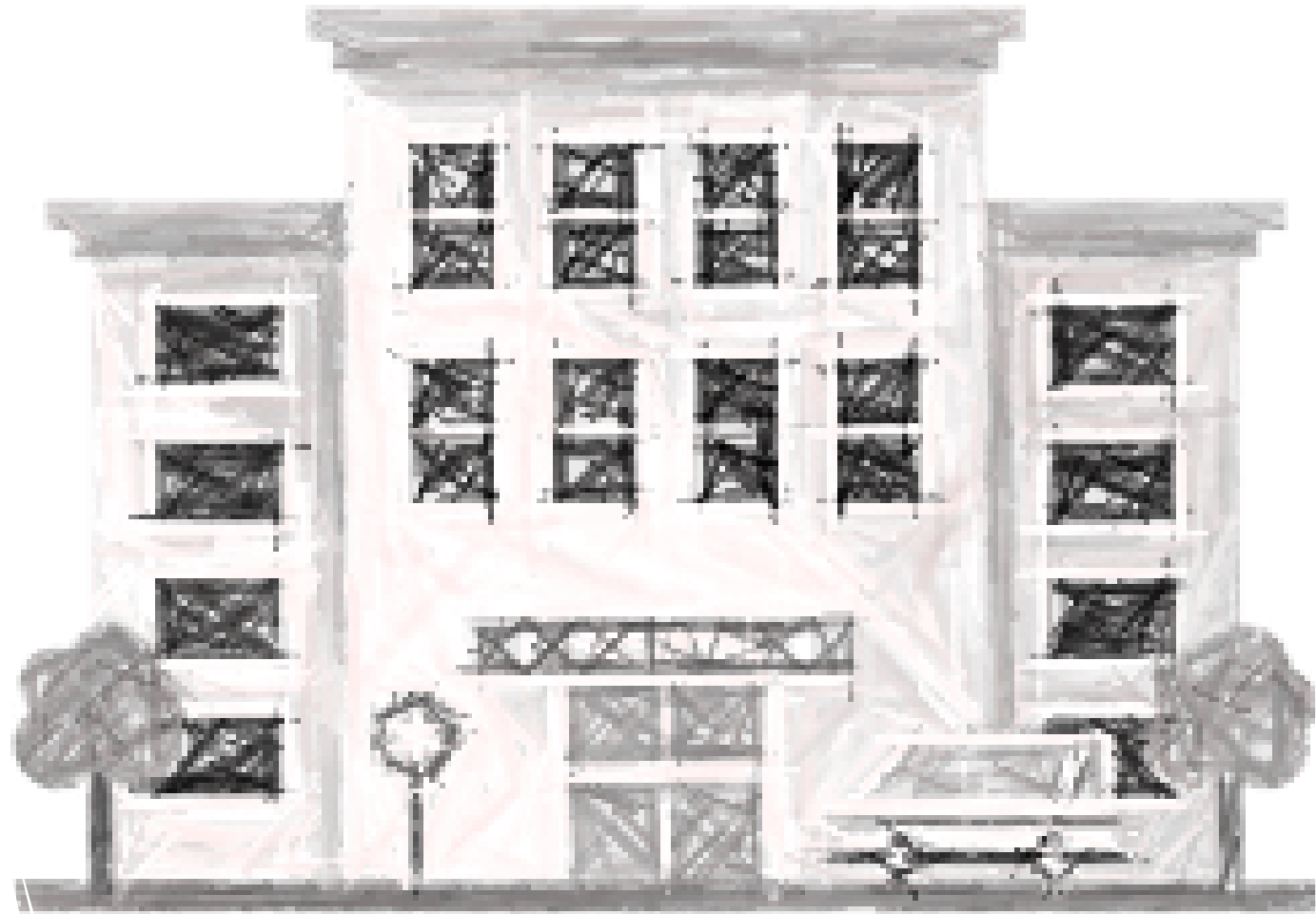
⁴ Field verification required for general conformance (testing maybe required)

⁵ Refer to 2022 CAC Chapter 6 Table 11.1 for force level (CBC 1998)

⁶ For NPC 4 self-declaration refer to 2022 CAC Chapter 6 Article 11 item 11.01 item 2. Self-declaration does not apply to other NPC categories.

⁷ NPC 4D requires operational plan as part of evaluation per 2022 CAC Chapter 6 Article 11 item 11.2.3

NPC 4 / NPC 4D Evaluation Report Summary Tables

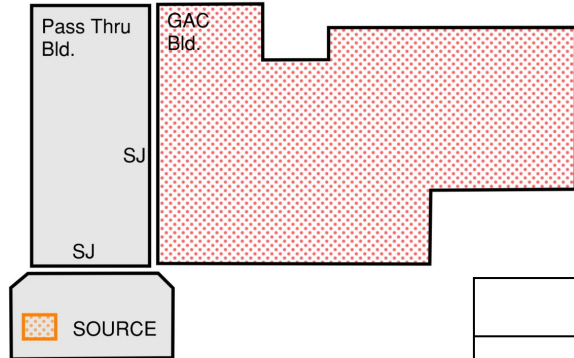


Summary Templates

- The following templates are strongly recommended to be included in NPC 4 / NPC 4D building evaluation reports. Including a summary is required per 2022 CAC, Chapter 6, Section 1.3.4.
- This will streamline the NPC upgrade process by summarizing the nonstructural deficiencies for the building and the scope of retrofit work to be done.


NPC 4 Summary Table

NPC-4



SJ : Seismic Joint


 Complete NPC 4 upgrade

 Source equipment to be braced if evaluated GAC building is constructed under pre OSHPD permit

Here is the link to the templates (NPC FAQ #47)
[NPC 4/4D executive summary templates](#)

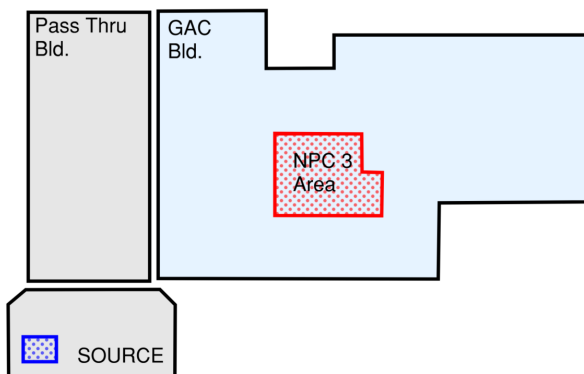
NPC-4 SEISMIC COMPLIANCE DEFICIENCY SUMMARY [See Notes]									
	GAC Building #	Above Ceiling/Overhead Components				Below Ceiling MEP Equipments and Architectural Components		All Elevators	Flex Utility Connection Passing Thru Seismic Joint
		Ducts/Pipes/Conduits/ Cable Trays	Ceiling/ Lights	Fire Sprinklers	Other Components	Wall or Floor Mounted Equipments	Hung Equipments	Anchorage/Bracing	
ENTIRE BUILDING	BLD-00XXX	Additional Retrofit Required (See Appendix X)	Additional Retrofit Required (See Appendix X)	Non-Compliant	N/A	Compliant	Additional Retrofit Required (See Appendix X)	Compliant	Compliant
SOURCE EQUIPMENT (CUP/PHYSICAL PLANT)	BLD-00ZZZ	N/A	N/A	N/A	N/A	Additional Retrofit Required (See Appendix Z)	Additional Retrofit Required (See Appendix Z)	Compliant	Compliant



NOTES:

- Sample text provided in () highlighted area shall be filled by DPOR showing NPC Seismic Compliance Deficiency Status ("Additional Retrofit Required or Non-Compliant" for Deficient items, and "N/A" for Non Applicable).

NPC 4D Level 1 Summary Table

NPC-4D
Level 1

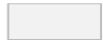


-  NPC 3 Area to be braced
-  Source equipment to be braced

Here is the link to the templates (NPC FAQ #47)
[NPC 4/4D executive summary templates](#)

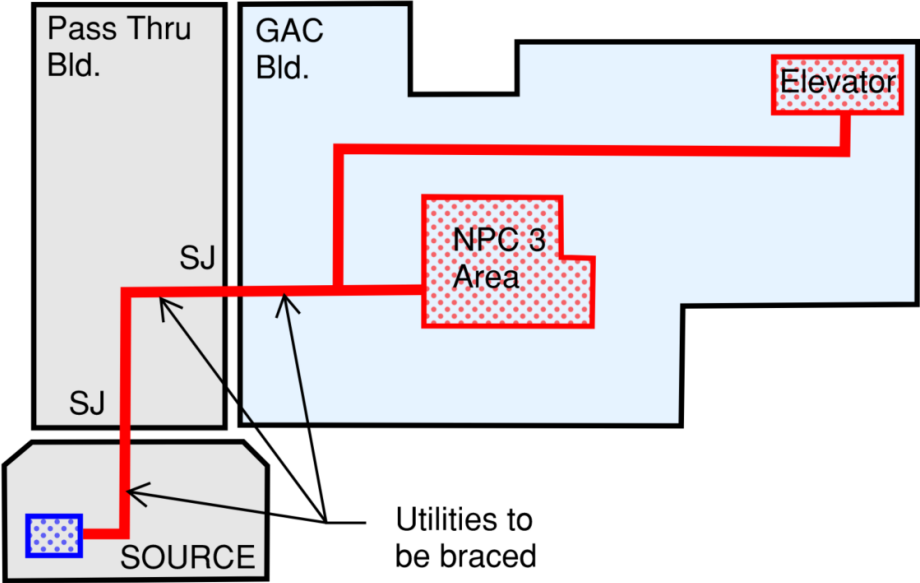
	NPC-4D Level 1 SEISMIC COMPLIANCE DEFICIENCY SUMMARY [See Notes]						
	GAC Building #	Above Ceiling/Overhead Components				Below Ceiling MEP Equipments and Architectural Components	
		Ducts/Pipes/ Conduits/ Cable Trays	Ceiling/ Lights	Fire Sprinklers	Other Components	Floor or Wall Mounted Equipments	Hung Equipments
AREA WITHIN THE BUILDING (NPC-3 / CC AREA)	BLD-00XXX	Additional Retrofit Required (See Appendix X)	Additional Retrofit Required (See Appendix X)	Compliant	N/A	Compliant	Additional Retrofit Required (See Appendix X)
SOURCE EQUIPMENT (CUP / PHYSICAL PLANT)	BLD-00ZZZ	N/A	N/A	N/A	N/A	Compliant	Additional Retrofit Required (See Appendix X)



NOTES:

- Sample text provided in () highlighted area shall be filled by DPOR showing NPC Seismic Compliance Deficiency Status ("Additional Retrofit Required or Non-Compliant" for Deficient items, and "N/A" for Non Applicable).

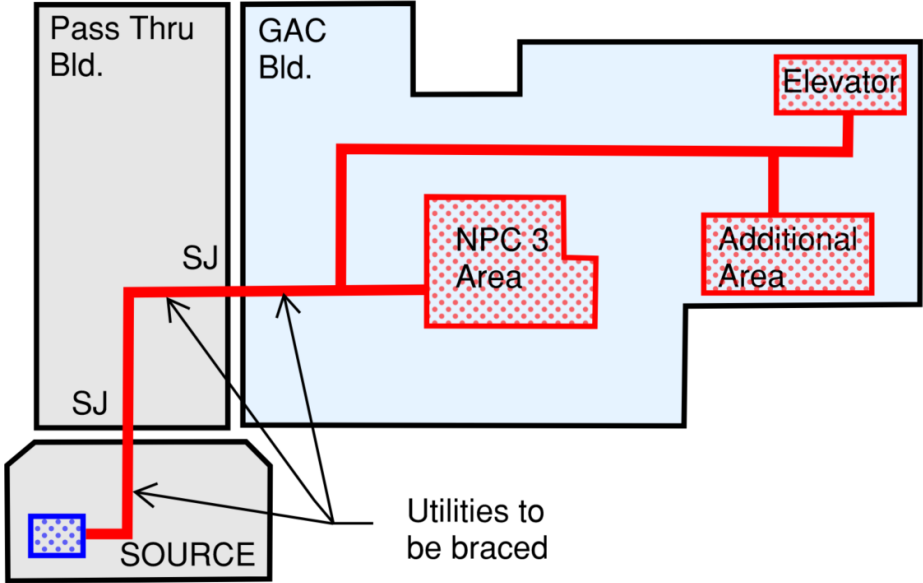
NPC 4D Level 2 and 3 Summary Table



NPC-4D
Level 2



- SJ : Seismic Joint
-  NPC 3 Area to be braced
 -  Source equipment to be braced

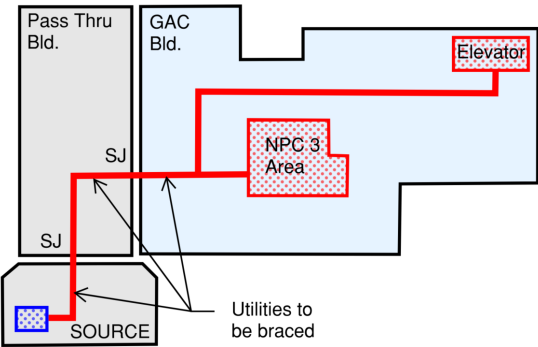
NPC-4D
Level 3



- SJ : Seismic Joint
-  NPC 3 Area to be braced
 -  Source equipment to be braced

Here is the link to the templates (NPC FAQ #47)
[NPC 4/4D executive summary templates](#)

NPC 4D Level 2 and 3 Summary Table



NPC-4D Level 2 or Level 3 SEISMIC COMPLIANCE DEFICIENCY SUMMARY [See Notes]									
GAC Building #	Above Ceiling/Overhead Components				Below Ceiling MEP Equipments and Architectural Components		Elevator serving CC Area / Additional Areas	Flex Utility Connection Passing Thru Seismic Joint	
	Ducts/Pipes/Conduits/ Cable Trays	Ceiling/ Lights	Fire Sprinklers	Other Components	Floor or Wall Mounted Equipments	Hung Equipments	Anchorage/ Bracing		
AREA WITHIN THE BUILDING (NPC-3 / CC AREA / ADDITIONAL AREAS)	BLD-00XXX	Additional Retrofit Required (See Appendix X)	Additional Retrofit Required (See Appendix X)	Non-Compliant	N/A	Compliant	Additional Retrofit Required (See Appendix X)	Compliant	Compliant
UTILITIES IN PASS THRU BUILDING	BLD-00YYY	Additional Retrofit Required (See Appendix Y)	N/A	N/A	N/A	N/A	N/A	N/A	Compliant
UTILITIES FROM SOURCE (CUP/PHYSICAL PLANT ETC.)	BLD-00ZZZ	Additional Retrofit Required (See Appendix Z)	N/A	N/A	N/A	N/A	N/A	N/A	Compliant
SOURCE EQUIPMENT (CUP/PHYSICAL PLANT)	BLD-00ZZZ	N/A	N/A	N/A	N/A	Additional Retrofit Required (See Appendix Z)	Additional Retrofit Required (See Appendix Z)	N/A	Compliant

NOTES:

1. Sample text provided in () highlighted area shall be filled by DPOR showing NPC Seismic Compliance Deficiency Status ("Additional Retrofit Required or Non-Compliant" for Deficient items, and "N/A" for Non Applicable).

NPC 4D Operational Plan Summary Table

The operational plans shall have an executive summary per 2022 California Administrative Code, Chapter 6, Section 11.2.3.f.

Here is the link to the template:

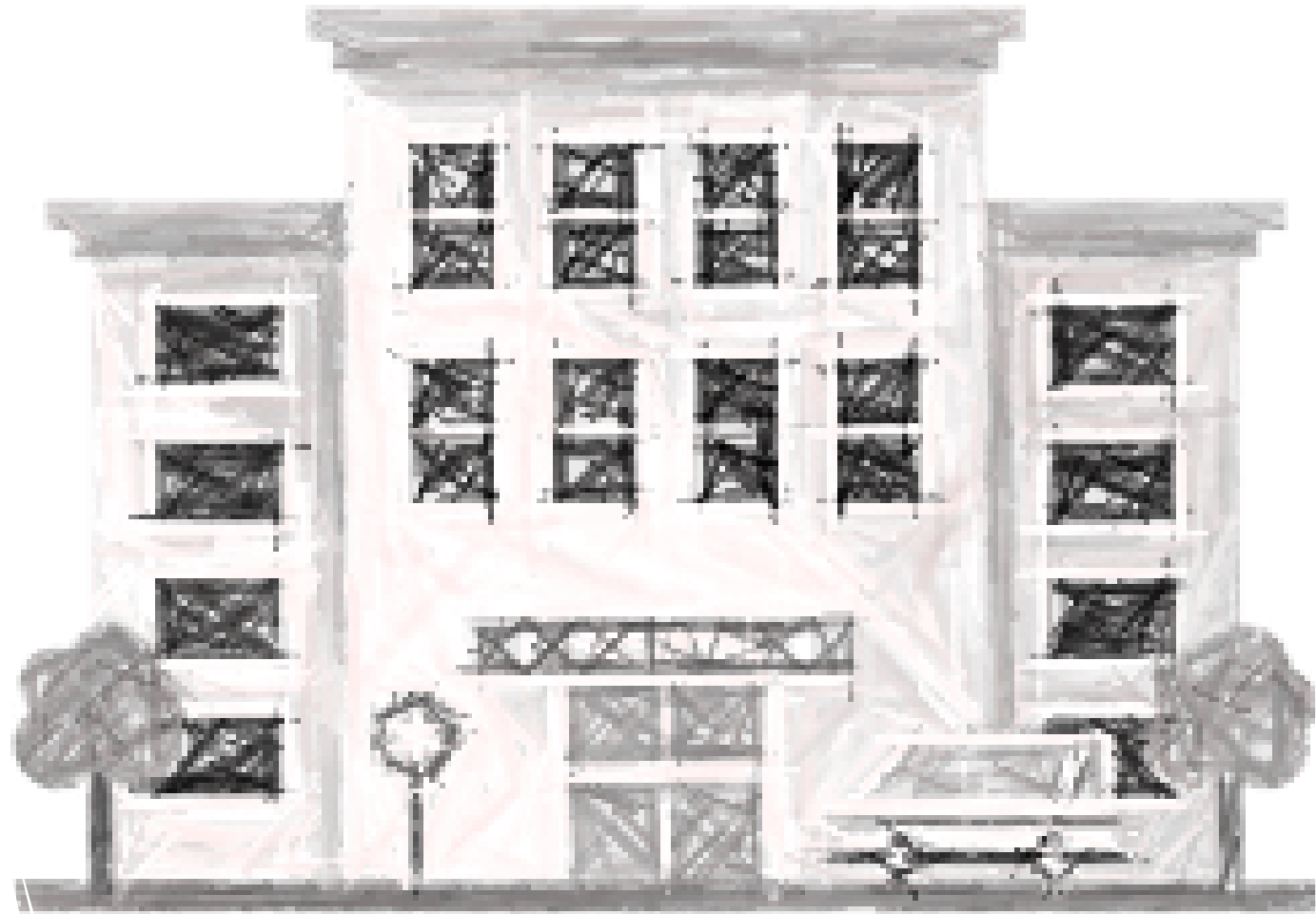
[NPC 4D Level 1, Level 2 or Level 3 building services functional status summary template.](#)

NPC-4D Level 1, 2 or 3 BUILDING SERVICES FUNCTIONAL SUMMARY				
Service Category	AB 1882 Reported Functions	Services ¹	Operational Plan ^{1,3}	Notes ^{1,2}
Basic Clinical Services	Nursing Med Surg	✓	Functional	
	Surgical	N/A	N/A	
	Anesthesia PACU	N/A	N/A	
	Clinical Lab	✓	Repair	
	Imaging Radiological Diagnostic Imaging	N/A	N/A	
	Pharmacy	N/A	N/A	
	Dietetic	N/A	N/A	
Basic Support Services	Administrative	N/A	N/A	
	Sterile Processing	✓	Alternate Location	To be provided in BLD-0XXXX New Tower
	General Storage	N/A	N/A	
	Morgue	N/A	N/A	
	Employee Dressing	N/A	N/A	
	Housekeeping EVS	N/A	N/A	
	Laundry Linen	N/A	N/A	
Supplemental Services	Special Procedures	N/A	N/A	
	ICU CCU PICU	✓	Repair	
	Burn Unit	✓	Alternate Location	To be provided in BLD-0YYYY East Wing
	Neonatal Intensive Care Unit	N/A	N/A	
	Pediatric Adolescent Nursing Unit	N/A	N/A	
	Psychiatric Nursing	✓	Functional	
	Obstetrics Perinatal Unit	N/A	N/A	
	Emergency	N/A	N/A	
	Nuclear Medicine	N/A	N/A	
	Rehabilitation Therapy	N/A	N/A	
	Physical Rehabilitation Nursing Unit	✓	Alternate Location	To be provided in BLD-0ZZZZ North Wing
	Renal Dialysis	N/A	N/A	
	Respiratory	N/A	N/A	
	Intermediate Care	N/A	N/A	
	Outpatient Services	✓	Not Functional	
Other Services	Skilled Nursing Unit	N/A	N/A	
	Central Plant Utility Bldg	N/A	N/A	
	Canopies Corridor Buildings Tunnels	✓	Functional	
	Non GAC Uses	N/A	N/A	

NOTES:

1. Sample text provided in () highlighted area shall be filled by DPOR showing the functional status of services to the building for the operations plan ("Functional", "Not Functional", "Repair", "Alternate Location" and "N/A" for Non Applicable).
2. Provide reference in the notes column if "Alternate Location" is chosen.
3. "Not Functional" status is permissible for elective services.

NPC 4D recent FAQs



NPC 4D Operational Plan

Question: Does the NPC 4D evaluation have to include the operational plan? Can we submit it later?

Answer: Operational plan is critical part of NPC 4D evaluation, required by 2022 CAC Chapter 6 Section 11.2.3 item (f).

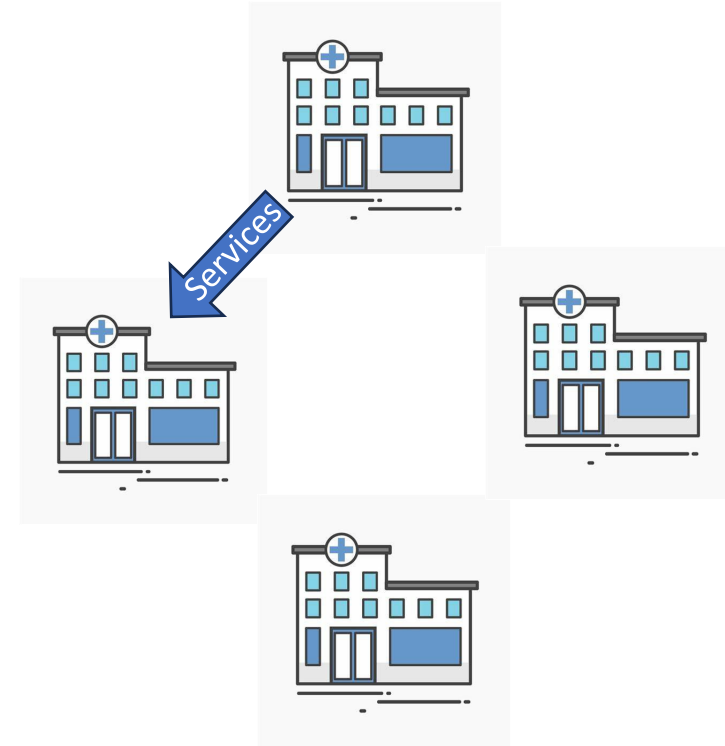
Follow up question: Can I change the operation plan later, after HCAI acceptance?

Answer: Yes, but please make sure that the areas that need bracing are considered in the revised plan. Resubmit the plan for approval.

FAQ #50: Certain functions of the NPC-3 area in the building can be provided through alternative means, while others are exclusive to this building. Does this building meet the criteria for NPC-4D Level 1 compliance?

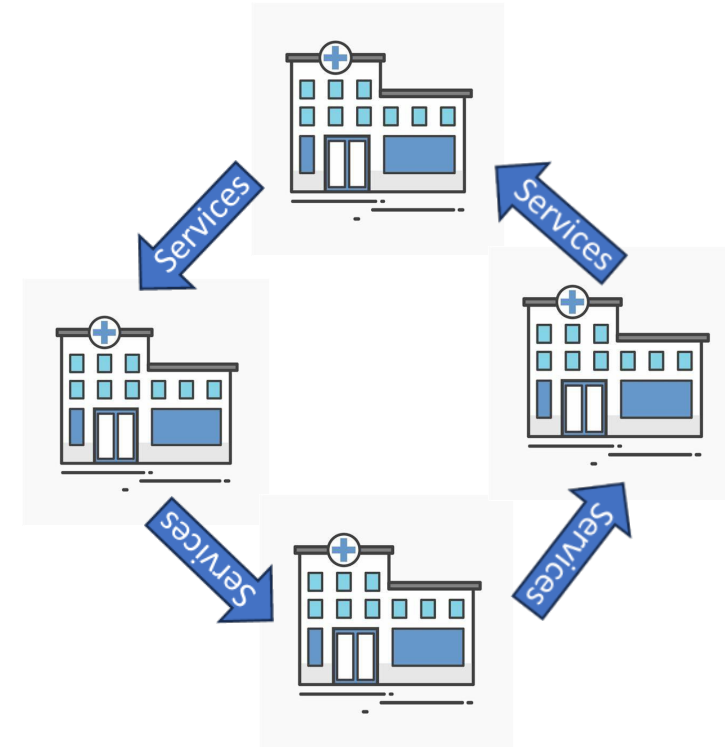
Per 2022 California Administrative Code Section 11.2.3 for minimum compliance including Level 1, the building must ensure the continuity of critical care operations. For areas where functions can be provided through alternative means, no further action is required under Level 1 other than upgrading the NPC 3 areas and equipment serving NPC 3 areas in other building to meet the NPC 3 requirements.

Services and utilities must be retrofitted, extending from their source to the NPC-3 areas where the service is exclusive to the building and no alternative means are available. If these requirements, along with all other NPC-4D Level 1 criteria, are met, the building will be eligible for NPC-4D Level 1 compliance.



FAQ #42: Can the entire facility be upgraded to NPC-4D Level 1?

No, NPC 4D Level 1 is for a building without critical care services or building that the critical care functionality can be provided in an alternative manner in another compliant building within the same facility. All buildings in the facility cannot be NPC 4D Level 1 as in the event of earthquake repairs are often not be feasible, and therefore the entire facility may end up shutting down. An evacuation is the last resort option, not a design target.



FAQ #39: What is the minimum number of elevators required by NPC 4D Level 2 and NPC 4D Level 3 upgrades?

There shall be a **minimum of one elevator** selected to provide service to patient, surgical, obstetrical, and ground floors during interruption of normal power. The selected elevator shall be capable of carrying a gurney. The selected elevators do not need to be in the building requesting the NPC 4D Level 2 or Level 3 upgrade, but shall be accessible on the patient, surgical, obstetrical, and ground floors and be reasonably close to the building in question.



FAQ #43: Can a Central Utility Plant (CUP) building, cooling tower or equipment yard be upgraded to NPC-4D Level 1 or 2 or 3?

No, these buildings **can only be upgraded to NPC-4** level of compliance. These buildings serve the entire facility and therefore should be in operation after an earthquake.

If a major source mechanical and electrical room is part of a larger hospital building, equipment in these rooms and extending utilities shall be braced since the effect of these rooms can extend facility-wide. However the hospital building itself is allowed to get NPC 4D rating.



Can NPC 4D Level 1-3 Buildings/Tunnels Supply Utilities to Conforming Buildings?

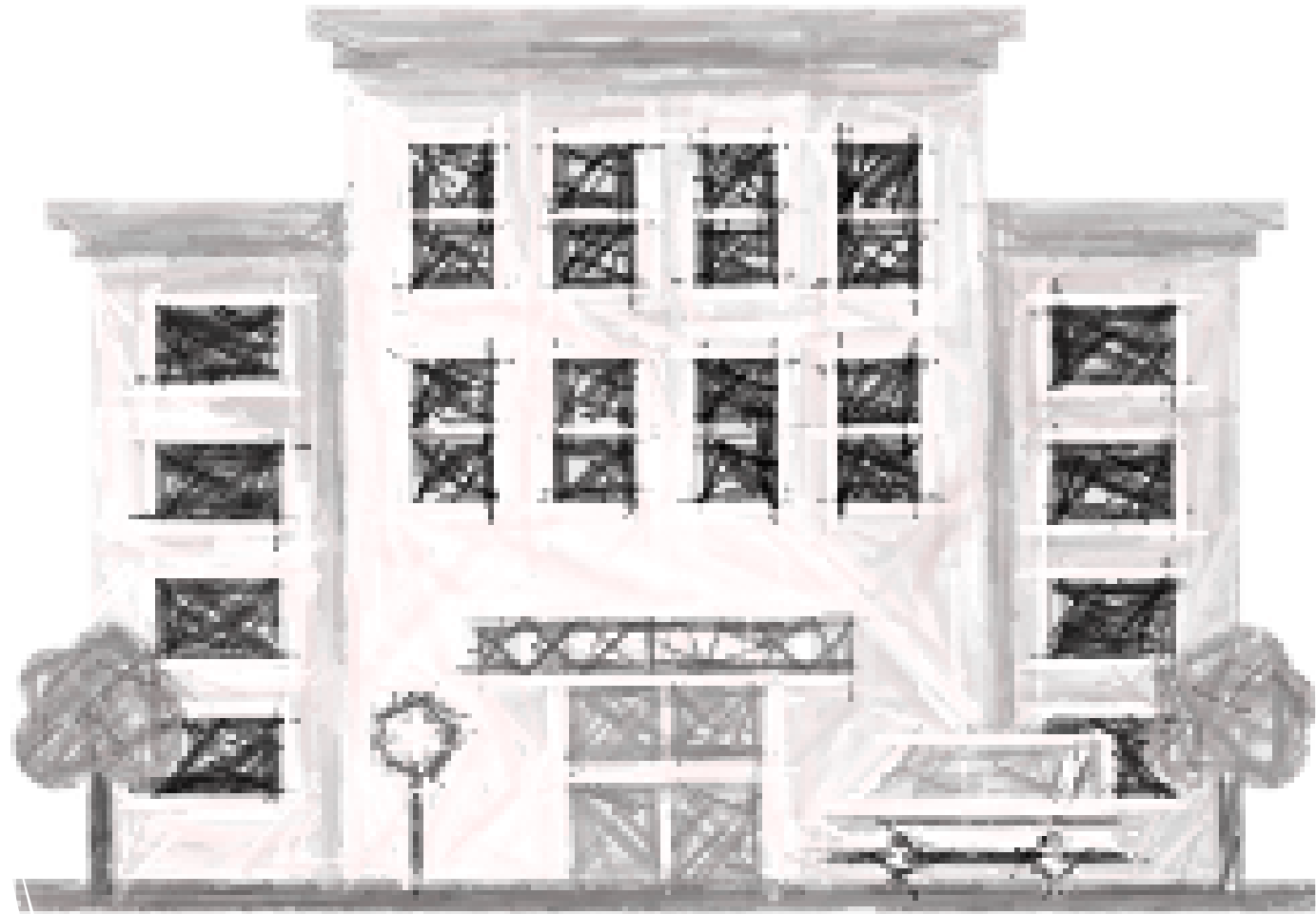
- **Yes**, per 2022 CEBC, Section 310A.1.1.1.1, NPC 4D Level 1, 2, or 3 buildings/tunnels can supply services and utilities to SPC-3, -4, -4D, or -5 buildings.
- **Requirement:** The NPC 4D Operational Plan must show how nonstructural damage will be repaired and systems restored for downstream critical care areas or provide alternative means to maintain critical care operations.

FAQ #29: Use of 1987, 1989, 1991 NFPA 13 to show compliance with fire sprinkler bracing

Scope of Work

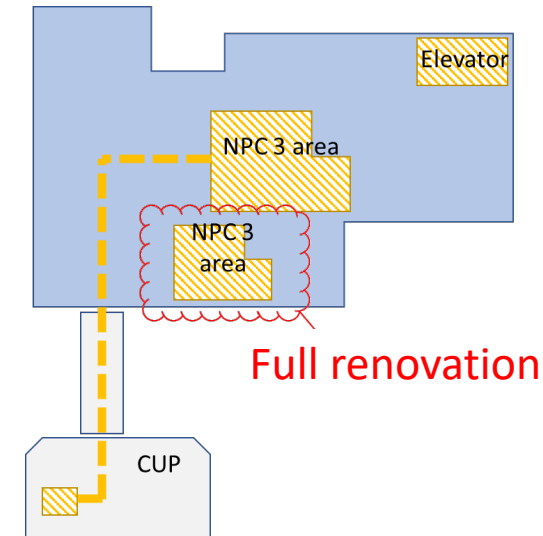
- **1987, 1989, 1991 edition NFPA 13 Building Scope:**
 - Buildings where fire sprinklers are designed with 1991 edition NFPA 13: *Design team required to add missing end-of- line restrains only.*
 - **Buildings where fire sprinklers are designed with 1987 and 1989 edition NFPA 13:** *Design team to perform a visit site and verify original branch line bracing and end-of-line restrains exist. Design team required to add missing end of branch line restrains, missing longitudinal sway bracing for feed and cross mains, and missing lateral sway bracing for feed and cross mains.*
- **1985 edition and earlier NFPA 13 Building Scope:**
 - **Buildings where fire sprinklers are designed with 1985 and earlier NFPA 13:** *All fire sprinkler piping above ceiling shall be evaluated.*

NPC misc. recent FAQs



FAQ #38: If the design professional doing an NPC 4 reconciliation report determines that an area has not been constructed under an OSA or OSHPD project, but planned to be **fully renovated later**, can they note the renovation as future deficiency mitigation through a construction project?

- The NPC 4/4D evaluation report needs to **note the areas** that will be fully renovated.
- The **renovation project** will need to be submitted to the Office by March 1, 2026
- **Building permit** issued by March 1, 2028
- **Construction being completed** by January 1, 2030.



FAQ #45: Are the NPC-3 exception in table 11.1 of California Administrative Code (CAC) applicable for NPC-4D L1, L2, L3 or NPC-4 reclassification?

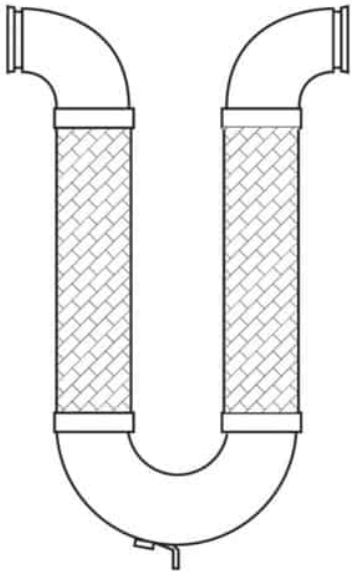
- 1.NPC-4D Level1:** All the NPC-3 exceptions in table 11.1 of California Administrative Code (CAC) are applicable to NPC-4D Level1.
- 2.NPC-4D Level2:** Seismic restraints from source to NPC-3 areas (including within the NPC-3 areas) shall be provided for cable trays, conduit, HVAC ducting and piping systems. The exception for NPC-3 cable trays, conduit, HVAC ducting and piping systems is not applicable. As indicated in NPC-4D L2/L3 requirement, elevator(s) selected to provide service to patient, surgical, obstetrical and ground floors during interruption of normal power needed, shall meet the structural requirements of Part 2, Title 24. The remaining NPC-3 exceptions in table 11.1 of California Administrative Code (CAC) are still applicable.
- 3.NPC-4D Level3:** Same as NPC-4D level 2 that applies to level 3 areas.
- 4.NPC-4:** None of the NPC-3 exception in table 11.1 of California Administrative Code (CAC) are applicable to NPC-4 reclassification.

FAQ #41: Flex joint requirement between buildings?

[For NPC 4, NPC 4D Level 2, NPC 4D Level 3] Please verify if utilities, services, and systems crossing seismic joints can accommodate the relative building displacements or have a flex joint.

Where the building does not meet this criteria, the design professional of record shall state the following sentence in the report: “*The building might not be functional after an earthquake due to failure in utilities between adjacent buildings*”.

	OSHPD	OSA	Pre-OSA	OSHPD Building Classification 1R/2/3/5
OSHPD	Survey not required	Survey not required	Survey not required	Survey not required
OSA	—	Survey not required	Survey required	Survey required
Pre-OSA	—	—	Survey required	Survey required
OSHPD Building Classification 1R/2/3/5	—	—	—	Survey not required



FAQ #44: The requirement for piping suspended by individual hangers 12" or less in length from top of pipe to bottom of support has changed in CBC 2016 and CBC 2019. Is it acceptable to use previous CBC codes for the exception?

The exception from 1998 code or later codes but not a combination thereof, shall be considered acceptable to satisfy the requirements of NPC reclassification.

FAQ #46: For buildings retrofitted to meet NPC-3R standards, can a consultant verify the adequacy of the anchorage through field observation?

No, the anchorage designed under NPC-3R standards was calculated with an importance factor (I) of 1.0, while NPC-3 requires an importance factor of 1.5.

Installations or retrofits designed to meet NPC-3R standards must be evaluated to ensure they meet the anchorage and bracing requirements of the California Building Code for NPC-3.

If the existing anchorage is insufficient to meet the forces required for NPC-3 compliance, a retrofit is necessary. See California administrative code section 11.2.3 item c.1.

Can buildings upgrade from NPC-2 to NPC-3 before reaching NPC-4?

Previous Approach: Upgrades were allowed in phases:

NPC-2 → NPC-3 then NPC-3 → NPC-4

Current Requirement (Due to upcoming 2030 Deadline):

- Direct upgrade from NPC-2 to NPC-4/4D is now expected
- NPC-3 requests are no longer accepted

Why?

- Limited time to meet the NPC-4/4D compliance deadline
- Ensuring compliance by 2030

Limits of Critical Care Areas

Question: *In a Surgical Services Department, CBC 1224 requires spaces such as staff locker rooms and nurse control offices. Do these code-required spaces need to be considered Critical Care Areas, or should Critical Care Areas only apply to patient spaces?*

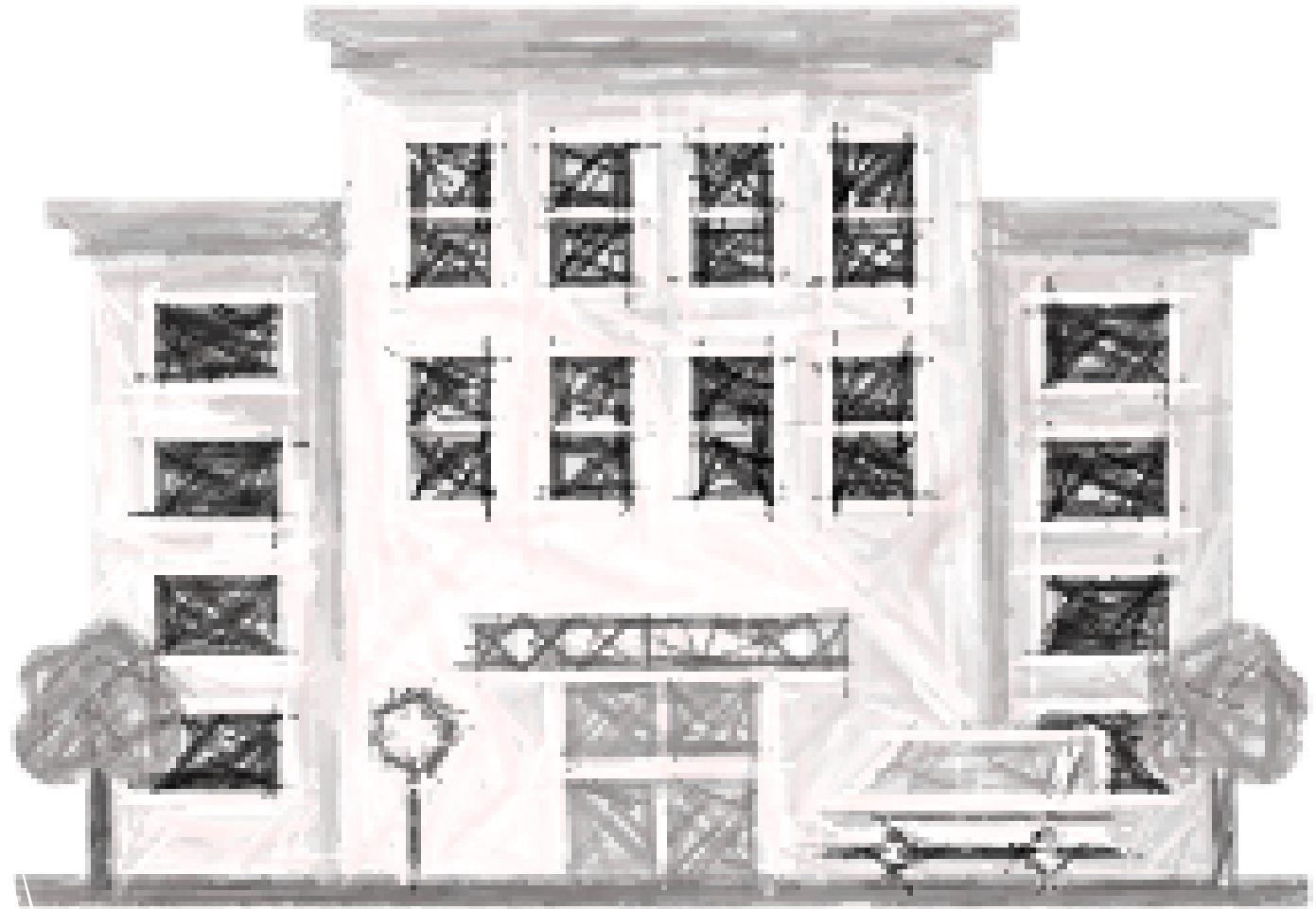
Answer: *The entire Surgical Services Department is considered the boundary of the NPC 3 Critical Care Area, including both patient and non-patient spaces.*

FAQ #37: What are the testing requirements for tension and shear for existing anchors?

Demand, capacity, and testing requirements are listed under 2022 CAC Chapter 6 Article 11 §11.3 and clarified below for NPC-3, 4, and 4D:

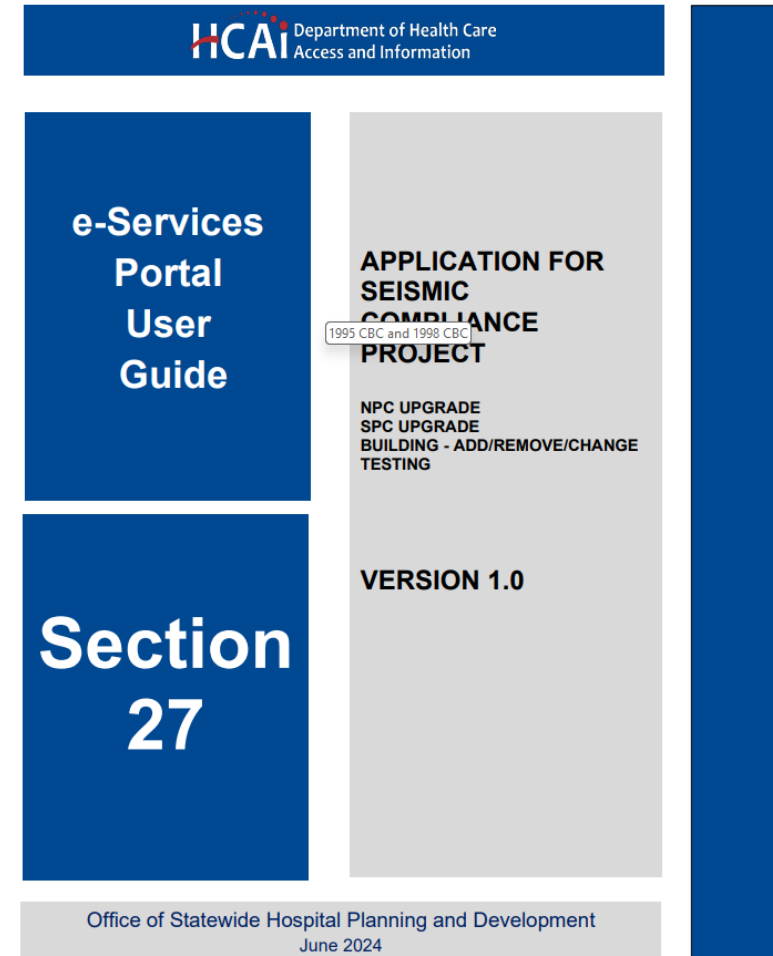
1. **Tension and shear demands** shall be calculated per 1998 CBC §1630B as listed under 2022 CAC Chapter 6, Article 11, §11.3.
2. **Tension and shear capacity for cast-in-place** anchors shall be per Table 19B-E of the 1998 CBC. The tension and shear **capacity for post-installed** anchor tension and shear capacity is allowed to be per the ICC ER report matching the anchor manufacturer and code cycle at the time of installation.
3. **Testing:**
 - Tension: Refer to §11.3.1 and §11.3.2 for testing frequency, demand ($3 \times \text{tension}$), usage type (equipment versus distribution system), and permitted exceptions.
 - Shear: Shear testing or tension testing is not required when analysis indicates only shear demand (no tension).
 - Alternate testing criteria are permitted per §11.3.4.

What about buildings
that will no longer
provide acute care
services beyond
2030?

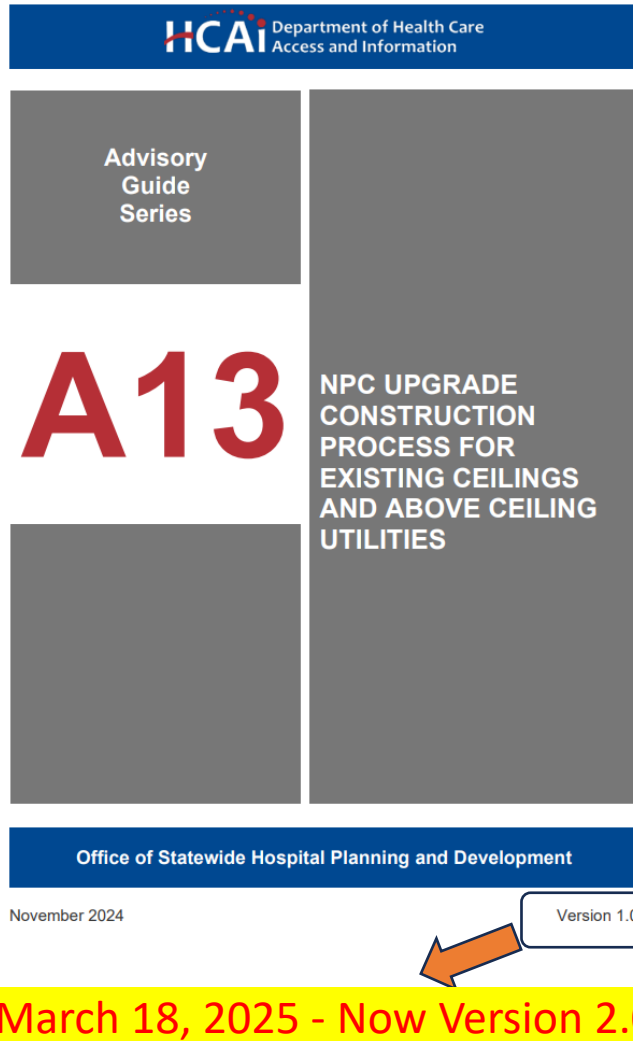


Intent to Remove GAC

- Submit an application with a letter of intent from the facility using eSP User Guide 27.
- SCU will place this building on a different track, no longer requiring NPC upgrade.
- However, the following submittals are required:
 - March 1, 2026: Submit construction drawings to relocate GAC services
 - March 1, 2028: Permit issuance
 - January 1, 2030: Construction Final



Advisory Guide – A13

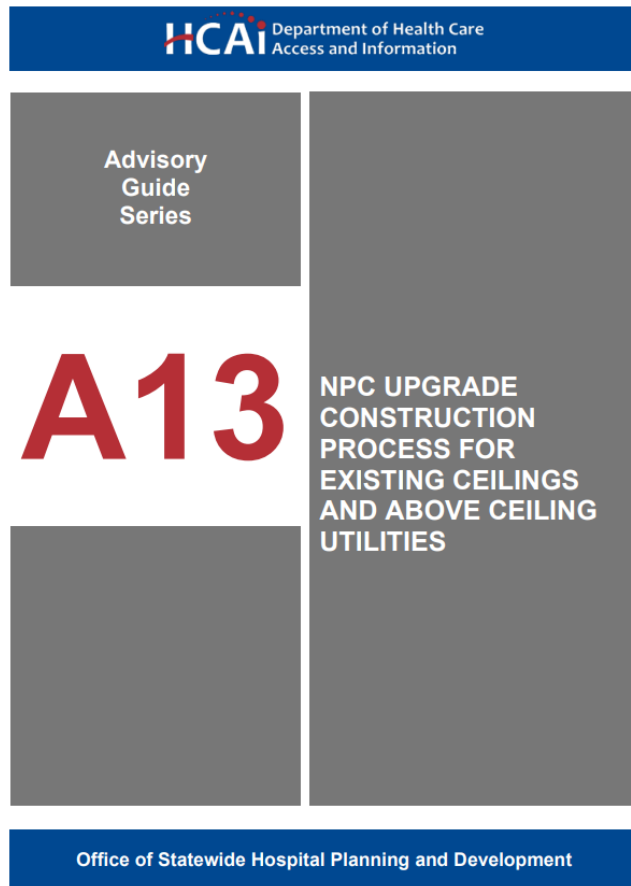


NPC Upgrade Construction Process for Existing Ceilings and Above Ceiling Utilities: [Click here](#)

TABLE OF CONTENTS

- SECTION 1 Purpose and Scope
- SECTION 2 Assessing Existing Conditions
- SECTION 3 Preparation of Construction Documents
- SECTION 4 Existing Braces
- SECTION 5 ACD versus NMA
- SECTION 6 NPC Upgrade Request

Purpose – A13 Guide



November 2024

Version 1.0

- For buildings not constructed under an OSHPD permit (or pre-1982/83, information regarding the layout and bracing conditions of utilities above ceilings is limited.
- Surveying these utilities disrupts hospital operations

Purpose: To minimize disruption and expedite NPC upgrade construction for components and systems at or above the ceiling.

Scope

- Advisory Guide is solely on the **NPC** upgrade of **existing** components and systems at or above ceilings.
- Advisory Guide does not apply to wall-mounted equipment, equipment mounted on top of the floor or roof, new equipment, new systems, and utilities, or deferred submittals



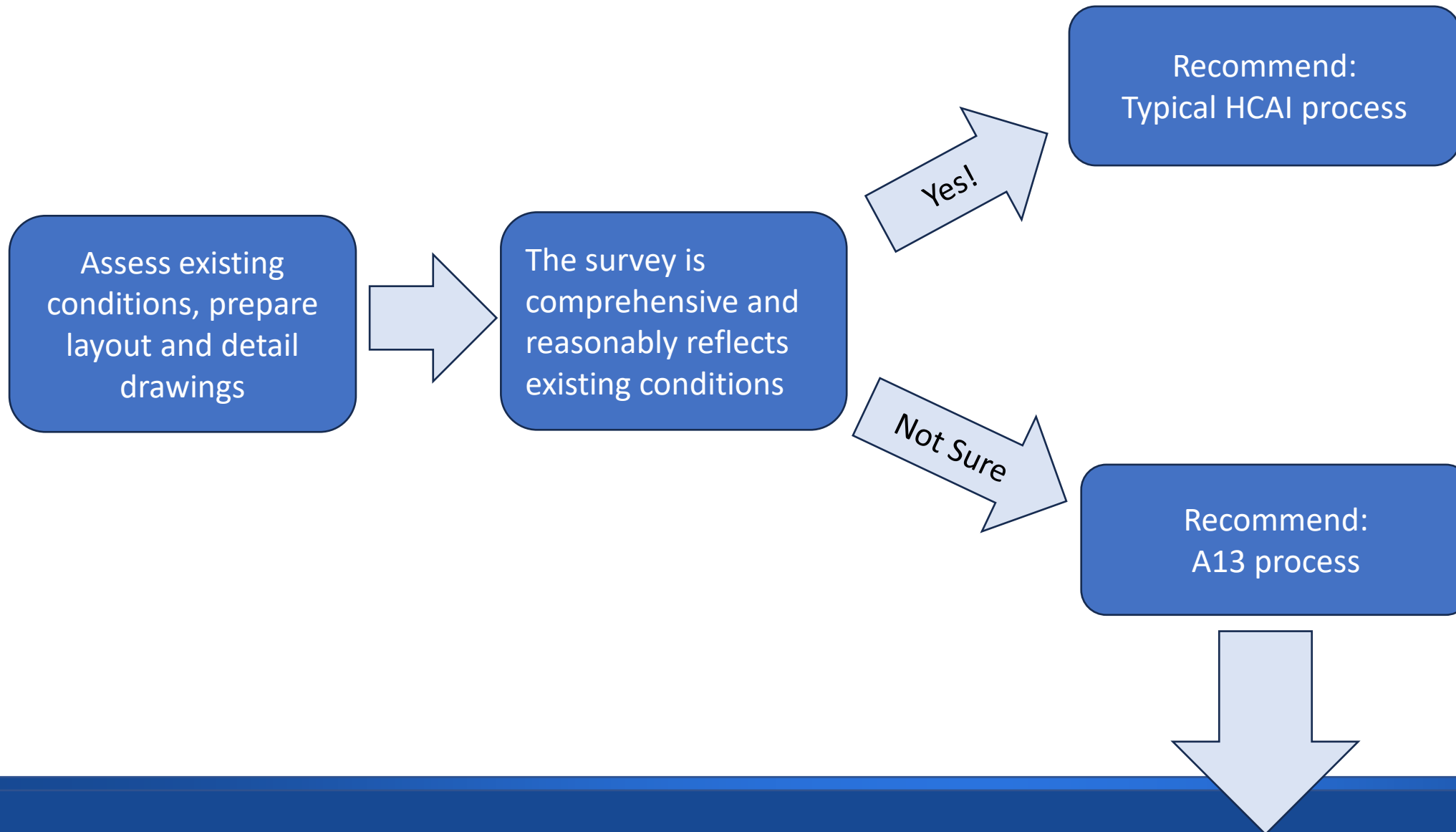
Scope

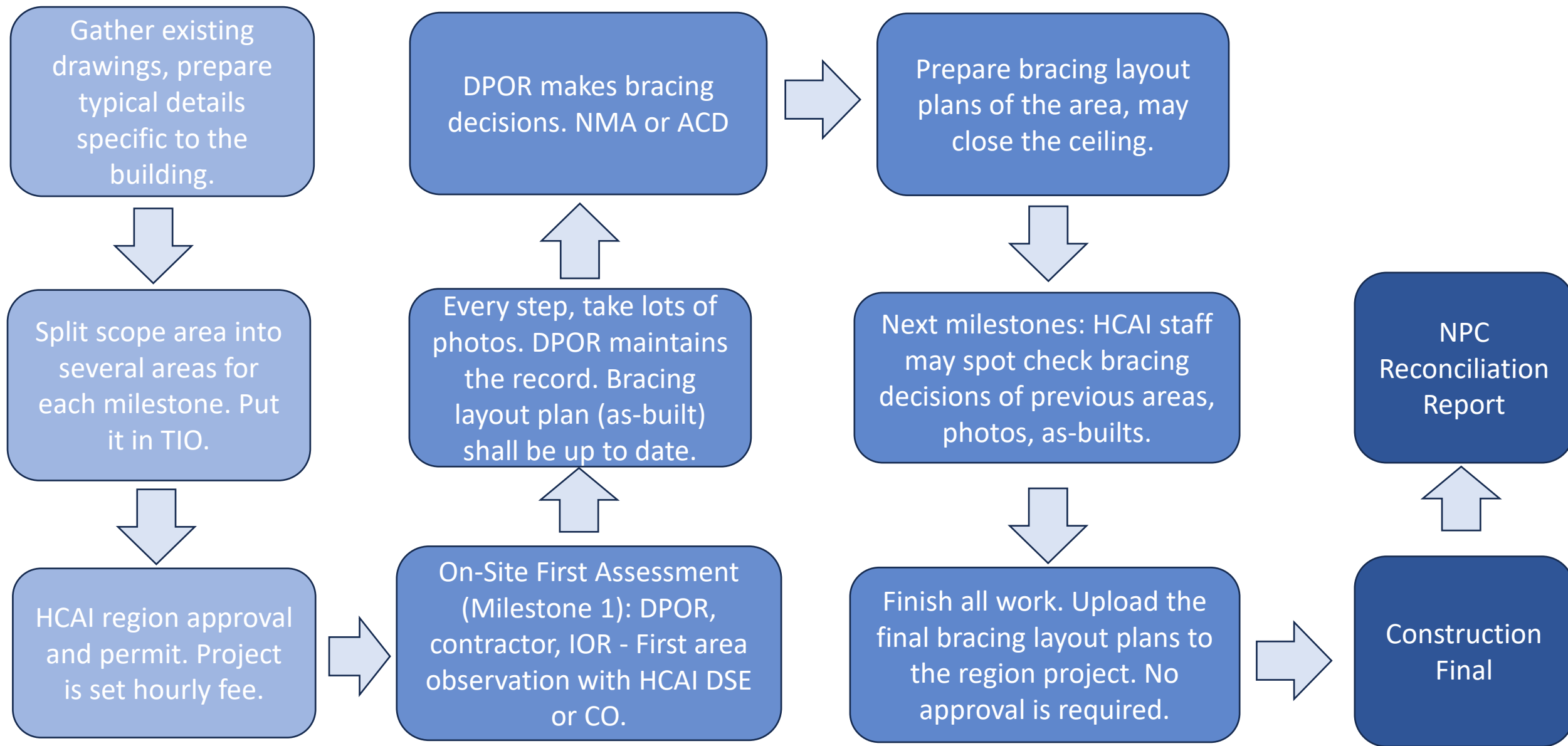
- A13 Guide is recommended to be used for building-wide ceiling and above-ceiling NPC upgrades.
- Deferred submittals are **not permitted** under the A13 guide process.

Tenant Improvement (TI) projects:

- Tenant Improvement (TI) projects shall follow the standard HCAI review and approval process.
- Deferred submittals might be utilized to upgrade the above-ceiling items per a typical TI project process.

DPOR Question: When should I use A13?





Assessing Existing Conditions



- DPOR should review the available record drawing
- Visit the site to observe and document typical conditions in various locations



Construction Drawings

Use of Pre-approved Details

- Acceptable to use more than one OPM (with some conditions)
- Pre-approved details shall be shown on the drawings
- An architectural floor plan showing the room functions and clearly defined boundaries of the NPC upgrade

Application and Plan Review

- Plan review will be performed at the corresponding HCAI region, following the typical plan approval and permitting process.
- Since the construction cost is unknown, the project review cost may be billed hourly by HCAI.

Construction Drawings

Testing, Inspections and Observation (TIO)

- Identify phases/stages/areas on the approved plans
- If the scope has a large area, multiple milestones are recommended.
- The first milestone shall be reserved for On-Site First Assessment (OSFA)
- Subsequent milestone clearance by HCAI staff may be done in person or remotely.

California Health and Human Services Agency
Gavin Newsom, Governor

HCAI Department of Health Care Access and Information
hcai.ca.gov

2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833

355 South Grand Avenue, Suite 1900
Los Angeles, CA 90071

Testing, Inspection, and Observation Program
2022 California Building Standards Code - OSHPD 1

This program is prepared and submitted for an OSHPD 1 project. OSHPD 1 projects include all construction and remodel projects for: general acute care hospitals, acute psychiatric hospitals, and general acute care hospitals providing only acute medical rehabilitation center services (2022 CBC 1224.1).

SECTION A		PROJECT INFORMATION	
Facility #:	Facility Name:		Project #:
Street Address:			
City:	County:		
Record Name (Scope of Project):			
<small>Abbreviations:</small> CAC: California Administrative Code CBC: California Building Code CEC: California Electrical Code CMC: California Mechanical Code CPC: California Plumbing Code			
<small>AAMA: American Architectural Manufacturers Association NFPA: National Fire Protection Association FM: FM Approval Standards DPOR: Design Professional of Record</small>			
Version: R04.39			
Testing, Inspection, and Observation Stages			
Stage No.	Stage Name	Stage Scope / Description	
1			
DESIGN PROFESSIONAL OF RECORD RESPONSIBILITY			
<p><u>The administration of the work of construction, including this TIO, shall be under the responsible charge of an architect and structural engineer. When a structural engineer is not substantially involved, the architect shall be solely responsible. Where neither structural nor architectural elements are substantially involved, a mechanical or electrical engineer registered in the branch of engineering most applicable to the project may be in responsible charge. (CAC 7-141(a))</u></p> <p><small>Note: HCAI plan review staff must provide verification that the TIO program has been "Reviewed" prior to plan approval to confirm the applicability of the tests and inspections identified in the TIO program for work scope, building systems, and the construction materials shown in the design drawings. Field staff will issue subsequent "TIO Program Approval".</small></p> <p><small>The "TIO Program Approval" from HCAI field staff must be obtained and included with the notice of start of construction required by CAC Section 7-137(a)(4) and 7-145(a)(5.A)</small></p> <p><small>Construction shall not commence until the health facility has obtained from HCAI "TIO Program Approval". (CAC Section 7-135(a)(3))</small></p>			

Construction Phase

Pre-Construction Meeting

HCAI staff will address issues and concerns to clarify the construction TIO process

Construction TIO Process

- The first phase/stage/area identified in the TIO form will be completed with HCAI staff presence, where possible, to provide critical feedback.
- Construction in each phase/stage/area shall be documented, photographed and maintained by the DPOR (and a copy kept by the facility).

Construction Phase

Site Verification

- The contractor or licensed professional is permitted to perform site verification but the DPOR shall take responsibility for the attachment detail and by documenting bracing locations and dimensions as part of the bracing layout plans.
- Decisions for the adequacy of the approved details compared to the existing conditions shall be made only by the licensed professional.
- The braces that are added during construction should be noted on the layout drawings with accurate locations identified by the DPOR.
- It is the responsibility of the DPOR to present the bracing layout plans for HCAI field staff when requested.
- Each area needs to be shown on the bracing layout plans before closing out the area.

Construction Phase

Utility and above Ceiling Braced Equipment Layout

- The DPOR shall submit to HCAI field staff the bracing layout plans
- The bracing layout plan is a mechanical/plumbing/electrical plan overlaid on an architectural floor plan showing the utility runs and the room descriptions inside the scope of the project with the seismic bracing locations (existing and new) and detail callouts (new and verified).
- The bracing layout plan needs to be updated every time a new location is opened, showing the layout of the existing utility lines.

Construction Phase

Utility and above Ceiling Braced Equipment Layout

- Utilities that require no added bracing, either because existing bracing is adequate, or because the utility is exempt from bracing requirements, may be noted for each room on the bracing layout plans.
- The transition from where bracing is required to where bracing is not required, should be clearly shown and noted.
- The final bracing layout plans must be submitted prior to requesting Construction Final from the HCAI field staff.
- The bracing layout plans are not required to be approved prior to closing the ceilings in an area.
- Any work that has been performed and is later changed due to a HCAI review on the Bracing Layout Plans to achieve code compliance may be subject to destructive investigation.

Construction Phase

Existing Braces With Existing Drawings:

- The DPOR shall implement an onsite verification process through various methods, including torque testing, pull testing, visual inspections, etc.
- Any observed deviation shall be evaluated by the DPOR.

Existing Braces Without Existing Drawings:

- The DPOR shall verify the bracing details and spacing and evaluate for conformance.
- The DPOR shall provide calculations to justify existing conditions if asked by the HCAI field staff.
- The DPOR shall include a sketch of existing bracing detail in the bracing layout plans.
- Similar to existing braces with documentation above, the DPOR shall establish a verification criteria throughout the area of work.

Construction Phase

ACD vs NMA:

- Changes to bracing locations and utility layout based on discovered conditions will be incorporated into the bracing layout plans and would not be classified as either an NMA or an ACD.
- If a condition is discovered that can be accommodated by using another detail in the selected OPM, this will be incorporated into the construction documents and would be classified as an NMA.
- For projects outside of the A13 Guide, please note that HCAI does not allow new details from an OPM not previously referenced to be brought into a project through the NMA process, they must be ACD. This NMA process is an exception, as it only applies to this NPC upgrade guide
- The OPM detail is required to be shown on the drawings per 2022 CAC Section 7-115(d)2.

Construction Phase

ACD vs NMA:

- If a condition is discovered that requires a minor non-material modification to a project approved detail that would generally be considered a non-material alteration
- If the change requires a calculation where determination cannot be made by inspection, it must be submitted as an ACD.
- If a material alteration is required, then an ACD must be prepared and approved by HCAI. If the DPOR can provide a stamped sketch to the construction team such that direction is provided before the space must be closed, then construction may proceed with inspection performed to the stamped detail.
- DPOR shall issue the ACD to HCAI within five business days. Please note, any work performed in this manner is subject to the Office's review and possible destructive investigation.

Construction Phase

Final Closeout of Construction Project:

Final bracing layout plans must be submitted to HCAI prior to project closeout.

- The bracing layout plans shall have a statement by the DPOR that all conditions in the area are compliant with the NPC requirements per 2022 CAC.
- Photographs need not be uploaded to the eSP HCAI project portal. The photographs with proper documentation are required to be kept with the facility and the design professional until the NPC 5 upgrade (which also includes NPC 4 or NPC 4D upgrade) is achieved. Please note that this documentation storage duration may be many years after completion of the project.

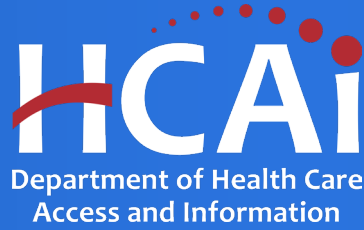
Construction Phase

NPC Upgrade Request:

- After completing all NPC 4 or NPC-4D construction projects, submit an updated reconciliation report under the previously accepted SRU project.
- The reconciliation report shall include the list of all relevant projects completed as part of the NPC upgrade.
- SCU will review and approve the reconciliation report, then change the rating and send an upgrade approval letter to the facility contact.

A13 Guide Benefit

- Fewer disruptions and faster construction compared to a typical TI project.
- Provides DPOR more control in the unfamiliar ceiling and above-ceiling space.
- Reduced number of ACDs and NMAs.



Thank You!

Questions?
Please email

SeismicComplianceUnit@hcai.ca.gov