



POLICY INTENT NOTICE (PIN)

#### SUBJECT

Skilled Nursing Facility (SNF) alternate source of power to maintain safe temperatures, maintain availability of life-saving equipment, and maintain oxygen-generating devices.



Effective: XX/XX/XXXX

PIN:

#### PURPOSE

The purpose of this Policy Intent Notice (PIN) is to provide a policy for the implementation of alternate sources of power to maintain safe temperatures, maintain availability of life-saving equipment, and maintain oxygen-generating devices for Skilled Nursing Facility (SNF) buildings as mandated by Assembly Bill 2511 (Chapter 788, Statutes of 2022).

#### BACKGROUND

SNFs have previously been required to provide 6 hours of on-site fuel storage for emergency power system sources such as emergency generators. AB 2511 requires that SNFs have an alternative source of power to protect resident health and safety for no fewer than 96 hours for power outages that may result from a public safety power shutoff, an emergency, a natural disaster, or other cause. An alternative source of power is defined as a source of electricity that is not received through an electric utility, but is generated or stored onsite, which may include, but is not limited to emergency generators using fuel, large capacity batteries, and renewable electrical generation facilities. The Centers for Medicare & Medicaid Services (CMS) may have additional certification requirements that will still need to be met by a SNF. These requirements are enforceable by the California Department of Public Health (CDPH) by January 1, 2024.

# PIN 74 Skilled Nursing Facility Alternate Power Source





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## **AB 2511**

The act to add Section 1418.22 to the Health and Safety Code, relating to backup power sources for SNF's was **signed into law by Governor Newsome** on Sept 29<sup>th</sup>, 2022

On Sept 29<sup>th</sup> via letter - **The Governor directed HCAI** to begin the regulation process



#### TO DATE HCAI HAS DONE THE FOLLOWING:

**Developed PIN 74** to provide policy for the implementation of alternate sources of power to maintain safe temperatures, maintain availability of life-saving equipment and maintain oxygen-generating devices for SNF buildings as mandated by the Health and Safety Code Section 1418.22 (AB 2511).

Presented Preliminary PIN 74 at Hospital Building Safety Board (HBSB) Joint Meeting – 11/1/22) To Codes and Processes/Energy Conservation and Management/Technology and Research Committees. At this meeting the board unanimously voted to endorse the guide with an understanding that some modifications were yet to come.

Presented PIN 74 for 2<sup>nd</sup> time to the HBSB at full board meeting on 12/7&8/2022 – <u>Updates included to address comments brought up at 11/2/22 joint meeting</u>

Presented a Webinar to the public on 12/12/22 – PIN 74 Skilled Nursing Facilities – Backup Power source

**Issued PIN 74** on 12/14/22

**Deployed on-line application process** on 1/1/2023



## **UPCOMING HCAI ACTIVITIES:**

**Presenting a 2<sup>nd</sup> Webinar to the public on 1/18/22** – PIN 74 Skilled Nursing Facilities – Backup Power source

Will Issue Advisory Guide A-6 - Backup power Source for Temperature Control, Life-Saving equipment and Oxygen-Generating devices – to be released in February



## **CODE WRITING VS ENFORCEMENT:**

**HCAI'S** is authorized to **develop and promulgate building standards and regulations** for the adequacy and safety of the SNF physical plant pursuant to HSC §1275. FDD is responsible for overseeing all aspects of SNF <u>construction</u> in California.

As outlined in HSC §1275 and HSC §1422(b), **CDPH** <u>licenses</u> long term care facilities, including SNFs, and conducts inspections of facilities with CMS certification to <u>determine compliance with federal standards and California statutes</u> and regulations to the extent that California statutes and regulations provide greater protection to residents, or are more precise than federal standards.



#### **PIN 74**

Skilled Nursing Facility (SNF) alternate source of power to maintain safe temperatures, maintain availability of life-saving equipment, and maintain oxygen-generating devices.



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#### SUBJECT

Skilled Nursing Facility (SNF) alternate source of power to maintain safe temperatures, maintain availability of life-saving equipment, and maintain oxygen-generating devices.

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Effective: XX/XX/XXXX

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#### **PURPOSE**

The purpose of this Policy Intent Notice (PIN) is to provide a policy for the implementation of alternate sources of power to maintain safe temperatures, maintain availability of life-saving equipment, and maintain oxygen-generating devices for Skilled Nursing Facility (SNF) buildings as mandated by Assembly Bill 2511 (Chapter 788, Statutes of 2022).

#### **BACKGROUND**

SNFs have previously been required to provide 6 hours of on-site fuel storage for emergency power system sources such as emergency generators. AB 2511 requires that SNFs have an alternative source of power to protect resident health and safety for no fewer than 96 hours for power outages that may result from a public safety power shutoff, an emergency, a natural disaster, or other cause. An alternative source of power is defined as a source of electricity that is not received through an electric utility, but is generated or stored onsite, which may include, but is not limited to emergency generators using fuel, large capacity batteries, and renewable electrical generation facilities. The Centers for Medicare & Medicaid Services (CMS) may have additional certification requirements that will still need to be met by a SNF. These requirements are enforceable by the California Department of Public Health (CDPH) by January 1, 2024.



## **PURPOSE**

The purpose of this Policy Intent Notice (PIN) is to provide a policy for the implementation of alternate sources of power to maintain safe temperatures, maintain availability of life-saving equipment, and maintain oxygen-generating devices for Skilled Nursing Facility (SNF) buildings as mandated by Assembly Bill 2511 (Chapter 788, Statutes of 2022).



#### **BACKGROUND**

SNFs have previously been required to provide 6 hours of on-site fuel storage for emergency power system sources such as emergency generators and have not been required to provide emergency power for cooling systems. AB 2511 requires that SNFs have an alternative source of power to protect resident health and safety for no fewer than 96 hours for power outages that may result from a public safety power shutoff, an emergency, a natural disaster, or other cause. An alternative source of power is defined as a source of electricity that is not received through an electric utility, but is generated or stored onsite, which may include, but is not limited to emergency generators using fuel, large capacity batteries, and renewable electrical generation facilities. The Centers for Medicare & Medicaid Services (CMS) may have additional certification requirements that will still need to be met by a SNF. These requirements are enforceable by the California Department of Public Health (CDPH) by January 1, 2024.



#### THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 1418.22 is added to the Health and Safety Code, to read:

- **1418.22.** (a) The Legislature finds and declares that it is the public policy of this state to ensure the health and safety of highly vulnerable persons residing in skilled nursing facilities during power outages that may result from a public safety power shutoff, an emergency, a natural disaster, or other cause.
- (b) (1) A skilled nursing facility shall have an alternative source of power to protect resident health and safety for no fewer than 96 hours during any type of power outage.
  - (2) For purposes of this section, "alternative source of power" means a source of electricity that is not received through an electric utility, but is generated or stored onsite, which may include but is not limited to emergency generators using fuel, large capacity batteries, and renewable electrical generation facilities.
- (c) For purposes of this section, "resident health and safety" includes, but is not limited to, maintaining a safe temperature for residents, maintaining availability of life-saving equipment, and maintaining availability of oxygen-generating devices.
- (d) Facilities that use a generator as their alternative source of power shall maintain sufficient fuel onsite to maintain generator operation for no less than 96 hours or make arrangements for fuel delivery for an emergency event. If fuel is to be delivered during an emergency event, the facility shall ensure that fuel will be available with no delays.
- (e) Facilities that use batteries or a combination of batteries in tandem with a renewable electrical generation facility as their alternative source of power, shall have sufficient storage or generation capacity to maintain operation for no fewer than 96 hours. Facilities shall also make arrangements for delivery of a generator and fuel in the event power is not restored within 96 hours and the generation capacity of the renewable electrical generation facility is unable provide sufficient power to comply with state requirements for long-term care facilities.
- (f) A facility shall comply with the requirements of this section by January 1, 2024.



#### **POLICY**

This PIN implements the requirements specified in HSC §1418.22. The Department of Health Care Access and Information (HCAI) will provide a technical basis from which a SNF can create a plan for identifying existing conditions that are already in compliance with the statute or to develop a construction project to achieve a compliant condition as required for acceptance by CDPH. The methods outlined and details described in this PIN indicate acceptable methods and details for achieving compliance with the law. These may be approved by HCAI in either the office or the field. Other methods proposed by the design professional of record to solve a particular problem shall be reviewed by HCAI and, if approved, may also be an acceptable solution.



## **DEFINITIONS/REQUIREMENTS**

#### Safe Temperature for Residents

"Comfortable temperature" under normal operating conditions: Title 22, California Code of Regulations, Section 72657, Mechanical Systems, requires that "heating, air conditioning and ventilation systems shall be maintained in normal operating conditions to provide a comfortable temperature and shall meet the requirements of Section T17-105, Title 24, California Administrative Code."

Title 24, California Code of Regulations, California Mechanical Code, Chapter 4, VENTILATION AIR, Table 4-A lists temperature range requirements for locations in the building based on use and function. Patient areas are required to have mechanical systems designed to maintain temperatures between 70°-75°F.

"Safe temperature" under emergency conditions: Federal Code of Regulations, Title 42, §483.73(b)(1)(ii)(A), CMS emergency preparedness requirements, states, "alternate sources of energy to maintain - Temperatures to protect resident health and safety and for the safe and sanitary storage of provisions." Title 42, §483.10(i)(6) requires "comfortable and safe temperature levels. Facilities initially certified after October 1, 1990, must maintain a temperature range of 71 to 81 °F." Furthermore, CMS requires facilities to establish procedures that determine how heating and cooling of their facility will be maintained during an emergency, including when there is a loss of the primary power source. It is noted that facilities are not required to heat and cool the entire building evenly but must ensure safe temperatures are maintained in areas deemed necessary to protect patients, other persons and for stored provisions. (This is to be determined by the facility risk assessment.)



## **DEFINITIONS/REQUIREMENTS**

#### **Life-saving Equipment**

Life-saving equipment, where provided, shall have power provisions for a period of 96 hours from an alternate source of power. Life-saving equipment may include but shall not be limited to ventilators, AEDs, crash carts with defibrillators, intravenous therapy equipment, feeding pumps, IV pumps, nebulizer machines, suction equipment and medication dispensing machines.

#### **Oxygen-generating Devices**

Oxygen-generating devices, where provided, shall have power provisions for a period of 96 hours from an alternate source of power. Oxygen-generating devices may include but shall not be limited to concentrators and positive pressure apparatus as identified in Title 22, California Code of Regulations, Section 51511.



## **ANALYSIS**

#### **Power Source**

Any new or existing onsite essential and alternate power source used to meet AB 2511 requirements shall conform to one or more of the following requirements as applicable:

- Title 24, California Electrical Code, Part 3, ARTICLE 517.29 through 517.30 for SNF Subacute units
- Title 24, California Electrical Code, Part 3, ARTICLE 517.40 and 517.41 Essential Electrical Systems for Nursing Homes and Limited Care Facilities
- Title 24, California Electrical Code, Part 3, ARTICLE 701 Legally Required Standby Systems
- Title 24, California Electrical Code, Part 3, ARTICLE 705 Interconnected Electric Power Production Sources



## Additional code sections and requirements:

#### The following requirements are applicable:

- Special seismic certification of alternate power equipment, Title 24, California Building Code, Part 2, Volume 2, Section 1705.13.3
- 2) 96 hours of on-site fuel storage (or an approved Emergency Preparedness plan).

#### **Acceptable Outage Durations:**

- Life-Saving Equipment and Oxygen Generating equipment will be required to be restored to back up power within 10 seconds of failure of normal power source.
- 2) Cooling and heating equipment will be restored to power within sufficient time to maintain temperature between 71-81 degrees Fahrenheit.



## 96-Hours of On-site Fuel Storage

Where **generators** are used as an alternative source of power, sufficient fuel onsite shall be maintained to sustain generator operation for no less than 96 hours <u>or contract</u> arrangements shall be made for fuel delivery for an emergency event. If fuel is to be delivered during an emergency event, the facility shall ensure that fuel will be available with no delays. <u>On-site fuel storage shall not be less than 6 hours capacity</u> in a minimum of one tank. For instances where 96 hours of on-site fuel is not provided, CDPH must approve any alternate arrangements that have been made for the delivery of fuel to meet this requirement.



## 96-Hours of On-site Fuel Storage

Facilities that use **batteries or a combination of batteries in tandem with a renewable electrical generation facility** as their alternative source of power shall have sufficient storage or generation capacity to maintain operation for <u>no fewer than 96 hours</u>. Facilities shall also <u>make arrangements for delivery of a generator</u> (quick connect provisions for temp generator required) and fuel in the event power is not restored within 96 hours if the generation capacity of the renewables is unable to provide sufficient power to comply with state requirements for long-term care facilities. <u>For all options a minimum of 6 hours of onsite fuel is required</u>.



## California Electrical Code (CEC) sections

The following three scenarios could be used provide compliance options for existing SNFs to meet HSC §1418.22:

- 1) Add New Loads to Existing or Replacement Emergency Generator:
- ARTICLE 517.29 through 517.30 for SNF Subacute units
- ARTICLE 517.40 and 517.41 Essential Electrical Systems for Nursing Homes and Limited Care Facilities
- 2) New or Additional Generator: ARTICLE 701 for legally required standby systems
- 3) New Healthcare Microgrid: ARTICLE 705, Interconnected Electric Power Production Sources

Note: Other designs could be implemented to meet new HSC §1418.22 requirements

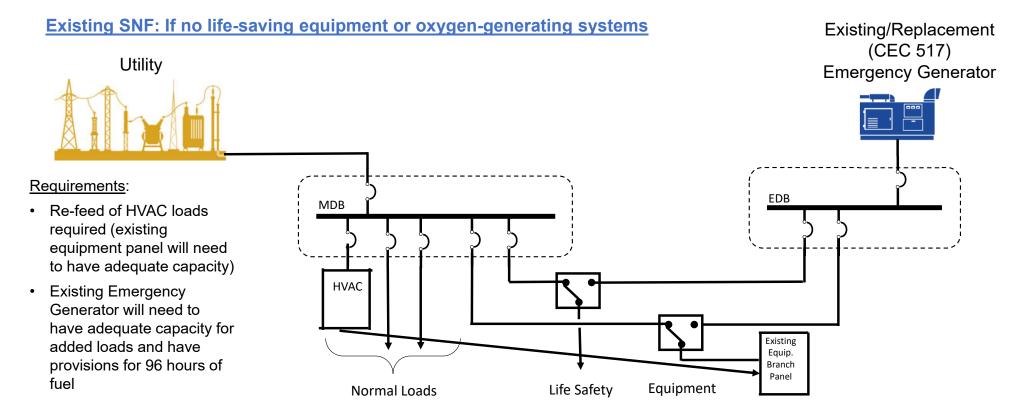


## **ANALYSIS – Scenario 1**

1) Add New Loads to Existing or Replacement Emergency Generator: Where an existing or replacement emergency generator meets CEC ARTICLE 517 - Health Care Facilities requirements and has adequate capacity to support the loads required to maintain 96 hours of operation, the existing system could be considered compliant if confirmed or modified to meet HSC §1418.22 requirements for safe temperatures, life-saving equipment, and oxygen-generating devices as identified above. The replacement emergency generator and distribution equipment including any new panels feeding the required loads would need to be seismically certified. The emergency generator(s) will need to have provisions for 96 hours of fuel.

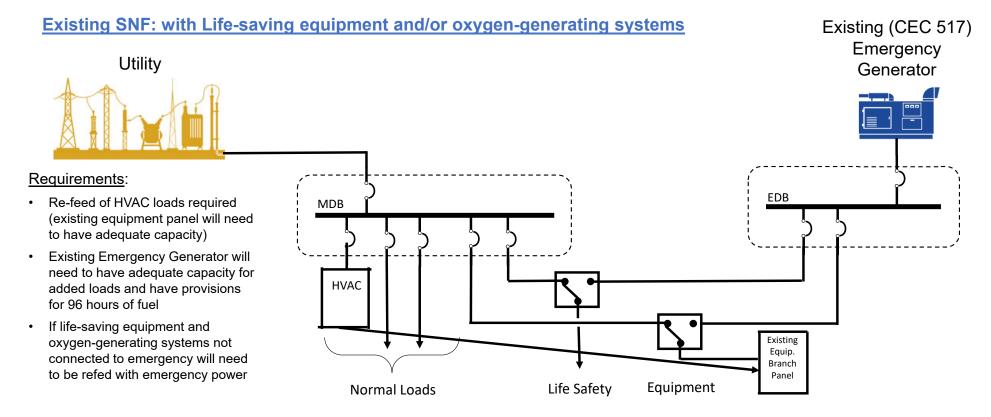


## 1) Standard SNF–Existing or Replacement Emergency Generator





## 1A) Subacute SNF–Existing or Replacement Emergency Generator



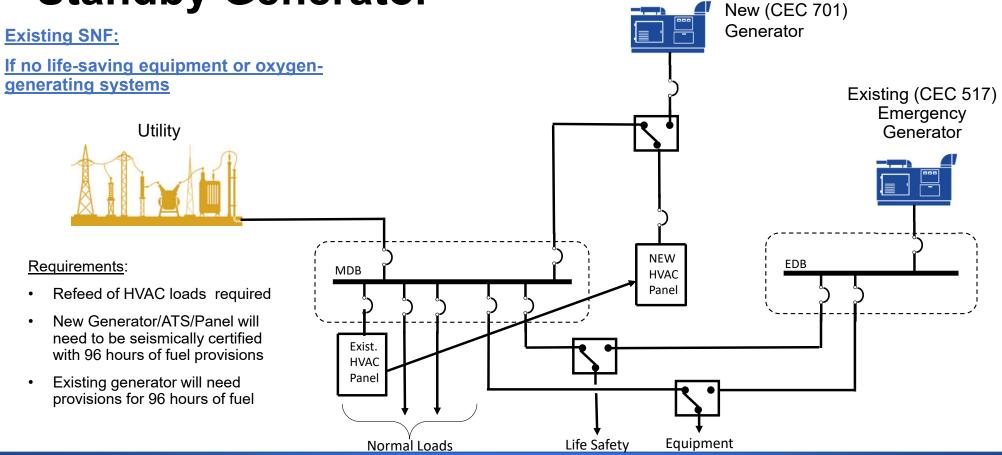


## **ANALYSIS – Scenario 2**

2) New or Additional Generator: A new alternate generator and associated equipment could be introduced into the system to feed new or additional loads necessary to meet HSC §1418.22 requirements. The new generator and equipment shall meet CEC ARTICLE 701 - Legally Required Standby Systems requirements, have special seismic certification, and fulfill the 96-hour on-site fuel requirements. The new standby system would need to feed the cooling equipment, life-saving equipment, and oxygen-generating devices as identified above. In this scenario, the existing distribution system would need to be modified to transfer all loads from existing equipment to new equipment. If some loads identified in HSC §1418.22 are to remain on existing facility emergency system, the existing emergency generator would need to have 96 hours of fuel provisions.

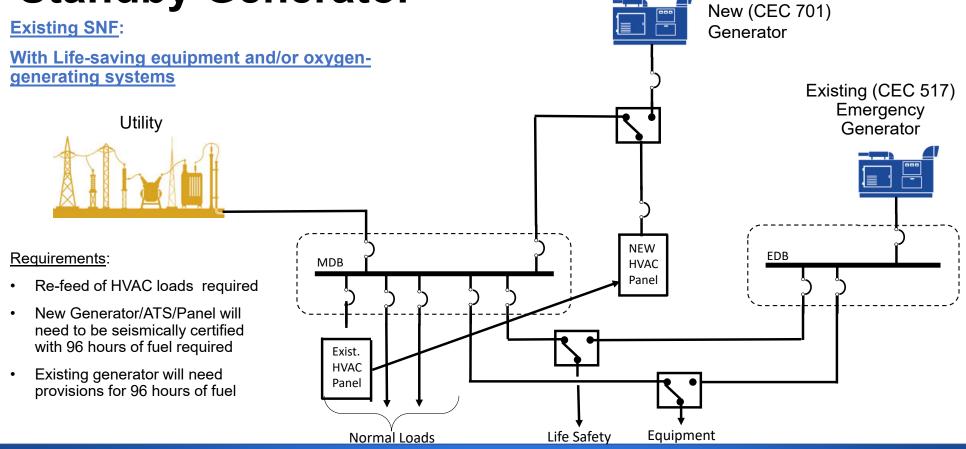


2) Standard SNF-New Legally Required Standby Generator





2A) Subacute SNF–New Legally Required Standby Generator



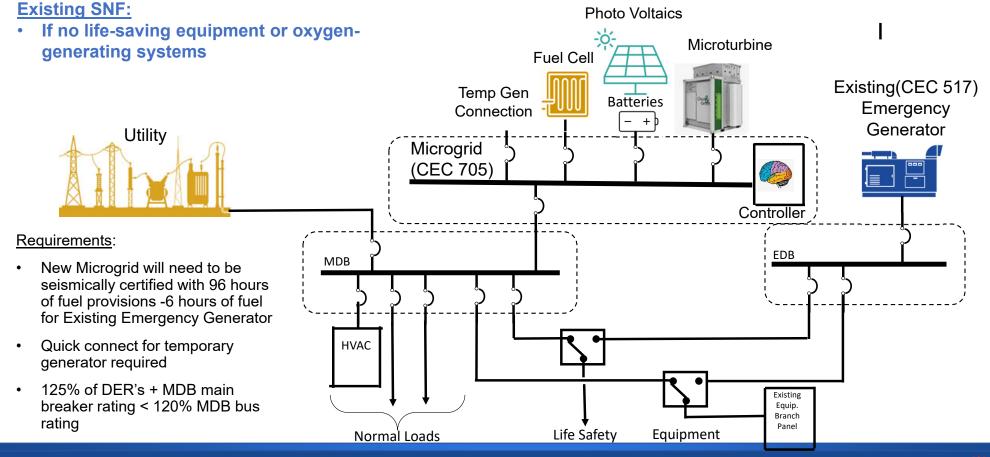


## **ANALYSIS – Scenario 3**

3) New Healthcare Microgrid: A new healthcare microgrid could be introduced to the system with any combination of generator(s), turbine(s), fuel cell(s), photovoltaics, battery storage system, or other on-site Distributed Energy Resources (DER's) and be configured to parallel with a normal distribution board at the facility. The new system components shall meet requirements of Title 24, California Electrical Code, Part 3, ARTICLE 705 (Interconnected Electric Power Production Sources), have special seismic certification and fulfill the 96-hour fuel requirement. For this scenario, all new equipment including energy producers will need to be seismically certified. This approach would utilize the existing normal distribution system backed up by the alternate power source (microgrid) to feed all loads including the cooling equipment, life-saving equipment, and oxygen-generating devices. The existing Essential Electrical System (Title 24, California Electrical Code, Part 3, ARTICLE 517.42) will need to remain as is.

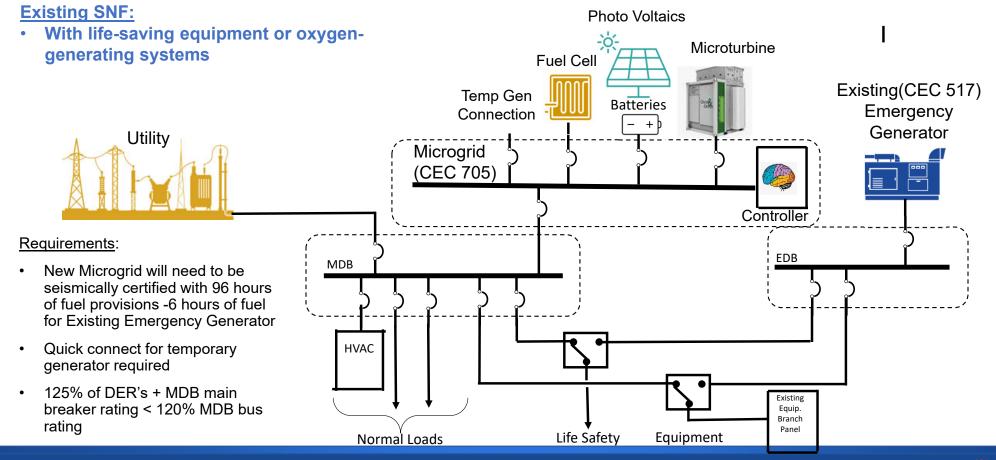


## 3) Standard SNF-Microgrid Parallel w/Utility





## 3) Standard SNF-Microgrid Parallel w/Utility

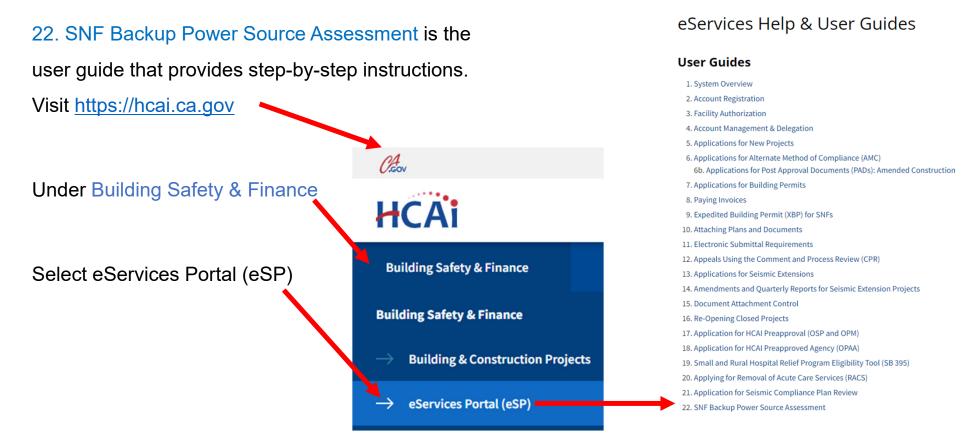




## **On-Site Source of Power Assessment**

SNFs shall submit an evaluation of on-site sources of power under the provisions of HSC §1418.22. The Assessment Form which can be used to identify items for inclusion in the Assessment Report. The assessment report shall include existing conditions and describe proposed changes that will result in a SNF's compliance with HSC §1418.22. The Assessment Report shall be submitted electronically using the eServices Portal located on the HCAI website. As part of HCAI's charge from the Legislature, this reporting tool was developed to be used by SNFs and HCAI to achieve the new requirements of the statute.

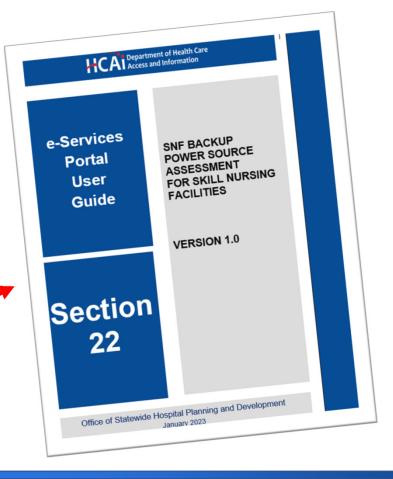






Once you navigate to <a href="https://hcai.ca.gov">https://hcai.ca.gov</a> and open the user guide, you will see that there is homework to prepare for submission.

- 15. Document Attachment Control
- 16. Re-Opening Closed Projects
- 17. Application for HCAI Preapproval (OSP and OPM)
- 18. Application for HCAI Preapproved Agency (OPAA)
- 19. Small and Rural Hospital Relief Program Eligibility Tool (SB 395)
- 20. Applying for Removal of Acute Care Services (RACS)
- 21. Application for Seismic Compliance Plan Review
- 22. SNF Backup Power Source Assessment





#### Homework:

- Floor plan showing location of existing equipment and area of coverage.
- Documentation explaining how each of the follow system(s), equipment, or devices are compliant with HSC 1418.22.

#### OR

- Documentation with proposed remediation to bring the system, equipment, or device into compliance. (Optional)
- Make, Model, Fuel Type, etc. for Heating System, Cooling System, Generator,(s) and Alternate Power Source(s).

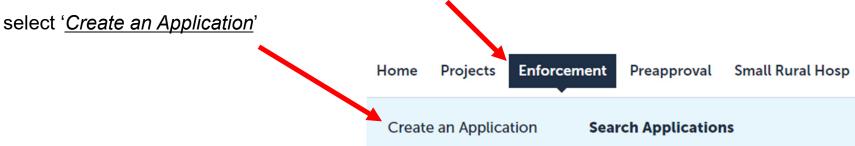
#### System(s), Equipment, and Device(s)

- Heating System(s)
- Cooling System(s)
- Ventilator(s)
- Automated External Defibrillators (AED)
- Crash Cart(s)
- Other Life-Saving Equipment
- Oxygen Concentrator(s)
- o Positive Pressure Apparatus (PPA)
- Oxygen Generation System(s)
- On-site Permanent Backup Generator(s)
- On-site Permanent Alternate Power Source



Once you have documentation finished, go to <a href="https://esp.oshpd.ca.gov">https://esp.oshpd.ca.gov</a>

Log into eServices Portal and navigate to the **Enforcement** module and



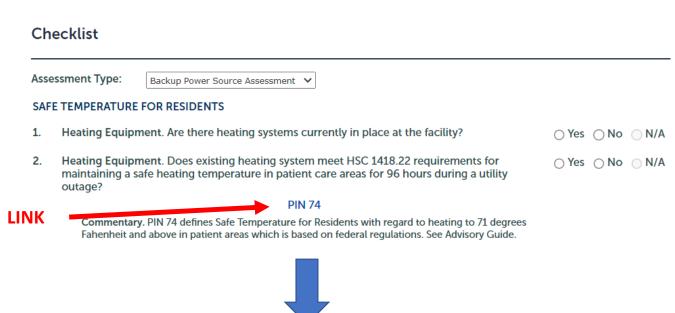




The application involves a series of question about the systems mentioned previously with regards to compliance with HSC 1418.22.

Each question can have commentary and/or a link to a resource.

At the bottom of the checklist, shown are the questions that are yet unanswered.



29d. Alternate Power. Does the alternate power source have a minimum of 6 hours of on-site fuel 

Yes 

No 
N/A storage?

29e. Alternate Power. Does the facility have a fuel delivery agreement to supply the alternate power O Yes O NO N/A source with fuel to comply with the 96 hours operational requirements of HSC 1418 22?







If a system or device is not in use at the facility, a No answer will disable questions in that topic.

As each question is answered, potential, requirements are listed at the end of the checklist.

#### LIFE-SAVING EQUIPMENT

- 19. Ventilators. Are there ventilators using 120V for operation/charging at the facility?
- 19a. Ventilators. Are the ventilators connected to emergency power? This question has been disabled because of your answer to question 19
- 19b. Ventilators. Will the ventilators work in event of utility power outage? This question has been disabled because of your answer to question 19
- 19c. Ventilators. Do the ventilators have provisions to remain energized for 96 hours? This question has been disabled because of your answer to question 19

- Yes 

  No N/A
- Yes No No N/A
- Yes No ⑥ N/A
- Yes No N/A
- 29e. Alternate Power. Does the facility have a fuel delivery agreement to supply the alternate power O Yes O No N/A source with fuel to comply with the 96 hours operational requirements of HSC 1418.22?

#### Requirements based on answers entered:

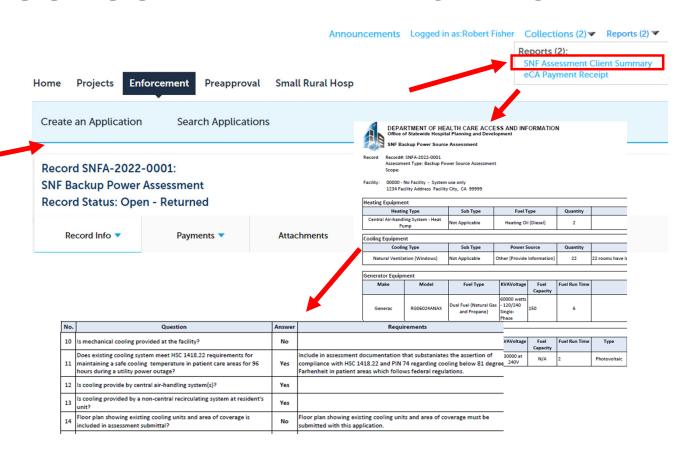
- 1. Floor plan(s) showing existing heating units and area of coverage must be submitted with this applicatioin.
- 2. Submit documentation with proposed remediation to bring facility in compliance with HSC 1418.22 requirements for heating to 71 degrees Farenheit and above in patient areas as detailed in PIN 74 which follows federal regulations.
- 5. Floor plan showing existing heating system location and area of coverage must be submitted with this application.
- 9. Submit documentation with proposed remediation to bring facility in compliance with HSC 1418.22 requirements for heating.
- 10. Floor plan(s) showing existing cooling units and area of coverage must be submitted with this applicatioin.
- 11. Submit documentation with proposed remediation to bring facility in compliance with HSC 1418.22 requirements for cooling below 81 degrees Farenheit in patient areas which follows federal regulations.
- 18. Submit documentation with proposed remediation to bring facility in compliance with HSC 1418.22 and PIN 74 requirements for cooling.



After submission is complete, the requirements displayed on the checklist are available in a report.

View the application details and select the report as shown.

The information entered in the application displayed in the report including the questions, answers and requirements.

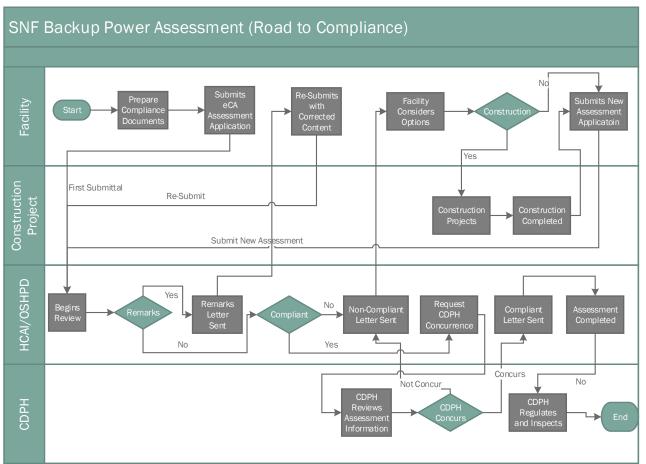




## **AFTER SUBMISSION**

Once the assessment application is submitted, HCAI will perform a review to determine compliance.

The flow chart to the right shows the process to obtain compliance with HSC 1418.22.









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Q1: The bill states "shall maintain sufficient fuel onsite to maintain generator operation for no less than 96 hours or make arrangements for fuel delivery for an emergency event. If fuel is to be delivered during an emergency event, the facility shall ensure that fuel will be available with no delays." PIN 74 specifically states 6 hours of fuel onsite minimum, with arranged delivery. How can we ensure that if we have 6 hours of fuel on site that a delivery can be made within this time period? (note: during earthquakes the roads might be down)

**A1:** Demonstration of compliance with this requirement will need to be included in the assessment report submitted to HCAI. Acceptance by CDPH is required.

**Q2:** If PV's are used as a component of the alternate source, would just the feed to building be evaluated for code and AB 2511 compliance or would the PV's, collectors, inverters etc., need to be seismically certified?

**A2:** If the PV's or any other Distributed Energy Resource (DER) are used as a component of the alternate source designed to provide back-up for cooling equipment, life-saving equipment and oxygen generating devices, the entire system: PV panels, collectors, inverters etc., would need to meet the requirements of AB 2511, (ie have special seismic certification and have provisions for 96 hrs of run time.)



**Q3:** Will the existing electrical infrastructure need to be special seismically certified to meet AB 2511 requirements?

**Q3:** No, it is assumed that the existing facilities are code compliant, so just the new equipment including DER's, ATS's, Distribution Boards, Panels etc. would need to have special seismic certification.

**Q4:** Will existing HVAC equipment need to be special seismic certification to meet ABH 2511 requirements?

**A4:** Existing HVAC equipment will not be evaluated for special seismic certification for AB 2511 driven upgrades. The new bill only addresses new sources.



**Q5:** If fuel cells are used as a component of the alternate source, and they require natural gas service, which are required to have seismic switches to shut off gas service, in the event of an earthquake, how can we meet 6 hrs min on site fuel requirements?

**A5:** We have not seen any designs to date for SNF's to address this challenge. One approach for natural gas DER's would be to provide with a dual fuel option (natural gas and propane for instance) and to provide 6 hrs of propane stored on site, with contracts in place for delivery of propane (if acceptable by CDPH) to meet the 96 hr requirement.

Q6: Can back-up systems be provided that are not seismically certified?

**A6:** All components of required alternate source(es) added to meet AB 2511 requirements will need to have special seismic certification to ensure that they can provide power "during power outages that may result from a public safety power shutoff, an emergency, a natural disaster, or other cause", which is the language contained in the bill.



**Q7:** It was recommended that if the facility intends to shelter occupants in place that kitchen/cooking facilities should be required to be powered by the alternate power source.

**A7:** HCAI does not intend to check power sources for kitchen/cooking facilities to show compliance with AB 2511. Note: CMS Guidance for Emergency Preparedness-Appendix Z of the State Operations Manual (SOM) requires facilities to develop an emergency preparedness plan and includes language for provisions including, but not limited to, food and water for facilities whether they evacuate or shelter in place.

Please see SOM Appendix Z for additional and more specific CMS requirements.

Q8: What is the acceptable delay time for alternate loads to be picked up?

**A8:** We have added the following requirements to PIN 74 to address acceptable delay times:

- 1. Life-Saving Equipment and Oxygen Generating equipment will be required to be restored to back up power within 10 seconds of failure of normal power source
- 2. Cooling and heating equipment will be restored to power within sufficient time to maintain temperature between 70-81 degrees Fahrenheit.



**Q9:** Could the alternate system be used on a daily basis, or does it need to remain "off" and only used when normal power to the site is disrupted?

**A9:** Normally off and normally on backup systems are acceptable. Three possible configurations for the alternate system(s) are:

- 1) CEC 517 Healthcare Essential Electrical System normally off
- 2) CEC 701 Legally required standby system normally off
- 3) CEC 705- Interconnected Electric Power Production Source normally on

For both the "normally off" and the "normally on" systems, the 96 hour fuel back-up (6 hrs on site min) must be maintained at all times. Note CDPH will need to sign off on any designs that do not provide 96 hours of fuel on site.

Q10: How will HCAI handle fuel suppliers, required to guarantee fuel delivery if 96 hrs of fuel not stored on site?

**A10:** If the facility decides to not store 96 hrs of fuel on site, they will need to store a minimum of 6 hrs of fuel on site, and arrange for fuel supplier to guarantee fuel delivery within 6 hrs sufficient to operate back up power equipment for 96 hrs. Demonstration of compliance with this requirement will need to be signed off by CDPH.



**Q11:** If SNF's have been permitted previously, can the design team assume that the facility have met life safety back up requirements?

**A11:** Yes, however please note this new bill does not address life safety branch equipment, this new law requires lifesaving equipment to be backed up for 96 hrs, by a seismically compliant system. Life-saving equipment has a different definition than life safety branch equipment:

- <u>Life-Saving equipment</u> May include but shall not be limited to ventilators, AEDs, crash carts with defibrillators, intravenous therapy equipment, feeding pumps, IV pumps, nebulizer machines, suction equipment, and medication dispensing machines.
- <u>Life Safety branch</u> Shall supply power for egress lighting, exit signs, alarm and alerting systems, communication systems, lighting in dining and recreation area(s), lighting and receptacles at Generator set location, cab lighting and controls for elevators as detailed in CEC 517.43

Q12: How will designers address load calculations for cooling equipment?

**A12:** The current code CEC 220 and HCAI PIN 38 list acceptable means of addressing load calculations, based on the nature of mechanical loads (cooling) required to be backed up, any existing demand load calculations associated with mechanical equipment will need to be based on values metered during the summer months (June 1– August 31).



**Q13:** Can the designer use load shedding values, or take into account partial use of cooling equipment if existing equipment is sized to cool below 81 degrees, in load calculations?

**A13:** For load calculations that do not use nameplate data and/or CEC values for mechanical systems, documentation will need to be provided to demonstrate, automation of set-back conditions and anti-override provisions and provide calculations to justify loads.

**Q14:** Does the alternate power source need to provide power for existing HVAC equipment? Will other options be considered.

**A14:** The PIN does not specify the method of cooling required to allow flexibility for each designer to determine the most appropriate equipment to meet the temperature control requirements. All submitted plans will be reviewed for code compliance and compliance with the new law.



**Q15:** What load should be used to determine required fuel quantities to meet 96 hr run time requirements.

**A15:** The actual demand load taken at 125% should be used to determine fuel quantities required.

**Q16:** What are facilities required to do if their facility already meets the requirements of PIN 74

**A16:** The facilities will need to fill out the survey attached to PIN 74 and submit for concurrence.



**Q17:** There is no defined review timeline for plans; however facilities are expected to have construction completed by the Jan 1, 2024. Is it expected that the plan reviews and approvals be completed prior to implementation?

**A17:** We understand the timeline is short. Completeness of plans that are code compliant and address the new AB 2511 requirements will affect review time. Complete code compliant plans can be reviewed and returned quickly. Remember that added above grade equipment added to sites will need local approval as well as HCAI approval. Construction cannot start until after plan approval and a building permit is issued.



Q18: In order to meet the 96-hour fuel requirements can an above ground tank be utilized?

**A18:** The PIN does not go into detail about methods of fuel storage. Above grade tanks that are designed to meet code would be acceptable.

Q19: Can a hybrid solution be used to meet 96 hr back-up requirements.

**A19:** Yes, multiple resources can be utilized to meet these requirements. Calculations will need to be provided to detail how the 96-hour back-up is provided. Commissioning of the final installation will be required to demonstrate that the installation meets criteria presented in design and calculations.



**Q20**: Based on the fact that CMS requires compliance with 2012 NFPA 99 and 2012 NFPA 101, CMS requirements will not be met if equipment other than an emergency generator is used for the code mandated Emergency power source. Will this affect the approach to AB 2511 upgrades.

**A20:** Possibly, please note there are multiple acceptable solutions. Three possible configurations of the alternate system(s) are:

- 1) CEC 517 Healthcare Essential Electrical System
- 2) CEC 701 Legally required standby system
- 3) CEC 705- Interconnected Electric Power Production Source
- For the CEC 517 solution where the code mandated emergency power requirements are fed by the same source that feeds the new AB 2511 loads, the source will need to be a generator to qualify for Federal reimbursements. For the CEC 701 and CEC 705 solutions, which leave the existing generator as is and introduces new sources to back up AB 2511 loads, the system would meet CMS requirements even if sources other than emergency generators are used.
- Note: as CMS requirements are different from current code requirements, if our office determines that the proposed design meets current code, but does not meet CMS requirements, we will only provide a blue pencil (for your information only) comment.



# Thank you

