PIN 74 - Skilled Nursing Facilities: Backup Power Source

Q and A

- When this Webinar is over where can I get a copy of this recording? I would like it to train my Maintenance Directors. **Q1**
- The session is being recorded and will be uploaded to the HCAI website in approximately 4 5 weeks following closed captioning and website accessibility. A1
- Will a link to the assessment be made available? Q2
- A2 Here is file path to find: hcai.ca.gov >> Building Safety & Finance>> eServices Portal Information > eServices Help & User Guides > User Guide #22 (SNF Backup Power Source Assessment).
- Q3 Are all SNF's required to go through the assessment and upgrade their generators to meet the 2024 deadline?
- A3 Yes, the assessment is required. If deficiencies exist, upgrades to the systems will need to be made by January 1, 2024, to comply with the law. (Note: generators are not the only option.)
- Q4 When is the completion of the assessment application required?
- There is no defined review timeline for assessment application; however, facilities are required to have construction completed by the Jan 1, 2024. Is it recommended that facilities begin the assessment application ASAP. A4
- Q5 If existing heating is provided by natural gas, diesel or propane, is there any additional requirement for alternate fuel source? Alternate fuel source is not required for heating hospital. A5 AB 2511 is designated to provide an alternate power source for specified items. An alternate fuel source for fuel burning equipment is not included in the scope of this bill.
- Q6 Does emergency power need to be hooked up to heating and cooling equipment?
- A6 Previous versions of the California Electric Code (CEC) required heating to be supplied by essential power. The new law now also requires an alternate source for cooling, note: this could be accomplished by other means than essential power. 2 solutions that would meet the requirements of the law and codes, are a CEC 701-Legally Required Stand-by System, and an CEC 705-Interconnected Electrical Power Supply Sources. Any solution required will need to meet current codes and new requirements specified in HSC §1418.22.
- Q7 Can there be a designated area for each SNF that meets these requirements or would this have to be met project wide.
- A7 The assessment will need to show which portions of the building are required for patient care, and temperature control will need to be provided to maintain temperatures between 71 and 81 degrees F. 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.)
- For existing facilities, HVAC equipment is very likely not seismically certified if not sub-acute. This HVAC equipment would have to be replaced with seismically certified equipment, correct? **Q8**
- A8 Seismic certification will be required for new equipment or when equipment is replaced. Existing, installed equipment will not be checked for seismic compliance.
- Q9 Is Special Seismic Certification (SSC) now required for all new HVAC equipment serving all skilled nursing facilities, or is SSC only required for new HVAC equipment required to maintain a "safe temperature for residents"? For example, would SSC be required for items such as air conditioning equipment solely serving admin spaces, kitchen hood exhaust systems, or HVAC equipment serving electrical equipment rooms?
- A9 Special seismic certification is required for the new equipment listed in CBC 1705.14.3.1 and for new equipment installed to provide safe temperature for patients as noted in HCAI Pin 74 to meet AB 2511 requirements.
- Q10 Would this mean that OSP #'s are required for all HVAC Equipment?
- A10 Existing HVAC equipment will not be evaluated for Special Seismic Certification for AB 2511 driven upgrades. The new bill only addresses new sources.
- Will a natural gas connection for fuel satisfy my requirement for the 96 hrs. Q11
- A11 No. The facility will need to store 96 hours of fuel on site, or as the bill says arrange for fuel delivery sufficient to operate alternate power equipment for 96 hrs. The facility will need to store a minimum of 6 hrs. of fuel on site at all times. Any configurations/arrangements other than 96 hours of fuel stored on site will need to be reviewed and approved by CDPH.
- Is the 96 hours of fuel based on design load or the generator's rating? Q12
- A12 NFPA 110 requirements for sizing fuel tanks based on the generators rating will apply for both the CEC 517 (emergency power) and the CEC 701 (Legally Required Standby Systems) solutions. If the solution is not one of these two, CEC 705 Interconnected Electric Power Production Sources for instance, the sizing of the fuel tank (or other stored energy resources) could be determined by actual demand load taken at 125%.

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- NFPA 110 indicates fuel stored for 96 hours based on the running maximum kW rating of the generator. On this specific PIN 74 are we following PIN 38 to size the fuel stored in lieu of the generators max kW rating? Q13
- A13 NFPA 110 requirements will apply for both the CEC 517 (emergency power) and the CEC 701 (Legally Required Standby Systems) solutions. If the solution is not one of these two, CEC 705 Interconnected Electric Power Production Sources for instance, the sizing of the fuel tank (or other stored energy resources) could be determined by actual demand load taken at 125%.
- Q14 If a LP tank has 96 hr. capacity, is propane engine generator approved?
- Solutions will need to be code compliant, meet all associated ordinances, APCD requirements, utility requirements, pick up loads within 10 seconds etc.. including the new requirements of the law regarding ability to operate after a A14 seismic event and with provisions for 96 hrs. of operation.
- Q15 Clarification question. If the facility has a diesel generator backup but does not have 96 hour fuel supply. Can you not apply for the option of being able to deliver the fuel to get to the 96 hours?
- A15 PIN 74 specifically states 6 hours of fuel onsite minimum, with arranged delivery. Demonstration of compliance with this requirement will need to be included in the assessment report submitted to HCAI. Acceptance by CDPH is required. Note the bill has added requirements for cooling, life-saving equipment and oxygen generating devices to have alternate power source(s).
- Q16 Are there safety issues of storing much fuels for 96 hours?
- Yes, you will need to meet all NFPA codes requiring fuel storage. HCAI has provided a reminders list for both above and below grade tanks this can be found by googling HCAI reminders list and PIN 2. A16
- Do you know of any AQMD leniency for proposed new generators due to the short time deadline? Q17
- No, we have not heard of any. A17
- Q18 Is there any provision listed as to the flood plan level or high above Grade?
- Based on the requirement for the alternate source to operate "during power outages that may result from a PSPS event, an emergency, a natural disaster, or other cause" the DER's would need to be installed above the flood plain A18 level. The alternate power sources will have essentially the same requirements for the Location of Essential Electrical System Components which can be found in CEC 517.30(C).
- Q19 Is there is a diesel fuel source that is exempt from Air Resource rules for testing and actual runs.
- We are not aware of any, we recommend you contact the Air Resource Board for more info regarding testing start-up requirements. A19
- Q20 Does the microgrid equipment need to be seismically certified? If so, does that equipment currently exist?
- Yes, the alternate power source(s) will need to be seismically certified. We recommend that you check with vendors to determine what product are available that have SSC. A20
- Q21 For added legally-required generators (in addition to existing 517 generators), do the added generators need to be NFPA 110?
- Yes, for 701 Legally required standby systems, NFPA 110 requirements would be enforced. A21
- Q22 In scenario 2, when installing a new generator under CEC 701. It would then be required have selective coordination rather than 0.1 coordination per section 517, correct?
- A22 Yes, that requirement is in code CEC 701.27 Selective Coordination.
- When re-feeding an existing normal branch panel from an emergency branch, surge protection would be required to be added, but an OSP for the panel would not be required if the panel is physically not relocated, correct? Q23 Yes, these are both correct assumptions, and would result in a code compliant design. A23
- Q24 Option 3 included a requirement for a temporary generator connection. Wouldn't this connection be made to the EDB, not the MDB?
- As far as code requirements are concerned, either point of connection would be compliant. The design as implemented will need to meet functionality requirements as well. Final project will need to be commissioned. A24
- 2022 CFC Section 1207.1.1(Table) Energy Storage System (ESS) Threshold Quantities with batteries Lithium-ion batteries not to exceed energy capacity 20kWh. If exceeds, then requires more Plan reviews and permitting with Q25 Reporting to CalEPA.
- A25 Yes, if the capacity exceeds that in Table 1207.1.1 additional requirements are to be met, including but not limited to additional permits and approvals, potential of a fire resistance rated room, etc. There are several requirements throughout the CFC and CBC that will also need to be met. Please see all applicable codes.

January 18, 2023