

**AB-2511
SOLUTIONS**

AB-2511 Microgrid Solution



AB-2511 Skilled Nursing Facilities Requirements

AB-2511 requires SNFs to provide backup electric power to the following

- Equipment required to maintain safe temperatures for residents
- Life saving equipment
- Oxygen-generating devices

AB-2511 requires SNFs to provide sufficient fuel onsite to maintain power production for no less 96 hours or have an agreement for fuel delivery during an emergency event

HCAI / OSHPD has implemented Policy Intent Notice (PIN) 74 to get SNFs compliant with AB-2511

HCAI Policy Intent Notice 74

On Site Source of Power Assessment

- A power assessment must be performed and submitted to HCAI with all required information
- A remediation plan must be submitted with the assessment
- A letter from HCAI will be sent out to let you know if you are compliant or not
- ***COMPLETION OF THE ASSESSMENT DOES NOT MAKE YOUR FACILITY COMPLIANT***

HCAI Policy Intent Notice 74

Remediation Options

1. Re-route all required equipment and panels to an existing emergency back-up generator that can handle the additional load and has 96 hours of onsite fuel
2. Add an additional emergency back up generator and automatic transfer switch to cover the non-connected emergency loads with 96 hours of onsite fuel
3. Add a microgrid with cogeneration that will run 24 hours, 7 days a week and provide all electricity needs for the entire facility with 96 hours of onsite fuel

3 Steps to Compliancy - Step 1

Complete the Power Assessment

- If you have not done so yet, then we can complete and submit the power assessment for you with all attachments and the remediation plan
- Needs to be done before January 1st, 2023

3 Steps to Compliancy – Step 2

Choose One of the PIN 74 Options and Sign An Agreement

- Once you choose the option you are going to move forward with, sign an agreement with us before January 1st, 2024 and you will be temporarily compliant.

3 Steps to Compliancy - Step 3

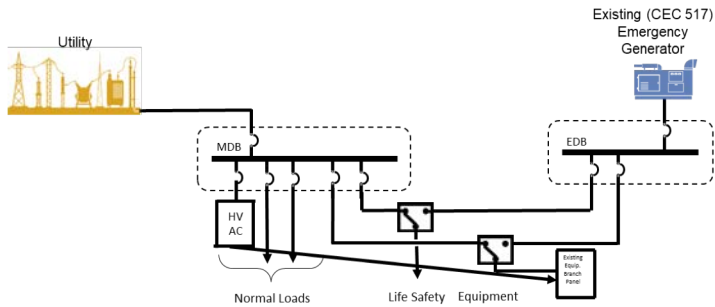
Design Build Engineering & Construction of Your Project

- With your contract signed, we will move forward with the design build phase of your project
- Equipment for these projects have lead times from 27 to 52 weeks.



All 3 Solutions Require Investment Only 1 Pays For Itself

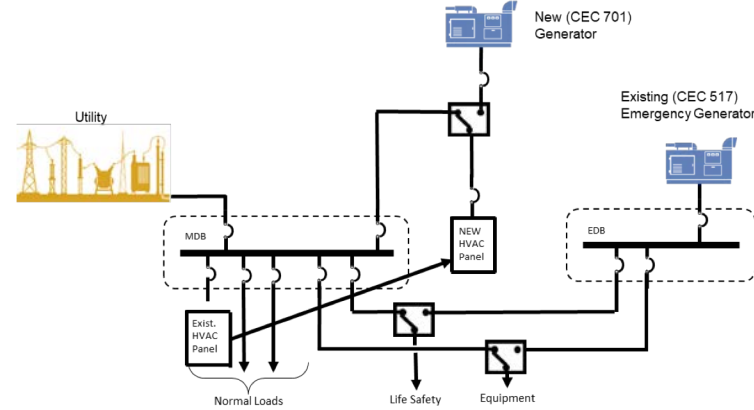
Additional loads to existing emergency Generator(s)



Requirements:

- Re-feed of HVAC loads required (existing equipment panel will need to have adequate capacity)
- Existing Emergency Generator will need to have adequate capacity for added loads and have provisions for 96 hours of fuel
- If life-saving equipment and oxygen-generating systems not connected to emergency will need to be re-fed with emergency power

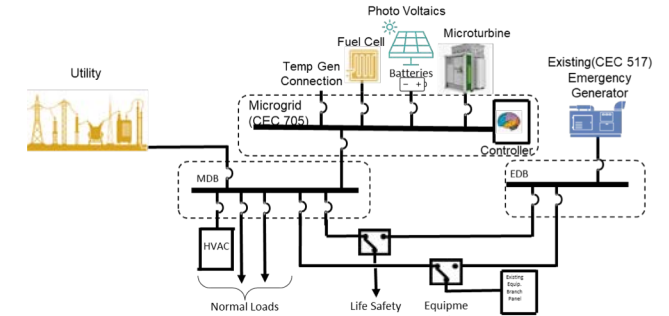
New or additional Generator



Requirements:

- Re-feed of HVAC loads required
- New Generator/ATS/Panel will need to be seismically certified with 96 hours of fuel required
- Existing generator will need provisions for 96 hours of fuel

New Microgrid



Requirements:

- New Microgrid will need to be seismically certified with 96 hours of fuel provisions -6 hours of fuel for Existing Emergency Generator
- Quick connect for temporary generator required
- 125% of DER's + MDB main breaker rating < 120% MDB bus rating

Switchgear Upgrade

The Majority of Facilities Will Have to Replace Their Switchgear

- All options will tie into your switchgear, and this will be inspected by the OSHPD IOR during the project implementation
- Most existing switchgear is beyond its service life
- Most existing switchgear is not large enough to handle the additional load required
- Due to the age of the facilities and switchgear, parts are no longer available



Which Option is the Best?

The Microgrid Solution

- This solution pays for itself in 2 to 4 years with a cash purchase
- This solution is cash flow positive from day one with a financed option
- The financed option can also be off balance sheet
- The microgrid solution qualifies for up to a 40% subsidy through Inflation Reduction Act for both profit and non-profit
- The microgrid solution qualifies for the Federal Bonus Depreciation
- The microgrid provides power for your entire facility and runs 24 hours a day, 365 days a year
- You no longer will need to buy electricity from the grid at a very high rate per kilowatt hour
- If the grid goes down your entire load will continue to operate
- The microgrid solution will also provide heating for your domestic hot water which will save 30 to 40 percent of your natural gas charges

SNF Case Study

149 Bed Skilled Nursing Facility in Northern California

- Current annual electric and natural gas cost \$395,662
- Switchgear over 25 years old and pass its life expectancy
- HVAC and Heating not connected to existing backup generator
- Existing back up generator too small to add additional load to

Remediation Plan

- Assessment complete
- Design build for a 420KW BSD Special Seismic Certified Combined Heat and Power generator
- Replace existing switchgear
- Onsite compressed natural gas tank

SNF Case Study Financial Results

Total Cost (CAPEX):	\$2,358,883
Finance Option Annual Payment:	\$355,500
Incentives:	\$1,548,370
Simple Payback:	2 Years
Finance Option Payback:	Cash Flow Positive
25-Year IRR:	13.54%
25-Year ROI:	640.73%
Net Present Value:	\$4,963,575
Average Annual Savings:	\$604,562
25 Year Savings:	\$14,273,436

About Combined Heat and Power

- Natural gas reciprocating combined heat and power generator.
- Hot water is generated from heat recovery through the boilers or water heaters.
- Along an SCR, Heat Exchanger, Exhaust Gas Silencer, and Island Mode Capability.
- Long-duration (unlimited) power.
- Guaranteed 95% availability.



Natural Gas Emergency Backup Generator

Cummins gaseous generator sets are the industry benchmark for quality, reliability and performance. With this solution you will have the additional emergency backup power required by AB2511, however, this solution has no payback.



Get started today.

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