HCAI Department of Health Care Access and Information
2020 West El Camino Avenue, Suite 800
Sacramento, CA 95833
hcai.ca.gov

***** SPECIAL NOTICE *****

This meeting will be held in-person at the locations noted below, as well as by teleconference. Committee members and members of the public may fully participate from their own locations.

NOTICE OF PUBLIC MEETING

HOSPITAL BUILDING SAFETY BOARD
JOINT MEETING:
Codes and Processes Committee
Energy Conservation and Management Committee
Technology and Research Committee

Date:
Tuesday, November 1, 2022
1:00 p.m. – 4:00 p.m.
Please note late start time.

Locations:
Department of Health Care Access and Information
2020 West El Camino Avenue, Suite 930
Sacramento, CA 95833

Department of Health Care Access and Information
355 South Grand Avenue, Suite 2000
Los Angeles, CA 90071

Teleconference Meeting Access:
HBSB Teams Joint Committee

For more detailed instructions on how to join via Microsoft Teams, see pages 3 – 4.

Codes and Processes Committee Members:
Michael O'Connor, Chair; Jim Malley, Vice-Chair; Cody Bartley, Louise Belair; John Donelan*; Gary Dunger*; John Griffiths; Mark Hershberg*; Mike Hooper; Scott Jackson; Michele Lampshire; Scott Mackey; Farzad Naeim

1. **Call to Order and Welcome**
   Facilitator: Michael O’Connor, Codes and Processes Committee Chair (or designee)

2. **Roll Call and Meeting Advisories/Expectations**
   Facilitator: Ken Yu, Executive Director (or designee)

3. **HCAI Policy Intent Notice (PIN) “Skilled nursing facilities: backup power source”**

   Facilitators: Chris Tokas, Ali Sumer, HCAI (or designees)

   - Assembly Bill 2511, signed August 2022, requires skilled nursing facilities to have an alternative source of power to protect resident health and safety, for no fewer than 96 hours during any type of power outage. The new PIN describes how this new statutory program will be implemented.
   - Discussion and public input

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.

Facilities Development Division
Department of Health Care Access and Information
2020 W. El Camino Ave, Suite 800 • Sacramento, CA 95833 • (916) 440-8300
355 S. Grand Ave, Suite 1900 • Los Angeles, CA 90071 • (213) 897-0166

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.

PIN: 74

Effective: XX/XX/XXXX

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 licensing 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.

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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).

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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^{o}-75^{o}F.

“Safe temperature” under emergency conditions: Federal Code of Regulations, Title 42, §486.73(b)(1)(ii)(A), CMS emergency preparedness requirements, states, "alternate source 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 ^{o}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, power beds/pressure mattresses, 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 shall conform to one or more of the following requirements as applicable:

1) Title 24, California Electrical Code, Part 3, ARTICLE 517.29 through 517.30 for SNF Subacute units
2) Title 24, California Electrical Code, Part 3, ARTICLE 517.40 and 517.41 Essential Electrical Systems for Nursing Homes and Limited Care Facilities
3) Title 24, California Electrical Code, Part 3, ARTICLE 701 for legally required standby systems
4) Title 24, California Electrical Code, Part 3, ARTICLE 705, Interconnected Electric Power Production Sources
5) Special seismic certification of equipment, Title 24, California Building Code, Part 2, Volume 2, Section *1705A.13.3*
   and
6) 96 hours of on-site fuel storage (or an approved Emergency Preparedness plan).

ANALYSIS

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 or contract 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. Fuel storage shall not be less than 6 hours capacity in a minimum of one tank. CDPH must approve any alternate arrangements that have been made for the delivery of fuel.

ANALYSIS

Alternative Source of Power

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 to provide sufficient power to comply with state requirements for long-term care facilities. For all options a minimum of 6 hours of on-site fuel is required.

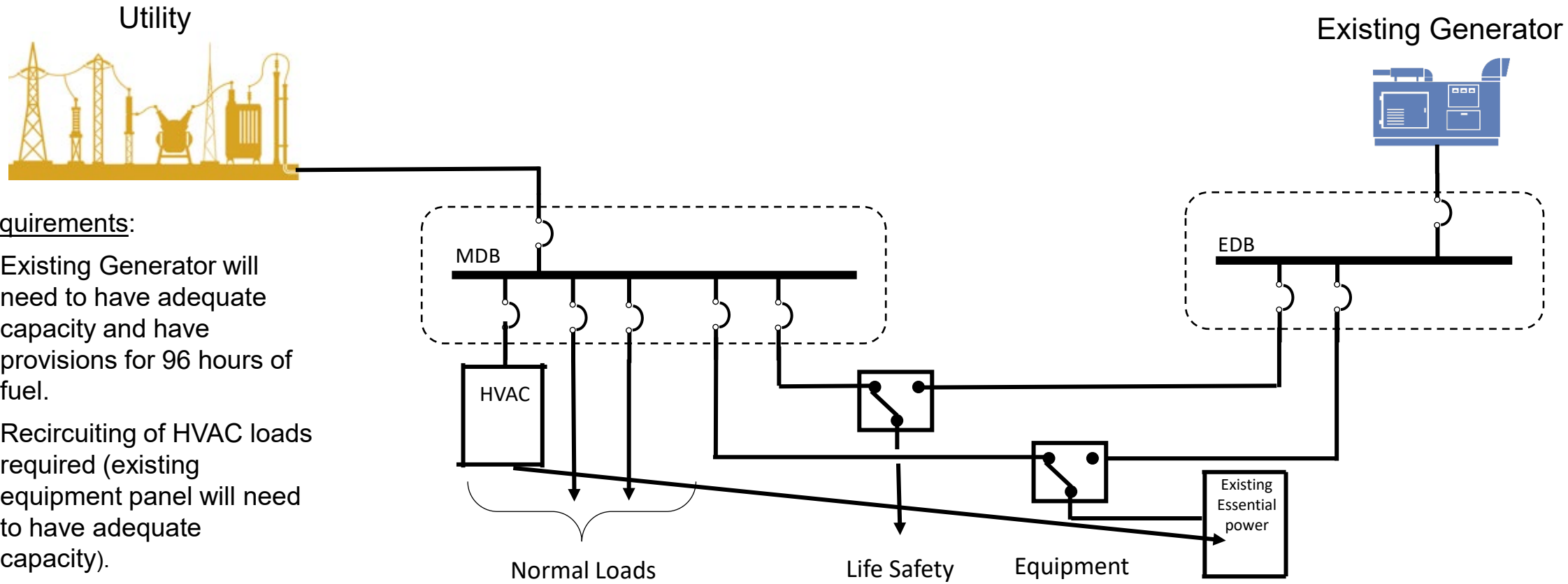
ANALYSIS

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

1) Add New Loads to Existing or Replacement Emergency Generator: Where an existing or replacement emergency generator meets Title 24, California Electrical Code, Part 3, 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 or modified to meet HSC §1418.22 for safe temperatures, life-saving equipment, and oxygen-generating devices as identified above. A 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 Generator

Existing SNF: No life-saving equipment or oxygen-generating systems.

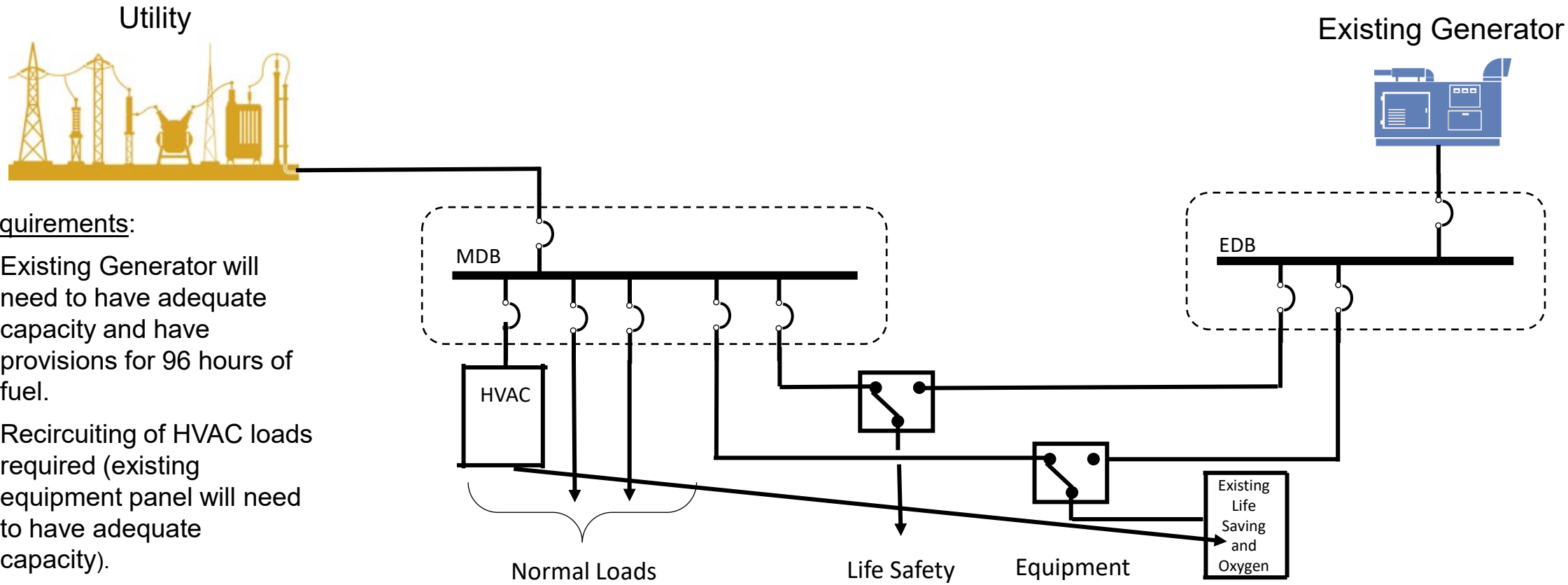


Requirements:

- Existing Generator will need to have adequate capacity and have provisions for 96 hours of fuel.
- Recircuiting of HVAC loads required (existing equipment panel will need to have adequate capacity).

1A) Subacute SNF–Existing Generator

Existing SNF: Life-saving equipment and/or oxygen-generating systems.



Requirements:

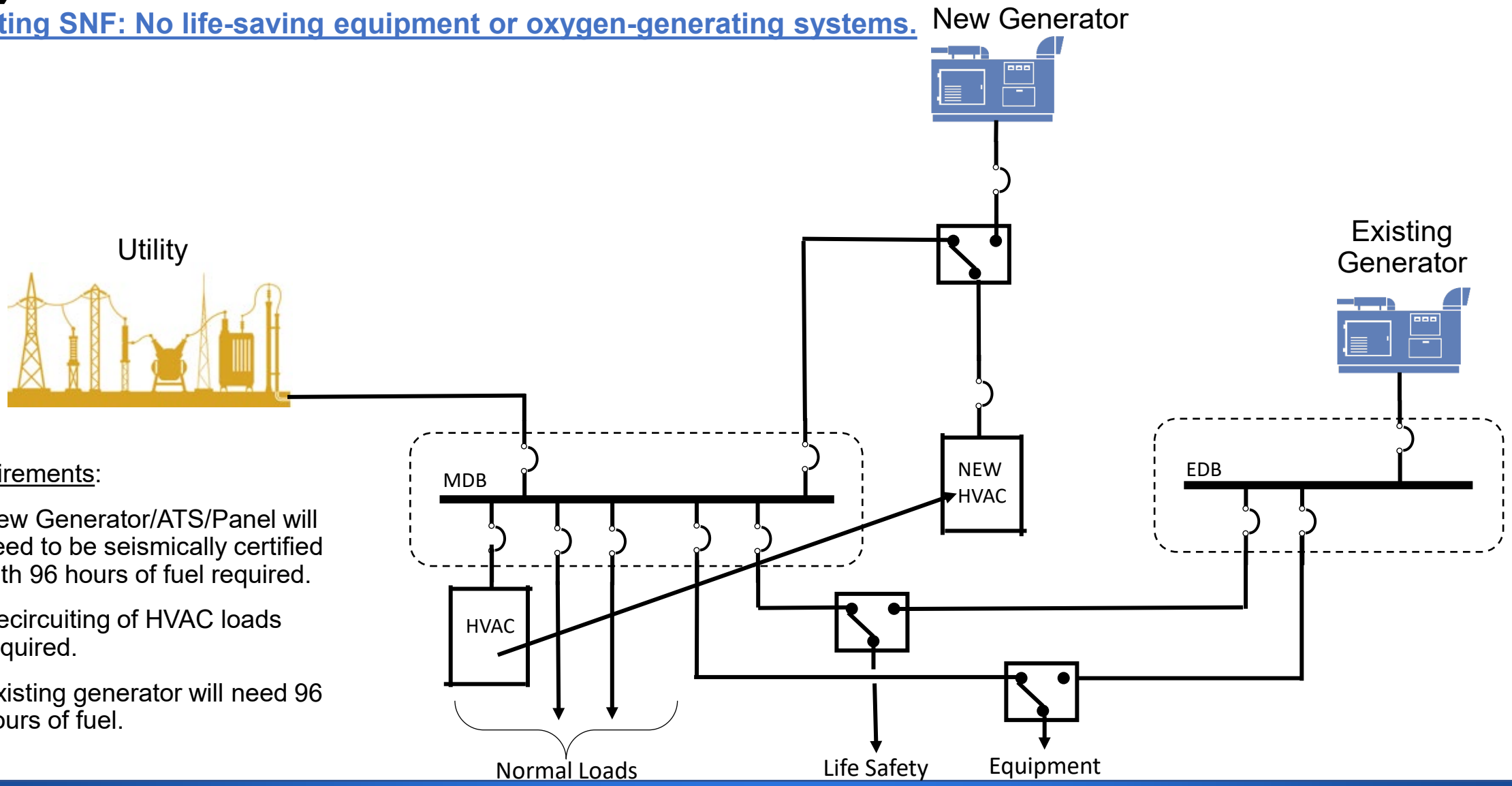
- Existing Generator will need to have adequate capacity and have provisions for 96 hours of fuel.
- Recircuiting of HVAC loads required (existing equipment panel will need to have adequate capacity).

ANALYSIS

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 requirements. The new generator and equipment shall meet Title 24, California Electrical Code, Part 3, 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. In addition, the existing emergency generator would need to have 96 hours of fuel provisions and continue to feed emergency loads as defined in Title 24, California Electrical Code, Part 3, ARTICLE 517.

2) Standard SNF–New Generator

Existing SNF: No life-saving equipment or oxygen-generating systems.



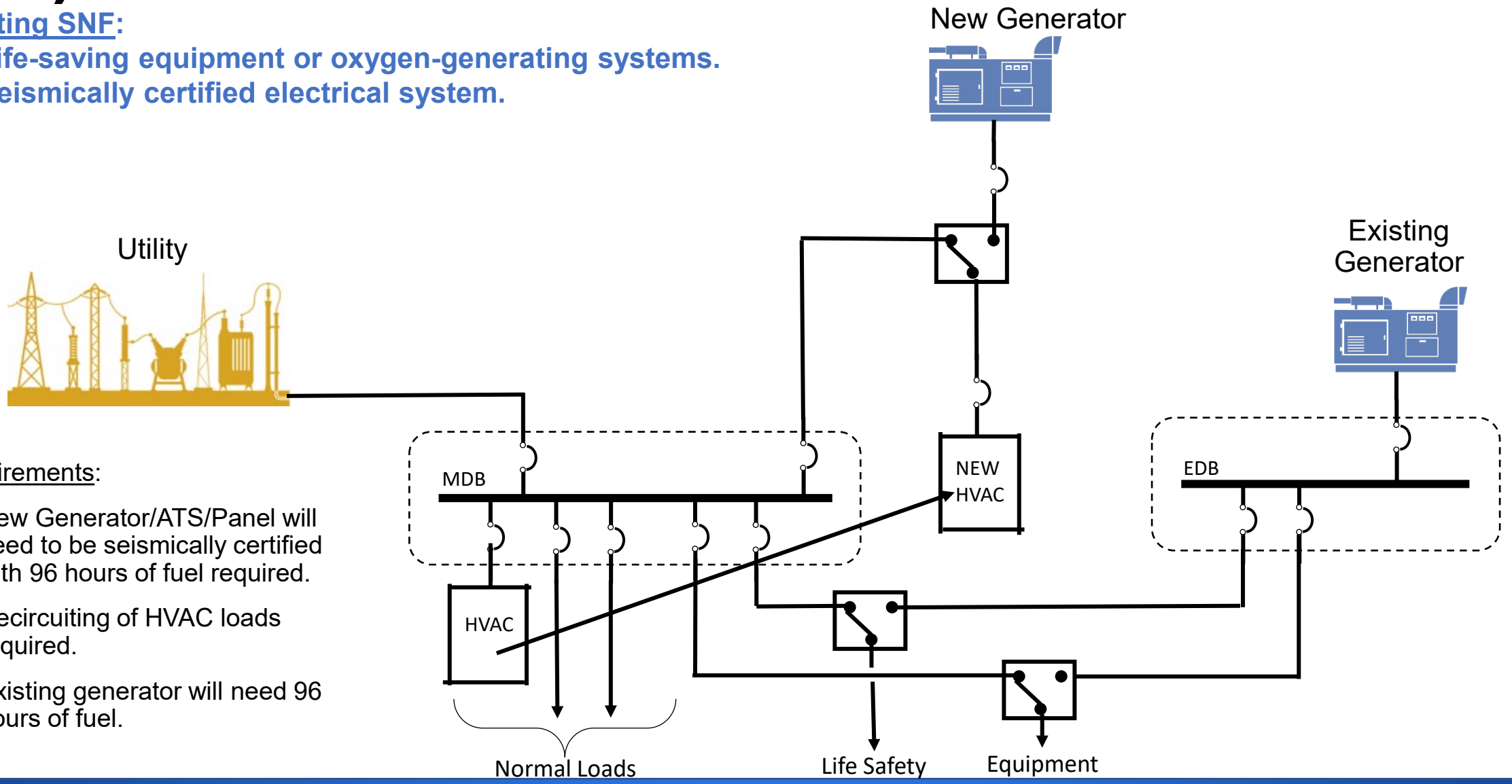
Requirements:

- New Generator/ATS/Panel will need to be seismically certified with 96 hours of fuel required.
- Recircuiting of HVAC loads required.
- Existing generator will need 96 hours of fuel.

2A) Subacute SNF–New Generator

Existing SNF:

- **Life-saving equipment or oxygen-generating systems.**
- **Seismically certified electrical system.**



Requirements:

- New Generator/ATS/Panel will need to be seismically certified with 96 hours of fuel required.
- Recircuiting of HVAC loads required.
- Existing generator will need 96 hours of fuel.

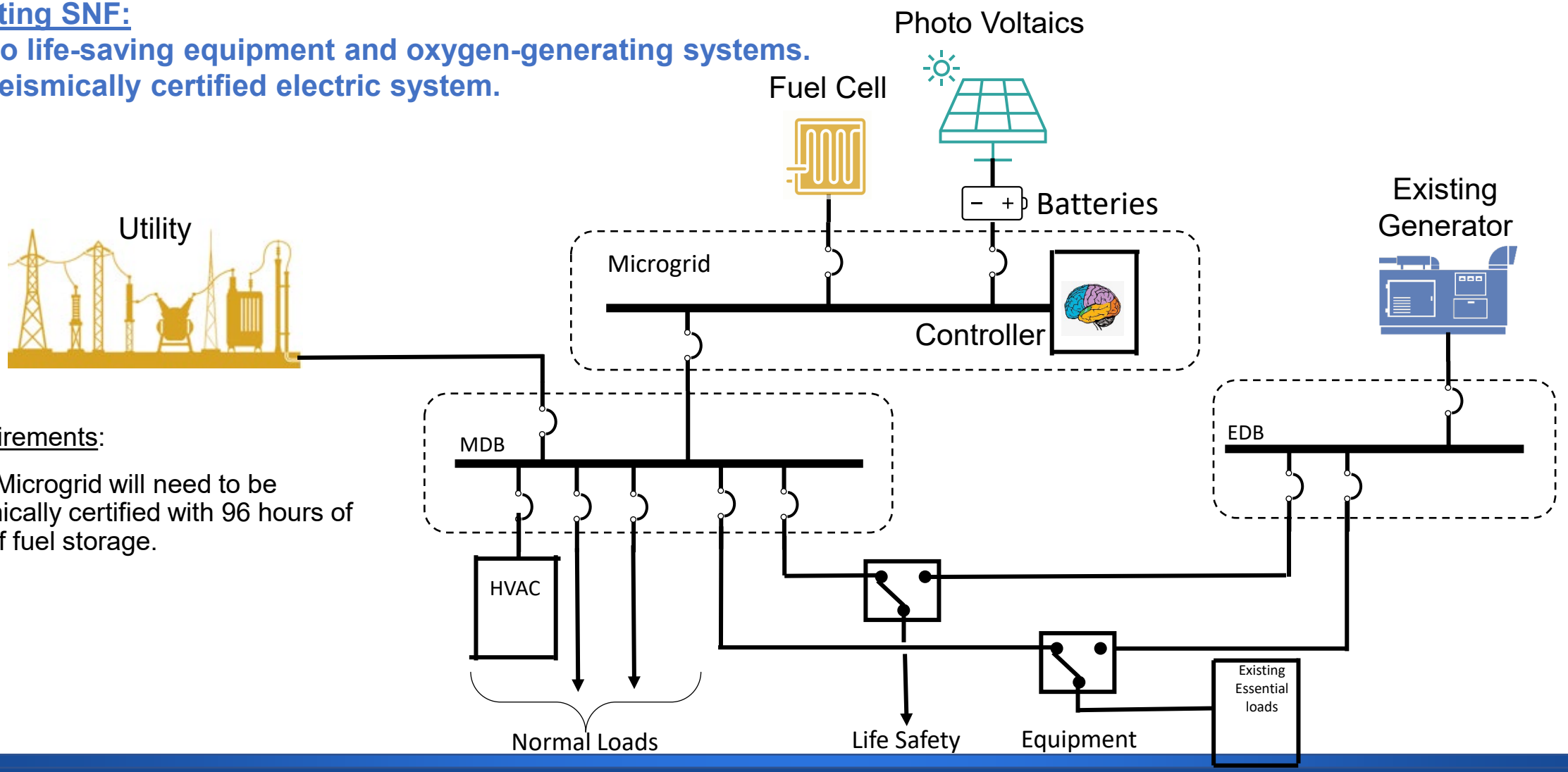
ANALYSIS

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 would 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, new equipment in the distribution system from the point where the microgrid ties into the system and extends to the boards that feed the required loads shall also 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

Existing SNF:

- **No life-saving equipment and oxygen-generating systems.**
- **Seismically certified electric system.**



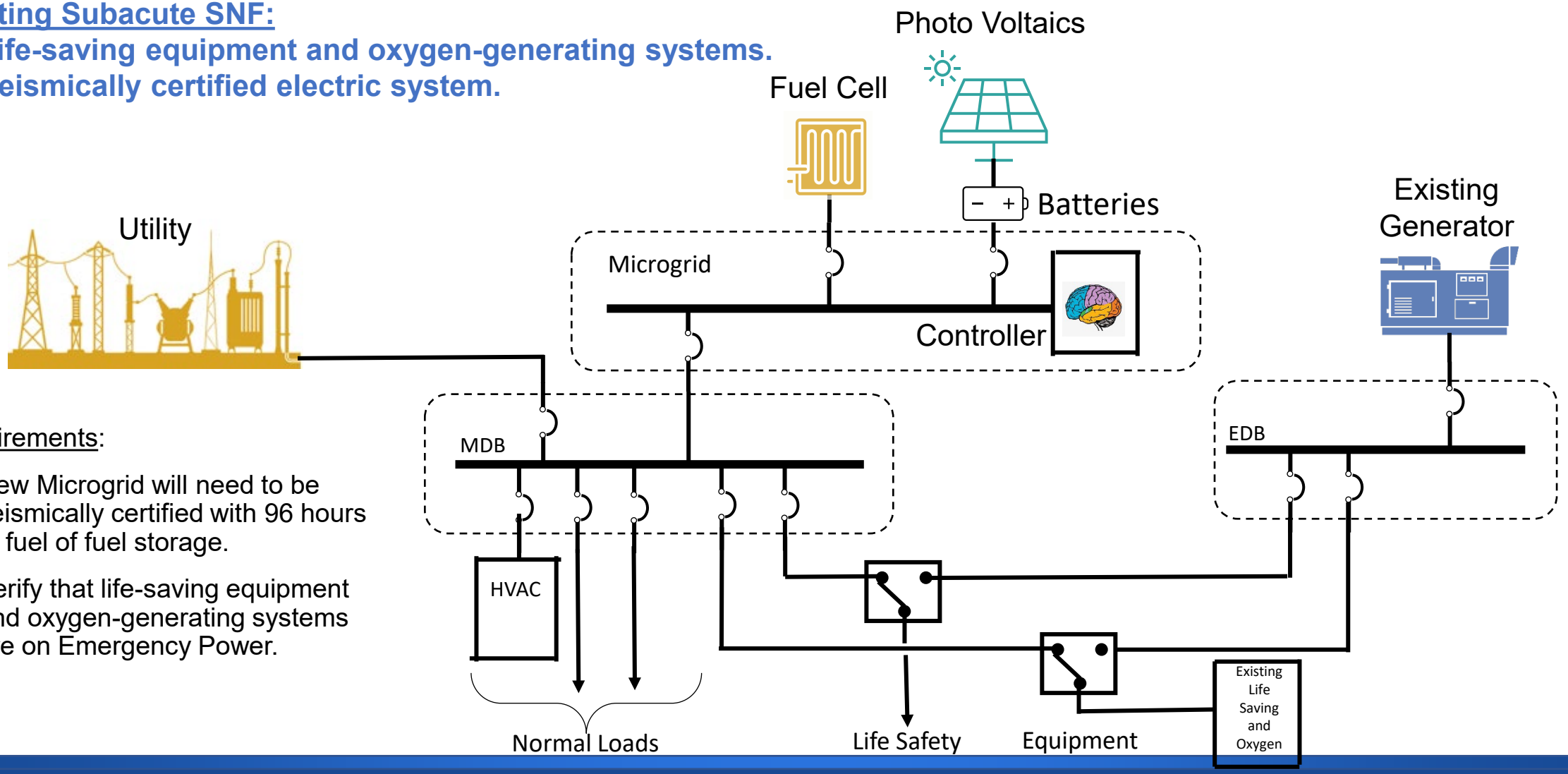
Requirements:

New Microgrid will need to be seismically certified with 96 hours of fuel of fuel storage.

3A) Subacute SNF–Microgrid Parallel w/Utility

Existing Subacute SNF:

- **Life-saving equipment and oxygen-generating systems.**
- **Seismically certified electric system.**



Requirements:

- New Microgrid will need to be seismically certified with 96 hours of fuel of fuel storage.
- Verify that life-saving equipment and oxygen-generating systems are on Emergency Power.

On-Site Source of Power Assessment

SNFs shall submit an evaluation of on-site sources of power under the provisions of HSC §1418.22. Appendix A provides an 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 will be used by SNFs and HCAI to achieve the implementation goals of the statute.

APPENDIX A

SKILLED NURSING FACILITY
SAMPLE ASSESSMENT CHECKLIST OF ON-SITE SOURCE OF POWER

	HSC §1418.22 Compliance Requirements	Yes	No	Description/Explanation
Safe-temperature for residents				
	Heating			
	Are there heating systems currently in place at facility?			
	Does existing heating system meet HSC §1418.22 requirements (maintains temps above 71 deg)			
	List Equipment and fuel source(s)			
	Is heating provided at unit or is there a central system for the facility?			
	Is heating system connected to emergency power?			
	Will heating system work in event of utility power outage?			
	Does the facility currently meet HSC §1418.22 requirements - if not, attach a page and propose remediation to bring facility in compliance with bills requirements.			
	Cooling			
	Are there cooling systems currently in place at facility?			
	Does existing cooling system meet HSC §1418.22 temperature requirements (maintains temps below 81 deg in patient care areas?)			
	List Equipment			
	Is cooling provided at unit or is there a central system for the facility?			
	Provide marked up floor plan showing existing units and area of coverage.			
	Is cooling system connected to emergency power?			
	Will cooling system work in event of utility power outage?			
	Does the facility currently meet HSC §1418.22 requirements - attach a page and propose remediation to bring facility in compliance with bills requirements.			
Life-saving Equipment				
	Are there any of the following at your facility:			
	120V operating/charging - Ventilators			

HCAi
Department of Health Care Access and Information

Questions?

4. **Comments from the Public/Committee Members on issues not on this agenda**

   Facilitator: Michael O’Connor, Codes and Processes Committee Chair (or designee)

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