

RELi 3.0 HA Req. 2.0 Backup Power Update

– Prerequisite for service structures the public requires. Optional credit for all other structures –

Assumptions: Hospitals, police, fire, utility, communications, and other structures the public requires must operate continuously or almost so in order to effectively serve their mandated public need. Accordingly, for critical facilities, backup power is a RELi prerequisite. Other structures like commercial buildings and homes, backup power is an optional credit.

Existing Duration Requirements

Proposed 3.0 Update

Prerequisite:

BACK-UP POWER TIME DURATION TABLE

FACILITY TYPE	TIME DURATION FOR BACK-UP POWER
BASELINE FACILITIES	
Residential Buildings, lodging, hospitals, nursing homes, emergency shelters and emergency facilities: fire stations, 911 call centers, police stations and similar.	Four consecutive days, 24 hours per day.
FUNDAMENTAL COMMUNITY SERVICE ORGANIZATIONS	
Pharmacies, convenience stores, grocery stores and facilities with significant stocks of refrigerated or frozen food and ATMs* (Automated Teller Machines) at these facilities	Four consecutive days, eight hours each day during daylight hours for general operations. Refrigeration and freezers, four consecutive days, 24 hours per day.
Gas Stations	Four consecutive days, 12-hours each day (or until fuel stocks are exhausted), primarily during daylight hours. Back-up power or built-in hand pumps for fuel distribution.
*ATMs at banks, credit unions and other similar facilities such as malls	Powered during regular business hours.
SOLAR + WIND ELECTRIC BACK-UP POWER SYSTEMS WITH ENERGY STORAGE	
For all facilities identified above, except hospitals, nursing homes and emergency facilities.	One-half of the duration of back-up power as identified as described above (excluding elevators) for solar or wind electric systems and battery storage. Gas stations must have built-in hand pumps for fuel distribution.

*Cleaner burning fuels include natural gas (if allowed by local code)

AND

Exception

Elevator operation must be maintained as required by code only for emergency facilities such as 911 call centers, fire or police stations. Hospitals must maintain the operation of elevators serving staff and patients.

Prerequisite:

Baseline critical service structures identified in HA Req. 2.0 in the first column of this table, must continue to provide backup power as prescribed.

Optional Credit:

Fundamental community service organizations, commercial and retail buildings are non-critical structures and can achieve backup power optional credit. Backup power must be solar, wind or electric storage. Either the whole structure or safe zones must have backup power.

RELi 2.0 Appendix B backup power guidance remains as is.

For Prerequisite & Optional Credit. Either the whole structure or safe zones must have backup power. Safe zone must be 30 ft² per person for hospitals, and 20 ft² per person for other facilities. Lighting, communications, computer access and power for heating and cooling must be provided. Passive approaches are allowed like windows and must achieve thermal safety temperatures specified in RELi HA Req. 3.0.