

NCSO COMMUNITY CENTER EOC BACKUP POWER OPTIONS

WHAT IS AN EOC?

When major emergency events occur in a community it is standard operating practice (SOP) to activate an emergency operating center (EOC) at a pre-designated physical location. Representatives from Fire Department, Law Enforcement, Highway Patrol and County and Local Government Agencies staff the EOC and are able to interface one-on-one with each other to provide efficient support to address the needs of the community during the emergency. In Newberry Springs, the Fire Chief has specified that the NCSO Community Center, located at the CSO building, will be the location of the EOC.

WHAT POSSIBLE EMERGENCIES MIGHT REQUIRE EOC ACTIVATION?

1. A major earthquake.
2. A Clearway lithium-ion battery fire.
3. A railroad derailment with a fire or a hazardous materials spill.
4. A freeway accident with a fire or a hazardous materials spill.
5. A weapons accident or an attack at one of the Marine Corp Logistics Depot locations in Barstow, Daggett or Yermo.
6. A large commercial or military airplane crash.

WHAT NEEDS TO BE PROVIDED?

110-volt AC power for lighting, heating or cooling (depending on season), computer and communications equipment, Internet access.

240-volt AC power for operating the well pump to supply water.

WHAT ARE THE CHOICES FOR THE BOARD?

The Board needs to discuss and decide on a budgetary range for the project and the best NCSO account from which to fund the project (if approved).

OPTION 1 – LOWEST COST, FASTEST TO IMPLEMENT

This option consists of one transportable backup dual-fuel (gasoline/propane) 10 kilowatt (KW) or larger generator placed outdoors during operation with extension cords running indoors to supply 110-volt AC power to multiple-outlet distribution strips. This option would provide AC power for the operation of 1) portable lights, 2) portable heaters for winter heating or portable fans for summer cooling, 3) electronic communications equipment including portable (i.e. laptop) computers. This same backup generator can simultaneously supply 240-volt AC power to a permanently-mounted transfer switch to operate the well pump in order to maintain operation of the building water and sewage systems. Being able to operate the well pump also makes it possible to continue to provide water to the Fire Department for fire suppression activities. A **preliminary, conservative estimate** for this power option is **\$2500**. Professional installation of this system is not required. For security, the generator could be stored in the CSD building attached garage.

OPTION 2 - HIGHEST COST, SLOWEST TO IMPLEMENT

This option consists of a permanently-mounted outdoor (so called “whole-house”) backup generator with automatic transfer switch. These generator are generally configured to detect the loss of commercial power and to turn on automatically. In rural areas, these generators are typically propane or diesel powered. The generator would be sized by a commercial electrical firm to meet the full electrical needs of the building. A **preliminary conservative estimate** for this generator, external fuel tank, generator installation, building permit, security camera and security fence is **\$15,000 to \$25,000**. Professional installation of this system is required.

BUILDING ELECTRICAL PANEL

The NCSD building has 200 Amp electrical service provided by Southern California Edison. A picture of the buildings electrical boxes follows.



NOTE: This September 24, 2024 **preliminary report** addresses only the need for emergency backup electrical power. Additional needs to fully operate the EOC, such as backup food, portable lights, floor heaters, cooling fans, etc. are best addressed once the NCSD Board chooses a backup power option to pursue.