"Securing the Utilities"

Captain Andrew Laird, 55-B

Often a task delegated by Command; securing the utilities can sometimes be more than a quick and simple request. With a variety of power and fuel sources, many of the structures in the districts we protect have unique challenges. S.O.P. Tactical 8 does not specify a specific unit/person with this responsibility and it can often fall to the Outside Vent position, the Initial RIT, a second special service, or another unit already engaged with a task on scene. The control of utilities is also relevant on other incidents including but not limited to gas leaks, CO calls, struck meters/lines, and odor investigations. In all cases, control of utilities and the need for BGE should be relayed to Command.

Electricity

For single-family residential structures, the main electrical shut-off is usually a single main breaker in a circuit panel. Depending on the configuration of the home, this panel is most often located in the basement or the garage. Larger homes could have several panels side-by-side that each need to be shut off. The electric service to the panel(s) could come in via underground service or overhead from a utility pole. In most cases, the panel on the interior is located adjacent to where the electrical service comes into the home. In new construction, an exterior main disconnect is required (which makes our job much easier). In cases where fire has compromised the structure's electrical system, we should request that BGE cut power at the utility pole or at the meter to avoid secondary fires due to unauthorized/inappropriate re-energizing of the system.

Tip: Leaving individual breakers on while turning off the main breaker is desirable as it could assist with the fire investigation. If you must shut all of them off, take note of what was tripped or in the "off" position!



Condos and apartments are typically configured differently. They typically have a remote main disconnect on the exterior or in a utility closet. Often these disconnects are poorly marked and could even be locked. The subpanels in the individual units have no single main shut-off and will need to have each breaker turned off if the remote disconnect cannot be identified or located.

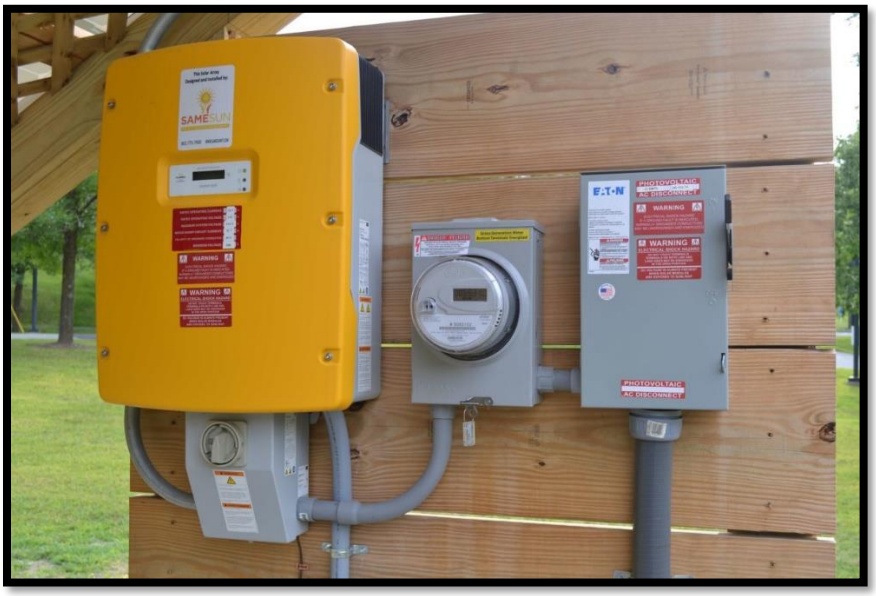




Solar

Rooftop and ground-based solar (PV) systems have a different level of hazard and concern for our operations. On a basic level, it is important to know that these systems are required to have an AC and DC disconnect located on the exterior near the electric meter. Both of these shut-offs needs to be turned off to render the system safe.

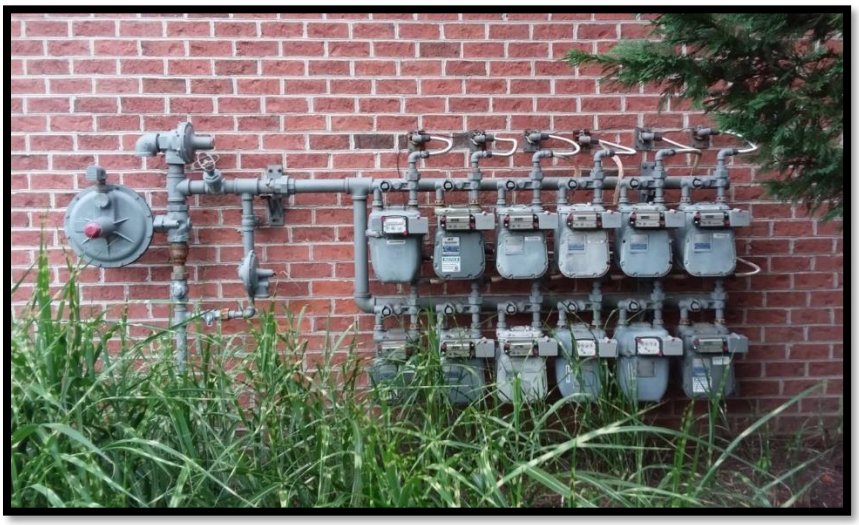
Tip: Some of these systems could also have stored energy (battery) systems that include lithium-ion batteries and require a Haz-Mat response and special considerations. Refer to S.O.P. Tactical 40 for more information.



Natural Gas

- For single-family homes, natural gas service is mostly found in our denser communities. A BGE meter with nearby shut-off can typically be found on the front or side exterior of the home. Older gas service may have a shut-off on the exterior with a meter located on the interior (this is being phased away).
- For condo/apartment buildings, a natural gas shut-off is typically located at a meter bank on the side exterior of the building or in a utility closet. These shut offs are also typically hard to identify due to a lack of markings.
- Most single and multi-family structures also have a gas manifold that has a main shut-off as well as individual shutoffs for individual appliances.

Tip: If a gas meter is involved with fire or unable to be turned off, this likely necessitates a BGE request to turn a valve off underground. More information on gas emergencies can be found in Training Reps 23-03.





Propane

- Propane service is typically found in some rural single-family homes. Besides being a source or heat or hot water, it is often connected to backup emergency generators as well. It is stored in above or below-ground tanks ranging from 100-2000 gallons.
- These tanks can be owner or leased which can change responsibility. The homeowner will likely need to provide an emergency contact from the company that services or fills the tank(s).
- Above ground tank(s) have a valve located at the top of each tank. If connected in series, they will need all tanks to be individually shut off.
- Below-ground tanks have a shut-off valve next to the gauge and fill connection located under a metal or plastic cover at the top of the tank. These tanks can often be difficult to locate on a property, especially if at night or hidden by vegetation.



Tip: Beneath the covers for underground tanks are a great place for wasp to build a nest. Take a second to lift these up with a hook or other tool so you don't ruin your day!

*** Corrugated Stainless Steel Tubing (CSST) used to route gas through a house is a concern for both natural gas and propane in single and multi-family structures. Much information has come out about this product following recent LODDs, and this should be a top concern, especially when faced with a fire following a lightning intense storm***

Heating Oil

- Heating oil is typically only found at single-family homes and is used to fuel furnaces, boilers, and water heaters. It is typically stored in above ground tanks located in a basement or garage but can also be found above or below ground on the exterior.
- Although mostly found in rural homes, they can also be found in densely populated areas including the rowhome communities.
- Heating oil storage tanks are typically 275 gallons with a gauge on top and a shut-off located underneath.
- Besides shutting off the valve for fuel supply under the tank, personnel should also shut off the electricity to these connected appliances via the emergency shut-off switch (often at the top of basement stairs) or a circuit breaker.

Tip: More information related to furnace and boilers can be found in [Training Reps 23-01](#).







Anatomy of a utility pole

