

Figure: 30 TAC §290.47(g)(2) [§290.47(g)]

Appendix G2 [G]: Emergency Preparedness Plan Template for Affected Utilities defined under §13.1395

This appendix contains information to assist an affected utility, defined in TWC §13.1395, in preparing an emergency preparedness plan (EPP). A comprehensive guide and shell form, TCEQ Form No. 20536A, [20536,] for preparing a plan is available from the executive director upon request. A cover letter containing the name of the affected utility; the affected utility representative's name, title, and contact telephone number; and, if applicable, the public water system's identification number (PWS ID) and district number must be included with the plan submittal.

Information provided by an affected utility relating to its emergency preparedness plan is confidential and is not subject to disclosure under Texas Government Code, Chapter 552.

Rules. All of 30 TAC Chapter 291, Subchapter L applies to affected utilities that are not public water systems. The following commission rules apply to affected utilities that are public water systems:

Definitions: §290.38

General Provisions: §290.39(c)(4)[(A) - (E)] and (o)(1) - (5)

Water Distribution: §290.44(d)

Minimum Water System Capacity Requirements: §290.45(a)(7), (b)(3), (c)(3), (d)(4), (e)(3), (e)(4), (f)(6), (g)(5)(A)(i), (g)(5)(A)(iv), (g)(5)(B), and (h).

Minimum Acceptable Operating Practices for Public Drinking Water Systems: §290.46(f)(5), and (r).

Plan Options. An affected utility, as defined in TWC §13.1395, must choose from the 8 options listed under §290.45(i) and must be able to provide a minimum of 35 pounds per square inch (psi) to customers during a power outage lasting longer than 24 hours.

A submitted emergency preparedness plan must include one of the following:

(1) Auxiliary generators equipped with automatic starting generators and switch over equipment. This equipment must have the ability to detect the failure of normal power from the electric grid; automatically start the generator; isolate necessary water equipment from the normal power grid; and switch the running generator's power to power the necessary water equipment to maintain the required minimum pressure.

(2) Direct pressure from another system. This option is only for systems that purchase water directly from another system and which may or may not repressurize the water to maintain at least 35 psi throughout the distribution system during extended power outages that last longer than 24 hours. A distribution-only system that does not repressurize may choose to become a member of TXWARN in order to accept the assistance of certified operators or equipment loans to repair the distribution system

during an extended power outage. [Two or more affected utilities may propose the sharing of auxiliary generator power. Necessary electrical and/or water connections equipped with automatic switch over and opening valves must be presented in the plan to demonstrate how one or more affected utilities will be able to maintain the required minimum pressure. Describe which equipment will share the auxiliary generator power and which equipment, if any, would receive power from only a single affected utility's auxiliary power equipment.]

(3) Becoming a contributing member of TXWARN (distribution-only affected utilities do not qualify for this option) or negotiated leasing and contract agreements for emergency power equipment and any necessary fuel. This includes [Copies of negotiated leasing and contract agreements for emergency power equipment and any necessary fuel. This includes mutual aid agreements with other retail public utilities, exempt utilities, or providers or conveyors of potable or raw water service if the agreements provide for] coordination with the division of emergency management in the governor's office. Consideration must be given to the location of where the other water supplier(s) are located as they may also be affected by the same natural disaster. In addition, when entering into a contract for leasing of emergency power equipment and necessary fuel, the contractual commitments of the supplier to other water suppliers and businesses within an area subject to the same natural disaster event must be taken into consideration.

(4) Portable [Use of portable] generators capable of serving multiple facilities. The portable generator(s) and the necessary water equipment must be pre-equipped with quick-connect, mating electrical connectors to facilitate the rapid implementation of the emergency preparedness plan. The plan must address whether there is an adequate number of portable generators to operate all of the necessary water equipment in order to maintain the required minimum pressure in multiple pressure plans or at multiple systems, if affected by the same natural disaster event.

(5) In lieu of generators, alternative on-site electrical generation, or distributed electrical generation facilities, may be used. This may include the use of wind, solar or other power as a means of providing sufficient emergency power to operate the necessary water equipment to maintain the required minimum pressure.

(6) Hardening of the electric transmission and distribution system serving the affected utility. One alternative is to relocate electric transmission lines for the system from overhead to underground and protect them from flooding. Another alternative is to replace overhead transmission lines, poles, and related appurtenances with ones that can withstand historical hurricane-force wind velocities, and trim or remove any trees next to and above the overhead transmission lines. Either alternative must include documentation on the ability of applicable power plant(s) and station(s) to withstand hurricane-force winds.

(7) Engines equipped with direct or right angle drives can be used as auxiliary power sources. Each pump or other equipment must be equipped with appropriate mechanical fittings to facilitate the use of engines. The plan must address the operation of chemical feed pumps using a generator(s).

(8) Any other alternative determined by the executive director to be acceptable. This option requires that alternative solutions be proposed to the executive director as long as they meet the requirements of TWC §13.1395 and provide at least 35 psi to the entire distribution system during a power outage lasting longer than 24 hours.

Plan Contents. Affected utilities, as defined in TWC §13.1395, should use TCEO Form 20536A and affected utilities, as defined in TWC §13.1394, should use TCEO Form 20536B. An emergency preparedness plan must provide for any applicable production, treatment, transfer and service pumps at an adequate flow rate and at a minimum pressure of 35 pounds per square inch in the far reaches of an affected distribution system, including multiple pressure planes. If applicable, provide the following information:

- Contact information, including names, emergency telephone [and pager] numbers, and e-mail addresses.
- A time frame for the full implementation of the emergency preparedness plan.
- The location of distribution maps, diagrams of the water system, and a copy of any necessary piping maps.
- All groundwater, surface water, [List all ground, surface,] and purchased water sources, with locations and individual capacities.
- All [List all] interconnections with other water providers, [providers;] whether normally open or closed; size, [size;] whether wholesale, purchase, or both; available capacity, [capacity;] and any other pertinent information. When relying on a wholesaler to meet emergency preparedness plan requirements indicate if the wholesaler intends to provide water or water and pressure, and any other pertinent information. Include the names of each interconnected entity [interconnection] and [their] contact information, including names, titles, telephone [and pager] numbers, and e-mail addresses.
- [List the capacity and power requirements of all treatment equipment.]
- For each chemical used, list the type, location, volume of storage container, [of storage, volume,] and volume required per day during emergency operations.
- All primary chemical supplier's contact information and include an alternate chemical supplier in case the primary supplier is nonfunctional.
- All equipment necessary to provide water to customers at the required minimum pressure and adequate flow rate. Include the capacity and power requirements of all treatment equipment to be used to meet EPP requirements.
- [Provide a copy of all water distribution and transmission piping maps.]
- The [Provide the] maximum and average daily demands. If the EPP [emergency preparedness plan] is for a proposed affected utility, the minimum specified capacities in §290.45 of this title [subchapter] shall be used for the maximum daily demand.
- Any purchased water systems and the number of connections that your affected utility intends to provide with water, or water and pressure, during a power outage lasting longer than 24 hours.
- All [List all] primary electrical power sources and include an electrical schematic.
- [List all equipment necessary to provide water to customers at the required minimum pressure and adequate flow rate, and the power requirements for each piece of equipment.]

- The [List the] size, location and fuel requirement in gallons per hour of diesel or gas, at the load necessary to maintain emergency operations for all on-site manual and automatic auxiliary power equipment. Provide [equipment, and provide] information as to how the affected utility determined the necessary fuel quantity.
- Documentation [Provide documentation] as to how the affected utility will ensure that it maintains an adequate supply of fuel during emergency operations.
- For each fuel tank, provide the location, volume, name of fuel suppliers, contact names, titles, telephone numbers, and e-mail addresses.
- For all shared auxiliary power equipment, list [List] the size, location, fuel requirement in gallons per hour of diesel or gas, at the load necessary to maintain emergency operations. List [operations, and] the names [name] of the systems [system] sharing the equipment and the system's contact information, including names, titles, [for all shared auxiliary power equipment. Include the other system's contact persons with their] emergency telephone [and pager] numbers and e-mail addresses.
- A [Provide a] copy of any leasing and contracting agreements, if the agreements provide for coordination with the division of emergency management in the governor's office, including mutual aid agreements with other retail public utilities, exempt utilities, or providers or conveyors of potable or raw water service. [service, if the agreements provide for coordination with the division of emergency management in the governor's office.] If leasing, include the vendor's name, location, and contact information.
- All [List all] portable generators' power, phase, type of quick-connect, fuel type, and fuel demand in gallons per hour.
- Specifications, [Provide specifications,] a description, and detailed capacity information for all on-site electrical generation or distributive generation equipment. Include all fuel demands for this equipment.
- All [List all] direct or right-angle [right angle] drive emergency power equipment with the name, type of engine, fuel type, and fuel demand in gallons per hour.
- Details [Provide details] for any other proposed alternative.
- [□ For each fuel tank, provide the location, volume, name of fuel suppliers, contact names, titles, telephone and pager numbers, and e-mail addresses.]
- All [List all] local and state emergency responders and their emergency contact telephone and pager numbers. Include medical facilities.
- All priority water users, such as hospitals, nursing homes, and their emergency contact names, titles, telephone numbers, and e-mail addresses.
- Contact information for primary certified laboratories and include an alternate laboratory in case the primary lab is nonfunctional.
- Contact information for all utility providers to the affected utility.
- [□ List all priority water users, such as hospitals and nursing homes, and their emergency contact names, titles, telephone and pager numbers, and e-mail addresses.]

Any [List any] bulk water haulers that could be used, including contact names, telephone and pager numbers, and e-mail addresses.

The name of the [Provide the] system's designated media spokesperson and include [with] a list of local media contact names, titles, type of media, telephone [and pager] numbers, and e-mail addresses.

The [Provide the] water restrictions that the system will implement during an emergency response.

Provide a proposed time frame for full implementation of the emergency preparedness plan.]