Connecticut's Emergency Power Generator Program:

A Drinking Water State Revolving Fund (DWSRF) Case Study

The Emergency Power Generator Program (EPGP) was established in SFY 2012 due to the potential for widespread and prolonged power outages caused by severe weather or other incidents which would impair a public water system's ability to provide safe and adequate drinking water. The EPGP includes streamlined procurement procedures and allows eligible public water systems with projects costing less than $100,000 to obtain low-interest loans and subsidies to purchase and install generators to be used in the event of power outages.

Briar Cliff Pump Station

Emergency Power Generator Program:

Loans Executed: 66 subsidized loans

Assistance Provided: $2 million

Generators Installed: 73

The Connecticut Department of Public Health Drinking Water Section continues to provide funding for this program. Since it began, 66 subsidized loans have been executed totaling over $2 million for the purchase and/or installation of 73 generators.

Subsidization is provided up to 25% of the cost of eligible components of each generator project that receives DWSRF funding. The maximum amount of subsidy a water system can obtain for a generator is $25,000. The EPGP's subsidy brought many small systems to the program that may not normally participate in the DWSRF.

Issues Facing Water Systems

The importance of having an emergency standby generator at community water systems is to maintain electrical power to their water system during an outage and to continue to provide potable water at adequate volume and pressure to their customers. When a water system loses pressure to their system, not only do the customers lose their potable water supply but it allows for contamination to enter the system and becomes a public health risk to the community. Many of the small water systems in Connecticut face the same resiliency issues that the larger water systems face only with limited capacity to pay for substantial upgrades to their system or to navigate the requirements associated with DWSRF assistance.

Solving The Technical, Financial, Or Managerial (TMF) Capacity Issues

Although the DWSRF is an excellent source of funding for water systems that need financial assistance to implement improvements to their water system, the program does have an extensive list of federal and state requirements that must be navigated to be eligible to receive funds. These requirements are often too burdensome for small systems to overcome and may discourage them from using the DWSRF altogether. For instance, when the water system is merely seeking to make small improvements to their system, such as installing an emergency power generator, the requirements can significantly increase the cost or delay the project timeline to a point where the project is no longer feasible to pursue. An example of these issues is the procurement process involved in hiring a consultant, prevailing wage rage rate requirements and a formal bidding process to select a contractor. The Emergency Power Generator Program was designed to streamline the project requirements to alleviate these burdens on the borrower. This streamlining is accomplished by keeping the total project cost below $100,000 and limiting the project scope to avoid construction activities such as excavation. The borrower must only procure a minimum of three competitive contactor quotes and submit those quotes to the state for review and authorization by the Public Health Commissioner. This process can generally be completed without the assistance of a formal project consultant, eliminates the need for formal bidding packages and does not involve prevailing wage rate requirements. The only other major federal requirement that must still be met is EPAs American Iron and Steel requirement.

Eureka Water Treatment Plant

How have things turned out?

As a result of the EPGP a significant number of small public water systems have been able to install emergency power generators to bolster the resiliency of their water systems. Many of these generator projects were funded from the DWSRF as a result of the streamlined loan process and allowed small systems to take full advantage of the savings provided through the DWSRF including subsidization and long-term financing at a low interest rate. This program has provided important public health protection by allowing small water systems to maintain adequate pressure, volume and water quality to their customers during power outages.

Images provided by Connecticut State Department of Public Health-Drinking Water Section

Lessons Learned:

- Small systems with limited TMF often need support to help with the federal and state requirements associated with the DWSRF.
- Streamlining the procurement procedures for specific projects limit the additional costs that may make such a project less desirable for DWSRF support.