



MEMORANDUM

DATE: December 7, 2020

TO: Dan Duchniak

FROM: Kelly Zylstra

RE: Highline Booster Station Generator

The Southeast Highline (SEHL) Booster station contains three boosters that move water from the Central Pressure Zone into the Hunter Tower to feed the Southeast Pressure Zone. SEHL also contains four pressure reducing valves that are used to reduce the pressure from the Southeast Pressure Zone and supply water to the Reduced Southeast Pressure Zone. SEHL also contains a generator plug and manual transfer switch that can be used with a portable generator in the event of a power outage. In addition, there is one “back up pump” for SEHL located inside the East Avenue Booster Station.

Standby generators are located at Well No. 12, Woodridge, Oakmont, Hillcrest, Madison, Crestwood and River Place Booster stations. Two portable generators are shared among our other booster pumping stations and Well No. 13. None of the deep wells have standby power, nor can they be run using our existing portable units.

One of the aspects of the water system evaluated during this year’s Risk and Resiliency Report preparation, was the ability the system to reliably provide water during an extended power outage. As a result of this evaluation, the conclusion was reached that adding a standby generator at SEHL should be one of our priorities.

Some of the factors that contributed to this conclusion include:

- Deployment and startup of a portable generator can take 45 minutes to an hour to complete which poses a problem if the water in the Hunter water tower is at a low or declining level.
- There have been several occurrences when power has been out at multiple stations at the same time, including SEHL and East Avenue.
- The need to move the portable generators between multiple locations depending on outages would take multiple staff, and extended periods of time.
- The need to share the portable generators between multiple locations poses the risk that the needs exceeds their availability.
- SEHL, and all of its functionality, will remain in service after the transition to Lake Michigan water.
- The potential decommissioning of the East Avenue Booster Station would eliminate the back-up supply source for the Southeast Pressure Zone, eliminating redundancy.

It is for these reasons that account number 3250-300 of the 2021 budget includes \$99,910 for the design, permits, purchase and the installation of a generator at SEHL.

Recommended Motion: Move to approve the standby generator project at Highline Booster Station in an amount not to exceed \$99,910.