

Memorandum

Department of Public Works



TO: Michael O. Geisel, P.E.
City Administrator

FROM: James A. Eckrich, P.E. *JAE*
Public Works Dir. / City Engineer

DATE: October 28, 2020

RE: Public Works Facility Generator

The City of Chesterfield Public Works Facility (PWF) was designed to include a 150 kilowatt generator in order to power the PWF during electrical outages. The existing generator was installed when the facility was opened in 1997. As you know, the PWF is identified as a critical facility from which we access fuel, maintain police vehicles, and manage essential operations during storms and other times when power outages occur. In order to ensure the generator functions appropriately when required, it is regularly run, serviced and load tested. During our last load test on September 23, the motor malfunctioned and the generator failed. It could not be repaired by Facility Maintenance Staff, necessitating a rental generator at a cost of \$2,275 per month to preserve our emergency readiness capabilities. The rental generator has been installed and is currently capable of providing emergency power to the Public Works Facility.

The Facility Maintenance Staff obtained quotes to repair the generator, ranging from \$25,708 to \$30,142. The repair contractors each cautioned that the repairs could end up being much higher than this due to conditions which cannot be diagnosed until the generator is disassembled. Each contractor recommended that the City consider replacing the generator instead. The current generator is 23 years old, and was planned for replacement in 2029.

After discussing the matter in detail, we determined that the City should consider replacing the generator and not pursue a less cost effective repair. During our research, Facility Maintenance Staff found a CAT diesel generator available through Sourcewell. As you may recall, Sourcewell is a cooperative procurement program which has previously been approved by City Council. The 150 kilowatt CAT diesel generator is available at a cost of \$58,800, including installation.

It simply does not make economic sense to spend \$25,000+ to repair a 23-year old generator when the generator can be replaced for \$58,800. **Accordingly, I recommend that the City purchase a new 150 kilowatt CAT diesel generator through the Sourcewell Cooperative Procurement Program (#120617-CAT) at a cost of \$58,800.**

This purchase was obviously not planned as part of the 2020 Budget. However, due to the myriad cuts made earlier this year, there is 2020 budgetary funding available for this purchase in Account 120-079-5470. Accordingly, a supplementary budget allocation is not required in this case. Nevertheless, because the PWF generator was not budgeted, its purchase does require Council authorization.

Please note that the Public Works Department maintains a multi-year capital replacement plan for facilities, vehicles, and heavy equipment. Regularly updating and maintaining that plan helps us minimize problems like these, including extra costs such as the generator rental. We have gone through the process of reviewing and, where appropriate, extending the expected life of our capital assets. As a result, some of these assets will fail prior to the expected “average” life. Assets will not always reach their expected life, and unplanned expenditures will occur, no matter how hard to work to avoid them.

Action Recommended

This matter should be forwarded to the Planning and Public Works Committee for consideration. Should PPW concur with Staff’s recommendation it should vote to recommend the purchase of a new 150 kilowatt CAT diesel generator through the Sourcewell Cooperative Procurement Program at a cost of \$58,800. The matter will then be forwarded to the full City Council for final consideration.

Please forward to PPW for review and recommendation to the full City Council.

 2020/10/29