From: <u>Him, Efrain</u>
To: <u>Susan Blevins</u>

Cc: <u>Cassie Stephens</u>; <u>Lisa Ray</u>; <u>Vasquez</u>, <u>Javier</u>

**Subject:** FW: maintenance program and warranty for generator

**Date:** Wednesday, January 11, 2023 2:56:22 PM

Attachments: Generators of Houston- Extended Warranty Offer .msg

Generac Product Activation.msg

Preventative Maintenance and Load Bank.msq

Importance: High

Susan,

As requested, I have reviewed the attached documentation regarding warranty and preventative maintenance options for the new Lift Station Emergency Generator and offer the following comments and recommendations:

## 1. Manufacturer's Warranty Option:

- a. Costs per year for 5, 7 and 10 Years Comprehensive Extended Warranty (CEW) is \$254.40, \$354.43 and \$407.85, respectively (excluding taxes).
- b. Considering this generator is designated for a critical facility (i.e. lift station), and the service call rates (ranging from \$450.00 to \$350.00 for one-hour + \$225.00 to \$150.00 for each additional hour) listed under the Preventive Maintenance Service Agreement, my recommendation would be for the City to obtain the 10 Years CEW. I did not see the warranty terms/details in the e-mails; however, the 10 Year CEW annual cost of \$407.85 is nothing compared to what the City will have to pay for repairs or just service calls on their own.

## 2. Preventative Maintenance:

- a. For Routine Maintenance, I would recommend the Quarterly option (\$1,388.92 per year) but if cost is an issue, at least the Semi-Annual option (\$806.82 per year).
- b. For Load Bank Test, I would recommend the Level 1, (1) Annual 2 hr Load Bank Test (620.00 per year) just to make sure the generator is not degrading and is able to sustain the loads in the event of an emergency.
- c. I would also recommend the Level 1 Monthly Transfer Test (\$275 per month?) just to make sure the generator automatic transfer switch is operating properly when needed; however, maybe twice a year instead of all twelve (12) months, if this option is available. Please check if the \$275 for this test is per month or per year; I believe is per month or test.

Let me know if you have any other questions.

Regards,

**Efrain A. Him,** P.E. Senior Project Manager