

BACKUP POWER AND ENERGY MANAGEMENT AT O.N. STEVENS WATER TREATMENT PLANT

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BACKGROUND



- The O. N. Stevens Water Treatment Plant (ONSWTP) currently operates four on-site backup generators capable of supplying up to 8 Megawatts (MW) of electrical power
- These generators play a critical role during emergencies or power outages, ensuring uninterrupted operation of electrical systems and high-service pumps to maintain a continuous flow of drinking water to the community

BACKGROUND

- Three of the four generators have been upgraded to comply with air quality standards, qualifying them for participation in ERCOT's Demand Response program, an energy rebate initiative
- The fourth generator is not eligible for such upgrades
- The aging generators have incurred substantial maintenance costs, totaling approximately \$485,000 in repairs since 2020
- To support upcoming infrastructure enhancements and additional equipment, expanded on-site backup power is essential



SERVICE AGREEMENT

- Exergy Energy, through its separate entity EE ON Stevens LLC (Contractor), will replace all four existing units with eight new natural gas-powered Cummins generators, all associated operational infrastructure, and the full conversion of the ON Stevens generator facility from diesel to natural gas, at an estimated cost of approximately \$27 million
- If CCW were to purchase the generators outright and design and construct all associated infrastructure needed at ON Stevens plant through the Capital Improvement Program, the projected capital requirement was estimated at \$35–\$40 million.
- The new generators will delivering a combined backup capacity of 10 MW, expandable to 12 MW to accommodate future growth
- Units will be configured to support partial load operations during a single utility outage on the AEP side or to power the entire plant during severe weather events or full outages
- The new generators will meet current air quality standards, enabling broader participation in energy savings and rebate programs
- Contractor will own and maintain the generators and supporting equipment, will oversee all aspects of program management, and provide comprehensive preventative and corrective maintenance for the new units
- At the completion of 120 months of payments, the City may elect to purchase the system for \$1.00

FISCAL IMPACT

There is no fiscal impact for Corpus Christi in FY26, no payments are required until the backup power system becomes fully operational—an event anticipated to occur 564 days after contract execution.

- The annual lease costs of approximately \$2.7M will be budgeted in the future year through the annual budget process.
- The new generators will be eligible to participate in ERCOT's ancillary grid services, which is projected to generate approximately \$2–3 million in annual revenue. These proceeds will partially or fully offset the annual lease costs, significantly reducing the net financial impact to Corpus Christi Water.

STAFF RECOMMENDATION

Staff recommends approval of this motion authorizing a ten-year service agreement, with a one ten-year option, with Exergy Energy LLC of Berkeley, California as presented.



