

AGENDA ITEM FORM

SUBJECT: Request Authorization to Issue Purchase Order for RO Membranes to Replace Existing RO Membranes at Saylorville Water Treatment Plant

SUMMARY:

- In October of 2005, DMWW entered into an agreement with Zenon Environmental Corporation for delivery and commissioning of ultra-filtration (UF) membranes, reverse osmosis (RO) membranes, and related process equipment that would become the integral treatment components of the Saylorville Water Treatment Plant (SWTP).
- Commissioning of the membrane equipment was completed in late December 2010. Treated water from the plant was delivered to the distribution system beginning in January of 2011. Continuous operation of the plant began in April of 2011. Zenon Environmental Corporation was acquired by GE Water & Process Technologies during the first two years of plant operation.
- The original contract included a 5-year warranty for RO membranes. The existing RO membranes are now approaching this amount of time, and DMWW has observed a decrease in RO membrane performance. Colder water temperatures also decrease membrane performance and will limit plant production significantly if membranes are not replaced soon. RO membranes have an expected useful life of 3-5 years.
- The original contract also included a guaranteed membrane replacement cost of \$500 per module and was subject to adjustment to inflation according to the US-CPI. This adjusted cost today would be \$624.90 per module.
- Improving the production capability of SWTP has become an operational necessity. Restoring production capacity will benefit us in regard to water quality and water volume issues. Additional production at SWTP aids in our efforts to combat disinfection by-product and nitrate challenges at the other two plants. Customers (Johnston, Polk City, and Ankeny) will benefit greatly with a restoration in production capacity to meet their peak demand needs.
- On December 3, 2015, three separate proposals were received for the purchase of 882 RO membranes. The proposals included a standard 3-year manufacture prorated warranty and optional 5-year prorated warranty.

| BIDDER | BASE BID 3-YEAR WARRANTY | ALTERNATE BID 5-YEAR WARRANTY |
|-------------------------------|-------------------------------------|--|
| Wigen Water Technologies | \$415,412.00 | \$463,922.00 |
| Pure Aqua, Inc. | \$455,205.00 | No Bid |
| GE Water & Process Technology | \$482,577.00 | \$482,577.00 |

- The replacement membranes (DOW Filmtec XLE-440) are the exact same membranes installed in the original contract. All bids included a unit cost significantly below the guaranteed membrane replacement cost of \$624.90 per module as stated in the original contract.
- Staff recommends issuing purchase order in the amount \$415,412.00 to Wigen Water Technologies.

FISCAL IMPACT:

The SWTP – RO Replacement portion of the 2016 Capital Budget included \$599,047 designated for membrane replacement.

RECOMMENDED ACTION:

Authorize staff to issue a Purchase Order in the amount of \$415,412.00 to Wigen Water Technologies.

BOARD REQUIRED ACTION:

Motion to authorize staff to issue a Purchase Order in the amount of \$415,412.00 to Wigen Water Technologies.

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| _____/_____ Kyle A. Danley, P.E. (date) Water Production Engineer | _____/_____ Michael J. McCurnin, P.E. (date) Director of Water Production | _____/_____ William G. Stowe (date) CEO and General Manager |
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