ARTICLE 4 - BASIS OF PROPOSAL – BEST AND FINAL OFFER

4.01 Furnish the CITY with a complete UV Disinfection Systems per the attached general specifications, technical specifications and plans, and requirements. Indicate the make and model you are quoting and attach descriptive literature.

CITY OF SANTA ROSA, LAGUNA TREATMENT PLANT (LTP) PROPOSAL FORM			
Item No.	Description		Proposal Price ($ US)
Equipment Costs			
1	**UV Disinfection System, as specified in the Technical Specifications (sales and use taxes not included)**		$5,628,891.28
2	**Spare parts and special tools, as specified in the Technical Specifications**		$132,300
3	**Freight, as specified in the Technical Specifications**		$73,700
4	**Supervision of installation, testing, training, commissioning, warranty, and Follow-up support services. (Technical Specifications Sections 11289 and 01756)**		$88,600
5	**Total Equipment Cost (Sum of Items #1 - 4) (Sales and use taxes not included)**		$5,923,491.28 US
Operation and Maintenance Costs			
7	**Annual Cost for Electricity: Item #7a multiplied by the unit power cost ($0.10/kW-hr) multiplied by 365 days per year.**		$344,026
	a	Average Power Consumption (APC) for all equipment supplied by Supplier, expressed in kilowatt-hours/day, for the average annual flow condition and average UV transmittance.(1)	9425.4
8	**Annual lamp replacement costs: Item #8c multiplied by Item #8d.**		$103,958
	a	Number of Lamps in Service at average annual flow rate of 20 mgd and average UV transmittance of 64 percent. Include a 25 percent safety factor. Use the design End of Lamp Life and Fouling factors when calculating the required number of lamps at average conditions. Then multiple the required number of lamps at average conditions by the safety factor (1.25) to determine the Number of Lamps in Service (Ad1).	780
	b	Guaranteed Lamp Life, expressed in hours, for the conditions in Item #7a.	16,000
	c	Number of Lamps Replaced Per Year: Item #7a divided by Item #7b multiplied by 8,760 hours in a year.	427.1
	d	Lamp Material Cost: guaranteed not-to-exceed replacement cost for one (1) UV lamp, expressed in dollars.	$243
9	**Annual ballast replacement costs: Item #9a divided by Item #9c and then multiplied by Item #9b.**		$152,199
	a	Total number of installed ballasts/lamp drivers.	2600
	b	Guaranteed replacement cost per ballast/lamp drivers expressed in dollars.	$585
	c	Guaranteed Ballast/Lamp Driver Life, expressed in years.	10
10	**Annual sleeve replacement costs: Item #10a divided by Item #10c and then multiplied by Item #10b.**		$17,999
	a	Total number of installed quartz sleeves.	2600
	b	Quartz Sleeve Replacement Cost: the guaranteed not-to- exceed replacement cost of one (1) quartz sleeve, expressed in dollars.	$104
	c	Guaranteed Quartz Sleeve Life, expressed in years.	15
11	**Annual sensor replacement costs: Item #11a divided Item #11c and then multiplied by Item #11b.**		$4,286

CITY OF SANTA ROSA, LAGUNA TREATMENT PLANT (LTP) PROPOSAL FORM			
Item No.	Description		Proposal Price ($ US)
	a	Total number of UV intensity sensors in the system.	25
	b	UV Intensity Sensor Replacement Cost: the guaranteed not-to- exceed replacement cost of one (1) UV intensity sensor expressed in dollars.	$1,200
	c	Guaranteed Sensor Life, expressed in years.	7
12	**Cost for duty/reference sensor calibration: Item #12b multiplied by Item #12c.**		$854
	a	Total number of duty/reference sensors that require calibration.	26
	b	Average number of calibrations required per year.	3.7
	c	Average cost per calibration of sensors, expressed in dollars.	$230
13	**Annual cost for cleaning system consumables (Cleaning Solution, etc.)**		$0
14	**Annual wiper replacement cost: Item #14a divided by Item #14c and then multiplied by Item #14b.**		$30,212
	a	Total number of automatic cleaning wipers installed in the system. * (* note quantity shown are installed in operating channels)	780
	b	Guaranteed replacement cost per wiper, expressed in dollars.	$58
	c	Guaranteed wiper life, expressed in years.	5
15	**Total Annual Operational and Maintenance Cost (Sum of Items #7 - 14)**		$632,385 US
16	**Total Operational and Maintenance cost over 20 years (Item #15 * 20 years)**		$12,647,701 US
17	**TOTAL EQUIPMENT SUPPLY AND O&M BID (Sum of Item #5 and Item #16)**		$18,571,192.28 US
Options			

Notes:
(1) The Average Power Consumption (APC) calculation shall assume that the system will operate at conditions specified in Section 11289 of the Technical Specifications.
(2) Value entered in Item #7 shall be equivalent to the value expected to be determined by validation testing divided by 0.80 (attenuated lamp conditions for APC calculations). This factor will be used for all manufactures for the life cycle cost analysis and is independent of the validated quartz sleeve fouling and lamp aging factors. Specific quartz sleeve fouling and lamp aging factors listed in Form 1 of Section 11289 in the Technical Specifications shall be used for sizing equipment.

4.02 Supplier further agrees that performance of Supplier field services (including installation check, startup assistance, and certification of acceptable installation and operation) to final completion will be coordinated with the Contractor to the satisfaction of the CITY.

4.03 Communications concerning this Proposal shall be sent to Supplier at the following address:

Kris Sticinski, Americas Sales Director

Email: kris.sticinski@denora.com

Tel: 424-392-1107