



WEFTEC 2016

GE Booth # 6239

### **GE Announces World's Largest Membrane Aerated Biofilm Reactor System Will Use ZeeLung\* Technology**

- *Yorkville-Bristol Sanitary District in Illinois to Upgrade Wastewater Treatment Plant with ZeeLung*
- *ZeeLung Chosen for Ability to Increase Treatment Capacity in Existing Plant Footprint and Reduce Energy Consumption*
- *When Commissioned in 2017, Will be the Largest Membrane Aerated Biofilm Reactor System in the World*

NEW ORLEANS—September 26, 2016—GE (NYSE: GE) today announced that the Yorkville-Bristol Sanitary District (YBSD) in the Fox River watershed in Illinois is the first customer for its new [ZeeLung\\*](#) membrane aerated biofilm reactor (MABR) technology. YBSD will use ZeeLung MABR to upgrade the existing plant to increase its treatment capacity within the existing biological reactors. The upgrade also involves modifications to enable biological phosphorous removal. When commissioned in 2017, the plant will be the world's largest MABR system.

YBSD provides wastewater collection and treatment services for the city of Yorkville, Illinois, with a population of 18,035 residents. YBSD's treatment facility is an activated sludge plant with a design average flow of 3.62 million gallons per day. The plant is operating near its design load and to accommodate new industries within the city, YBSD sought a cost-effective solution to increase the treatment capacity. The plant also faces more stringent discharge regulations for phosphorous.

"GE's ZeeLung MABR technology will enable us to increase the treatment capacity within our existing footprint while also reducing the energy consumption of the plant," said Kevin Collman, executive director, Yorkville-Bristol Sanitary District. "The Fox River provides our community with recreation and a home for wildlife, and our expansion with ZeeLung also will increase phosphorous removal and help protect the watershed."

ZeeLung MABR technology is a simple solution that allows municipalities to achieve nutrient removal and/or capacity expansion in existing tank volumes while significantly reducing energy consumption. It employs an innovative gas transfer membrane to deliver oxygen to a biofilm that is attached to the membrane surface. Immersing ZeeLung cassettes into mixed liquor increases the inventory of biomass in a treatment system thereby intensifying the biological treatment process. Oxygen is delivered to the biofilm by diffusion through the membrane, which reduces the energy required for oxygen delivery by up to four times compared to conventional aeration.

"When we introduced ZeeLung MABR last year, we knew it was going to be a transformative new technology for municipalities to upgrade wastewater treatment plants for nutrient removal and capacity expansion within existing plant footprints. As our first ZeeLung customer, the Yorkville-Bristol Sanitary District can increase treatment capacity to meet Yorkville's growing industrial and residential

population while also enabling phosphorous removal and reducing energy consumption,” said Kevin Cassidy, global leader, engineered systems—water and process technologies for GE Power.

## **About GE**

GE (NYSE: GE) is the world’s Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry. [www.ge.com](http://www.ge.com)

## **About GE Power**

GE Power is a world leader in power generation with deep domain expertise to help customers deliver electricity from a wide spectrum of fuel sources. We are transforming the electricity industry with the digital power plant, the world’s largest and most efficient gas turbine, full balance of plant, upgrade and service solutions as well as our data-leveraging software. Our innovative technologies and digital offerings help make power more affordable, reliable, accessible and sustainable.

For more information, visit the company's website at [www.gepower.com](http://www.gepower.com). Follow GE Power and GE’s water business on Twitter [@GE\\_Power](https://twitter.com/GE_Power) and [@GE\\_Water](https://twitter.com/GE_Water) and on [LinkedIn](https://www.linkedin.com/company/ge-power) at GE Power.

###

\* Trademark of General Electric Company; may be registered in one or more countries.

For more information, contact:

Renee Twardzik  
GE Power  
+1 215 942 3288  
[renee.twardzik@ge.com](mailto:renee.twardzik@ge.com)

Beth Coffman  
Masto Public Relations  
+1 518 786 6488  
[beth.coffman@mastopr.com](mailto:beth.coffman@mastopr.com)