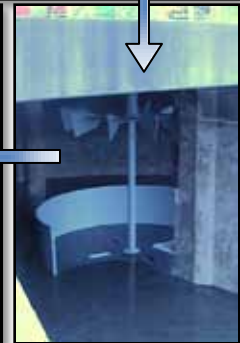
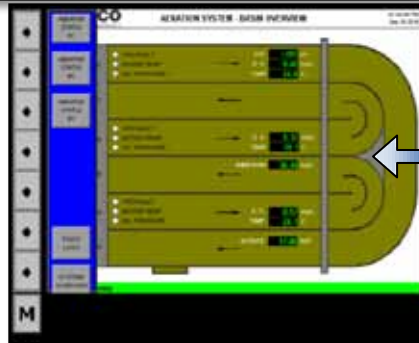


## Case History – St. Peters, MO (Carrousel® System)

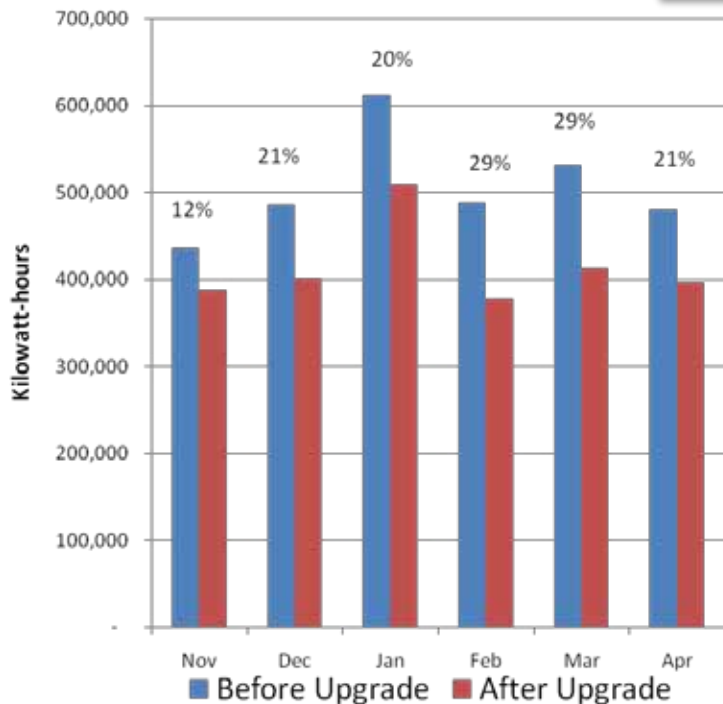
### Background

Facing new treatment limits in 1988, the City of St. Peters, MO selected to install a Carrousel® System consisting of six 125 HP two-speed aerators to meet their current and future wastewater treatment needs. During the 20-year lifecycle operating stretch, the biological treatment aspects of the Carrousel system consistently exceeded the performance requirements imposed by the regulators while keeping pace with the increasing flows due to population and business expansion.



### Ovivo Value Added

In 2008 Black & Veatch was hired by the city to explore upgrade options to meet newer, stricter effluent limits and expand the capacity by another 37%. Black & Veatch contacted Ovivo regarding the upgrade and invited our process engineers to provide an alternative.



Ovivo's process engineers recommended simply replacing the existing aerators with more powerful and efficient 200 HP Excell® Aerator II's and to operate them using VFDs and Ovivo's aeration and nutrient control system. After a thorough evaluation of all options, the Ovivo recommendation was selected as the most cost effective and efficient alternative.

### Results

As a result of the retrofit, the city has expanded their treatment capacity by increasing the nameplate HP, all the while lowering their overall power consumption by using Ovivo's control system. Due to these changes, the city has so far lowered their wastewater treatment power consumption by an average of 22% while increasing nutrient removal. Their power bill is currently thanking them.