

ONE SMALL BOX SAVES THE DAY – TWICE – IN PUMP SYSTEM SOLUTION



Mike Venters, plant manager for the Cherokee Water and Sewage Authority, at the Rose Creek Wastewater Treatment Plant in Woodstock, Georgia. “We’ve enjoyed cost savings in so many ways since we installed the Grundfos pumps and control system. We’re still reaping them,” he says.

THE SITUATION

In the middle of the night at 3 a.m. on a Saturday in the spring of 2016, Jamie Veley got a phone call. Something was wrong at the Rose Creek Wastewater Treatment Plant, where Veley was Maintenance Supervisor.

Over the phone, a plant operator told him the six newly installed Grundfos submersible wastewater pumps were not

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– Mike Venters, Plant Manager,
Cherokee County Water & Sewerage Authority (USA)

working properly at the plant in Woodstock, Georgia. “The influent level was rising, and the pumps were not running,” he recalls. “So he went down to the influent station and tried starting one pump. It went into alarm and shut off. He started a second pump. Alarm, shut off. He went to a third pump – alarm, shut off.”

The alarms were coming from the pumps’ MP204 motor protection units – something that Veley’s crew did not yet have experience with, since everything was so new. Veley got in touch with Grundfos’s Brendan Watson. Watson used the Grundfos GO remote monitoring app to see that the MP204’s alarm was registering a “Current Asymmetry” of 12.9% - a power imbalance that would quickly destroy any pump.

THE SOLUTION

Brendan Watson suggested that Veley’s crew kick on their on-site generator. “With the generator, the alarm from the MP204

disappeared, thus confirming a bad power feed to the station,” Watson says. “Once we checked all the MP204’s, it was clear they were all seeing the same issue.”

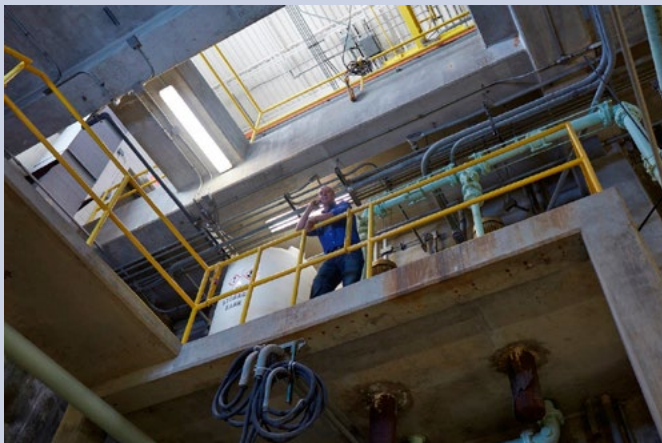
The plant called its local power company, which sent a truck to a nearby sub-station and confirmed that it had a faulty regulator. The electrician fixed the problem, making the power feeding the station nearly perfect again, with 1-2% current asymmetry.

Problem fixed. Total time needed to find the problem: 20 minutes. In the past, Veley says, such a problem “might have taken all night.” And if they were not lucky in finding the problem themselves, they would have called an electrician, who would have needed an hour to get to the site and at least a few hours trouble-shooting in the middle of the night, he says. “Keep in mind that these are influent pumps. They’re critical.”

THE OUTCOME

Cherokee Plant Manager Mike Venters says the MP204 saved several large pumps that night. “The pump was what gave us the answer to an external power problem,” he says. “Getting the MP204s – with its equipment protection and troubleshooting – was one of the best decisions we’ve made in terms of the pumps,” Venters says. “Just the ability to troubleshoot so quickly is a cost savings. What the MP204 does for us, it’s a matter of minutes instead of hours to find out what’s wrong in the system.”

See video



Maintenance Supervisor Jamie Veley’s crew discovered the usefulness of the full Grundfos system solution shortly after they installed their first Grundfos wastewater pumps – and the MP204 motor protection units saved the plant from disaster.



Maintenance Supervisor Jamie Veley at the Rose Creek Wastewater Plant in Woodstock, Georgia, USA.

The plant is still reaping those savings, adds Jamie Veley. Not long after the first incident, one MP204 gave another alarm. “We had an underload alarm,” he says. “That tells us right away that we’re not pumping any liquid – we had our levels set too low. It took us just a minute to figure out what the issue was, where otherwise we’d be pulling pumps and trying to figure out what was going on. So there again, the MP204 saved the pump, the motor and a lot of time and maintenance.”

GRUNDFOS SUPPLIED

In addition to the wastewater pumps, Grundfos supplied full system control and monitoring, including the MP204 motor protection units. [Read more about it here.](#)



Maintenance Supervisor Jamie Veley stands in front of the Rose Creek Wastewater Plant’s MP204 cabinet. After a recent “underload alarm” on the MP204, “it took us just a minute to figure out what the issue was, where otherwise we’d be pulling pumps and trying to figure out what was going on,” Veley says.