Case Study:
How Spire Metering Provides A One-Stop Solution for Contractors

MAKKAH CLOCK TOWER

The Makkah Clock Tower, located in Mecca, Saudi Arabia, is the world’s largest clock tower and the second tallest building. It has 76 stories and is 577 meters high. It is a vast complex with hotels, shopping outlets, food courts, and luxury apartments. Bin Laden Group is a leading contractor and system integrator that works on prestigious intelligent projects in the Middle East region.
The Challenge

Bin Laden Group was asked by the owners of the luxury apartments to implement a solution so that each of their 5000 tenants could be billed individually for their utility usage. Bin Laden Group’s challenge was to find a vendor that could provide meters that could measure water usage along with cooling and electricity usage.

Another challenge was to be able to take the readings from each of these meters remotely.

Bin Laden Group looked at a variety of vendors before making their final decision. They chose Spire Metering Technology because of the diverse product portfolio. Spire Metering’s entire line of products provides the best value for the investment.
The Solution

Spire Metering proposed its 280W-D to provide measurements for the water usage in each of those 5000 units.

The 280T was used for the cooling measurements. Both the 280W-D and the 280T use ultrasonic technology that provides long-term accuracy. Both meters are maintenance-free, as there are no moving parts. This was a much better solution than mechanical meters which lose accuracy over time and need to be replaced due to moving parts wearing out or breaking down.

The 101E was used to measure the electricity usage.

Spire provided 150 280C-type concentrators. The 280C uses M-Bus for communication protocol. Each concentrator acts as a “master” and can take the data from each meter, or “slave”, on a preset schedule.

Spire provided Automated Meter Reading (AMR) software to allow the meter reading to be captured remotely.

The final step in the solution was to provide the Billing Software that would allow each of the 5000 tenants to be charged for their actual usage.

The total project value was $2 million.
The Results

Bin Laden Group was thrilled with the overall solutions from Spire Metering Technology. They only had to go to one vendor to find all of the appropriate meters and software to solve the problem of remotely collecting and billing 5000 tenants for water, cooling, and electricity usage.

Bin Laden Group looked at a variety of solution providers, but chose Spire Metering Technology for the best return on investment.

The luxury apartment owners are able to accurately bill each of their customers for the actual usage.

Spire Metering Technology can take care of every application, from the smallest to the largest project.