

## Press Release

# Tabreed Integrates Big Data Technology to Improve Operational Performance

*Tabreed Becomes First District Cooling Company to Integrate OSIsoft PI System into its Operations as Part of Digital Transformation Strategy*

**February 6, 2019 – Abu Dhabi, United Arab Emirates:** National Central Cooling Company PJSC (DFM: Tabreed), the leading UAE-based regional district cooling utility company, is integrating data-based operational intelligence software across its network of district cooling plants to monitor, analyze, and improve overall plant performance and reliability, making it the first district cooling company to do so. Created by OSIsoft, a leader in operational intelligence, the PI System will collect, analyze, visualize and share the large amount of data produced by Tabreed's network of plants.

Tabreed is a partner of choice for organizations across the GCC in providing environmentally friendly district cooling solutions that support the region's energy sustainability. With 74 district cooling plants located throughout the region, Tabreed currently delivers over one million refrigeration tons to key developments in the region including iconic infrastructure projects such as Abu Dhabi's Al Maryah Island, Yas Island, Sheikh Zayed Grand Mosque, Dubai Metro, Dubai Parks and Resorts, and the Jabal Omar Development in the Holy City of Mecca, Kingdom of Saudi Arabia.

"The PI System gives us real-time insight into our systems, which plays a key role in enhancing customer satisfaction and our services provided to them," **said Jean-Francois Chartrain, Chief Operating Officer, Tabreed.** "This kind of immediate application of such world-class Technology is the cornerstone of digital transformation and we hope to leverage technology like the PI System to predict equipment malfunctions and proactively enhance our operations. Data analytics solutions will increase our ability to deliver affordable and reliable chilled water to our customers."

Tabreed now tracks approximately 30,000 data streams or 'tags', monitoring metrics such as real-time and historic power consumption, cooling energy production and equipment status. Employees also use PI Vision, OSIsoft's visualization tool, to create dashboards which present data with greater clarity and across multiple devices.

### **District Cooling: Efficient, Reliable and Big Enough for an Entire City**

A highly efficient and cost-effective form of air conditioning, district cooling relies on centralized cooling plants to produce chilled water, which then gets circulated through underground insulated pipes to buildings and campuses within a network. District cooling consumes up to 50% less energy than conventional individual air conditioning, reduces maintenance and capital costs, and lowers CO<sub>2</sub> emissions. By reducing demand for conventional air conditioning, Tabreed estimates its own operations has contributed to eliminating 986,750 tons of CO<sub>2</sub> annually, or the equivalent of taking 214,000 cars off the road, and contributed to saving 1.97 billion kilowatt/hour across the GCC – enough energy to power approximately 112,000 homes in the UAE every year. District cooling equipment also typically lasts 30 years or more, twice as long as conventional air conditioners, and can take advantage of seawater or treated sewage effluent (TSE) rather than potable water to further reduce costs and environmental impacts.

District cooling is expected to play a pivotal role in many regions in curbing the escalating energy demands of air conditioning, which currently accounts for approximately 10% of global electricity consumption and is the fastest growing use of energy in buildings, according to the International Energy Agency. By 2050, around two-thirds of households are expected to have air conditioners. Demand for air conditioning power is expected to triple by 2050, an increase that would require an increase in capacity equivalent to the current electrical capacity of the U.S., EU and, Japan today.

### **The PI System**

OSIsoft's PI System transforms the vast number of operational data streams from sensors, industrial equipment and other devices into rich, real-time insights to help save money, increase productivity and make better decisions. Worldwide, over two billion sensor-based data streams are managed by the PI System.

In facilities, the PI System is used to manage power consumption for over 135 million square feet of building space at leading universities, research hospitals, data centers, national laboratories, stadiums, government centers and corporate campuses. The PI System is also used to optimize district heating networks across France.

"We're incredibly excited to be working with Tabreed, which has been a regional leader in demonstrating the power of district cooling," said **J. Patrick Kennedy, founder and CEO of OSIsoft**. "Data is the one commodity in the world that gets more valuable the more people use it. In Tabreed's case, digital transformation can help improve the company's performance, enhance the comfort of its customers and ultimately benefit the greater community. We look forward to seeing what they accomplish."

### **About National Central Cooling Company PJSC (Tabreed)**

Tabreed is the leading UAE-based regional district cooling utility company that provides energy-efficient, cost-effective and environmentally friendlier year-round district cooling solutions in the GCC. Founded in 1998, and listed on the Dubai Financial Market, Tabreed's cooling infrastructure is an integral part of the region's growth. The company now delivers over 1 million refrigeration tons to major residential, commercial, government and private projects. Tabreed owns and operates 74 plants in its portfolio across the GCC, including 63 plants in the United Arab Emirates, two in the Kingdom of Saudi Arabia, three in Oman, one in the Kingdom of Bahrain and others in the region.

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### **About OSIsoft**

OSIsoft is dedicated to helping people transform their world through data. For more, please visit [www.osisoft.com](http://www.osisoft.com)

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