

Project Spotlight

evaptech

PSE&G Bergen

Bergen Generating Station is a power plant owned and operated by Public Service Electric and Gas Company. The plant is located on the banks of Overpeck Creek near its confluence with the Hackensack River in Ridgefield in Bergen County, New Jersey. The plant supplies electricity to New Jersey and via the Hudson Project to New York City.

EvapTech recently was awarded the refurbishment of Bergen Generating Station Unit 1 @ Tower 1A & 1B Cooling Tower Project. The work on the two (2) towers @ eight (8) cells consists of a partial fill media change-out with thermal improvement, and a complete replacement of the motors, drive shafts, gear reducers, fan assemblies, and mechanical frames. The union project will be executed in the Fall 2017 during a specified outage.



EVAPTECH QUARTERLY



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From the Corner Office



The view from the corner office of EvapTech is an interesting view indeed. EvapTech serves Evapco customers who require highly efficient large scale evaporative and hybrid cooling

equipment. At the opposite end of the large application spectrum is our Evapco Power partner, Evapco-BLCT, which supplies air cooled steam condensers for large power applications. The fourth quarter of 2017 brings the introduction of Evapco adiabatic and air cooled equipment to complete the Full Spectrum of Global Solutions unique to the highly focused family of Evapco companies. We are proud to be a part of such a dynamic and growing company focused on providing high quality and technically advanced heat transfer solutions.

Don Dobney

President, EvapTech, Inc.

Technical Tidbit

Motor Input Power

Because motors are nameplated based on the output power of the shaft instead of the input power, the motor's efficiency must be accounted for when providing data on motor input power. Motor efficiencies vary depending on models and configurations, but are typically around 95% efficient. See the example below on the motor input power calculation for a 200 HP motor:

Power at Motor Shaft = 200 HP, Motor Efficiency = 95% Input Power = 200 HP / 0.95 x 0.746 kW/HP = 157.1 kW

When evaluating power consumption of cooling tower proposals, care

should be taken to ensure that all bidder's are providing data on a comparable basis, i.e. all are providing motor input power or all are providing motor output power. This concept is also important when sizing VFDs for cooling towers or any motor-driven equipment.





Chris started with EvapTech four (4) years ago after a successful six (6) years at Composite Cooling Solutions. His proposal preparation, estimating prowess, technical solutions and project management experience from all parts of the world has provided EvapTech an avenue to continue its success in the aftermarket sector of our business.

Chris Bickerstaff

Senior Proposal Mgr.

You say it, he charts it.

Chris had recently received his Bachelor of Business Administration (BBA) from Kansas State University.

When not at the office he spends most of his time spoiling his daughter; she says jump, he says how high. His hobbies and interests are bookmarked by Research - Debate - Tabletop RPGs.

Sales & Marketing News

Rep Spotlight: Bemark

Bemark Associates, Inc. is located in Newark, DE and was formed in 1997 by a dedicated father and son tandem. Bemark joined the EvapTech family in 2011, covering Eastern Pennsylvania, New Jersey, Delaware, and Maryland. Bemark has developed extensive relationships with PSEG, Talen Energy, PBF Refining, Exelon Corp., Dynegy, AECOM and Wor-



leyParsons. Bemark's hard work in this region has provided recent project successes at PSEG Bergen, PSEG Linden, Paulboro Refinery, Dynegy Liberty Electric, and a new 4 Cell FM Approved ES Tower for Kraft Heinz. We look forward in continuing the success into 2018.

Product Development Update

New OSHA Access Regulations

On November 17, 2016, the Occupational Safety and Health Administration (OSHA) released a final rule updating their standards in Part 1910 - Subpart D - Walking-Working Surfaces, which were to go into effect on January 17., 2017. Among the changes made were updates to the requirements for stairs and ladders.



Major changes to the requirements for all new stairways include:

- Stairway angle to be between 30-50 degrees, maximum allowed riser height of 9.5" and minimum tread depth of 9.5"
- Height of stair guardrail is not less than 42" above leading edge of tread.
- Height of handrail on stair to be between 30-38" above leading edge of tread.
- ♦ Minimum head clearance on stairs to be 6'-8".

A part of this same ruling is a major change to ladders that will take effect in 2018. Any ladder with a height more than 24' above a lower level and installed after November 18, 2018 is required to have a ladder safety or personal fall arrest system installed with it. A safety cage cannot be installed without one of these two systems being included.

Please contact your local EvapTech sales representative for more information on these changes and solutions for necessary safety retrofits!



Featured Projects

UMass Amerst

The University of Massachusetts at Amherst has nearly completed their campus chilled water expansion project which included a new North Chiller Plant and ISB Chiller Plant upgrade. This project offered challenges which required a complement of products from the Evapco family. EvapTech installed a new 3-cell, Factory Mutual Approved field erected tower capable of meeting the new 4,800 ton demand required at the North Plant and a 1-cell addition upgrade at the ISB Plant. With the help of our local sales representative, Fluid



Equipment Systems of New England, two Evapco AT package cooling towers were installed to meet the reduced winter loads at each chiller plant. Overall it was a very successful project for the entire Evapco family!



Al-Corn Clean Fuels

EvapTech recently completed the installation of a new 3-cell Series EC Fiberglass Counterflow at the Al Corn Clean Fuels ethanol production facility in Claremont, MN, south of the Twin Cities. The new tower supports the plant's 70 MMGY expansion, and features EvapTech's low fouling TechClean 312 fill. The new unit is expected to begin commercial operation in early 2018. Along with the installation of a 4-cell Series EC tower at Heartland Corn Products in Winthrop, MN in 2016. The Al Corn project represents EvapTech's 2nd project in as many years with McGough Industrial Construction, and Karges-Faulconbridge, Inc, who served as site General Contractor and Engineer respectively.

Contact EvapTech

World Headquarters

8331 Nieman Road Lenexa, KS 66214 P: 913-322-5165 F: 913-322-5166 marketing@evaptech.com

www.evaptech.com

B-6-1, IOI Boulevard Jalan Kenari 5, Bandard Puchong Jaya

47170 Puchong Selangor Darul Ehsan Malaysia (60-3) 8070-7255 marketing-ap@evaptech.com

EvapTech Asia-Pacific, Sdn. Bhd. EvapTech Shanghai Cooling Tower Co., Ltd. marketing@evaptech.com

> Evapco Power Mexico, S. De R.L. de C.V. marketing@evaptech.com

Sales Contacts

Social Media

Midwest US George Nicely, gnicely@evaptech.com Gulf Coast / Southeast US Rich Forster, rforster@evaptech.com Dave Simac, dsimac@evaptech.com Western US Joe Padilla, jpadilla@evaptech.com Northeast US Darryl Miller, dmiller@evaptech.com



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