

# MOMENTUM

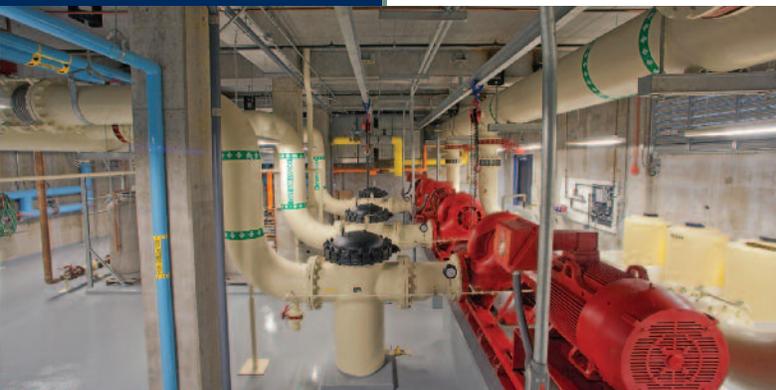


**Mueller**

Fall 2013

## EXPANDED POWER PLANT SUPPORTS GROWING MEDICAL CAMPUS

Reliability, Efficiency Stand Out in Complex Project at Wake Forest



condenser water system with an existing 14,400-ton system, is now complete. Three 933-ton chillers were replaced with three 1,600-ton chillers. "The location of the new chillers and how to fit the piping were very challenging aspects of the work," says Mueller Project Manager Steve Gillis, PE. "Detailed hydraulic analysis and modeling enabled us to create alternative piping schemes with careful simulations." Close coordination with the construction team, including construction manager Frank L. Blum Construction, mechanical contractor Benner & Fields, Inc., and electrical contractor Salem Electric Company, was also critical to the success of the complicated integration.

Ouellette. "The project came in under budget and on time. We were also able to choose an aesthetically pleasing cooling tower. I think it's a great feature of this project. Mueller was involved early on, and it was a high-quality job. They were a great team to work with."

According to WFBMC Plant Manager Randall Marshall, "This entire project was successful. Mueller was intuitive and attentive to details. It was well thought out. It's a large chiller plant from a healthcare standpoint, and we were not going to be able to take the entire system down. The modeling validated our concerns prior to construction and helped us identify where we needed to focus our money from a hydronic standpoint. There was also a lot of prefabrication, and shut-downs were kept to a minimum."

### On Time, Under Budget

"Our new cancer center was coming on line, and that put pressure on the schedule," says WFBMC Project Manager Paul

**A**s a nationally recognized academic medical center and health system, Wake Forest Baptist Medical Center (WFBMC) in Winston-Salem, North Carolina, offers clinical expertise in more than 100 specialties and is the only Level 1 trauma center in the region. A major phase of recent growth has included the development of a free-standing cancer hospital, scheduled to open in early 2014.

### Integrating New Equipment

Anticipating the campus expansion, administrators turned to Mueller Associates in 2006 to create a Master Utility Plan and begin to explore improvements to the circa-1969 power plant. The plant serves the four-million-square-foot campus with central chilled water and steam generation and distribution systems, with piping routed to buildings via a utility tunnel network.

The initial phase of the Master Utility Plan, involving the integration of a 4,800-ton

Mueller Associates has worked continuously with WFBMC on nearly 100 projects since 1991, and recently completed major improvements to the campus chilled water plant and cooling tower.



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# Mueller

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**“My father encouraged me to attend Baltimore Polytechnic Institute and that led to my career in engineering,” Nerf says. “It’s been a great career. I’ve had the opportunity to work on many unique projects, with many terrific people—both colleagues and clients. If I had the chance, I’d do it all over again.”**



**Gene Nerf began his career in 1961.**

## GENE NERF CELEBRATES 50 YEARS OF SERVICE

**C**hairman Emeritus Eugene Nerf, Jr., PE, who began his career as an engineering draftsman in 1961 and spent nearly all of his career with Mueller Associates, is celebrating his 50-year service anniversary this year. Nerf will retire from day-to-day operations at the end of the year and will continue to consult on major projects.

In 1963, Nerf joined the firm of N.P. Lloyd and Associates, which became Richard P. Mueller & Associates in 1966. A Baltimore native and a graduate of the Baltimore Polytechnic Institute “A” Course focusing on science and

engineering, Nerf earned his B.S.E. in mechanical engineering from Johns Hopkins University. He was mentored by Richard Mueller, founder and long-time president of Mueller Associates.

Together, Mueller and Nerf oversaw many milestone projects for the firm, including the expansion of North Arundel Hospital, a ten-year project to complete the Nave and West Front of the Washington National Cathedral, major expansions and HVAC improvements to the Baltimore Museum of Art and the Lyric Opera House, and the Sun Papers press facility in Baltimore.

Nerf became director of design in 1981 and served as president from 1992 until 2006. He served as chairman of the board until last year, when President Bob Marino, PE, LEED AP, succeeded him.

Nerf has continued to provide leadership and expertise on major projects for the firm, directing multiple projects at Wake Forest Baptist Medical Center in North Carolina and numerous projects for Northrop Grumman Corporation in the Baltimore area and the University of Maryland’s School of Pharmacy.



**Gene Nerf (left) joined Mueller Associates as a young designer in 1966. Richard Mueller was president of Mueller from 1966 to 1984.**

### A TRIBUTE TO EUGENE F. NERF, JR. ■ BY RICHARD MUELLER, PE

**G**ene and I go back a long way—approximately 50 years. He was a serious young man, and kind of on the quiet side. He always had his head down, putting lines on his drafting assignment. He was a very good worker while at the same time pursuing the engineering curriculum at the Hopkins Evening College. As time went on, he took on more design work. Upon receiving his engineering degree he applied for and was awarded his professional engineering license. He was ready to “soar with the eagles.”

We worked hard in those early days, sometimes working around the clock to meet the deadlines. One project requiring extra effort was the air conditioning of the

Enlisted Men’s Barracks at Andrews Air Force Base, which was one of our early projects for Chesapeake Division, Naval Facilities Engineering Command.

The projects became larger and more complex and included mechanical and electrical alterations to the original Monumental Life Insurance Co. in Baltimore, mechanical and electrical work for the Washington National Cathedral, and the Bloomberg Center for Physics and Astronomy at Johns Hopkins University. One high point in the firm’s history was the HVAC retrofit of the General Accounting Office in Washington, D.C., for which Gene and I negotiated with GSA our largest commission up to that time, \$1 million.

On a lighter side, we were not all work and no play. Gene loves golf and one summer he and I were in a foursome when he attempted a difficult iron shot to the green. He pulled a 5 iron from his bag, lined up the shot, and took a mighty swing. He swung so hard, he launched the club airborne vertically into the waiting arms of a nearby maple tree. It may still be there. Gene was not deterred and finished the round with a good score.

There are many other stories about Gene. One thing remains quite evident: Gene’s commitment, leadership, hard-nose budget planning, and follow-through are foremost in the factors which made and continue to make the firm successful. Gene is a “hard act to follow.” Good luck, “son.”