Hello WGA members:

I hope everyone enjoyed their summer as it comes to an end and fall is upon us. Now the scramble starts to get loop fields into the ground before frost and snow covers the region.

I would like to discuss the importance of training and hopefully spark some interest from industry trainers to get involved with our annual conference coming up in March. I can’t stress enough how important training is for long term success of the geothermal heat pump business. Training not only means how to properly install a geothermal system, but also how to correctly design and size a system, how to service the system if it should need it, and how to install a ground loop properly and safely.

I know some people don’t look at proper sales training as a necessity, but it is also a vital part of your business. Sales training and knowing how to set the right expectations of the consumer is a very important part of your reputation. You could do everything right on the installation of the system, but if the expectations of the system aren’t properly set, you could still end up with an upset customer in the end.

With our annual conference around the corner, we are looking for some great industry trainers to step up, become a part of our group and provide some of the short courses. We have a section on the WGA website, www.wisgeo.org, where you can submit an application to present at the conference. We still have plenty of room and the board would love to have to sort through a lot of applications.

Thanks and have a wonderful fall. Go Packers!

Brian Urlaub
WGA President
Gateway Technical College located in Kenosha, Racine and Walworth counties, is the first in the nation to begin offering geoexchange drilling and overall geoexchange system training through course offerings which began in May 2010.

Gateway is a premiere site for geoexchange technicians to receive their training. Federal and state grants awarded to Gateway for development of curriculum for geoexchange training, allow the school to provide first-of-its-kind courses and pathways for program graduates to continue their education and training which are keys to this quality training opportunity.

**National Science Foundation Grant**

Gateway was honored to receive a $141,000 grant from the National Science Foundation (NSF) Advanced Technological Education program. Recognizing Gateway’s cutting-edge work, the grant supports expansion of the technician training curriculum.

The national grant specifically addresses the need for qualified earth drillers by funding curriculum development, which would equip students with the proper knowledge and expertise to drill for geoexchange systems.

The curriculum being developed provides for a certified geoexchange technology process – specifically in drilling – which could be used as a stand alone associate degree program or incorporated into existing college programs such as heating, venting and air conditioning technologies. The curriculum development will be finalized in December, but Gateway began offering some of the already-developed introductory courses.

The curriculum developed by Gateway will be a national model for other colleges, who can then use it as a pattern to develop their own geoexchange technician programs.

**Cutting-Edge Training**

Gateway began offering geoexchange courses developed through the NSF grant in May in its Air Conditioning, Heating and Refrigeration Technology associate degree program, including training in rotary rig operation and rotary mud boring applications. Once fully developed, it will be a stand alone associate degree program.

Gateway is now offering training in grouting and sanitation, plastic fusion applications and ground loop methods. Courses that will be offered soon include site safety and training in trenching and headering, rig transport and setup and geologic formations. Gateway is the only college in the state and the nation to offer accepted geothermal drilling training.

Kenosha resident Tony Paura entered the HVAC
program with an emphasis in geoexchange technology seeking a career change after his construction company declined in the poor economy.

“Geoexchange is the best of all worlds,” Tony said. “It’s a profession in which I can continue to learn and grow and it’s a sustainable industry, too … This industry is where it’s at – and Gateway is the place to be trained for this profession.”

Before the current geoexchange career track was developed within the HVAC program, Gateway, during spring 2009, began offering separate training courses. Students drilled 3-inch wide by 100-foot deep holes to the north of the college’s Horticulture Building Greenhouse. The project gives students hands-on training opportunities in addition to providing Gateway a 60,000 BTU direct exchange heat pump system. When the system is completed and installed it will be hooked up to another earth-friendly heating system inside the building.

The geoexchange system will heat units underneath greenhouse seedling beds to allow the plants to germinate and grow more efficiently – as well as reduce energy costs to that building by 50 - 60 percent.

The Gateway geothermal drilling training incorporates HDPE and copper for geoexchange systems.

**Broadened Career Opportunities**

In addition to providing new and cutting-edge training so geoexchange graduates can enter and succeed in this emerging industry, Gateway has worked to offer students expanded opportunities if they wish to continue their education at a four-year college.

Gateway and the University of Wisconsin-Parkside signed an agreement in July giving students graduating in two “green” career areas at Gateway expanded educational and career opportunities.

The agreement provides pathways for associate degree graduates in two Gateway programs to transfer their credits to UW-Parkside to continue their education toward a four-year degree. Those two programs are Civil Engineering Technology-Freshwater Resources and Air Conditioning, Heating and Refrigeration Technology with an emphasis in geoexchange technology.

The agreement is a seamless opportunity for Gateway associate degree graduates with a degree in either of the programs to continue their education by transferring into UW-Parkside to earn a bachelor of science degree in Geosciences-Soil and Water Sciences.

Geoexchange graduates will have the opportunity to engage in a 1-plus-3 agreement, where 30 approved Gateway credits will transfer.

For more information on Gateway’s geoexchange program, please contact Tom Niesen, (262) 564-2610.
The day after the “great flood of 2010” the 5th Annual Wisconsin Geothermal Association motorcycle ride took place. It was a smaller than typical group with about 12 bikers that were brave enough to make the trip.

In keeping with our tradition of scheduling the ride around rainy weather, the northern group gathered at Water Source Heating & Cooling in Eau Claire at 7:30 Friday morning with a light mist in the air. We headed south for the rendezvous with more of the group at Al Muth Harley Davidson in Black River Falls. After enjoying some coffee and goodies, provided by Mark Muth, and of course looking at some new bikes, we left for our next stop at Vernon Electric in Westby, WI.

Beginning with crossing the Black River, which was raging like the Colorado River, we saw a lot of flooding, high water and flooded fields along our route to Westby. As the skies cleared, pushing out the remaining rain clouds we had wind gusts of 40-50mph, especially on the high ridges.

We met with Dave Maxwell at Vernon Electric for a tour of their new electric coop facility and geothermal system. After we left the co-op, WGA board member, Mark Flock from Cashton WI, led us on a beautiful tour through the hills and valleys of Vernon County and the winding Kickapoo river.

We had lunch at the world famous Rockton bar, which is that area’s primary biker stop. After lunch Mark led us to S & S cycle where we stopped for about an hour during which time one of their employees gave us a tour of their bike museum, which included many custom S&S bikes, racing bikes and some that had set speed records. This was a very interesting stop that was a big hit with everyone. Then we rode another hour through the hills and circled back to Westby where everyone parted ways to head home.

The afternoon was beautiful weather but with gusty winds on the hilltops in the high country. The ride, as always, was very enjoyable with good camaraderie and great riding. So for all of you that chickened out because of a little rain, you missed a great ride. Be sure to put the 6th annual WGA ride on your calendar, the first Friday of June, 2011. See you then!

Written by Dan Green
WGA Board Member
Go Paperless!

If you wish to receive only the electronic copy of the WGA newsletter and stop receiving the paper copy in the mail, simply send an email to info@wisgeo.org. In the subject line ask to stop receiving paper newsletters.

Calendar of Events

March 2-4, 2011
Better Buildings: Better Business Conference
Wisconsin Dells
Go to www.ecw.org/university for more information.

March 9-10, 2011
WGA Annual Conference, Hotel Mead, Wisconsin Rapids

If you are interested in being a presenter at the annual conference, visit www.wisgeo.org and click on the Submit Presenter Application link.

Online conference registration will be available in January 2011.

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