



ETA KAPPA NU

Electrical and Computer Engineering Honor Society

Gary Bruce Helming PE

Sr. Telecommunications Technician

Northwestern Energy

Iota Kappa, Montana State University



Career Synopsis

I have worked in the power utility business nearly all of my career. I left the PhD program at MSU, with an MSEE, and began my employment at a subsidiary of Montana Power Co called TRI, which did telecom consulting for other utilities. This company folded in 1990. I went back to work as a Consulting Engineer for March Engineering Bozeman and worked at utilities in California and Oregon. In '95 I started my own consulting firm (H-Comm) doing telecom and SCADA projects. In 2001, I came back to work for Montana Power while continuing to operate my own consulting business on the side. Montana Power is now Northwestern Energy. I am a senior telecommunications technician at Northwestern and the owner of my own business.

Career Highlights

I was really on the ground floor on a lot of utility technologies. Montana Power was one of the most technologically advanced utilities on the planet for many years, it was small, and I had a lot to do with its success. MPC was the first utility in the nation to use digital microwave and invented its own line of SCADA equipment (Tetragenics). I was involved in a lot of this and when its consulting business folded, I was able to do a lot of the work that it had as my own business. While doing consulting work at major west coast utilities, I found that the traditional progression was to move Engineers into project management positions, where their technical skills wilted. I resisted that move and rearranged my work and my career so that my consulting work is in the field with my hands on the technology. Besides making the job better from my standpoint, I have found that the people close to the technology survive corporate shakeups much better than middle management too!

Education and Career

At MSU, I went through the whole telecommunications program and even developed another class, as a Grad Student, to go along with the telecom track. I went through the entire power engineering track too. This placed me well for doing power utility telecommunications and controls. In these tough economic times, the power industry still has a lot of good jobs that are hard to fill. I have worked hands on with the technology for many years. I really enjoy being the person that people go to with technical questions. I have many engineering friends who haven't used their technical knowledge in years. I feel that I am really using what I learned and am adding to it all of the time! My MSU education was very adequate. I keep in touch with people at MSU to this day!

Advice to Engineering Graduates:

I would tell them that whereas the corporate progression track might take them toward higher management (which is what some Engineers want), if you truly went into engineering for your love of the science and not just because it seemed like a good way to get a job, then I would say to stay as close to working with the technology as possible. Companies nowadays are really looking for people with specific experience with specific technologies. If you have that, you will probably have better employment stability and can also more easily branch out to be your own boss too. With companies coming and going left and right, you have to look out for yourself, and keeping your hands on the technology, I think, is the best way to do it.