



# Sloan Career Cornerstone Center

## Profiles of Power Engineers



**Kathlene West, P.E.**  
**Engineer**  
**Dayton Power and Light Co.**  
**Dayton, Ohio**

<b>EDUCATION</b>	<ul style="list-style-type: none"> <li>▶ BS Electrical Engineering, University of Dayton</li> <li>▶ MS Engineering Management, University of Dayton</li> </ul>
<b>JOB DESCRIPTION</b>	I am responsible for modeling and analysis of the power system, protective relay studies/settings calculations, and system disturbance analysis.
<b>ADVICE TO STUDENTS</b>	<p>I have three suggestions for young engineers and future engineers:</p> <ol style="list-style-type: none"> <li>1. <b>Be a good communicator</b> Writing and speaking skills are just as important for engineers as they are for business majors. If technical writing isn't your thing, take some classes. Make sure you can express yourself clearly and that you can adjust your writing for a variety of audiences.</li> <li>2. <b>Become an expert on something</b> Sometimes young engineers are fast-tracked from one position to the next. This can be great for your career but may leave you without an area of mastery. It's prudent to have some depth in one or more technical areas. Job security is never guaranteed and your technical expertise might make all the difference if you need to re-establish your career after a layoff or relocation.</li> <li>3. <b>Get your license</b> Start working toward getting your PE and other certifications specific to your field. We are all competing for our jobs in a global marketplace and you should do everything you can to distinguish yourself.</li> </ol>

### ▶ INTERVIEW SEGMENTS

▶ **Q: When did you know you wanted to become an Engineer?**

▶ **West:** When my brother and I were kids, our dad (who has a degree in physics) was often explaining how things worked. We learned about whatever was around us - air conditioners, the transmission in our car, the jet flying overhead. We explored the workings of our computer and how to count in binary and hex. This was back in the 70s and 80s when it was unusual for young kids to be computer literate. Growing up this way really fueled my interest in the sciences and a career in engineering seemed to be a natural choice.

▶ **Q: What was your university experience like?**

▶ **West:** I loved engineering school at the University of Dayton. There was plenty of hard work involved, but not so much that academics were all consuming. I found that I still had time for extracurricular activities and fun. At UD, I was able to enjoy the benefits of an outstanding academic program within a community of students and faculty sharing similar values.

▶ **Q: Did you incorporate work experiences while you were an undergraduate student?**

▶ **West:** Yes, I participated in the co-op program offered at UD. I strongly recommend co-op/intern programs for all engineering students. Getting some real world experience for your resume is just one benefit. Equally important is the opportunity for students to evaluate prospective employers and vice versa.

▶ **Q: How did you get your first job?**

▶ **West:** I worked at DP&L as a co-op student and was offered a full-time position upon graduation.

▶ **Q: What's the most rewarding thing about being an Engineer?**

▶ **West:** It is important to me that DP&L provides a much-needed service. On a day-to-day basis, I get the most satisfaction from the nature of the work itself. Each project is interesting and technically challenging. The industry and technology is constantly changing and there is always something new to learn.

▶ **Q: Is there an example you can provide that shows how something you've worked on has positively impacted the world?**

▶ **West:** Every project I work on is directly related to improving the reliability and safety of the power system. When a protection engineer does their job right, there isn't much of a visible result. Nobody is going to pat you on the back saying "good job – no blackout today!" So you have to content yourself with the knowledge that you are working to provide a vital service to the community.

▶ **Q: Do you spend a fair amount of time traveling?**

▶ **West:** No, travel is limited to occasional trips for training or technical seminars.

▶ **Q: Do you have a mentor? Or did you in your college years?**

▶ **West:** Yes, I've had several informal mentors over the years and not all are engineers. Early in my career, I benefited greatly from a mentoring relationship with a colleague in accounting who provided great business/career advice.

▶ **Q: Do you find yourself working more in a team situation, or more alone?**

▶ **West:** While there are always tasks I work on individually, most of my work is done as part of large projects involving many people.

▶ **Q: Do you find you are able to balance work with social/family life while working in your current job?**

▶ **West:** I have four young children and find that maintaining a work/life balance is my biggest challenge. Switching to part-time status a few years ago gave me the flexibility I needed to make things work. I've learned that you can't simply find one solution and stick to it. Constant re-balancing is required to keep things running smoothly at work and at home.

▶ **Q: If you had to do it all over again, would you still become an Engineer?**

▶ **West:** Absolutely.

▶ **Q: Did you think that school prepared you for the way the work gets done in the real world?**

▶ **West:** As a participant in the co-op program, I was developing my understanding of the workplace right along with my theoretical knowledge. By the time I entered the full-time workforce, I had a good understanding of how work really gets accomplished. At UD, we did a lot of lab work, projects, and reports in small groups. These team projects were also very good preparation for real-world work.

▶ **Q: Where do you see jobs for Engineers in the future? What should students be doing to prepare themselves to take on those roles?**

▶ **West:** The power and energy industry is undergoing a lot of change right now. Distributed generation, increasing use of renewables such as wind and solar, distribution automation, and a constantly shifting regulatory environment are just a few examples. Although I can't predict exactly how this industry will take shape in the years to come, it's safe to say that complexity will increase. That means more work for protection and control engineers. Students looking to enter this field might want to consider schools offering power systems as an area of emphasis. This is helpful but not strictly necessary and anyone with a solid grasp of the fundamentals can be successful.

▶ **Q: What other advice do you have for students?**

▶ **West:** I have three suggestions for young engineers and future engineers:

- 1. Be a good communicator**  
Writing and speaking skills are just as important for engineers as they are for business majors. If technical writing isn't your thing, take some classes. Make sure you can express yourself clearly and that you can adjust your writing for a variety of audiences.
- 2. Become an expert on something**  
Sometimes young engineers are fast-tracked from one position to the next. This can be great for your career but may leave you without an area of mastery. It's prudent to have some depth in one or more technical areas. Job security is never guaranteed and your technical expertise might make all the difference if you need to re-establish your career after a layoff or relocation.
- 3. Get your license**  
Start working toward getting your PE and other certifications specific to your field. We are all competing for our jobs in a global marketplace and you should do everything you can to distinguish yourself.