

# **THE ACADEMY OF ELECTRICAL CONTRACTING**

**Paper Presented by  
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On the national level, quality management has been the subject of hundreds of articles, the focus of an equal number of meetings and seminars, and a sometimes elusive goal toward which we all aspire. On a personal level, I would like to share some specific examples that have impressed me.

In December of last year I stopped in a supply store to purchase a bench drill. On the counter was a stack of papers titled "Mission Statement" which included the following observation: "Our company is in the business of distributing specialty products to the construction industry. We succeed in this endeavor by adding valuable services to our products."

At an international conference that I attended last September an Emory University Professor presented a session entitled, "A Dissatisfied Customer is a Terrorist." The meeting focused on the importance of customer satisfaction as it directly relates to a company's cost efficiency and productivity, and indicated that one dissatisfied customer increases the cost that is equal to or greater than the profits from five satisfied customers.

On a personal level, I am involved with a local company that is in the business of supplying components to aircraft manufacturing companies that provide products to 90 percent of the world's aircraft. Our products involve a great deal of electrical high tech design at the cutting edge of new development. Two years ago we adopted a "Quality Improvement Process" that is intended to be a four-year process. The unique part of this program is that it expects to achieve improvement in productivity at the rate of 5 percent per year. This is not dictated from the top, but is the result of involvement of employees at all levels.

Another interesting example comes from our local newspaper, The Seattle Times. In an article by Frank Shrontz, the CEO of Boeing, their commitment to quality was presented in the following statement: "To sustain our aerospace leadership, Boeing has embraced the principles of 'Total Quality,' or what we call 'Continuous Quality Improvements.' We have embarked on a long term commitment to steadily improve the way we design, build, and support our products. Every part of the company from manufacturing to business systems has been charged to look for better and more efficient ways to get the job done. To effect this kind of systematic change, employees at every level must continually acquire new skills and the company's training requirements have grown accordingly."

From these examples, I can draw a number of components that are common to the achievement of Quality Management. First, though, we need to be sure that we have an understanding of commonly used terms. Let's start with customers. For an electrical construction subcontract, the list would include the owner, the general contractor, the electrical design engineer, and the architect. In addition, of course, there are employees within each of

these categories who extend the range of the customer's network. Although this is not an easily defined unit, it is a very important one if we are to use customer satisfaction as a measure of the success of Quality Management.

The next term we need to define is "quality." This is a generic term that means very different things to different people. To electricians, it may mean the appearance of a conduit installation or the satisfaction of having installed a job to an engineer's specifications. The general contractor, as our customer, is likely to have a different interpretation of the meaning of quality than the design engineer. For purposes of discussion, I would like to define "quality" as a commitment to total company improvement as well as a commitment to customer satisfaction.

As I understand the concept of total quality, it involves the support and commitment from top management to a program that must begin at the lowest employee level. All employees must work together as a whole toward continuous improvement within the overall framework of the organization, and also within specialized units that have specific responsibilities. Opportunities to suggest and implement changes to increase productivity should be encouraged throughout the organization.

It may seem that there are more impediments than apparent gains from going through this process. I personally believe the gains can be monumental. An important first step can be to encourage a change in attitude. If you start with the idea that it is vital to satisfy the customer, it immediately clarifies the objective and focuses on a starting point toward improvement.

The first attitude that needs changing is the perception of the general contractor as the enemy. As all of you know, the topic most enjoyed by a group of subcontractors is all the abuse given to them by their general contractor customer. Second, top- and middle-management need to see the importance of taking a long-range view in which the general contractor can be recognized as a satisfied customer. Finally, the structure of a job site organization can contribute to cooperative and harmonious working relationships.

In my own experience, I have had subcontracts where there was excellent cooperation with the general contractor and also on the job site. It is a marvelous feeling to make a suggestion that will speed up job completion and have the job superintendent not only agree with you but put your suggestion in action immediately. This type of relationship with a general contractor doesn't often happen. How, then, can we-NECA-improve the process so that exception becomes the norm?

If Quality Management can be identified with Total Quality Improvement, we at least have a starting point for a focus of a major, long-term educational process. NECA offers a lot of educational programs to promote marketing. These could be augmented to include the idea of custom-

er satisfaction. Another area—the subject of annual production improvement—would require a detailed study and, possibly, research. We presently have a number of joint union efforts that are successful. There would, of necessity, have to be modifications to the present union agreements, both to work toward customer satisfaction as toward productivity improvement. It would be desirable to be able to track production and to augment pay if improvement is accomplished. Improvement in annual productivity is the responsibility not only of the job site personnel, but of management and staff as well.

My own idea of Quality Management is management that sees the customer as the focus of an organization in which the staff and employees work to provide customer satisfaction and, at the same time, continually improve the bottom line profits. Within our industry, I

doubt if many contractors can even come close to this definition of Quality Management. I believe that NECA's educational program for the future should be focused on both quality management and customer satisfaction which will help us realize our full potential in the changing business environment of the future.

*Don Close has been affiliated with NECA since 1947 when the company he owned (Donald W. Close Company of Seattle, Wash.) joined NECA. Don was active in the Puget Sound Chapter and served as both President and Governor. Don was elected to the Academy in 1970 and has been active at annual meetings. Don retired from the electrical contracting business in 1985, but continues providing consulting services as an electrical engineer to several clients.*