

# **Technology: Friend, Foe, or** **A combination of the two?**

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Imagine a time when a water treatment plant operator would be able to sit at home, in his or her living room, and be able to run the entire system without ever leaving the couch. Well, as some of you already know, this is possible. With the latest technology available today, and the courage to depend on it, your system could be updated to this level. Oh, I left out the part about the cost. Well let's not go there. Please don't take this the wrong way. I do believe SCADA (Supervisory Control and Data Acquisition) Systems are absolutely amazing. I'm also in favor of anything to make an operator's job less hectic. The thing I am concerned with is the possibility of, over a period of time, a new generation of operators trained only on the automated systems.

How many of you readers have ever heard something like, "I'm sorry we are not able to help you at this time, our computer is down?" Did you ever have a cashier in the store try to make change without the register telling them how much? Ok, that last one may be a little below the belt, but I think you know what I'm trying to say. Here comes one of those, when I was in school I had to walk uphill to and from references, but when we learned Math, for example, a calculator couldn't be used. When my children were in school, they were able to use them in 7<sup>th</sup> grade. Again, I know in today's world we need everything we can get our hands on to stay competitive and I'm all for it. I just feel we should never forgo the basics when it comes to education. A friend of mine, who works for a County Welfare System, told me that during a recent computer virus infection she had over 50 employees virtually paralyzed. Only three long time employees had the experience to be able to get clients their aid. Since the stores could not access the State System, to authorize their eligibility, some of these people were unable to buy food for up to six days.

I'm just afraid that as this evolution of technology takes places in our industry, new operators will eventually be trained only using the latest equipment and not really know how to, or worse yet, be able to run the plant manually. Possibly some may not even know exactly what sequence of

events takes place during a filter backwash. Just an example guys, I just want to convey the message that I would hope every new operator would have a good understanding of the whole system and it's operation and not just push buttons and not know what actually happens when he or she pushes one.

Again, I want to stress my belief in the latest technology to the max. The savings to any system that can upgrade their operation with the wide array of products on the market today can be quite substantial. Man-hours alone can be cut, or better yet, be redirected to take care of something we to often neglect, such as Preventive Maintenance. Also the quantity and speed at which we can access information on-line is unbelievable. Reports alone that can be generated with the proper use of programs and templates, such as Vulnerability Assessments and Emergency Response Plans, can not only save your operators time in generating, but insure that they will not be rejected upon submittal.

I hope you can appreciate my concern with the concept of FRIEND OR FOE with regard to the things I have mentioned. I would like to hear your opinions and input along these lines.