Written by William C. Livoti
Thursday, 17 February 2011 14:45

As we enter a new year, let's first reflect on the past. What actions (changes) have we as a country undertaken to improve our environment, economy and overall quality of life? If that sounds like a trick question, it is. It's also intended to be thought-provoking.

Legislation to address environmental issues has the potential to significantly impact our economy and—*consequently*—the quality of our lives. Unfortunately, some proposed legislation could play a role in stalling what most of us would characterize as a painfully slow economic recovery.

A number of power companies say new rules won't stop them from expanding over the next few years. Others are replacing coal-fired plants with cleaner natural-gas plants to avoid pending legislation that could force coal plants to install Carbon Capture and Sequestration technology at significant cost. Let's understand what's on the table.

As noted by Power-Gen Worldwide (www.powergenworldwide.com), the North American Electric Reliability Corp. (NERC) has analyzed the potential impact of four rules under development by the EPA. They are the Clean Water Act — Section 316 (b), involving cooling-water intake structures; Title I of the Clean Air Act — National Emission Standards for Hazardous Air Pollutants (NESHAP) for the electric power industry, also known as the Maximum Achievable Control Technology Standard; the Clean Air Transport Rule; and Coal Combustion Residuals (CCR) Disposal Regulations. The proposed regs specifically involve:

- Sulfur dioxide and nitrogen oxide caps
- Reconsideration of the ambient ozone standard
- Limitation of power-plant mercury emissions
- A rule to tighten controls on power-plant cooling-water intakes
- Another rule for managing coal ash

NERC's analysis points to a number of possible repercussions, should these new rules take effect:

- We could lose up to 19% of our fossil-fired steam capacity by 2018.
- Planning of reserve margins could be affected.
- Reserves could fall below reserve margins in about half of NERC regions (U.S., Canada and part of Mexico) by 2015.
- Plant retirements could exceed 50GW on a fleet capacity of 340GW (15%).
- 100GW (existing plants) would require “large investment” to meet emission rules.
- Retirements could cut demand for steam coal by 15-31%.
- Natural-gas demand could grow 8-16% as some coal plants are replaced.
- Coal plants could close due to “economics.” (Coal prices are a premium to natural gas by themselves. Now add the cost of environmental controls.)

I believe in protecting our environment, cutting energy consumption and reducing greenhouse gases—*who doesn’t?* That said, we need to approach these issues with a great deal of common sense. Pending regulations could be tantamount to cutting off our collective noses to spite our faces. **MT**

Bill Livoti is a fluid power and power industry engineer with Baldor Electric Company. Telephone: (864) 281-2118; e-mail: wclivoti@baldor.com.