



INDEPENDENT ELECTRICITY
CONSULTANTS

With the rapid changes in the electric power industry, I thought that I would write a brief note regarding my thoughts on industry trends. As always, I encourage you to contact me if you have questions, thoughts, or issues you would like to discuss with me.

Natural gas prices have more than doubled in the last several years, and in many parts of the country, natural gas is typically the marginal fuel and therefore sets the price of electricity. International oil markets are faced with growing demand and security concerns, and there is ever tightening U.S. environmental regulation, which predominately affects the costs of generation electricity with coal. There is still insufficient retail price responsive electricity demand, and markets in the Mid-West are just getting off the ground. Combining all of these factors means that electricity prices will stay at existing levels or increase; a substantial decrease is unlikely unless a major recession occurs.

With high electricity prices and other energy issues on policymakers' minds, regulators are itching to fashion and implement new policies. The Federal Energy Regulatory Commission is taking on a new role as the reliability regulator for the nation's grid (except for Texas – remember why?). The FERC also has been responding to the Energy Policy Act of 2005 in the areas of transmission congestion, security constrained economic dispatch, price-responsive load and net metering. The Northeast and California are implementing renewable policies and are in the process of adopting carbon dioxide cap-and-trade markets. Coal and even nuclear power are also making a comeback. Although no one wants to be the first to build a new nuclear power plant, many companies want to be second.

So what is the prognosis for North American electricity markets? There will continue to be a strong mix of regulation and “markets”. Natural gas-fired power plants – whether combine cycle or combustion turbines – will not longer be the slam-dunk choice for new power plants. Newer technologies, many using traditional fuels, will be tried along with aggressive energy efficiency measures and expanded transmission systems. Utilities, even those in ISO markets, will continue their role as managing price risk for many of their customers, since retail access has only really taken off in a couple of states.

With all this excitement going on, the industry is likely to see rapid change, reverses in course, and perhaps one or two major mistakes. As I expect you recall from the seminar, problems of interest cannot typically be segregated into one discipline; instead a cross-disciplinary approach is required. It is important that we remember to think through the problems that we are confronting from an engineering, economic, regulatory, and business perspective to find solutions that work from all of these different angles.
