# *World Energy* interviews the leadership team of Black & Veatch Corporation's Enterprise Management Solutions (EMS):


## Rodger Smith, President, Enterprise Management Solutions
## Jay Lukens, Managing Director, Lukens Energy Group, a Unit of EMS
## Rich Rudden, Managing Director, RJ Rudden & Associates, a Unit of EMS


***World Energy:*** At Edison Electric Institute's annual conference, it was reiterated that natural gas will fuel approximately 75 percent of the new electric generators going into service through 2008. Natural gas prices are rising. There is a continued downward trend in the domestic production of new gas wells, and there is increasing momentum around increased importation of liquefied natural gas to supplement domestic supplies. What are the prospects for gas supply and price?

***Rodger Smith:*** Gas supply will remain tight for consumption by generators as we see a continued decline in domestic supply. Prices will continue to rise. I am afraid those generators that bet the farm on gas-generated electricity as the low-cost option will see the bus bar cost of electricity continue to rise for their customers. Natural gas will not have been the best alternative for baseload generation.

***Jay Lukens:*** At the current oil price levels, we expect that gas prices will trend upward until 2010, when some of the new LNG terminals come into service. Increasingly, however, we see a linkage between gas and oil markets. If, as many observers expect, oil prices fall next year into a $30-$40 trading range, then there should be a related decrease in gas prices. Longer term, we expect the emergence of a true world gas price and stronger correlation between gas and oil markets. Given the inventory of known but unexploited gas reserves, gas will gain share of global energy consumption. The only certainty in future gas prices is continued volatility over the last 18 months.

***World Energy:*** We haven't heard much about plans to build big baseload generators. Won't we need them? If we do, what are the obstacles and how do we overcome them?

***Rich Rudden:*** New baseload will definitely be needed within the coming decade. The problems are risk and ability to finance. The up-front investments required for coal or IGCC [integrated gasification combined cycle] plants are huge, and they are measured in the many hundreds of millions, if not billions, of dollars per plant. It is unlikely that the merchant sector will build these new facilities, at least until the demand for this new baseload capacity becomes immediate and manifest, or until purchasers of the output are prepared and authorized by their regulators to sign long-term purchase agreements. It may very well be up to the utility sector, where "rate-based" generation is still permissible, to undertake the necessary planning and construction to ensure the baseload needs are met. However, even within this sector, investor-owned utilities will be extremely cautious in undertaking any investment without some degree of assurance that regulators will permit the timely recovery of costs. Another option would be, of course, to permit reintegration of generation for today's wires-only companies.

***Jay Lukens:*** The industry needs a rational approach to capacity pricing. In the Northeast United States, where the markets that have advanced furthest in terms of the FERC's [Federal Energy Regulatory Commission] vision of how wholesale power markets should work, capacity markets are dysfunctional. In New England, for example, there is currently a glut of generation capacity, but the ISO wants more capacity to be built to meet its reliability goals. The market price for capacity in New England is far below the price required to incent construction of new generation. The issue of how to design a capacity market must be resolved before the industry will be able to finance big baseload plants.

***Rodger Smith:*** I would add that we have seen a resurgence of large baseload plants in the expansion plans at some of the utilities that remained vertically integrated (the need to serve load growth reliably and to grow the company seem to be factors). These plants include large coal units and even some discussion of nuclear. Given our current resource and technical constraints, these are probably our two best alternatives for baseload generation. The cost and regulation associated with environmental controls for coal-fired plants must become more rational. Spent fuel storage and a more reliable and predictable NRC [Nuclear Regulatory Commission] licensing approval process for new plants must be resolved before nuclear is a viable option again.

***World Energy:*** Duke, Exelon and Berkshire Hathaway have announced big merger and acquisition deals. Would repeal of the PUHCA [Public Utility Holding Company Act] open the way to more deals? Will FERC use its power to reject deals as a lever to further its agenda? What do those deals mean for competitive markets?

***Rich Rudden:*** M&A activity will accelerate this year and into 2006, whether or not PUHCA is repealed. If the 1935 Act is repealed, however, the mix of players will probably change as more opportunities become available to foreign acquirers. This would make the M&A market more competitive. Regarding FERC, I believe that it will be challenged to address some very real merger-induced issues of market power, but I do not think that it has an agenda, per se, to reject mergers as a matter of principle, or in furtherance of other objectives. At this point, it is not clear just how activist the next FERC will be, let alone what its specific objectives might be.

***World Energy:*** How will the passage of the energy bill change the electricity marketplace?

***Rich Rudden:*** The energy bill's emphasis is on enhanced domestic production of primary fuels, such as clean coal, natural gas and oil, as well as on the encouragement of LNG development and green supply alternatives. To the extent that the electric utility industry will have a greater diversity of reliable generating fuels available, the bill can only be helpful. However, I'm not sure that any of this is particularly industry transforming.

***Rodger Smith:*** We have followed the progress of the energy bill with great interest. In addition to the opportunities presented around the development of new fuel sources, new coal technologies, renewable alternatives and the potential reinvigoration of nuclear generation, we believe that elements of the bill supporting transmission siting and mandatory electric reliability standards could lead to significant investment in the electric transmission and distribution grids.

***World Energy:*** Just about everyone agrees that the electric industry will have to file for a lot of rate relief. At various meetings, though, we hear investors complain about regulatory uncertainty and lack of clarity. What is less certain regarding regulation?

***Rich Rudden:*** What is less certain this time around includes a lack of recent regulatory precedent to guide Wall Street in assessing the likelihood that utilities will have a reasonable chance to earn their allowed returns; a host of new risks that face both vertically integrated and "wires-only" electric companies that remain largely unidentified, unmeasured and probably underestimated by regulators; significant questions concerning the merchant generation sector and its ability to meet the future needs for baseload generation; and the conditions that regulators will place on mergers and acquisitions, and the degree to which real synergies will be refunded to customers.

***Jay Lukens:*** One of the regulatory uncertainties that will muddle the next round of utility rate cases is the status of retail choice programs. In most areas, retail choice in residential and small commercial markets has been a bust. Yet regulators refuse to throw in the towel and end the programs. As a result, utilities have to plan for a world where they may lose customers. In many states, regulatory policy preserving options for retail choice inhibits companies from entering into long-term contracts or making commitments for long-lived assets. In the wake of the Enron debacle, the energy policymakers have lost their appetite for pushing a competitive agenda. But a stalled, "one foot on the bank, one foot in the canoe" stance toward retail choice is not serving the industry well. Regulators need to complete the hard work of evaluating retail choice programs and coming to ground on what direction they want markets to take.

***Rodger Smith:*** I would also add that uncertainty comes in the form of utilities having much less experience in handling these issues. Much of the talent utilities had in the rate and regulatory arenas is retired or otherwise left the utility. For a while, it was believed that the independent generators and marketers would handle these issues. That's not true any longer, and most utilities have been caught flat-footed. Many have not filed rate cases for 10 to 15 years and no longer possess all of the required skills to do so. This is what causes much of the anxiety.

***World Energy:*** Rodger, with the Kyoto Treaty now in force, the Europeans have launched a greenhouse trading scheme that has begun to produce some real prices for pollution. The Bush administration has professed little interest, but several states have taken action, prominent utility executives have mentioned a carbon tax and General Electric has declared that it views carbon reduction as a big business opportunity. What should the average utility do?

***Rodger Smith:*** Utilities need to become proficient at assessing and monetizing risk exposure. They will have to develop regulatory strategies and relationships that will prevent the stockholders from taking all of the risks. They should become policy influencers, not just followers.

***World Energy:*** Rodger, would you give us a quick summary of what can be expected in the short term?

***Rodger Smith:***

- Gas prices will move upward and be influenced more by global oil and gas trends.
- Builders who plan baseload plants for the end of the decade will need to see resolution of issues involving contracts, the role of the utility and how to pay for capacity.
- Expect more mergers with or without PUHCA, but repealing PUHCA would grease the skids.
- The energy bill concentrates on domestic fuel supplies, but its passage will greatly clarify some of the rules for utilities.
- Expect more regulatory filings, complicated by new issues and lack of experienced staff.
- Yes, capital costs have fallen overall, but the real issue for utilities is how to calculate the risk premium for an industry operating under a new set of rules.
- Finally, although most have focused on foreign or federal global climate initiatives (or lack thereof), a lot of the real action has been at the state level, and utilities need to develop strategies rather than waiting for the governments to act.