



2010 Utilities Industry Perspective

When we wrote to you last year, the global economy was in the depth of the deepest recession since the 1930s and uncertainty persisted about whether “green” issues – carbon footprints, greenhouse gases, and cap and trade legislation – would be addressed by the new U.S. Congress and how they would impact utilities going forward. We know part of the answer now. The Obama administration is ideologically committed to new greenhouse gas reduction, and the US\$700 billion economic stimulus program included a number of tax breaks, investment grants, and other initiatives targeting the use of renewables and energy efficiency, with more legislation still to come.

In the short run, the electricity sector will no doubt benefit from this economic stimulus. However, the stimulus package will not ameliorate the impact of the recession. Electricity sales for the 12 months ending in July 2009 were 5 percent lower than in the previous 12 months, with the most severe decline – an 11 percent drop – in the industrial sector. Moreover, the likelihood of increasing demand weakness – the result of a wide range of general economic malaise, demand management, and efficiency programs – raises the prospect of a redefinition of industry economic fundamentals.

More important, while carbon cap and trade legislation has passed the House of Representatives, it remains on hold in the Senate and still must endure additional legislative deliberation – all in an election year. Thus, the climate response regulatory environment facing the utilities industry today is even more uncertain – and hence riskier – than it was 12 months ago.

Over the past year, the realities of the challenge have also come into somewhat better focus. Strategically, we believe the market over the next three to five years will be defined by several factors:

- Economic stagnation will persist for the next 12 to 18 months and will be accentuated by more permanent demand – and revenue – destruction.
- In the long term, demand will be reduced and the overall growth curve flattened as the focus on smart grid, energy efficiency, and demand management takes hold.

- Higher rates will lag behind declines in demand and revenue and exacerbate these declines.
- Renewable mandates will continue to appear in a patchwork manner, leading to increased dependence on government subsidies and increased exposure to market distortions.
- Carbon legislation will remain mired in the Senate, and it appears that any legislation will have many safety valves and a marginal impact on generation trends in the short term.
- Environmental Protection Agency pollution regulations are a threat to utilities, but they will likely be challenged and stall in federal court.
- Ash regulation and the renewal of the EPA's Clean Air Interstate Rule (CAIR) will impact coal generators in the same way that carbon legislation affects other utilities.
- Natural gas will continue to complicate the picture as it settles in as a more stable and moderate price option for electricity generation.

Thus, the overall near-term picture is likely to be one in which gas and renewables compete for new generation, while risk-tolerant players exploit uncertainties in coal and capital and regulatory and financially advantaged companies pursue selective nuclear plants. Demand will be fundamentally redefined by energy efficiency and distributed sources, such as subsidized solar, before a large influx of smart grid technologies are launched later in the decade. These new technologies will have to overcome customer resistance to "high touch" responsibilities – primarily having to set up and monitor their own individual electric usage devices.

But regardless of pace, utilities need to prepare now for radically different market conditions by choosing business models that will shape their "right to play" in the future. The new paradigm will require management discipline – more concentration on developing strategic risk management and capital management skills that typically lag at utilities – to drive vital capabilities and improve asset performance. With this backdrop in mind, we have several suggestions for utility management teams in 2010.

Enhance Strategic Management Capabilities

Utilities need to shift their focus toward long-term business stewardship and strategic positioning, with significant enhancement of skills to support

strategic versus operational roles. Stated another way, the management model needs to mature beyond the short-term operations- or regulator-focused models prevalent today. Utility executives must understand the interactions among emerging market drivers and their potential impact on the company. For example, they will need new asset management capabilities to respond to the increasing intelligence available within today's electric system and the vast insight it can offer about network performance and condition. Maturing smart grid and demand response systems and the integration of renewable generation systems require electric distribution networks to use more computational, control, and communications technologies. The skills and experience required to manage these more complex and dynamic systems are very different from managing "one-way" systems characterized by a high level of redundancy to ensure reliability.

Expand Stakeholder Awareness

Many of the underlying operating costs of the utility business – salaries and benefits, cost of capital, and taxes – are increasing at the same time that demands for capital investment for transmission, renewables, energy efficiency, and infrastructure continue to grow. As a result, the current cost for new investment and service delivery exceeds the average embedded costs, resulting in continually increasing prices for the foreseeable future. Since industry and government policy architects have been more inclined to address each price issue independently, the aggregate impact of all these changes is rarely considered. Sustained higher rates will likely raise the hackles of consumers and other stakeholders. And we expect rate makers to employ a variety of mechanisms – freezes, negotiated moratoriums, artificial restraints, and lower returns on equity – to sidetrack price increases. To limit the damage in the conflict between cost recognition and price recovery, utilities must emphasize economic fundamentals in each regulatory debate. They must be prepared not only to defend the need for higher rates to cover costs but also to candidly educate external stakeholders about future trends, including escalating risks to the business.

Capitalize On Infrastructure Needs

While the effects of carbon-related policy outcomes on power generation remain unpredictable, ongoing grid and network requirements are much more tangible. Therefore, concerted focus on infrastructure investment provides utilities with the opportunity to sustain earnings growth while advancing their fundamental operating capabilities. Achieving the goals of current carbon policy directives is partially dependent on the ability of utility companies to establish adequate transmission to interconnect remote wind,

solar, or biomass sources. In 2010, utilities should also extend their involvement into direct or indirect renewable transmission corridors through partnerships with other companies operating in these areas that may employ nontraditional ownership and financing structures to enhance returns. Capital support for smart grid investments is only part of the ongoing infrastructure funding needs going forward. Capital for asset replacement, modernization, growth, and maintenance is still the primary cost factor underpinning the case made for higher rates. Alternative approaches to cost recognition and recovery will play an increasing role in balancing enhanced and sustained capital investment with long-term balance sheet flexibility and liquidity.

Redesign The Demand-Side/Retail Business

Utility customers are gaining a better understanding of their energy choices and usage, and they are employing new, more efficient control and communications technologies. These changes have the potential to erode utility revenues and increase variability in utility demand. As a result, utilities are placing increased management attention on the demand side of the business. This will necessarily entail redefining the nature of the relationship between utilities and their customers so that education about choices and behaviors is paramount.

Adopt Integrated Portfolio Models

One of the key drivers of uncertainty in the market is the absence of comprehensive and coherent regulatory approaches to capacity planning. Numerous, arbitrarily timed regulatory initiatives introduce significant complexity into capacity planning that affects both the demand and supply sides of the business. On the demand side, smart grid, demand-side management, distributed generation sources such as solar, and the introduction of electric vehicles have all altered the familiar planning equations that utilities have intuitively relied on for decades. On the supply side, coal assets could face a severe future from EPA ash regulation, and despite its promise, nuclear development remains hampered by high capital costs. Natural gas, on the other hand, is poised to play a significant role in the generation portfolio based on the expectation of moderate prices in the short and even long terms. Traditional supply analysis inadequately assesses market dynamics and the effect of new transformational factors on the demand and supply sides and tends to view market activities individually. Instead, utilities must embrace a new era of scenario planning to further their understanding of the interactions of new environmental policies, new consumer and operational regulations, and financial risks.

Selectively Look For White-Space Growth

The net impact of all this uncertainty points to potential margin erosion for traditional utilities. As demand shifts and revenues erode, it is likely that the regulatory compact will squeeze return and value out of the remaining core business. Simple diversification is no longer sufficient. The challenge is to selectively identify “white-space” plays – opportunities for targeted expansion outside of a company’s usual business scope – and determine where to place bets on market discontinuities. Emergent growth in distributed generation, energy storage, plug-in vehicle infrastructure, and renewables interconnection offers utilities the opportunity to use their traditional industry knowledge to meet shifting usage and policy requirements and at the same time enjoy potential incremental investment.

As we look ahead to 2010, it is clear that economic and regulatory uncertainty will remain. In this environment, those companies that can better anticipate and flexibly respond to changes in this dynamic and volatile market are likely to enhance their relative strategic positions. This transformation will take time, but embarking on these changes now, before the transformation takes its final shape and while companies can still influence its outcome, makes more sense than waiting for prescriptive rules, policies, and structures to be in place. At that point, strategic choices and tactical paths will be constrained.

We would be happy to discuss any of these issues with you in further detail.

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