



CRA Insights: Energy

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Emerging issues in electricity utility M&A

Following an active year of electricity mergers and acquisitions, consultants with CRA's Energy Practice examine the challenges and approaches that buyers and sellers are employing for regulatory review, portfolio management, strategy and business planning, and utility resource planning.

In this *Insights*, we summarize a webinar hosted by CRA experts on the challenges ahead for buyers and sellers of electric utilities. Discussing the emerging issues in electric utility M&A were: Dr. David Hunger, formerly an economist with the Federal Energy Regulatory Commission (FERC); Edo Macan, an expert on FERC issues and portfolio management; Jim McMahon, a corporate strategy and utility business planning expert; and Pat Augustine, an expert on utility resource planning.

The speakers addressed four emerging challenges that buyers and sellers are confronting in electricity utility M&A, including:

- Forecasting the retail rate “headroom” that a target utility has to support capital investment;
- Identifying targets or buyers that are less likely to present market power issues with FERC;
- Quantifying the risk of the departure of significant utility load to distributed generation; and
- Evaluating the environmental and fuel diversity risks of a target utility's generation portfolio.

Forecasting investment headroom

Many utilities are on a collision course with regulators and customers as a result of aggressive capital spending programs that may raise rates significantly. Mr. McMahon advised acquirers to take a hard look at how much “headroom” a target utility has for investment over the next 10 years and where other sources of value could be extracted. Acquiring a utility without this plan in mind could lead to regulatory blowback in the form of disallowances or a lower return on equity—something not likely contemplated at the outset.

Many electric utilities today are suffering low or even declining load growth as a result of energy efficiency, increased distributed generation, and the loss of industrial customers. Despite this, many utilities continue to aggressively invest in infrastructure, for example replacing retiring power plants and, increasingly, investing to refurbish and modernize transmission and

distribution systems. Aggressive spending without companion load growth tends to lead to rate increases, Mr. McMahon noted. CRA consultants recently forecasted retail rate growth for utilities nationally and noted a 2% to 5% compound annual growth rate for the next 10 years, depending on the utility, he added.

Mr. McMahon argued that rate growth isn't necessarily a bad thing, but utilities need to actively manage growth relative to peer utilities and consider how it may impact the potential for substitution (e.g., distributed solar, storage, large customer relocation). Indeed, a utility that is growing rates more rapidly than its neighbor may do better to consider reducing operating costs or investing in another part of its portfolio altogether. Vectren recently employed this strategy as the company shifted away from investing in its higher cost electric utility to investing in its gas business.

Mr. McMahon recommended that acquiring companies evaluate the relative retail rates and the state of the target utility's system as part of any due diligence process. This may require requesting more information in diligence than is typical, although generally the information should be readily available from the asset management system and financial model. If rates are high and the system was recently modernized or rebuilt, the utility may have limited investment options without customers and regulators claiming "gold plating," and resisting investment. If, however, the utility carries a below average rate and has the opportunity to upgrade or replace infrastructure, the utility may have significant headroom to invest.

Mr. Augustine presented a case study, analyzing potential "headroom" for a set of possible utility acquisition targets by comparing projections for rate and earnings growth over a 10-year forecast horizon. In addition to diligence on recent investments, he noted that generation portfolio composition can also be an important driver of future headroom. In the example, one utility with out-of-market power purchase agreements (PPAs) rolling off was expected to have significant headroom to invest in new generation without raising rates, while peers with recently completed new additions did not present such an opportunity. The expected trajectory of commodity prices and environmental costs can also impact rate growth and investment opportunities in the generation fleet, Mr. Augustine noted. Using an example of a nuclear-heavy utility that would be advantaged if gas prices rise, Mr. Augustine explained that the resulting stability in generation costs would open up investment opportunities in T&D or other generation. However, that same utility could face stranded cost concerns if gas prices remained flat or declined, keeping its existing portfolio more expensive than the prevailing market.

Avoiding market power issues

Dr. Hunger and Mr. Macan described how utility consolidation has led to significant market concentration in some parts of the US and that changing federal regulations, and ambiguities with state and local regulations, are creating increasing challenges for mergers. They described a recent assignment that involved an electric utility that had received multiple purchase offers from utilities in the region. Each of the entities presented unique market concentration issues that would require some form of mitigation. Understanding how FERC and the DOJ would view each combination, both conceptually and mathematically, was critical to bidder negotiations.

In a pair of orders earlier this year, FERC clarified what it does (and does not) want to see in a market power study for market-based rates or an application for approval of a transaction under the Federal Power Act (FPA) Section 203. The FERC's methodology, the delivered price test (DPT), has been used in practice since the issuance of its merger policy statement in 1996, but many details of the methodology are open to interpretation and not clearly articulated by the Commission. The FERC orders clarify the ambiguities around specifics of the DPT. In particular,

FERC clarified seven key points in the DPT methodology: (1) data transparency/integrity; (2) use of historical transaction data to corroborate results; (3) calculation of available economic capacity; (4) calculation of variable costs; (5) transmission rates; (6) identification of potential supply; and (7) inclusion of long-term purchases and sales contracts.

In late October, FERC also issued a Notice of Inquiry (NOI) regarding Modifications to Commission Requirements for Review of Transactions under Section 203 of the Federal Power Act and Market-Based Rate Applications under Section 205 of the Federal Power Act. Dr. Hunger and Mr. Macan, along with several other market power experts, have made recommendations and provided joint comments to the FERC in response to their NOI on November 28, 2016 under RM16-21-000.

Quantifying the risk from distributed generation

Mr. McMahon described that US electric utilities are increasingly facing challenges in growing load, which has been the lifeblood of the vertically integrated utility. Contributing to this in some states is the increase in distributed generation, from solar panels to cogeneration plants. With solar panel and electric storage costs coming down monthly, and the costs of natural gas expected to remain relatively low, he explained that we are likely to see continued growth in distributed generation. On the other hand, Mr. McMahon indicated that much of the distributed generation still relies on some form of subsidy and could be moved significantly by changes in policy. He also stressed that utilities are fighting against net energy metering, and in some cases, winning.

In a recent engagement with a small Midwest utility, Mr. McMahon described how the company was caught off guard by the entry of distributed generation when a developer unexpectedly entered the market and, by the utility's estimation, had taken 50 basis points of load growth. This affected earnings expectations and forced the utility to develop a regulatory and customer strategy after the fact. The utility had not appreciated the emotional aspect of ratepayer decisions. The developer had convinced some of the utility's customers to expect significant utility rate increases and that solar panels offered a level, certain cost. By the utility's estimates, that math was flawed, but a subset of the population was concerned about the risk and may not have been fully trusting of the utility.

Mr. McMahon argued that utility buyers should do their homework regarding the customer base they are inheriting, the regulations they will be operating under, the state of competition from distributed generation providers, and the favorability of the utility from the customer perspective. This can inform a load forecast that does not grow indefinitely at the historical average. He provided a recent example of a utility transaction where the target utility saw limited distributed generation penetration despite significant penetration in neighboring service territories. After diligence, it was determined that the utility likely would see less growth than other utilities in the region given demographics, locational challenges (low insolation), and customer distrust of renewable providers.

Evaluating environmental and fuel diversity risk

Mr. Augustine explained that utility buyers should be mindful of the mix of generating resources in a target utility's portfolio. Although the assets may be rate based, he explained that each portfolio presents its own unique cost structure and can pose a risk when it comes time for cost recovery. For instance, a portfolio with significant coal assets could face stranded costs in the future. An all gas portfolio could become uneconomic in the event of a significant rise in gas prices.

An acquiring utility should think about how the generation portfolio it acquires rounds out its broader portfolio, which may include the generation of other utilities it owns. For instance, an acquirer that owns utilities with predominantly coal and gas generation may want to think about how it can diversify with a utility that owns nuclear or renewables. Although these generating assets will not technically be combined, the utilities themselves may have different, and potentially offsetting risk profiles. In an example of possible utility combinations, Mr. Augustine described how the risk of each utility could be evaluated through scenario-based market simulation and portfolio analysis.

Conclusion

Every utility transaction presents a unique set of risks to the acquirer, from market power failures to regulatory disallowances. Yet, with some work these risks can be understood and evaluated for any potential target. With the pace of acquisitions likely to increase, additional time should be spent by a potential acquirer, even ahead of due diligence, to screen potential targets on these and other attributes.

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