Finance 501 - Financial Implications of Disruptive Forces

As discussed previously, equity investors expect and will value an equity security based upon growth attributes as a major component of the expected total return investors require. Growth in utility earnings has historically been realized by a combination of increased electricity sales (volume), increased price per unit of sales (higher rates), and/or expanded profit margins on incremental revenues achieved between rate cases reflecting the realization of operational/overhead efficiencies. Earnings levels and growth are also impacted by changing costs of capital due to market forces—this is currently a depressant on utility earnings per share (EPS) levels due to the sector-wide decline in authorized returns on equity (ROE) realized over the last several years.

First, let's review the current climate for the utility sector. While valuations are near all-time highs, the headwinds facing the sector are significant. Concerns start with the anemic electricity demand, which has been primarily impacted by the overall economic climate but also impacted by demand-side efficiency programs and the emergence of DER. Next, there is the need to deploy capital investment at almost twice the rate of depreciation to enhance the grid and address various regulatory mandates. Soft electricity demand plus increasing capital investment lead to rate increase needs and the investment uncertainty created by a future active rate case calendar. While sell side analysts are expecting EPS growth of 4 percent to7 percent overall for the regulated sector, this is likely to be quite challenging. If investor expectations are not realized, a wholesale reevaluation of the sector is likely to occur.

So, what will happen when electricity sales growth declines and that decline is not cyclical but driven by disruptive forces, including new technology and/or the further implementation of public policy focused on DSM and DER initiatives? In a cost-of-service rate-regulated model, revenues are not directly correlated to customer levels or sales but to the cost of providing service. However, in most jurisdictions, customer rates are a function of usage/unit sales. In such a model, customer rate levels must increase via rate increase requests when usage declines, which from a financial perspective is intended to keep the company whole (i.e., earn its cost of capital). However, this may lead to a challenging cycle since an increase in customer rates over time to support investment spending in a declining sales environment (due to disruptive forces) will further enhance the competitive dynamics of competing technologies and supply/demand efficiency programs. This set of dynamics can become a vicious cycle (See Exhibit 3) that, in the worst-case scenario, would leave few(er) customers remaining to support the costs of a large embedded infrastructure system, some of which may be stranded investment but most of the costs will continue to be incurred in order to manage the flows between supply and customers.