The Rationale for Reforming Utility Business Models

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Over the past two decades, more than half of state public utility commissions reformed utility business models (UBMs) by removing a disincentive to invest in utility-scale demand-side management (DSM) with a revenue decoupling mechanism. These mechanisms allow a utility to recover revenue, otherwise lost due to DSM, through electric rates. Although the effectiveness of UBM reform in increasing DSM investment has been studied at length, the rationale for reform with revenue decoupling during this period has been assumed as straightforward.

Economic models of utility DSM investment regularly assume commissions reform the UBM with revenue decoupling primarily to remove the disincentive for utility DSM investment. Under this assumption, commissions aim to enhance social welfare by increasing avoided costs of electricity usage from a total resource perspective, including electricity generation, transmission, and environmental costs. Others have questioned whether commissions reform the UBM in response to interest group and political pressure.

This paper tests whether commissions reformed UBMs with revenue decoupling primarily to enhance social welfare or if commissions also respond to other political economy considerations. Controlling for political economy determinants, we model how commissions reformed UBMs with a revenue decoupling mechanism from 1997 to 2012 using a multinomial logit regression. Importantly, we account for whether commission decisions on UBM reform removed disincentives for DSM programs with either a "limited" (allowing case-by-case recovery) or "full" (allowing automatic recovery) revenue decoupling mechanism.

We find limited support for the public interest assumption underlying economic models of commission decisions. Instead, we find statistically significant associations primarily between commission decisions to reform the UBM and the political economy context that exacerbates a commission's political risks. These political risks include higher-than-regional-average residential electricity prices as well as political pressure from interest groups and politicians facing intense competition for partisan control of state legislatures. Beyond questioning the primacy of the public interest rationale for regulation, our results give reason to reevaluate economic models of UBM reform that do not explicitly consider commission interests within a broader political economy context.

Understanding the rationale for UBM reform during the period of 1997 to 2012 is of critical importance as public utility commissions across the United States consider a new wave of reforms. We offer that the rationale for future UBM reform may follow the rationale for past UBM reform. The history of UBM reform demonstrates that reforms were not positively associated with high avoided *environmental* costs. Instead, commission decisions to reform the UBM were positively associated with high avoided *political* costs.

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