

Divestiture Policy and Operating Efficiency in U.S. Electric Power Distribution

EPRG Working Paper 0819

Cambridge Working Paper in Economics 0835

John Kwoka, Sanem Ozturk and Michael Pollitt

This study examines the effects of divestiture policy on the operating efficiency of US distribution utilities. We focus on the decisive 1994-2003 period when state utility commissions required or pressured utilities to create standalone generation facilities, and thereby almost incidentally standalone distribution systems. We examine major divestitures both in general and also with particular respect to those that were forced upon utilities by state public utility commissions or legislative action. The possibility of an adverse effect from divestiture policy is most obvious in these latter cases which were least likely to correspond to utilities' perceived self-interest.

The analytical foundation of this study is the measurement of the operating efficiency of 73 distribution units of major U.S. electric utilities in each of those ten years through the use of data envelopment analysis (DEA). DEA generates a numerical score for each distribution utility in each year, a score that represents its efficiency of input use relative to best practice in that year. Using this panel of data and controlling for other possible influences, we then evaluate the effects on measured efficiency from the divestitures that many of the utilities underwent during the study period. We find that while all divestitures as a group do not significantly

affect distribution efficiency, those mandated by state public utility commissions have resulted in large and statistically significant adverse effects on efficiency.



These results raise questions about the merits of a centerpiece of electricity restructuring namely, mandated divestitures in order to create standalone generation sector. The resulting standalone distribution utilities appear to suffer from significant and persistent reduced efficiency. Taken by itself, this represents a cost of divestiture policy, but it also raises a question about the overall benefits of the policy. Whatever the benefits at the generation stage, these must be weighed against the costs to distribution utilities in order to arrive at a comprehensive judgment about divestiture policy as a whole.

Contact Publication Financial Support m.pollitt@jbs.cam.ac.uk August 2008 American Public Power Association, ESRC TSEC1, CMI IR-045

