Reaching New Lows? The Pandemic's Consequences for Electricity Markets

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The COVID-19 crisis has disrupted electricity systems worldwide. This article disentangles the effects of the demand reductions, fuel price devaluation, and increased forecast errors on New York's day-ahead and real-time markets by combining machine learning and structural econometrics. From March 2020 to February 2021, statewide demand has decreased by 4.6 TWh (-3%) including 4 TWh (-8%) for New York City alone, and the day-ahead market has depreciated by \$250 million (-6%). The real-time market has, however, appreciated by \$15 million (+23%) because of abnormally large forecast errors which significantly undermined system efficiency.

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