Predicting Market Power in the Ontario Wholesale Electricity Market

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ABSTRACT

This paper studies measuring market power in the Ontario wholesale Electricity Market, which has been restructured. Analysis is based upon the economic foundations of the Residual Supply Index (RSI) as a market structure variable, that is to say, that market structure is hypothesized to be a significant determinant of market performance. We mainly focus on the large generators like OPG, Bruce, Brookfield, and TransAlta. We use RSI to demonstrate when suppliers are pivotal in affecting prices and Lernet Index (LI) to indicate when prices are above competitive levels. The results confirm that the RSI-slope coefficients from the simple regressions of the LI on RSI are negative. As LI and RSI has a negative relation, by decreasing in LI, RSI increasing which means that the firm loses market power.