Demand Response Potential Impact to the Philippine Wholesale Electricity Spot Market

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Abstract:

Created by the Electricity Power Industry Reform Act (EPIRA) of 2001, the Philippine Wholesale Electricity Spot Market (WESM) was established to reflect the actual cost of electricity and to lower its price through more efficient production and competition. However, in spite of its design being at par with the best in the world, as evidenced by high market prices and poor performance relative to the Wholesale Electricity Spot Markets of the world, WESM seems to be unsuccessful in its mandate. The two evidences also point to the presence of significant market power in the WESM.

Making demand more responsive to price through Demand Response holds promise for lessening the occurrence of extreme high prices. This paper assesses the potential impact of Demand Response to the market clearing price of WESM.