

## UNBUNDLING, NETWORK ACCESS AND DISTRIBUTED GENERATION – AN ANALYSIS OF FRINGE FIRMS FACING A MONOPOLIST

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### ABSTRACT

This paper provides an analytical examination on the welfare enhancing effects of unbundling in the context of distributed generation. A simple analytical model is developed of a vertically integrated monopolist providing network access, while facing a competitive fringe of distributed generators in the electricity market. The monopolist maximises profit by setting the power price and the network access charge paid by the fringe. This is compared to the case of effective unbundling: the monopolist solely obtains revenue from electricity sales and incurs an access charge for the usage of the network that is now operated by an independent system operator. Thereafter, extensions to the simple model will be discussed, reflecting some of the specificities in the policy context of distributed generation. This includes the impact of deep and shallow connection charges, and the adoption of feed-in tariffs.

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