



# Joint supply — demand optimization in electricity supply ☆

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## Abstract

In most energy sub-sectors today a basic ignorance and lack of understanding of consumer response has meant that electricity supply systems have been conceived, planned, operated and priced mainly according to the basic criterion of engineering economics, ie cost-minimization. The few benefits taken into account have been included merely as negative costs. Recently this approach has been queried by energy policy makers. The cost-minimization process could be markedly strengthened by including further data, meanwhile information is methodically being gathered on consumer response to changes in electricity price and its should soon be possible to change over to the basic criterion of economic efficiency and welfare economics. A start can already be made, with joint supply-demand optimization in respect of the planning and operation of most interconnected electricity supply systems.

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## Keywords

Electricity pricing; Investment; Planning

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