

The costs of electricity interruptions in Spain. Are we sending the right signals?

P. Linares Llamas; L. Rey Los Santos

Abstract-

One of the objectives of energy security is the uninterrupted physical availability of energy. However, there is limited information about how much is the cost of energy supply interruptions. This information is essential to optimize investment and operating decisions to prevent energy shortages, or, alternatively, to determine the strength of the signals to be sent to the agents so that they may invest accordingly. In this paper, we estimate the economic impact of an electricity interruption in different sectors and regions of Spain. Although there are several caveats in our analysis, we find that in 2008 the cost for the Spanish economy of one kWh of electricity not supplied was above €4 even in a conservative scenario, which is higher than the signals currently being sent as incentives to avoid these interruptions. This might result in an underinvestment in short-term energy security, particularly when we add the usual risk aversion of most consumers.

Index Terms- Energy security; Electricity interruptions; Value of lost load

Due to copyright restriction we cannot distribute this content on the web. However, clicking on the next link, authors will be able to distribute to you the full version of the paper:

[Request full paper to the authors](#)

If your institution has an electronic subscription to Energy Policy, you can download the paper from the journal website:

[Access to the Journal website](#)

Citation:

Linares, P.; Rey, L. "The costs of electricity interruptions in Spain. Are we sending the right signals?", Energy Policy, vol.61, pp.751-760, October, 2013.