

Environmental-economic analysis toward building liability law that protects nuclear power plants against catastrophe*

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Abstract

In this paper, we investigate which type of the liability law that protects nuclear power plants against catastrophe such as large earthquakes and massive tsunami is socially optimal. We show that: (i) when a firm with a few funds is managed under the strict liability, maximization of social welfare is impossible since the firm may not cope with the damage by a catastrophic disaster, and (ii) when a government set suitable safety standards in the case that a firm has a few funds, maximization of social welfare can be attained according to the negligence rule.

JEL Classification: K32, Q54

Keywords: the Great East Japan Earthquake, law and economics, catastrophic risk

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