SOCIETAL AND ECONOMICAL CONSEQUENCES OF EVACUATION IN CASE OF ACCIDENTAL RELEASE: A POSSIBLE APPROACH

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The study presented is carried out with the objective of quantitative evaluation of the societal and economical risks of an evacuation after a radiological accident on a PWR.

Indeed, the cost of consequences on the economic activity of the region has to be added to the direct cost of the evacuation itself, correlated to transportation, relocation and protection of the populations and the real estates.

Our purpose is to obtain a complete investigation of the problems, and to define as realistically as possible a methodology, a nuclear plant was chosen: Gravelines in the North of France.

In this region around the nuclear plant, the major economic activities are encountered: agricultural areas, industrial activities in a specific area, sea-borne trade (Dunkerque harbour) and touristic business of the beaches between the site and Calais.

Taking into account the nature of the atmospheric release, the meteorological conditions and the dynamics of the accidents, the consequences of the counter measure (evacuation) are shown and their degree of importance are discussed as an important factor for decision making.