

EMERGENCIES AND RATIONALITY THE CASE OF THREE MILE ISLAND*

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The accident at the Three Mile Island nuclear power plant is analyzed from the perspective of rationality theory. Contrary to the popular view that operator errors are inexplicable, the concept of practical rationality reveals the subjective meaning of the operators' actions. It is argued that rationality is a valuable notion for the practical management of emergencies and man-made disasters, and that rationality is an essential element in the development of a sociology of disasters.

Introduction

Given the nature of modern processes in petrochemicals and nuclear power production there is always a risk that an industrial accident may become a disaster. Much depends then on the ability of managers in these industries to maintain detailed control over the complete extraction, processing, distribution cycle; and over operating procedures, operating behavior, maintenance work and safety standards. It has been an implicit assumption of scientific management that such ultimate control over production is, or will soon become, a practical reality. Recent events cast doubt on the optimism of such thinking as human errors in design, in planning, or in the response to emergency itself, show that initial estimates of system reliability are unrealistically high.

Such errors are not so easy to explain. To outside observers the actions of those in the organization may appear whimsical, negligent, or, more profoundly, inexplicable. Even after the

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