THE NEA INCIDENT REPORTING SYSTEM:
DESCRIPTION, EXPERIENCE, FIRST RESULTS

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ABSTRACT

The paper presents an overview of the NEA Incident Reporting System (IRS), which was established to collect, assess and disseminate information on safety-related incidents in nuclear power plants. The IRS information exchange is significant for two reasons. First, it enables regulatory authorities and utilities in participating countries to take appropriate action in order to avoid the mishaps reported from occurring again elsewhere. Second, the continuous collection and systematic analysis of such information allows identification of areas of concern where safety research should be strengthened.

The paper gives some details of the IRS mechanism and discusses the reporting criteria used and the information included in the reports. Areas of concern identified from reported incidents, and some examples of lessons learned are also discussed.

INTRODUCTION

It is widely recognized that actual experience gained in day-to-day plant operation is of great value to enhancing the safe operation of nuclear power plants. Since 1965, the Member Countries
of the OECD Nuclear Energy Agency (NEA) have regularly exchanged information on significant operating experience at the annual meetings of CREST (Committee on Reactor Safety Technology) and its successor CSNI (Committee on the Safety of Nuclear Installations). With the increasing number of nuclear power plants in the world, the CSNI established the Incident Reporting System (IRS) in January 1980 to facilitate proper feedback of operating experience between Member Countries.

The system was operated initially on a trial basis for a two-year period, at the end of which the participating countries agreed on formal guidelines and stipulated detailed procedures for exchanging information and thresholds for deciding which incidents should be reported. These guidelines were made the subject of an OECD Council Recommendation in February 1983 in order to place the system on a more formal basis.

OBJECTIVES

The objectives of the IRS are two-fold:
- First, it enables the regulatory authorities and utilities in participating countries to benefit from the lessons learned from significant incidents occurring in other NEA countries, and to check whether these lessons are applicable to their own plants and take corrective actions if necessary.

  The information exchanged through the system is first screened in the country where the incident occurred, in order to avoid reporting of abnormal occurrences having relatively minor or no safety significance. Emphasis is placed on information that allows the recipient to judge whether any lesson from the incident could be applied to his own plants.
- The second objective is to identify areas of concern or generic issues where safety research should be strengthened or improvements made in system design and operational practices. This is done through annual meetings of experts from participating countries who review the incidents reported.

IRS MECHANISM

The following mechanism has been established to meet the objectives set out above:

Participants

Participants in the IRS system commit themselves to report