

Principal Research Results

Development and Operation of a Nuclear Information System for Public Use Nuclear Information Archives (NUCIA)

Background

In late summer of 2002, due to the intentional concealment of the information in the incidents report by an electric power company, the severe damage was caused to public reliability on the safety of Japanese nuclear plants. The Japanese electric power utility which has shared nuclear information inside the industry through “Nuclear Information/Communication System (NICS)” decided to reveal information of nuclear incidents not only inside the industry, but also to the public. According to the decision, the CRIEPI, which has many experiences in the operation of the NICS, began developing a new network database system called NUClear Information Archives (NUCIA) to make nuclear information open to the public through the Internet.

Objectives

The objectives of this project are to develop and to operate steadily a nuclear network database system which has following features:

- 1) Maintaining the transparency of incidents occurring in nuclear plants to the public,
- 2) Supplying the research data concerning nuclear incidents to both researchers and experts in analyzing nuclear incidents.

Principal Results

We developed a network database system which has following characteristics and is continuously operating from Oct., 2003. The URL of the site is <http://www.nucia.jp/> (in Japanese).

1. Improvement in transparency of incidents occurring in nuclear power plants

Not only severe incidents, but also slight incidents are registered and open to the public on the database system. The registered information are: A. details of the incidents, B. links for similar incidents, C. reliability information of the incidents, D. links of the press releases to the information which are open to the public on the web of the owner company.

2. User friendly network database

Any data on the site can be accessed and used by any person. And various download data types including xml, CSV, etc. are prepared for the convenience of the users.

3. Rapid publication of incident data

The data on the system is registered from the nuclear plants directly, so as to achieve the rapid publication of the information.

Future Developments

Further improvement for user friendly database is planned. And increasing variety of the registered data to extend the coverage area of its application is also planned.

This research was entrusted to the CRIEPI by the Federation of Electric Power Companies of Japan.

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Reference

S. Sagai, 2004, “Development of the NICS-03 ---Improvement of NICS-99 to Cooperate with ‘Nuclear Information Archives’”, Technical Report of CRIEPI P03301 (in Japanese).

5. Nuclear - Improvement of economics and reliability of LWR power generation

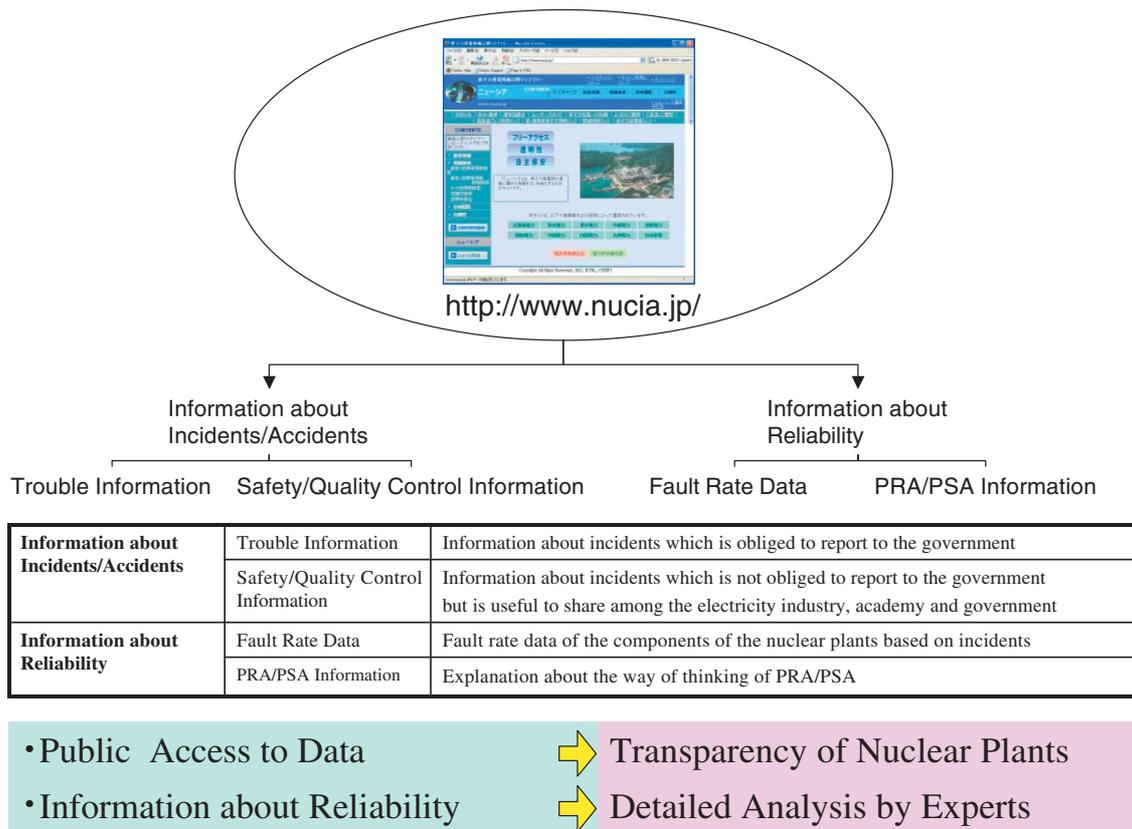
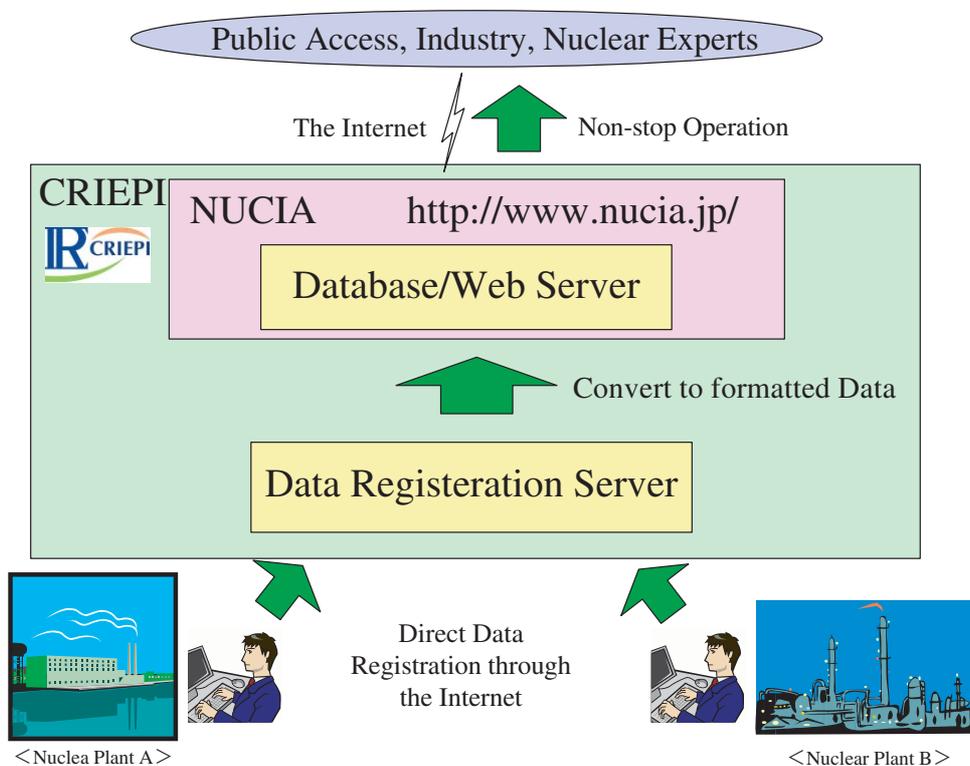


Fig.1 Contents and Aim of the NUCIA



Aim: Rapid Publication of the Data

Fig.2 Operation of the NUCIA