

**U. S. Nuclear Regulatory Commission
Office of Nuclear Security and Incident Response
Emergency Response Data System (ERDS)**

Emergency Response Data System (ERDS)

ERDS is an electronic data capture system for information received from U.S. commercial nuclear power plants after the declaration of an Alert or higher-level classification (an Event) and the supporting collection and transmission hardware located at the plants and NRC Offices. ERDS continuously collects selected information for NRC use in monitoring and analyzing the Event.

1) Inputs/Source Documents

ERDS is operational only during an Alert or higher-level occurrence at one or more nuclear power plants, although the system may be used for testing or to support an emergency exercise. After activation, the information described in the Master File is transmitted electronically to the NRC Emergency Operations Center from the power plant via modem or Network connection for display and analysis. ERDS electronically stores and displays the information; no manual inputs are made into ERDS.

a. Data Collected During an Alert or Event

ERDS information collected in support of NRC actions during an Alert or higher-level occurrence at one or more nuclear power plants.

Disposition: TEMPORARY. See Master File (Item 2.a)

b. Data Collected During a System Test or Exercise

ERDS information collected in support of NRC actions during a system test or exercise.

Disposition: TEMPORARY See Master File (Item 2.b)

[Instruction] } Approval
by
Archivist
not
needed

2) Master File

Information is collected in the following four functional areas:

1. Reactor core and coolant system conditions,
2. Containment building environmental conditions,
3. Site environmental (meteorological) conditions, and
4. Radioactivity release rates.

a. Data Collected During an Alert or Event

Disposition: TEMPORARY. Cut off upon termination of the license (following completion of the decommissioning procedure) for the nuclear plant covered by the Event. Destroy 20 years after cutoff.

b. Data Collected During a System Test or Exercise

Disposition: TEMPORARY. Cut off at the completion of the system test or exercise. Destroy or delete data when no longer needed for analysis or other business purposes. [GRS 20, Item 1.a]

Approval by
Archivist not
needed

3) IT Operations Records

a. ERDS System Operations Records

ERDS System maintenance support history records and additional system performance data is collected to support ERDS operation and maintenance activities, including records of completed maintenance, system downtimes, and system access logs

Disposition: TEMPORARY. Cut off at end of calendar year. Destroy 5 years after cutoff.

~~b. ERDS Operations Reports~~

~~Reports on operations, including measures of benchmarks, performance indicators and critical success factors, self assessments, and management reports.~~

~~**Disposition:** TEMPORARY. Cut off at end of calendar year. Destroy 3 years after cutoff. [GRS 24, Item 8.c]~~

Approval by
Archivist
not
needed

4) Outputs

This system provides data for a subsequent recreation and evaluation of the Event to identify the sequence of events and any lessons learned.

a. Data Printouts from ERDS data file

Printouts of the data or partial data sets made during or after the Event or exercise, used to analyze plant conditions and trends and other reports produced to analyze system performance.

Disposition: TEMPORARY. Delete or destroy when no longer needed for analysis or other business reason.

b. NRC Report or Analysis of the Event

Reports, including pertinent background documentation, that provide detailed information and formal evaluations of events with the highest potential risk to the public. Arrange files by event case study number.

Disposition: PERMANENT. Cut off at end of Calendar Year of last action and file in ADAMS. ~~Transfer electronic copy to the National Archives for pre-accessioning 5 years after cut off.~~ Transfer to the legal custody of the National Archives 20 years after cut off and destroy the NRC copy of the files after receiving notification that the transfer to NARA was successful.

NARA revoked pre-accession policy on 4/19/2022

5) ERDS System Documentation

System Design and User documentation is available, including data specifications, data dictionaries, hardware interconnection specifications, user and data security testing plans and reports, and system manuals. Specific documentation includes:

- ERDS User's Manual
- ERDS System Administration Guide
- ERDS Installation and Configuration Guide

~~a) Superseded or obsolete documentation~~

~~**Disposition:** TEMPORARY. Retain current revisions of these records in a controlled repository (e.g., Rational ClearCase or ADAMS) until development is complete and the software is operational. Transfer the final approved versions and subsequent revisions of these documents to ADAMS, or other currently approved record keeping system, in a format acceptable to the ADAMS Administrators and Records Officer. Cut off when the documents are superseded and the revisions placed in ADAMS. Destroy 2 years after cut off. [GRS 20/11a(1)]~~

Approval
by
Archivist
not
needed

~~b) Final System Documentation~~

~~**Disposition:** TEMPORARY. Cut off files when ERDS is decommissioned. Destroy 2 years after cutoff. [GRS 20/11a(1)]~~

Background:

ERDS was mandated to be installed at all United States commercial nuclear power stations to provide this information from installed plant instrumentation after the accident at Three Mile Island, Unit 2. The information collected by ERDS supports NRC's mission to assist in managing the response to an incident and in assessing the licensee's corrective actions. Information from ERDS may also be made available to the state government in which the plant is located. The current ERDS was developed and is maintained by a contractor for the NRC.

ERDS will be activated within 1 hour of a declaration of an Alert or higher-level plant condition by the plant control room operators. Once activated, periodic sets of data (typically between 25 and 100 data points) will be transmitted to the NRC Headquarters Emergency Operations Center via modem or other transmission process at regular intervals of 15 to 60 seconds. The information collection stops when the Event is declared to be closed. ERDS has the ability to collect and manage information from multiple power plants simultaneously.

The information is refreshed during the Event to provide a near real-time representation of site conditions. The information is collected and retained during the accident to provide a continuous record of the site conditions, until the Event is closed. After closure of the Event, the data is purged from ERDS, and kept on separate media as a case file.

ERDS works in conjunction with three other systems NRC electronic systems to form the Incident Response System (IRS). These other systems are:

- Operations Center Information Management System (OCIMS) [Scheduled Separately]
- Emergency Telecommunications System (ETS) [No Records Schedule Required]
- Secure Video Teleconferencing System (SVTC) [No Records Schedule Required]

The Program Authority for ERDS is the Nuclear Power Emergency Response Data System Act of 1987 (as amended). Generic Letter 89-15, Emergency Response Data System, issued on August 21, 1989, provides additional requirements and background information for ERDS.

Date: Beginning in 1989