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**Turnover of Records and Incremental Handover of Information for
Nuclear Facilities**

NUCLEAR INFORMATION AND RECORDS MANAGEMENT ASSOCIATION
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Foreword

This foreword is not part of the Nuclear Information & Records Management Association Technical Guideline TG23, referred to as the “What” TG. The Regulations and Information Management Business Unit (RIMBU) is the responsible NIRMA committee for this Technical Guideline. RIMBU collaborated with the Electric Power Research Institute (EPRI) and its Advanced Nuclear Technology (ANT) Initiatives on Information Handover in developing this TG. The guidance provided herein supplements that provided in EPRI ANT publications.

TG23 was written to assist Nuclear Facilities with the turnover and acceptance of information, documents and records from Engineering Procurement Constructors (EPC) or Consortiums, as well as information generated, procured and provided by external parties.

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1. Scope

The document defines "What" information should be included in a Handover/Turnover Plan developed and utilized by primary parties for project contracts. This includes information generated by the approved Engineering Procurement Constructor (EPC) or Consortium, as well as all information generated, procured and provided by external parties, e.g., subcontractors to the EPC, vendors and suppliers of items and services for the project.

This document provides guidance for the Information Turnover of as-built and final information to the Owner/Operator (O/O) from an EPC or Consortium, as well as all information generated, procured and provided by external parties, e.g., subcontractors to the EPC, vendors and suppliers of items and services for the project.

This document also provides guidance for the incremental approved-for-use Information Handover to the O/O for use in pre-operational readiness activities including recommendations on related change requests.

Particular attention should be given to the following elements of Document and Record Handover/Turnover:

- Defining the scope of information and data associated with components that must be delivered to support the early development of various O&M Programs which are prerequisites to receipt of fuel is an essential early planning action.
- Consideration of the full range of information generated in support of the licensing, design, procurement, construction, testing, start-up, pre-operation and operation of the nuclear facility including quality and non-quality documents and records is critical.
- Business records, in addition to Quality Records, must also be included when developing "What" type of information and records to include in the record retention schedule and Turnover Plan to meet other Business requirements.

The guidance within this document will assist Nuclear Facilities O/O (Utilities) with drafting and executing contractual agreements. The agreement should include "What" information, documents and records throughout their lifecycle, including during collaboration, that are required to license, design, construct and operate a Nuclear Facility.

This document specifies "What" Information Deliverables need to be considered in contracts and demonstrates the benefits of establishing "What" information, technologies and processes are necessary to facilitate an effective information exchange in support of configuration management to deliver the O/O with a seamless handover/turnover process.

Information is one of the most vital and strategic assets any organization possesses and the retention of that information must be validated to encompass quality control and mitigate the risk of loss of that information.

2. Definitions/Acronyms

a. As-Built

Documentation or data verified by physical inspection as depicting the current physical configuration within specified tolerances and verified as consistent with the design requirements e.g., piping and instrument diagrams.

ANSI/NIRMA CM1.0-2007 (Reaffirmed 2015)

b. Attribute

A single data item related to a database object. The database schema associates one or more attributes with each database entity.

www.databases.about.com

c. Collaboration

Collaboration is a working practice whereby individuals work together to a common purpose to achieve business benefit. Key features of collaboration tools include:

- Synchronous collaboration such as online meetings and instant messaging
- Asynchronous collaboration such as shared workspaces and annotations

www.aiim.org/What-is-Collaboration

d. Confidential

The lowest classification level applied to information whose unauthorized disclosure could reasonably be expected to cause damage to the national security.

NIRMA Glossary of Terms and Definitions, Appendix I Terms and Definitions from External Organizations (DOE)

e. Consortium

A group of separate businesses or business people joining together and cooperating to complete a project, work together to perform a contract or conduct an on-going business, each providing different expertise or component. (e.g., Westinghouse and CB&I Group and others formed a group to build the AP1000 Advanced Nuclear Power Reactors)

www.legal-dictionary.thefreedictionary.com/consortium

f. Data

A representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by a programmable digital computer.

NIRMA Glossary of Terms and Definitions, Appendix I Terms and Definitions from External Organizations (ANSI/IEEE/ANS)

g. Documentation or Document

Any written or pictorial information describing, defining, specifying, reporting, or certifying activities, requirements, procedures, or results.

NIRMA Glossary of Terms and Definitions

h. Electronic Document Management System (EDMS)

Any information system that produces, processes, or stores documents by using a computer, often called an automated information system.

NIRMA Glossary of Terms and Definitions

i. EPC

Engineering Procurement Constructor

j. EPC Contract

Engineer, Procure and Construct is a term used both domestically and internationally to describe a contract under which an engineering contractor undertakes to:

- Design process plant (e.g. a petrochemical plant) or power plant (e.g. a turbine generator and ancillary plant, structures and infrastructure) or works with a heavy engineering element, usually to meet a specified level of performance
- Procure all components comprised in the design
- Physically construct and test the plant

The equivalent term used in relation to more standard construction (e.g. housing, office blocks etc.) is design-and-build.

www.nuclearsupplychain.com/acronym-glossary

k. Information Handover

The transfer of approved-for-use documents and information from an EPC or Consortium entity to the O/O for use in pre-operational readiness activities. Note: These documents are not accepted by the O/O during the Handover Phase.

l. Information Management

The administration, use, and transmission of information and the application of theories and techniques of information science to create, modify, or improve information handling systems.

Information Management encompasses all elements involved in information transfers, e.g., Records Management, Document Control, Data Management and Configuration Management of IT solution used in transferring information of all types.

NIRMA Glossary of Terms and Definitions (NARA)

m. Information Turnover

The official transfer of as-built and final information from an EPC or Consortium entity to the O/O for use in the operation and maintenance of the operating unit(s); configuration management; and retained according to the O/O record retention schedule.

n. License Basis

Documented elements that the NRC has considered in granting and maintaining the license for the facility. These include the Combined Operating License Application (COLA), Safety Evaluation Report (SER), Design Control Documents (DCDs), Technical Specifications, Inspections, Tests, Analyses and Acceptance Criteria (ITAAC), and other commitments made under the Corrective Action Program.

EPRI Elements of Pre-Operational and Operational Configuration Management for a New Nuclear Facility - 2011 Technical Report

o. Lifecycle

The sequence of physical events from conception to decommissioning of a nuclear facility.

NIRMA Glossary of Terms and Definitions

p. Metadata

Data that aids in the identification of an object, file, image, etc. Metadata can include such items as size, file type, and index values.

NIRMA Glossary of Terms and Definitions

q. Native File Format

The file format of computer software used for creating and editing electronic documents (e.g., Microstation [.dgn], Word [.docx], Excel [.xlsx]).

r. Owner/Operator (O/O)

Individual or group who owns and may or may not operate their own business or the equipment used in business for the purpose of earning income. *(E.g., some utilities own and operate their facilities yet others may have multiple owners and another entity that maintains and operates the facility.)*

s. Owner Organization

The person, group, company, agency, or corporation who has overall legal, financial and technical responsibility for the operation of a nuclear facility.

NIRMA Glossary of Terms and Definitions, Appendix I Terms and Definitions from External Organizations (ANSI/ANS)

t. PDF and PDF/A

Portable Document Format is a digital format for representing documents. PDF files may be created from native applications (e.g., Microsoft Word, Excel, AutoCAD), Converted from other electronic formats (e.g., multi-page Tagged Image File Format (TIFF), or Digitized from paper or other media (e.g., through scanners and scanning software).

- Because the majority of PDF files are kept permanently, they must remain usable and accessible across multiple generations of technology.