U.S. DEPARTMENT OF ENERGY



UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION (UCNI)

GENERAL GUIDELINE GG-5

February 2004

Information Classification and Control Policy Security Policy Staff Office of Security and Safety Performance Assurance (SSA) Washington, DC 20585

U.S. Department of Energy

UNCLASSIFIED CONTROLLED NUCLEAR INFORMATION

General Guideline

GG-5

February 2004

<u>Change</u>

Date

New Pages

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GG-5 Unclassified Controlled Nuclear Information (UCNI) General Guideline

INTRODUCTION

A. Purpose

This General Guideline contains topics that identify what information is UCNI based on control determinations made under 10 CFR 1017.7 and reported under 10 CFR 1017.11. Where useful, it contains topics identifying certain information that is not UCNI. This General Guideline is the basis for:

- 1. Topical Guidelines and Internal Guidelines used by Reviewing Officials to determine whether specific information is UCNI.
- 2. Determinations made by the Director, Information Classification and Control Policy (ICCP), about whether specific information is UCNI in any subject area where no Topical or Internal Guideline exists.

B. Cancellation

This document supersedes GG-4, "Unclassified Controlled Nuclear Information General Guideline," dated September 1994.

C. Relationship to Classified Information

Any information under consideration for protection as UCNI must first be reviewed to ensure that it is unclassified and, therefore, eligible for control as UCNI.

D. Information Not Covered by This Guideline

If anyone thinks that information should be UCNI that does not fall under the scope of this Guideline, then he or she may propose changes to ICCP. ICCP reviews these proposed changes and, if appropriate, initiates the revision process.

E. Questions Concerning this Guideline

Field personnel should contact their Classification Officer and DOE Headquarters and other-agency personnel should contact ICCP regarding questions concerning this Guideline.

F. References

- 1. Section 148 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2168), is the statutory basis for the control of UCNI.
- 2. 10 CFR Part 1017, "Identification and Protection of Unclassified Controlled Nuclear Information," implements section 148 (42 U.S.C. 2168) of the Atomic Energy Act of 1954, as amended.
- DOE O 471.1A, "Identification and Protection of Unclassified Controlled Nuclear Information," and DOE M 471.1-1, "Identification and Protection of Unclassified Controlled Nuclear Information Manual," both dated 6-30-00, establish policy and procedures for identifying and protecting UCNI.

G. Topic Cross Reference List

Each topic in this General Guideline that states that information is UCNI has been assigned an identification number separate from its topic number. The identification number must be cited following each topic identifying information as UCNI in a Topical or Internal Guideline that is based on a General Guideline topic. The purpose of these identification numbers is to ensure that every UCNI topic in Topical and Internal Guidelines is based on an UCNI control determination.

Missing identification numbers were associated with topics describing information that was <u>not UCNI</u> in the previous version of this Guideline. Since there is no need to cite a basis for information that is not UCNI, such topics no longer have an identification number.

In this revision, all topics have been reworded and some topics have been consolidated. The following tables list each topic number for topics that specify that information is UCNI. Due to the extent of this revision, each UCNI topic within existing UCNI Topical and Internal Guidelines should be reviewed as they are reissued to ensure that it still falls within the scope of the GG-5 topic on which it is based.

Identification Number	Topic Number	Changes from GG-4
6	1111	Rewritten
7	N/A	No longer UCNI
8	5101	Simplified
10	3101	Simplified
11	1112	Rewritten
14	3102	Rewritten
15	1121	Rewritten
16	1113	Rewritten
17	1122	No longer addresses vulnerabilities
18	4101	Simplified
20	4121	Simplified
29	1131	Simplified
40	1132	Replaces 30, 31, and 32
41	2101	Replaces 12 and 13
42	2112	New topic
43	4102	New topic
44	4111	Replaces 19, 38, and 39

The following table allows one to find the topic number given the identification number:

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Topic Number	Identification Number	Changes from GG-4
N/A	7	No longer UCNI
1111	6	Rewritten
1112	11	Rewritten
1113	16	Rewritten
1121	15	Rewritten
1122	17	No longer addresses vulnerabilities
1131	29	Simplified
1132	40	Replaces 30, 31, and 32
2101	41	Replaces 12 and 13
2112	42	New topic
3101	10	Simplified
3102	14	Rewritten
4101	18	Simplified
4102	43	New topic
4111	44	Replaces 19, 38, and 39
4121	20	Simplified
5101	8	Simplified

H. Cross Reference Requirements

Each topic in a Topical or Internal Guideline that designates information as UCNI must cite the identification number of either the General or Topical Guideline on which it is based. Each Topical Guideline must contain a cross-reference list, similar to that on the previous page, containing both Topical and General Guideline identification numbers.

EXAMPLES:

6103	This is a simulated General Guideline topic that is the direct (or indirect) basis for the examples below. It illustrates placement of the General Guideline topic identification number that is to be cited in any topic based directly on it. (GG #99)	UCNI
110	This is a simulated Topical Guideline topic (in this example, from TG-XYZ-1) that illustrates placement of the citation to (1) the General Guideline topic on which it is based and (2) the Topical Guideline identification number to be cited in topics in other Topical or Internal Guidelines that are based on it. (Basis: GG #99; ID No.: XYZ #12)	UCNI
424.6(b)	This is a simulated Internal Guideline topic that illustrates placement of the citation to the Topical Guideline topic on which it is based, specifically the one in the above example. (Basis: XYZ #12)	UCNI
1.2.4.6	This is a simulated Internal Guideline topic that is <u>not</u> based on a Topical Guideline topic but is based directly on a General Guideline topic. It illustrates placement of the citation to the General Guideline	UCNI

topic on which it is based. (Basis: GG #99)

SECURITY

NOTE: Certain topics in this chapter use the terms "sensitive function" or "sensitive facility." These generic topics apply to a specific function if that function falls within the scope of the term "sensitive function" as defined in the Definitions section. The local Classification Officer determines which facilities at a site are sensitive facilities based on whether (1) a facility performs or performed a sensitive function and (2) other information protection measures (e.g., classification) are adequate to protect security-related information at the facility. Internal guidelines may include site-specific applications of the following generic topics and should be consulted whenever they exist.

1100 Sensitive Functions and Sensitive Facilities

1110

1120

1101	The fact that any specific function is a sensitive function	Not UCNI
1102	The fact that a specified facility is a sensitive facility	Not UCNI
1103	A list of sensitive facilities at a site	Not UCNI
1104	Any association of a specified sensitive function with a facility where it is performed	Not UCNI
Overa	II Design and Operation of a Sensitive Facility	
1111	Exploitable security-related or essential technology-related design information concerning a specified sensitive facility that cannot be casually observed from an uncontrolled area (GG #6)	UCNI
1112	Exploitable security-related information concerning equipment or components of sensitive facilities that if sabotaged could prevent safe shutdown or cause an unacceptable loss of operations (GG #11)	UCNI
1113	Exploitable information concerning security equipment for the protection of production or utilization facilities, nuclear material contained in such facilities, or nuclear material in transit (GG #16)	UCNI
Secur	ity Operations and Deficiencies	
1121	Exploitable information concerning security plans and procedures for production or utilization facilities, nuclear material contained in such facilities, or nuclear material in transit provided this information cannot be obtained from an uncontrolled area (GG #15)	UCNI
1122	Exploitable information revealing capabilities or deficiencies of a specified security plan, procedure, or system (GG#17)	UCNI

1130 Nuclear Emergency Support Team

DOE established the Nuclear Emergency Support Team (NEST) using highly skilled experts from the national laboratories, other DOE contractors, and various Government agencies to provide a capability to:

- search for and aid in the recovery of a lost or stolen nuclear weapon and
- aid the Federal Bureau of Investigation in the event of a crime involving the theft or alleged theft of a nuclear weapon or SNM; a threat to detonate a stolen nuclear weapon, improvised nuclear device, or a radiation dispersal device; or attempt to commit any other crimes involving nuclear or radiological weapons, devices or materials.

Much information concerning NEST is classified and appropriate classification guidance must first be checked to ensure information concerning NEST is unclassified before determining whether the information is controllable as UCNI.

- 1131
 Exploitable security-related or essential technology-related information
 UCNI

 concerning NEST operations, either training or
 actual, unless determined releasable by the Office of Emergency
 Response (GG #29)
- 1132 Exploitable security-related or essential technology-related information UCNI on NEST procedures, assets, equipment, threats, capabilities, or limitations (GG #40)

NUCLEAR MATERIAL PRODUCTION

Design and Operation 2100

2110

UCNI	2101 Essential technology-related information regarding nuclear material production that is not obvious to an outsider skilled in the art (GG #41)
Not UCNI	2102 Information concerning the design or operation of reactors used for the production of nuclear material for commercial use
	Hanford Decommissioned Reactors and Associated Fuels and Production Separations
Not UCNI	2111 Design and operating data on Hanford's decommissioned reactors, fuel targets and cladding, separations, and reduction to metal process technology
UCNI	2112 Beyond reduction-to-metal processing technology (i.e., weapon parts manufacturing), essential technology-related design and process information that is in sufficient detail to implement the technology but that has not been widely disseminated (GG# 42)
	NOTE: For other information not associated with the decommissioned reactors, their fuels and separations, refer to appropriate topics in this

reactors, their fuels and separations, refer to appropriate topics in this guideline or appropriate topical guidelines.

NUCLEAR POWER PRODUCTION

3100 Design and Operation

3101	Essential technology-related information regarding non-commercial nuclear power production that is not obvious to an outsider skilled in the art (GG #10)	UCNI
3102	Essential technology-related information concerning the design of naval nuclear propulsion reactor plants or their components (GG #14)	UCNI
3103	Information concerning the design or operation of commercial power producing reactors and the capabilities of such facilities	Not UCNI

NUCLEAR WEAPONS AND RELATED TECHNOLOGY

4100	Design			
	4101	Essential technology-related design information for an actual or hypothetical nuclear weapon, except for specific examples of such designs approved for public release by the Director, Information Classification and Control Policy (GG #18)	UCNI	
	4102	Research and development results that reveal essential technology-related design information (GG #43)	UCNI	
4110	Manufacture		UCNI	
	4111	Essential technology-related information regarding the manufacture of nuclear weapons (GG# 44)	UCNI	
4120	Utilization			
	4121	Essential technology-related or exploitable security-related design information related to the utilization of nuclear weapons (GG #20)	UCNI	
	4122	Information concerning the handling of nuclear weapons that can be casually observed from an uncontrolled area (e.g., airports, railroads, highways)	Not UCNI	
	4123	Information indicating the (a) total quantity produced of, (b) production rate of, or (c) cost of an unclassified non-nuclear component in support of a specified or unspecified weapon system	Not UCNI	

OTHER AREAS

5100 No Comment Policy

NOTE: The following topic is the basis for the "no comment" policy concerning widely disseminated UCNI documents or material:

5101 Confirmation that a publicly available document or material does or does UCNI not contain UCNI (GG #8)

ACRONYMS

- CFR Code of Federal Regulations
- DOE Department of Energy
- GG General Guideline
- NEST Nuclear Emergency Support Team
- ICCP Information Classification and Control Policy, Security Policy Staff, DOE Headquarters
- SNM Special Nuclear Material
- UCNI Unclassified Controlled Nuclear Information

DEFINITIONS

The source of the following definitions is indicated in parentheses after the defined term. If no source is cited, the term is defined here.

Classification Officer: An individual designated to administer the classification and UCNI programs for a field element or contractor organization.

Document or Material: (10 CFR 1017.3(g)) The physical medium on or in which information is recorded or a product or substance which contains or reveals Information, regardless of its physical form or characteristics. (Note: Examples of documents or material include removable ADP media (diskettes, tapes, cards, etc.); computer codes; charts; maps; paintings; drawings; engravings; sketches; photographic prints; exposed or developed film: working notes and papers: reproductions of such things by any means or process; and sound and video recordings by magnetic, optical, or any other electronic means.)

Essential Information: Unclassified information whose unauthorized dissemination could significantly increase the likelihood of the illegal production of a nuclear weapon.

Exploitable Information: Unclassified information whose unauthorized dissemination could significantly increase the likelihood of the theft, diversion, or sabotage of nuclear material, equipment, or facilities.

Facility: (S&S Glossary) An educational institution, manufacturing plant, laboratory, office building, or complex of buildings located on the same site that is operated and protected as one unit by DOE or its contractor(s).

Government Information: (10 CFR 1017.3(j)) Any fact or concept, regardless of its physical form or characteristics, that is owned by, produced by or for, or otherwise controlled by the U.S. Government.

Internal Guideline: (DOE M 471.1-1) Identifies whether information of interest to the issuing organization is UCNI.

Nuclear Material: (S&S Glossary) Special nuclear material, byproduct material, or source material as defined by sections 11a., 11e. and 11z. respectively, of the Atomic Energy Act or any other material used in the production, testing, utilization, or assembly of nuclear weapons or components of nuclear weapons that the Secretary of Energy determines to be nuclear material under §1017.10(a).

Sensitive Facility: A facility which performs or performed a sensitive function.

Sensitive Function: (10 CFR 1017.3(b)(1) and (2)) Sensitive functions include the following: (1) Development, production, testing, sampling, maintenance, repair, modification, assembly, utilization, transportation, or retirement of nuclear weapons or components of nuclear weapons; and (2) production, utilization, or transportation of nuclear material for military applications.

Site: (S&S Glossary) A geographical area where one or more facilities are located.

Topical Guideline: (DOE M 471.1-1) Identifies whether information in a specified technical or program area is UCNI.

Unclassified Controlled Nuclear

Information: (DOE O 471.1A) Certain unclassified but sensitive Government information concerning nuclear material, weapons, and components whose dissemination is controlled under section 148 of the Atomic Energy Act.

Information Classification and Control Policy Security Policy Staff Office of Security Washington, D.C. 20585