Appendix Abbreviations

Α

AAEM Alstom Atomenergomash - a joint venture between French turbine

manufacturer Alstom and Atomenergomash

ABG Advisory Bodies to Governments
ABWR Advanced Boiling Water Reactor
ACI American Concrete Institute
ACOP Approved Code of Practice

ADN European Agreement concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR European Agreement concerning the International Carriage of Dangerous

Goods by Road

ADSR Accelerator Driven Sub-critical Reactor
AEC Atomic Energy Commission (South Korea)

AECL Atomic Energy of Canada Limited

AEM Atomenergomash - a power engineering and Russian military company
AEP Atomic Energy Power Corporation - state-owned holding company that

unifies the Russian civil nuclear industry

AERE Atomic Energy Research Establishment

AFCEN Association for Design, Construction and In-service rules for nuclear island

components (France)

AFCR Advanced Fuel Candu Reactor

AFNOR Association Française de Normalisation - the French national organization for

standardization

AGR Advanced Gas-Cooled Reactor

AISC American Institute of Steel Construction

ALARA As Low as Reasonably Achievable (equivalent to ALARP)

ALARP As Low As Reasonably Practicable

ANDRA Agence Nationale pour la gestion des Déchets Radioactifs - the French

national agency for radioactive waste management

ANS American National Standards

ANSI American National Standards Institute

API American Petroleum Institute
APR Advanced Power Reactor

APWR Advanced Pressurized Water Reactor

AREVA French based international nuclear company (Mining/Nuclear Fuels/Reactors

and services/Waste, transportation and decommissioning) and renewable

energy designer/manufacturer

ARSAC Administration of Radioactive Substances Advisory Committee



Nuclear Quality Knowledge Appendix

ASME American Society of Mechanical Engineers

ASN French Nuclear Safety Authority
AWE Atomic Weapons Establishment

AWRE Atomic Weapons Research Establishment (superseded by AWE)

AWS American Welding Society

В

BCSA British Constructional Steelwork Association
BE British Energy (taken over by EDF in 2009)

BEGL British Energy Generation Limited (Component company within BE became

EDF Energy Nuclear Generation Limited in 2011))

BEG(UK)L British Energy Generation (UK) Limited (Component company within BE,

formerly known as Scottish Nuclear)

BEIS Department for Business, Energy and Industrial Strategy (BEIS energy

portfolio has passed to the Department for Energy Security and Net Zero

(DESNZ))

BIS Department for Business Innovation and Skills [replaced by the Department

for Business, Energy & Industrial Strategy]

BNFL British Nuclear Fuels Ltd (abolished circa 2010)

BNI Base Nuclear Installation

BoQK CQI Body of Quality Knowledge

BS British Standard
BSS Basic Safety Standard
BWR Boiling Water Reactor

C

CAA Civil Aviation Authority

CAEA China Atomic Energy Authority

CAGR Commercial Advanced Gas-cooled Reactor
CANE Coalition Against Nuclear Energy (NGO)

CARES an independent not-for-profit certification body, established to provide

confidence to the users, purchasers and specifiers of constructional steels

CCFE Culham Centre for Fusion Energy

CDLM Committee on Decommissioning of Nuclear Installations and Legacy

Management

CE Conformité Européenne – French for European Conformity
CEA The French Alternative Energies and Atomic Energy Commission

CECA Civil Engineering Contractors Association

CEGB Central Electricity Generating Board (England and Wales) [disbanded ~1900]

CEN European Committee for Standardization

CEO Chief Executive Officer





CDM Construction Design and Management
CFS (i) Counterfeit, Fraudulent and Suspect
(ii) Consortium Franctomo Sigmons

(ii) Consortium Framatome-Siemens

CFSI Counterfeit, Fraudulent and Suspect Items

CFR Code of Federal Regulations – in the US the Code of Federal Regulations

address energy related topics

CGN China General Nuclear Power Group

CIDAS Criticality Incident Detection and Alarm System

CIGEO Centre Industriel de Stockage Géologique

CMA Construction Manager-as-Agent

CMRR Chemistry and Metallurgy Research Replacement facility (USDOE - LANL)

CNC Civil Nuclear Constabulary

CND Campaign for Nuclear Disarmament (NGO)

CNI Chief Nuclear Inspector

CNNC China National Nuclear Corporation

CNPA Civil Nuclear Police Authority

CNRA Nuclear Energy Agency Committee on Nuclear Regulatory Activities

Cogent Cogent is a group of companies comprised of Cogent Skills, Cogent Skills

Services, NSAN and SIAS. Collectively these companies' purpose is entirely focused on skills and supporting the skills needs and ambitions of individual

employers and their employees.

COMAH Control of Major Accident Hazards

COMARE Committee on Medical Aspects of Radiation in the Environment

CoPs Communities of practice

CORE Cumbrians Opposed to a Radioactive Environment (NGO)
CORWM Committee on Radioactive Waste Management (DECC)
COSHH Control of Substances Hazardous to Health regulations

CPI Continual Process Improvement
CPI Group China Power Investment Corporation

CRPPH Nuclear Energy Agency Committee on Radiation Protection and Public Health

CSA The CSA Group (formerly the Canadian Standards Association) develops

standards in Canada and around the world

CSNI Nuclear Energy Agency Committee on the Safety of Nuclear Installations

CV Curriculum Vitae

DA Domestic Agency (Responsible for an ITER partners' contribution to ITER)

DAP Duly Authorised Person (LC 12)

DBA Design Basis Analysis

DECC Department of Energy and Climate Change (became part of Department for

Business, Energy & Industrial Strategy in July 2016)

DEFRA Department for the Environment, Food and Rural Affairs



Nuclear Quality Knowledge Appendix

DEMO Demonstration Power Station is a proposed nuclear fusion power station that

is intended to build upon the ITER experimental nuclear fusion reactor

DESNZ Department for Energy Security and Net Zero (focused on the energy

portfolio from the former Department for Business, Energy and Industrial

Strategy)

DE&S Defence Equipment and Support (MoD)

DFNSB Defense Nuclear Facilities Safety Board (within USDOE)

DfT Department for Transport

DGSNR Directorate General for Nuclear Safety and Radioprotection - the French

nuclear safety authority

DGTREN EU Directorate General of Transport and Energy

DH Department of Health

DNSR Defense Nuclear Safety Regulator (within DE&S Directorate of Safety and

Engineering)

DPFR Dounreay prototype fast reactor

DSA Defence Safety Authority

DSIN Directorate for Nuclear Installations Safety - now merged with OPRI to form

DGSNR (French)

DSRL Dounreay Site Restoration Limited
DWP Department for Work and Pensions

E

EA Environment Agency (England)

EA(S)R the Environmental Authorisations (Scotland) Regulations

EC&I Electrical, Control and Instrumentation

ECO Export Control Organisation (BIS)
EEC European Economic Community

EDF Electricité de France EDF Energy UK subsidiary of EDF

EDG Emergency diesel generators

EDMS Electronic document management system
EFQM European Foundation for Quality Management

EIADR Nuclear Reactors (Environmental Impact Assessment for Decommissioning)

Regulations

ENEA European Nuclear Energy Agency

ENs Standards maintained by CEN (European Committee for Standardization)

ENSREG European Nuclear Safety Regulators Group

EPD Electronic Personal Dosimeter
EPR European Pressurised Reactor
EPRI Electric Power Research Institute

ESBWR Economic Simplified Boiling Water Reactor

ETC Enrichment Technology Company

EQ Equipment Qualification



Nuclear Quality Knowledge Appendix

EU European Union

EURATOM European Atomic Energy Community (also refers to treaty of 1957 that

established the Community)

EVEDA Engineering Validation and Engineering Design Activities

F

F4E Fusion for Energy (Responsible for the EU's contribution to ITER)

FAO United Nations Food and Agriculture Organisation

FBR Fast Breeder Reactor

FCO UK Foreign and Commonwealth Office

FME Foreign Material Exclusion
FOD Foreign Object Damage
FOE Friends of the Earth (NGO)
FORATOM European Atomic Forum
FSA Food Standards Agency
FSP Fundamental safety principle

FSUE NO RAO Rosatom and the National Operator for Radioactive Waste Management

FTSE International indices organisation

G

GDA (i) Office for Nuclear Regulation & Environment Agency Generic Design

Assessment (new build)

(ii) Geological Disposal Facility

GEH GE Hitachi Nuclear Energy

GFR Gas Fast Reactor

GIF Generation IV International Forum
GNI General Nuclear International
GNS General Nuclear System Limited

GQAS General Quality Assurance Specification

GSG General Safety Guides (IAEA Safety publication)

GSR General Safety Requirements (IAEA Safety publication)

Н

H3AT Hydrogen-3 Advanced Technology centre (situated at the Culham Centre for

Fusion Energy)

HAL Highly Active Liquor

HASS Highly Active Sealed Source HEU Highly Enriched Uranium





HF Human Factors
HLW High Level Waste
HM Her Majesty's

HPA Health Protection Agency - became part of Public Health England in 2013

HPM Hyperion Power Module

HPR1000 A pressurised water reactor that has been developed by CGN

HR Human resources

HSE Health and Safety Executive
HSWA Health and Safety at Work Act
HTR High Temperature Reactor

IA (i) Inspection agency

(ii) Independent Assessment

IAEA International Atomic Energy Agency

IC Intelligent customer

ICAO International Civil Aviation Organization
IEC International Electrotechnical Commission

IEC Quality Assessment System for Electronic Components

IFMIF International Fusion Materials Irradiation Facility

ILO International Labor Organisation (UN)

ILW Intermediate Level Waste

IMO International Maritime Organisation (UN)

IMS (i) International Masonry Society

(ii) Integrated Management System

INES International Nuclear Event Scale (IAEA)
INPO Institute of Nuclear Power Operators
INSA Independent Nuclear Safety Assessment

INSAG International Nuclear Safety Advisory Group (IAEA)

IRIDM Integrated Risk Informed Decision Making

IRRs Ionising Radiation Regulations

IRSN Institute for Radiation-Protection and Nuclear Safety

IS Information system

ISCA Independent Safety Culture Assessment
ISFSI Independent Spent Fuel Storage Installation

ISM Integrated safety management

ISO International Organization for Standardization

ISRN Institute for Radiation-Protection and Nuclear Safety (French)

IT Information technology

ITER International Thermonuclear Experimental Reactor (located at Cadarache in

France)

ITNS Important to Nuclear Safety
ITP Inspection and Test Plan





ITS Important to Safety

J

JAERI Japan Atomic Energy Research Institute

JANSI Japan Nuclear Safety Institute
JANTI Japan Nuclear Technology Institute

JET Joint European Torus (situated at the Culham Centre for Fusion Energy)

JNC Japan Nuclear Cycle Development Institute
JNES Japan Nuclear Energy Safety Organization

JNFL Japan Nuclear Fuel Ltd

JSME Japan Society of Mechanical Engineers

K

KAERI Korea Atomic Energy Research Institute

KEPCO Korea Electric Power Company
KEPIC Korea Electric Power Industry Code
KHNP Korea Hydro & Nuclear Power

KINAC Korean Institute of Nuclear Non-proliferation and Control

KINS Korean Institute of Nuclear Safety

KM Knowledge Management

KNA Korea Nuclear Association for International Cooperation

KNEA Korea Nuclear Energy Agency KNFC Korea Nuclear Fuel Company

KOPEC Korea Power Engineering Company Inc.

KPI Key Performance Indicator

L

LANL Los Alamos Nuclear laboratory (USDOE)
LBNL Lawrence Berkeley National Laboratory

LCs Licence Conditions (made by Office for Nuclear Regulation under the Nuclear

Installations Act)

LFE Learning from Experience

LFR Lead Fast Reactor
LHD Large Helical Device

LLC Local Liaison Committee (see also SSG)
LLNL Lawrence Livermore National Laboratory

LLW Low Level Waste

LMZ Leningradsky Metallichesky Zavod - the largest Russian manufacturer of

power machines and turbines for power stations

LWR Light Water Reactor





M

magnox Type of fuel for first generation reactors in UK. Named because of the non-

oxidising magnesium alloy cladding used to contain the uranium fuel rods

Magnox Name of the operating company which is the site licence company for sites

on which reactors were fueled by magnox and also the former RSRL sites

Harwell and Winfrith

MAST Mega Amp Spherical Tokamak

MAST-U MAST upgrade (situated at the Culham Centre for Fusion Energy)

MEST stands for Ministry of Education, Science & Technology (South Korea)

METI Ministry of Economy, Trade and Industry

MCA Marine and Coastguard Agency

MDEP Multinational Design Evaluation Programme

MHI Mitsubishi Heavy Industries MoC Management of change

MoCP Management of change procedure

MoD Ministry of Defence

MOTIE Ministry of Trade, Industry and Energy

MOX Mixed Oxide Fuel;

MQP Management and Quality Program

MRF (i) Metals Recycling Facility

(ii) Materials Research Facility (situated at the Culham Centre for Fusion

Energy)

MRS Monitored Retrievable Storage Installation

MRWS Managing Radioactive Waste Safely

MSR Molten Salt Reactor

MTE Measuring or test equipment

MW megawatt

N

NAIR National Arrangements for Incidents involving Radioactivity

NAMRC Nuclear Advanced Manufacturing Research Center

NAO National Audit Office

ND Health and Safety Executive Nuclear Directorate (superseded by NDA the

Office for Nuclear Regulation in April 2011)

NDA Nuclear Decommissioning Authority

NDA archive Nucleus - The Nuclear and Caithness Archives (the archives of the UK civil

nuclear industry)

NDC Nuclear Development Committee (NEA)

NDE Non-destructive examination
NDPB Non-Departmental Public Body



Nuclear Quality Knowledge Appendix

NDT Non-destructive testing

NEA Nuclear Energy Agency (part of Organisation for Economic Co-operation and

Development)

NEI Nuclear Energy Institute
NESA Nuclear Energy Skills Alliance

NETEC Nuclear Environment Technology Institute
NFLA Nuclear Free Local Authorities (NGO)
NGO Non-Governmental Organisation

NI Nuclear Institute (merge 2009 of British Nuclear Energy Society (BNES) and

Institution of Nuclear Engineers (INucE))

NIA (i) Nuclear Installations Act

(ii) Nuclear Industries Association

NIA SC Nuclear Industries Association Supply Chain – NIA sub-group leading on UK

new build

NIEA Northern Ireland Environment Agency

NIF National Ignition Facility (a laser-based inertial confinement fusion research

device, located at Lawrence Livermore National Laboratory in the US)

NII Nuclear Installations Inspectorate (formerly part of the Nuclear Directorate,

incorporated into the Office for Nuclear Regulation in April 2011)

NIREX Nuclear Industries Radioactive Waste Executive (superseded by NDA RWMD

and subsequently by RWM)

NISA Nuclear & Industrial Safety Agency

NLC Nuclear Energy Agency Nuclear Law Committee

NNC National Nuclear Corporation

NNB GenCo Nuclear New Build Generation Company (subsidiary of EDF Energy)

NNL National Nuclear Laboratory - A UK government owned and operated nuclear

services technology provider

NNSA National Nuclear Security Administration (US)

NPC Nuclear Power Company
NPP Nuclear power plant
NPS Nuclear power station

NPT/NPPT The Treaty on the Non-Proliferation of Nuclear Weapons or Nuclear Non-

Proliferation Treaty

NQA Nuclear Quality Assurance (ASME) NQK Nuclear quality knowledge (CQI)

NQSA Nuclear Quality Standard Association (formed in 2011 from an AREVA /

Bureau Veritas initiative)

NRC US Nuclear Regulatory Commission

NRPB National Radiation Protection Board (now Health Protection Agency, Centre

for Radiation, Chemical and Environmental Hazards Radiation Protection

Division)

NSAN National Skills Academy (Nuclear)

NSC (i) Nuclear Energy Agency Nuclear Science Committee

(ii) Nuclear Safety Committee (LC13)





(iii) Nuclear Safety Commission

NSD Health and Safety Executive Nuclear Safety Directorate (renamed Nuclear

Directorate on addition of Office for Civil Nuclear Security and UK Safeguards

Office. Now ONR.)

NSQ Nuclear Safety and Quality (NSQ-100 standard)
NSS Nuclear Security Series (IAEA documents)
NSSC Nuclear Safety and Security Commission

NSSS Nuclear Steam Supply System
NucSIG CQI Nuclear Special Interest Group

NuLeAF Nuclear Legacy Advisory Forum - Group established by UK Local government

association to identify common local government viewpoint on nuclear clean-

up issues

NUMO Nuclear Waste Management Organization of Japan

NuSAC Nuclear Safety Advisory Group (former advisory group to HSE – suspended in

2008)

NUSS Nuclear Safety Standards (IAEA)

O

OAS Oxfordshire Advanced Skills centre (situated at the Culham Centre for Fusion

Energy)

OCNS Office of Civil Nuclear Security (formerly part of the Nuclear Directorate,

incorporated into the Office for Nuclear Regulation in April 2011)

OECC Organization for European Economic Cooperation (became OECD)

OECD Organisation for Economic Co-operation and Development

OEF Operating Experience Feedback

OEM (i) Office of Environmental Management (USDOE - NNSA) [The mission of the

Office of Environmental Management (EM) is to complete the safe cleanup of

the environmental legacy brought about from five decades of nuclear weapons development and government- sponsored nuclear energy

research.]

(ii) Original Equipment Manufacturer

OHSAS Occupational Health and Safety Assessment Series

OJ Official Journal of the European Union

OJEC Official Journal of the European Communities

OMZ Objedinennye Mashinostroitelnye Zavody - United Heavy Machinery, a large

Russia-based international heavy industry and manufacturing conglomerate.

OND Office for Nuclear Development (DECC) (DECC became part of Department

for Business, Energy & Industrial Strategy in July 2016)

ONR Office for Nuclear Regulation. The Office for Nuclear Regulation is

responsible for regulation of nuclear safety and security across the UK.

OPRI Central Board for Protection against Ionizing Radiations – now merged with

DSIN to form DGSNR (French)

ORR Office for Rail Regulation





OSART Operational Safety Review Team (IAEA plant based mission)

P

PAHO Pan-American Health Organisation

PAS Publicly Available Specification (BSI fast-track specification

Pantex US nuclear weapons assembly and disassembly facility (USDOE – Amorillo

Texas)

PAWB People Against Wylfa B (NGO)

PCPV Pre-stressed concrete pressure vessel (Wylfa and Oldbury sites plus all

Advanced Gas-cooled Reactors)

PEP Project Execution Plan

PER Pressure Equipment Regulations

PHE Public Health England

PLC Programmable logic controller

PNC Power Reactor and Nuclear Fuel Development Corporation

POCO Post Operational Clear Out
PRA Probabilistic Risk Assessment

PRISM Power Reactor Innovative Small Module

PRPP Proliferation, Resistance and Physical Protection

PSA Probabilistic Safety Analysis PSR Periodic Safety Reviews

PUWER Provision and Use of Work Equipment Regulations

PWR Pressurised water reactor PXP Project Execution Plan

Q

QA Quality Assurance

QAP Quality Assurance Program

QC Quality Control

QMS Quality Management System

QRA Quality Related Activity - an activity, the failure of which can lead to a

product non-compliance with the nuclear safety requirements

R

RACE Remote Applications in Challenging Environments centre (situated at the

Culham Centre for Fusion Energy)

RAEng Royal Academy of Engineering

RAF Royal Air Force

RBMK Reaktor Bolshoy Moshchnosti Kanalniy - a class of graphite-moderated

nuclear power reactor designed and built by the Soviet Union



Nuclear Quality Knowledge Appendix

RCC AFCEN Rules for Design and Construction

R&D Research and Development

REPPIR The Radiation (Emergency Preparedness and Public Information) Regulations

RFT Right First Time

RIC Regulatory Information Conference (run annually by NRC in Bethesda near

Washington)

RID Convention concerning International Carriage by Rail

RMTRO Radioactive Materials Transport Officer

RMTT Radioactive Materials Transport Team (DfT) (incorporated into the Office for

Nuclear Regulation in June 2011)

RN Royal Navy

RPA Radiation Protection Adviser
RPS Radiation Protection Supervisor

RPV Reactor Pressure Vessel
RSA Radioactive Substances Act

RSR Radioactive Substances Regulation

RSRL Reactor Sites Restoration Limited (SLC for Harwell and Winfrith until it

merged with Magnox in 2015)

RWMC Radioactive Waste Management Committee (NEA)

RWMD Radioactive Waste Management Directorate (NDA now RWM)
RWM Radioactive Waste Management (RWM). A subsidiary of the NDA.

S

SAP Senior Appointed Person

SAPs Safety Assessment Principles (ONR)

SCWR Super Critical Water Reactor

SCRAM Scottish Campaign to Resist the Atomic Menace (NGO)

SCRO State Council Research Office SDF Safety Directors Forum (UK) SEP Sound engineering practice

SEPA Scottish Environment Protection Agency

SF Safety Fundamentals (IAEA)

SFAIRP So Far As Is Reasonably Practicable

SFR Sodium Fast Reactor

SGHWR Steam Generating Heavy Water Reactor

SHE Safety, Health and Environment

SIL Safety Integrity Level

SLC Site Licence Company (holder of licence under Nuclear Installations Act,

issued by ONR)

SME Small to Medium Enterprise
SMLO Site Movement Liaison Officer
SMP Safety Management Prospectus

SMR Small Modular Reactor



Nuclear Quality Knowledge Appendix

SNERDI Shanghai Nuclear Engineering Research and Design Institute

SNPTC State Nuclear Power Technology Corporation (China)

SPIC State Power Investment Corporation (China)
SQEP Suitably Qualified and Experienced Person (LC 12)

SSG (i) Site Stakeholder Group (see also LLC)

(ii) Specific Safety Guides (IAEA)

SSR Specific Safety Requirements (IAEA)
SSC Structures, Systems and Components

SSEB South of Scotland Electricity Board - predecessor to Scottish Power and

Scottish Nuclear

STAR Stop Think Act Review

START Small Tight Aspect Ratio Tokamak

STEP Spherical Tokamak for Energy Production

STUK Säteilyturvakeskus - Finnish Radiation and Nuclear Safety Authority

T

TAG Technical Assessment Guide (ONR)

TECDOC Technical Document (IAEA)

TEXTOR Tokamak Experiment for Technology Oriented Research

TFTR Tokamak Fusion Test Reactor

THORP Sellafield Thermal Oxide Reprocessing Plant

TIG Technical Inspection Guide (ONR)

TNPG The Nuclear Power Group (design and construction consortia)

TRANSEC Department for Transport Security and Contingencies Directorate

TRIGA Training, Research, Isotopes, General Atomics (light water research reactor)

TRU waste Waste Containing Transuranic Nuclides
TSN Act on transparency and safety (French)

TU Trade Union

TVEL TVEL Fuel Company - a Russian nuclear fuel cycle company

TVO Teollisuuden Voima Oyj - a Finnish nuclear power company owned by a

consortium of power and industrial companies

UK United Kingdom

UKAEA United Kingdom Atomic Energy Authority

UKSO United Kingdom Safeguards Office (formerly part of the Nuclear Directorate

that was incorporated into the Office for Nuclear Regulation in April 2011)

UNAEC United Nations Atomic Energy Commission - disbanded in 1952

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

US United States





USA United States of America
USDOE Department of Energy (USA)

USNRC United States Nuclear Regulatory Commission

USSR Union of Soviet Socialist Republics - existed from 30 December 1922 to 26

December 1991

 \bigvee

VHTR Very High Temperature Reactor

VICWG Vendor Inspection Co-operation Working Group

VLLW Very Low Level Waste

W

WAC Waste Acceptance Criteria

WAGR Windscale prototype Advanced Gas-cooled Reactor

WANO World Association of Nuclear Operators

WENRA Western European Nuclear Regulators Association

WHO World Health Organisation

WINS World Institute for Nuclear Security

WISE World Information service on Energy (NGO)

WMO World Meteorological Organization

WNA World Nuclear Association

WNTI World Nuclear Transport Institute WQTR Welder qualification test record

WT&IP Waste Treatment & Immobilisation Plant (USDOE Hanford)

X

Υ

7

Zangger Committee Also known as the NPT Exporters Committee, essentially contribute to

the interpretation of article III, paragraph 2, of the Nuclear Non-Proliferation

Treaty and thereby offers guidance to all parties to the treaty

ZETA Zero Energy Thermonuclear Assembly





Revisions

Revision date	Description	Contributors	Editors
January 2019	Appendix update	Mike Underwood, Richard Hibbert	lain McNair
January 2023	Content and format updated by NNG.	NNG Steering Group	NNG Steering Group