

ABBREVIATIONS AND ACRONYMS

ADS	Air Detritiation System
ALARA	As Low As Reasonably Achievable
ANL	Argonne National Laboratory
ARIES	Advanced Reactor Innovations and Evaluation Study
ASE	Amplified Spontaneous Emission
ASWS	Auxiliary Service Water System
ATA	Advanced Test Reactor
AVLIS	Atomic Vapor Laser Isotope Separation
BCSS	Blanket Comparison and Selection Study
BHP	Biological Hazard Potential
BOP	Balance of Plant
BQ	Beam Quality
BRP	Blanket/Reflector/Plena
BW	Bandwidth
CANDU	Canadian Deuterium Uranium (Fission Reactor)
CAS	Compressed Air System
CASCADE	LLNL IFE reactor concept using rotating ceramic-granule blanket
CCWS	Closed Cooling Water System
CCW	Component Cooling Water
CD	Cryogenic Distillation
CDS	Central Difference Scheme
CEA	Commissariat A L'Energie Atomique
CEBAF	Continuous Electron Beam Accelerator Facility
CECE	Combined Electrolysis and Catalytic Exchange
CERN	Centre for European Research, Nuclear
CET	Chemical Equilibrium Thermodynamic Code
CFFTP	Canadian Fusion Fuels Technology Project
CH	Hydro-Carbon based material
COE	Cost Of Electricity
CRAM	(beam) Crossed Raman Accumulator
CTMS	Cooling Tower Makeup System
CS	Constant Spot
CSS	Condensate Storage System
CVD	Chemical Vapor Deposition
CVI	Chemical Vapor Infiltration
CWS	Circulating Water System
DAC	Derived Air Concentrations
DBTT	Ductile-to-Brittle Transition Temperature
DCG	Derived Concentration Guide
DD	Direct Drive (target)
DEMO	Demonstration Power Plant
DESY	Deutsches Elektron-Synchrotron
DOD	Department of Defense
DOE	Department of Energy
DPA	Displacements Per Atom
DPP	Demonstration Power Plant
DRTF	Darlington Tritium Removal Facility
DSTI	Dual-Sided Target Irradiation
DT	Deuterium-Tritium
DTX	Dose-To-Flux
E/O	Electro-Optical
EADS	Exhaust Atmosphere Detritiation System
EBEEL	Electron Beam Excited Excimer Laser
EBEL	Electron Beam Excimer Laser
EBSEDL	Electron Beam Sustained Electric Discharge Laser
EDEL	Electric Discharge Excimer Laser

ABBREVIATIONS AND ACRONYMS (CONT.)

EDS	Electrical Distribution System
EEDS	Exhaust Effluent Detritiation System
EGDS	Exhaust Gas Detritiation System
ELD	Excimer Driver Laser
ELMO	Excimer Laser Master Oscillator
ELP	Excimer Laser Preamplifier
ELPA	Excimer Laser Power Amplifier
EMRLD	Excimer Mid-range Raman-shifted Laser Device
ENEA	European Nuclear Energy Agency
EP	Exhaust Purification
EPA	Environmental Protection Agency
EPR	Experimental Power Reactor
EPRI	Electric Power Research Institute
ER	Energy Research
ESECOM	Environmental, Safety, and Economic Aspects of MFE COmmittee
ESCWS	Essential Services Cooling Water System
ETF	Engineering Test Facility
ETHEL	European Tritium Handling and Experimental Laboratory
ETR	Engineering Test Reactor
FCU	Fuel Cleanup Unit
F	Fluence
FEL	Free Electron Laser
FET	Field Effect Transistor
FFTF	Fast Flux Test Facility
FINESSE	Fusion Integrated Nuclear Experiments Strategy Study Effort
FMEA	Failure Modes and Effects Analysis
FODO	Focus-Drift-DeFocus-Drift
FPCCS	Fuel Processing Closed Coolant System
FPS	Freeze Protection System
FPS	Fuel Processing System
FPY	Full Power Year
FRC	Fiber Reinforced Composite
FRRA	Forward Rotational Raman Amplifier
FSMS	Fuel Storage and Management System
FSS	Fuel Storage System
FW/B	First Wall/Blanket
FW	First Wall
FWS	First Wall System
GB	Grain Boundary
GBCS	Glove Box Cleanup System
GBFEL	Ground-Based Free Electron Laser
GC	Gas Chromatographic
GDP	Glow Discharge Polymerization
GIA	Grazing Incidence Angle
GIMM	Grazing Incidence Metal Mirror
HI	Heavy Ion
HIBALL	Heavy Ion Beams and Lithium Lead
HID	Heavy Ion Driver or Driven
HIF	Heavy Ion Fusion
HIFSA	Heavy Ion Fusion Systems Assessment
HIP	Hot Isostatic Pressing
HITEX	High Temperature Isotopic EXchange
HR	High Reflectivity
HVAC	Heating, Ventilation, Air Conditioning
HYLIFE	High-Yield Lithium-Injection Fusion Energy
IADS	Inert Atmospheric Detritiation System

ABBREVIATIONS AND ACRONYMS (CONT.)

IB	Inverse Bremsstrahlung
ICCOMO	Inertial COntainment systems performance and COst MOdel
ICF	Inertial Confinement Fusion
ICFSS	Inertial Confinement Fusion System Study
ICRP	International Commission on Radiological Protection
ID	Indirect Drive (target)
IDLD	Indirect Drive, Laser Driven (targets)
IDLH	Immediately Dangerous to Life or Health
IDPR	IFE Experimental Power Reactor
IEEE	Institute of Electrical and Electronic Engineers
IEPR	IFE Experimental Power Reactor
IFE	Inertial Fusion Energy
IFERDS	Inertial Fusion Energy Reactor Design Study
ILSE	Induction Linac System Experiment
IS	Inherent Safety
ISI	Induced Spatial Incoherence
ISR	Ion Storage Ring
ISS	Isotope Separation System
IT	Impurity Treatment
ITER	International Thermonuclear Experimental Reactor
IVVS	In-Vessel Vehicle System
JAERI	Japan Atomic Energy Research Institute
JET	Joint European Torus
KfK	Kernforschungszentrum Karlsruhe
LA	Large Aperture
LAM	Large Aperture Module
LANL	Los Alamos National Laboratory
LBL	Lawrence Berkeley Laboratory
LD	Laser Driver or Driven
LIA	Linear Induction Accelerator
LIACEP	Linear Induction Accelerator Cost Evaluation Program
LIBRA	Light Ion Beam Fusion Reactor Conceptual Design Study
LINAC	LINear ACcelerator
LLE	Laboratory for Laser Energetics
LLNL	Lawrence Livermore National Laboratory
LLW	Low Level Radioactive Waste
LMF	Laboratory Microfusion Facility
LOCA	Loss of Coolant Accident
LOE	Level Of Effort
LOFA	Loss of Flow Accident
LRO	Local Raman Oscillator
LSA	Level of Safety Assurance
LTA	Long Term Activation
LTE	Local Thermodynamic Equilibrium
LV	Low Voltage
M	Blanket or Nuclear Power Multiplication
MARS	Mirror Advanced Reactor Study
MB	Multiple Beam
MBL	Multiple Beam Linac
MCF	Magnetic Confinement Fusion
MD	Molecular Dynamics
MDA	McDonnell Douglas Aerospace
MDESC	McDonnell Douglas Electronic Systems Company
MDMSC	McDonnell Douglas Missile Systems Company
MFE	Magnetic Fusion Energy
MHD	Magneto-Hydrmanmic

ABBREVIATIONS AND ACRONYMS (CONT.)

MINIMARS	Mini-Mirror Advanced Reactor Study
MOPA	Master Oscillator Power Amplifier
MPC _a	Maximum Permissible Concentration in Air
MSM	Master-Slave Manipulator
MTA	Maintainability Task Analysis
MTBF	Mean Time Between Failure
MTTR	Mean Time To Repair
MUF	Mass Utilization Factor
MV	Medium Voltage
NASA	National Aerospace and Space Administration
NECDB	Nuclear Energy Cost Data Base
NET	Next European Torus
NIOSH	National Institute for Occupational Safety and Health
NLO	Non Linear Optical
NMFECC	National Magnetic Fusion Energy Computer Center
NPB	Neutral Particle Beam
NPBIE	Neutral Particle Beam Integrated Experiment
NPR	New Production Reactor
NPRD	Non-electrical Parts Reliability Data
NRC	Nuclear Regulatory Commission
NRF	Neutron Reflection Factor
NRL	Naval Research Laboratory
OEL	Optimized Excimer Laser
OFE	Office of Fusion Energy
ORNL	Oak Ridge National Laboratory
PC	Pulse Compression
PF	Pulse Forming
PFL	Pulse Forming Line
PFN	Pulse Forming Network
PHA	Preliminary Hazards Analysis
PKA	Primary Knock-on Atom
PPPL	Princeton Plasma Physics Laboratory
PRA	Preliminary Risk Analysis
PRF	Pulse Repetition Frequency
PSA	Pressure Swing Adsorption
PWR	Pressurized Water Reactor
PVA	PolyVinyl Acetate
R&D	Research and Development
RA	Resonance Absorption
RA	Resonant Absorption
RAC	Raman Accumulator Cell
RADS	Recirculating Air Detritiation System
RAM	Reliability, Availability, Maintainability
RCRA	Resource, Conservation, and Recovery Act
RCS	Replacement Collision Sequences
RECON	A UCLA Heat and Mass Transfer Computer Model
RF	Radio Frequency
RHR	Reactor Heat Removal
RMCS	Remote Manipulator and Control System
RMS	Remote Monitoring System
RMSD	Remote Manipulator Systems Division (SPAR)
RPE	Reactor Plant Equipment
RPM	Revolutions Per Minute
RR	Repetition Rate
RT	Rayleigh-Taylor (instability)
RT	Room Temperature

ABBREVIATIONS AND ACRONYMS (CONT.)

SB	Single Beam
SBFEL	Space-Based Free Electron Laser
SBL	Single Beam Linac
SBS	Stimulated Brillouin Scattering
SCR	Silicon Controlled Rectifier
SDI	Strategic Defense Initiative
SDIO	Strategic Defense Initiative Organization
SENRI	A Japanese Fusion Reactor Design Study
SEP	Societe' Europeenne de Propulsion
SIRIUS	A Symmetric Direct Drive Laser Fusion Reactor Study (Univ of Wisc)
SLAC	Stanford Linear Accelerator
SNL	Sandia National Laboratories
SOLASE	Experimental Inertial Reactor Study (at Univ of Wisc)
SOW	Statement Of Work
SP	Single Pulse
SPAR	Spar Aerospace, Ltd
SPTF	Single Pulse Test Facility
SRRS	Stimulated Rotational Raman Scattering
SRS	Stimulated Raman Scattering
SSC	Superconducting Super-Collider
SSTI	Single-Sided Target Irradiation
STEM	Storage Tubular Extendible Member
STP	Standard Temperature and Pressure
TARM	Telescoping Articulating Remote Manipulator
TBCCWS	Turbine Building Closed Cooling Water System
TBR	Tritium Breeding Ratio
TCPSA	Thermally Coupled Pressure Swing Adsorption
TCPSA	Thermally Coupled Pressure Swing Adsorption
TDRF	Threshold Dose Release Fractions
TEXTOR	Tritium Experiment for Technology Oriented Research
TFTR	Tokamak Fusion Test Reactor
TPD	Two Plasmon Decay
TPR	Tritium Production Rate
TRIUMF	Tri-University Meson Facility
TRM	Total Remote Maintenance
TSA	Thermal Swing Adsorption
TSDS	Tritium Storage and Delivery System
TSTA	Tritium System Test Assembly
TVD	Total Variation Diminishing
TWA	Time Weighted Averages
TW	Target Debris-Wall Interaction
TWG	Target Working Group
UCLA	University of California at Los Angeles
UHS	Ultimate Heat Sink
US	United States
UV	Ultraviolet
VLS	Vapor-Liquid-Solid
VPCE	Vapour Phase Catalytic Exchange
VS	Ventilation System
WD	Water Distillation
WD	Water Detritation System
WJSA	W.J. Schafer Associates
XDL	Times Diffraction Limit
ZS	Zoomed Spot