

ABBREVIATIONS & ACRONYMS

A

A/E	Architecture-Engineering
AIP	Accelerator Improvement Project
ALARA	as low as reasonably achievable
ALD	Associate Laboratory Director
ANSI	American National Standards Institute
AoA	Analysis of Alternatives
APS	Advanced Photon Source-Upgrade
ATS	automatic transfer switch

B

Be	beryllium
BES	Basic Energy Sciences
BCM	beam current monitor
BI	Beam Instrumentation
BIM	building information modeling
Bio-SANS	biological samples
BLM	beam loss monitor
BMP	best management practices
BOA	basic ordering agreement
BOE	Basis of Estimate

C

CAD	computer-aided design
CD	Critical Decision
CDB	component database
CDR	Conceptual Design Review or Report
CEC	credited engineering control
CEF	Central Exhaust Facility
CF	Conventional Facilities
cfm	cubic feet per minute
CHES	Cornell High Energy Synchrotron Source
CLO	Central Lab and Office
CM/GC	Construction Management/General Contractor
CMS	cryogenic moderator system
CNMS	Center for Nanophase Materials Sciences
COTS	Commercial off the shelf
CSMB	Center for Structural Molecular Biology
CSNS	China Spallation Neutron Source
CUB	Central Utilities Building
CW	cooling water
CY	cubic yard
CYGNUS	SANS / WANS

D

DAC	Design Analysis Calculation
DAGMC	Direct Accelerated Geometry Monte Carlo

DAQ	data acquisition
DI	deionized
DIWS	Deionized Water System
DOE	Department of Energy
DOE-SC	Department of Energy Office of Science
DWV	drain waste vent

E

EB	electron beam
EL	event link
EOC	element of cost
EPICS	Experimental Physics and Industrial Control System
ESAAB	Energy Systems Acquisition Advisory Board
ESS	European Spallation Source
ETC	estimate to completion
EVMS	Earned Value Management System
EWALD	Enhanced Wide-Angle Laue Diffractometer

F

FFTB	Final Focus Test Beam
FM	ferromagnetic
FODO	focus-drift-defocus-drift
FPGA	field programmable gate array
fpm	feet per minute
fps	feet per second or fast protection system
FTE	Full Time Equivalent
FTS	First Target Station
FY	fiscal year

G

GC	General Contractor
GeV	giga-electron volt
GFE	government furnished equipment
gsf	gross square footage
GUI	graphical user interface

H

H ₂	hydrogen
HA	Hazard Analysis
HAP	hazardous air pollutant
He	helium
HEPA	high-efficiency particulate air
HFIR	High Flux Isotope Reactor
HMF	high magnetic field
HOG	hot off gas
HPM	high-power protection module

ABBREVIATIONS & ACRONYMS

HPSS high-performance storage system
 HUR hydrogen utility room
 HVAC heating, ventilation, and air conditioning
 Hz hertz

I

I&C instrumentation and control
 I/O input/output
 IC integrated controls
 ICS Integrated Control Systems
 INEL Idaho National Engineering Laboratory
 ISIS ISIS Neutron & Muon Source
 IOC Input/Output controller
 IPPS Instrument Personnel Protection System
 IPR Independent Project Review
 IPT integrated project team
 IR infrared
 IRP inner reflector plug
 IT information technology

J

J-PARC Japan Proton Accelerator Research Complex

K

KPP Key Performance Parameter
 kW kilowatt

L

LCLS Linac Coherent Light Source-II
 LED light-emitting diode
 LENS Low Energy Neutron Source
 LLC limited liability company
 LLLW low-level liquid waste
 LLRF low-level radio frequency
 LOE level of effort
 LVDT linear variable differential transformer
 fuzzy chart

M

MCN Machine Controls Network
 MCNP Monte Carlo N-Particle transport code
 MPS Machine Protection System
 mrem millirem
 MRA moderator reflector assembly
 MRF Micro-Research Finland

MUTS Mock-up Test Stand
 MW megawatt

N

NCNR NIST Center for Neutron Research
 NeXus neutron and x-ray scattering experiments
 NNSS Nevada National Security Site
 NScD Neutron Sciences Directorate
 nsf net square footage
 NSLS-II National Synchrotron Light Source-II
 NTS Nevada Test Site

O

OH overhead
 OPC Other Project Costs
 OPI Operator Interface
 ORNL Oak Ridge National Laboratory
 OSO ORNL Site Office

P

PARS-IIe Project Assessment and Reporting System
 PBW proton beam window
 PEP Project Execution Plan
 PF Proton Facility
 PHAR Preliminary Hazard Analysis Report
 PIE Post Irradiation Examination
 PLC programmable logic controller
 PPEP Preliminary Project Execution Plan
 PPS Personnel Protection System
 PPU Proton Power Upgrade
 psf pounds per square foot
 PSI Paul Scherrer Institute
 PV process variable

Q

QA quality assurance
 QA&VP quality assurance and validation process
 QAP Quality Assurance Program
 QIKR Quite Intense Kinetics Reflectometer
 QSL quantum spin liquid

R

RF radio frequency
 RPS run permit system
 RSB Ring Service Building

ABBREVIATIONS & ACRONYMS

RTBT Ring to Beam Target
RTDL real-time data link
RTST Ring to Second Target

X

XPS x-ray photoelectron spectroscopy

S

SANS small-angle neutron scattering
SC Office of Science
SCL superconducting linac
SE Sample Environment
SF square foot
SING SNS Instrument – Next Generation
SLAC SLAC National Accelerator Laboratory
SLS Swiss Light Source
SME subject matter expert
SNS Spallation Neutron Source
SOW statement of work
SS stainless steel
STPPS Second Target Personnel Protection System
STS Second Target Station

Z

Zr Zirconium

T

Ta tantalum
TEC Total Estimated Cost
TPC total project cost
TPS Target Protection System
TTOP Transition to Operation Parameters
TVP target viewing periscope

U

UL Underwriters Laboratories
UPS uninterruptible power supply
UTC Coordinated Universal Time

V

VAV variable air volume
VE value engineering or vendor estimate
VERDI Versatile Diffractometer
VFD variable-frequency drive
VME Versa Module Europa

W

W tungsten
WANS wide-angle neutron scattering
WAXS wide-angle x-ray scattering
WBS Work Breakdown Structure