

GLOSSARY

Section I Abbreviations

AC
Alternating Current

ADA
Americans with Disabilities Act

ADP
Automated Data Processing

AEI
Architectural and Engineering Instructions

AHJ
Authority Having Jurisdiction

ALTC
Automatic Load Tap Changer

ANSI
American National Standards Institute

AR
Army Regulation

ASCE
American Society of Civil Engineers

ASHRAE
American Society of Heating, Refrigeration, and Air Conditioning Engineers

ASME
American Society of Mechanical Engineers

ASTM
American Society for Testing and Materials

AWWA
American Waterworks Association

BT
Bus-Tie

BTU
British Thermal Unit

TM 5-691

C3I

Command, Control, Communications, and Intelligence (C3I) Facility Cooling Systems

C4ISR

Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance

C

Centigrade

CAD

Computer-Aided Drafting

CBR

Chemical, Biological, and Radiological

CCTV

Closed Circuit Television

cm

Centimeter

CEGS

Corps of Engineers Guide Specification

CES

Critical Equipment/System

CFR

Code of Federal Regulations

CI

Cast Iron

CM

Configuration Management

CONUS

Continental United States

CP

Cathodic Protection

CR

Control Room

CRT

Cathode Ray Tube

CSR

Cold Standby Redundant

CWA
Clean Water Act

DA PAM
Department of the Army Pamphlet

dB
Decibel

dBa
Decibel (Audio): sound pressure level above reference level of 0.00002 newton/cm²

DC
Direct Current

DOD
Department of Defense

DODISS
DOD Index of Specifications and Standards

DPGDS
Deployable Power Generation and Distribution System

DPW
Director of Public Works

DX
Direct Expansion

EM
Electromagnetic

EMC
Electromagnetic Compatibility

EMI
Electromagnetic Interference

EMP
Electromagnetic Pulse

ENS
Emergency Notification System

EPA
Environmental Protection Agency

EPAG
Electric Power Availability Goal

TM 5-691

EPAR

Electric Power Availability Requirement

F

Fahrenheit

FIPS

Federal Information Processing Standards

fps

Feet Per Second

ft

Feet

gpm

Gallons Per Minute

GFCI

Ground Fault Circuit Interrupter

GFE

Government-Furnished Equipment

GHz

Gigahertz

H₂

Hydrogen

HAD

Heat Actuator Detector

HEMP

High Altitude Electromagnetic Pulse

HEPA

High Efficiency Particulate Air

HFE

Human Factors Engineering

HVAC

Heating, Ventilating, and Air Conditioning

HVAC&R

Heating, Ventilating, Air Conditioning & Refrigeration

Hz

Hertz

G-4

IEC
International Electrotechnical Commission

IEEE
Institute of Electrical and Electronics Engineers

IGBT
Insulated Gate Bipolar Transistor

IMA
Installation Medical Authority

JCS
Joint Chiefs of Staff

kg
Kilogram

km
Kilo Meter

kVA
Kilo Volt Amperes

kW
Kilo Watts

LCB
Line Circuit Breaker

LCC
Life Cycle Cost

LCCA
Life-Cycle Cost Analysis

LDC
Line Drop Compensating

MCB
Maintenance Circuit Breaker

min
Minute

MOV
Metal Oxide Varistor

mph
Miles Per Hour

TM 5-691

MVA

Mega Volt Amperes

NACE

National Association of Corrosion Engineers

NEC

National Electrical Code

NEMA

National Electrical Manufacturers Association

NFGS

Naval Facilities Guide Specification

NFPA

National Fire Protection Association

NPS

Non-Point Source

NPDES

National Pollutant Discharge Elimination System

O&M

Operations and Maintenance

OCONUS

Outside Continental United States

OSHA

Occupational Safety and Health Administration

pA

Pascal

PA

Public Address

PCE

Power-Conditioning Equipment

PIV

Post Indicator Valve

ppm

Parts Per Million

psig

Pounds Per Square Inch, Gage

PVC
Polyvinyl Chloride

PWM
Pulse Width Modulated

R/A
Reliability/Availability

RAM
Reliability, Availability, and Maintainability

RFI
Radio Frequency Interference

RMS
Root Mean Square

RPTBP
Reduced Pressure Type Backflow Preventer

s
Second

SCADA
Supervisory Control and Data Acquisition

SCR
Silicon-Controlled Rectifier

SDWA
Safe Drinking Water Act

SE
Systems Engineering

SEDB
Systems Engineering Database

SMACNA
Sheet Metal Air Conditioning Contractors National Association

STS
Static Transfer Switch

TFA
Toxic-Free Area

THD
Total Harmonic Distortion

TM 5-691

TIMA

Thermal Insulation Manufacturers Association

TM

Technical Manuals

UL

Underwriters Laboratories

UPS

Uninterruptible Power Supply

USACE

U.S. Army Corps of Engineers

VAR

Volt-Ampere Reactive

VPI

Vacuum Pressure Impregnated

wg

Water Gage

WQA

Water Quality Act

Section II

Terms

Control Room

The area(s) from where power generation and supporting systems are controlled.

Critical Bus

A critical bus supplies the critical equipment/systems directly through feeders or branch circuits which originate at the bus and terminate at the input terminals of the equipment or control devices such as reduced-voltage motor starters. This definition excludes the use of frequency converters/inverters and transformers that alter the voltage between the bus and the equipment.

Critical Equipment/Systems

Critical equipment/systems include those items of equipment or systems that directly supply power to equipment and systems used to perform the primary mission(s) of the C4ISR site.

Critical Load

That portion of the technical load used to successfully accomplish the site missions and having a requirement for 100 percent continuity in power service, such as from the Uninterruptible Power Supply (UPS) system. These loads also include any equipment which, upon loss of power, will create an unacceptable impact on the mission or mission equipment.

Design Agency

The agency responsible for the overall design of the facility.

Emergency Load

Emergency lights, exit lights, fire suppression systems, and similar life-safety loads.

Essential Equipment/Systems

All systems other than the critical equipment/systems (CESs) are to be considered essential if they must operate to supply the CESs directly. This includes the support loads for the critical loads, security lighting, intrusion detection, entry control, and security monitoring equipment.

Essential Load

That portion of the technical load that directly supports routine accomplishment of site missions. Loads include general lighting and power systems, HVAC, and similar loads which can tolerate power outages without loss of data or without adversely affecting the vital C4ISR missions.

Loading/Unloading Areas

The area(s) which serve as a receiving/distribution point for supplies coming into the C4ISR facility. A loading platform or dock.

Mimic Board

A switchgear or control panel, or an assembly consisting of a single-line diagram of the main connections of a system constructed on the face, with instruments, switches, or status lights mounted in appropriate locations.

Mission Administration

All administrative areas such as offices, day rooms, kitchens, and sleeping areas.

Mission Area

The area(s) within the facility that are specifically designated for carrying out the command, control, communications, or intelligence mission of that facility. An example of a mission area would be a computer room where information related to C4ISR is gathered or processed.

Non-Essential Load

That portion of the operational load that indirectly supports the operations at the C4ISR site. This generally includes exterior and interior lighting and loads associated with administration and housing functions.

Off-Site Power Mode

The mode of operation in which off-site power exclusively is used for facility operations.

On-Site Power Mode

The mode of operation in which all power is generated by the on-site power supply system, and operational steps are taken to isolate the C4ISR power system from the outside operational environment and the commercial power source.

Off-Site/On-Site Power Mode

The mode of operation allowing paralleling of off-site and on-site power supplies to permit transition of the system load from one to the other without power interruption or unacceptable perturbation.

Continuous Operation in the On-Site Power Mode

In this mode, on-site power generation is the only mode available at this C4ISR power plant location.

Steady-State Variation

The effect of periodic and random deviations of instantaneous voltage or frequency on the mean steady-state value, at any constant load, the limit of such effect being expressed as a plus and minus percent of nominal value.

Technical Load

That portion of the operational which consists of general lighting and heating, ventilating, and air-conditioning (HVAC) systems necessary to maintain normal operations and loads directly associated with the C4ISR missions at the site.

Transmit/Receive Stations

Enclosed structures outside of the main facility which transmit and/or receive satellite, microwave, or RF transmissions.

User

The using Government Agency.

Using Government Agency

The Government Agency that will be responsible for completing the site missions and will have operational authority for the facility.