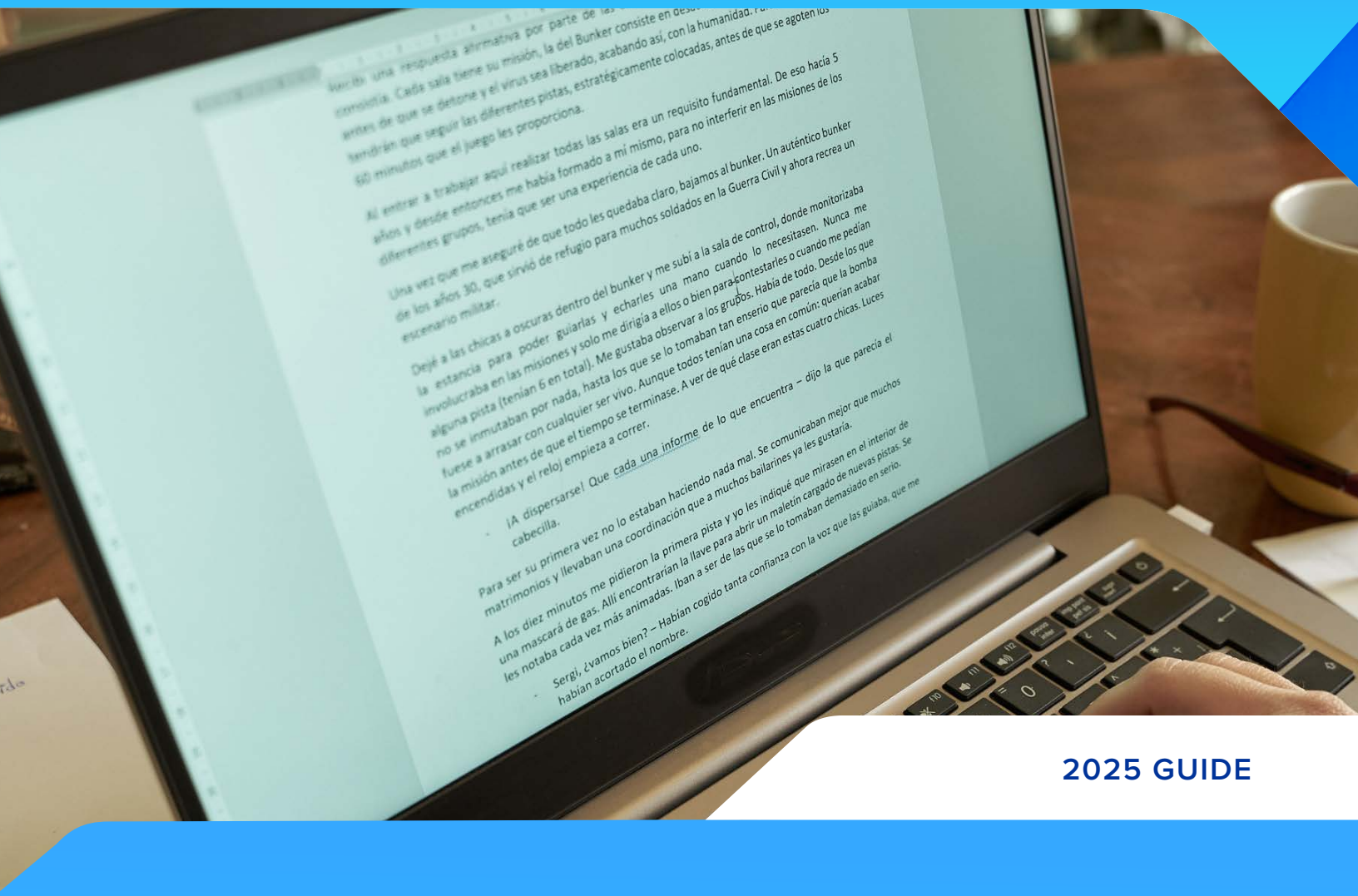

2025 GUIDE

EPRI Style Guide

2025

EPRI Style Guide

2025

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OVERVIEW

EPRI uses a combination of house style with the *Chicago Manual of Style: Seventeenth Edition (CMS).* Style guidelines in this section are particular to EPRI and may be assumed to take precedence over those in the CMS. For guidance on style issues not covered in this section, refer to the CMS and *The American Heritage Dictionary of the English Language.*

CONTENTS

1 ABBREVIATIONS

Names of Countries

In text, the abbreviation U.S. may be used as an adjective but not as a noun.

> U.S. foreign policy is changing rapidly.
>
> **But**: The diplomat returned to the United States.

States

When standing alone, the names of states, territories, and possessions of the United States should always be spelled out. It is also preferable to spell them out in text when they follow the name of a city or other geographic term.

> He arrived in Seattle, Washington, last week.

In lists, tables, footnotes, bibliographies, and indexes, the names of states, territories, and possessions may be abbreviated, generally using the two-letter zip code designations.

etc.

Avoid etc. if possible.

i.e. and e.g.

Use *that is* and *for example* instead. Other Latin or foreign phrases are put in italics.

2 CAPITALIZATION

Avoid unnecessary capitalization.

EPRI Terms

The EPRI name is always written in full caps.

Names for EPRI's governing bodies and its advisory committees ordinarily are caps and lowercase, even when the names appear in shortened form.

> Board of Directors, the Board, Board members, Board policy
>
> EPRI's Advisory Council, the Council
>
> Research Advisory Committee (RAC), the Committee

Full names of EPRI sectors and programs are caps and lowercase:

> The Fossil Materials and Repair Program is part of the Generation Sector.

While official names are caps and lowercase, shortened names or paraphrases are usually lowercase.

> Center for Materials Fabrication, the center, the materials fabrication center

Non-EPRI Terms

Capitalization of the names of government agencies, institutions, companies, universities, and associations generally follows the style for EPRI sectors and programs.

> Department of Energy, DOE
>
> Edison Electric Institute, EEI, the Institute Oregon State University, the University
>
> **But**: Oregon State and George Washington universities

3 PERSONAL TITLES

In text, official and professional titles are caps and lowercase when they precede personal names, but they are lowercase otherwise.

Dr. John Morgan, the president of Electric Utilities, Inc. President Morgan, the president

However, in listings such as the title page of an EPRI report, official and professional titles are caps and lowercase regardless of whether they follow the name or are used alone.

J. Smith, Project Engineer

D. Black Quality Assurance Manager

In Titles, Headlines, and Other Display Matter

Capitalize and lowercase all words in a title or head, with the exception of articles (the, an, a), coordinating conjunctions (for, and, or, but, nor), and prepositions of four letters or less (unless they are the first or last word of the title or head). Capitalize all prepositions of five or more letters.

The Coal Outlook for the 1990s

Quality of Supply Around the Globe

This rule applies to all hyphenated compounds in a title or head as well.

Solar-Thermal Generating Stations

State-of-the-Art Feedwater Heater Technology Merry-Go-Round Tactics

But:

An Expert System for On-Line Diagnostics A Survey of Off-the-Shelf Equipment

An Assessment of In Situ Experiments

Capitalize the first word following a colon in a title or heading.

Municipal Solid Wastes: A Problem or an Opportunity

To avoid being misread, most scientific abbreviations follow their normal capitalization style, regardless of the style of the title or head in which they appear:

Rating of 40 mHz Questioned

RATING OF 40 mHz QUESTIONED

But: AC and DC Transmission Studies

4 CHEMICAL ELEMENTS

Periodic Table of Chemical Elements	
Name	**Symbol**
Actinium	Ac
Aluminum	Al
Americium	Am
Antimony	Sb
Argon	Ar
Arsenic	As
Astatine	At
Barium	Ba
Berkelium	Bk
Beryllium	Be
Bismuth	Bi
Boron	B
Bromine	Br
Cadmium	Cd
Calcium	Ca
Californium	Cf
Carbon	C
Cerium	Ce
Cesium	Cs
Chlorine	Cl
Chromium	Cr
Cobalt	Co
Copper	Cu
Curium	Cm
Dysprosium	Dy
Einsteinium	Es
Erbium	Er
Europium	Eu
Fermium	Fm
Fluorine	F

Periodic Table of Chemical Elements	
Name	**Symbol**
Francium	Fr
Gadolinium	Gd
Gallium	Ga
Germanium	Ge
Gold	Au
Hafnium	Hf
Helium	He
Holmium	Ho
Hydrogen	H
Indium	In
Iodine	I
Iridium	Ir
Iron	Fe
Krypton	Kr
Lanthanum	La
Lawrencium	Lr
Lead	Pb
Lithium	Li
Lutetium	Lu
Magnesium	Mg
Manganese	Mn
Mendelevium	Md
Mercury	Hg
Molybdenum	Mo
Neodymium	Nd
Neon	Ne
Neptunium	Np
Nickel	Ni
Niobium	Nb
Nitrogen	N
Nobelium	No
Osmium	Os

Periodic Table of Chemical Elements	
Name	**Symbol**
Oxygen	O
Palladium	Pa
Phosphorus	P
Platinum	Pt
Plutonium	Pu
Polonium	Po
Potassium	K
Praseodymium	Pr
Promethium	Pm
Protactinium	Pa
Radium	Ra
Radon	Rn
Rhenium	Re
Rhodium	Rh
Rubidium	Rb
Ruthenium	Ru
Samarium	Sm
Scandium	Sc
Selenium	Se
Silicon	Si
Silver	Ag
Sodium	Na
Strontium	Sr
Sulfur	S
Tantalum	Ta
Technetium	Tc
Tellurium	Te
Terbium	Tb
Thallium	Tl
Thorium	Th
Thulium	Tm
Tin	Sn

Periodic Table of Chemical Elements	
Name	**Symbol**
Titanium	Ti
Tungsten	W
Uranium	U
Vanadium	V
Xenon	Xe
Ytterbium	Yb
Yttrium	Y
Zinc	Zn
Zirconium	Zr

5 COMPOUND WORDS

A compound word is a combination of two or more words used to express a single concept. Consistency in the treatment of compounds is always difficult. There are wide variations in acceptable style, and the rules that do exist sometimes conflict or overlap. More important than absolute consistency in the formation of compounds is the union or separation of the elements so that terms can be easily read, understood, and pronounced.

Compound Nouns

A compound noun or adjective consisting of a short verb plus a word that normally functions as a preposition or an adverb is usually solid, unless a hyphen is needed for readability.

runoff

tie-in

breakdown

burnup

It is preferable to spell out the name of a chemical compound (lowercase) in text the first time it is used. Subsequently, the chemical symbols can be used, especially in equations and formulas.

An isotope of an element that is designated by its chemical symbol should be written with the mass number displayed as a superscript preceding the symbol.

use of ^{238}U for fuel

An isotope written out in text is lowercase and is followed by a hyphen and the mass number written on the baseline.

uranium-238 plutonium-32 cobalt-60

Compound Adjectives

Hyphenate words and abbreviations that form a compound adjective immediately preceding a noun, particularly if one element is a past or present participle or if meaning or readability is enhanced.

EPRI-sponsored study

two-phase flow

real-time power system applications

light-dark cycle

well-known Chexal-Lellouche correlation method

Hyphenate compound adjectives containing units of measure and time.

a 24-ft (7.3-m) room

1-in.-(2.54-cm) diameter pipe

one-half hour

six-year-old study

a 3-m pole

a 600-MW plant

10-year period

200-hp engine

If a compound adjective does not contain a past or present participle, if there is no chance of misreading it, or if the adjective contains a symbol ($,°C, %), no hyphen is necessary.

fossil fuel plant

$20 million budget

air quality standards

an 800°C metal temperature

low energy rate

4% solution

Do not hyphenate compound adjectives formed from scientific terms (for example, chemical, disease, and plant names) unless a hyphen appears in their noun form.

carbon dioxide gas

methyl bromide mixture

sodium chloride solution

prickly pear cactus

whooping cough vaccine

equivalent uranium content

But: hydrogen-oxygen reaction (to differentiate two elements versus one chemical compound)

In almost all cases, hyphenate **high**- and **low**- adjectival compounds.

high-voltage transmission

high-energy physic

But:

lower energy rates

high coal prices

low level waste (see EPRI Abbreviations, Acronyms, Initialisms, and Terms for other exceptions due to industry standards)

Hyphenate a compound adjective formed by an adverb plus an adjective or participle, especially if the adverb can be misread to modify the noun following the compound.

best-equipped plant

long-awaited results

above-mentioned criteria

well-preserved specimens

If the adverb ends in **-ly**, the compound is open.

roughly equivalent amounts thoroughly tested materials

Omit the hyphen if a compound adjective is preceded by an adverb that modifies only the first word of the compound.

a well-equipped plant

a very well equipped plant

A compound adjective that follows the noun is ordinarily not hyphenated unless it is shown with a hyphen in the dictionary.

That plant is best equipped for the job.

Their energy policy was ill-advised.

A compound adjective whose second element is a letter or a numeral is usually not hyphenated.

Phase 1 results

Type 304 stainless steel

A compound adjective that is a foreign language phrase is not hyphenated unless it is hyphenated in the original language.

per diem rate

in situ experiment

With compound adjectives that drop a repeated element, the hyphen is retained to indicate parallel relationships. This guideline also holds true for adjectives formed with prefixes or suffixes.

diamond- or rotary-drill rig

long-, mid-, or short-range plans

30- to 40-year plant life

pre- and post-1995 data

However, if the last adjective or a prefix is ordinarily solid, it remains so.

surface- and groundwater studies

mono- and polycellular materials

pre- and postcombustion cycles

A slash is used to indicate alternatives, to separate the numerator and denominator in numerical fractions, to designate certain electrochemical notation, and with the phrase and/or. It does not replace a hyphen or a dash.

go/no-go gag

high-heat and/or high-speed applications

on/off cycling

input/output device

ac/dc transmission lines

sodium/sulfur battery

3/4-in. (1.9-cm) steel pipe

Prefixes and Suffixes

A word combined with a prefix is ordinarily solid (one word), even if the combination results in a double vowel.

pretest

posttest

microorganism

milliwatt

subbituminous

deemphasize

nonnuclear

Hyphens are used to set prefixes and suffixes off from proper nouns, proper adjectives, and numerals.

post-Copernican

Florida-like

pre-1995

intra-AIAA

A hyphen is used to distinguish between words with the same spelling but different meanings and to prevent misreading, mispronunciation, or visual confusion.

re-treat (to treat again)

bell-like

re-fuse (to fuse again)

de-ashing

de-alloying

supra-auditory

A hyphen is used with a prefix that applied to a two-word hyphenated compound and with a prefix that is doubled.

non-heat-producing machinery

sub-subprogram

A hyphen is used to connect a prefix and an open compound.

pre-Civil War days

post-industrial revolution technology

Measurements

As with numbers, there are variations in the treatment of units of measure. What is important is the consistent use of **one** style within an EPRI publication. The following general rules apply:

A unit of measure is usually abbreviated or expressed as a symbol when it is used with a numeral. Used alone, however, it is spelled out (unless its abbreviated form is an accepted term).

75 kg/s

But: The calculation is based on kilograms per second.

17%

But:

What percent of the nation's energy supply depends on oil imports?

The plant's Btu-generation level was high.

Even when used with a numeral, units of time that are not considered units of measure (i.e., days, weeks, months, years) are **not** abbreviated, unless they are used in relation to another unit of measure.

The project team saw a successful end to their 12-year program.

Evidence showed the five-month goal was unattainable.

On average, the mine's coal output was 6 t/d (5.4t/d).

A measurement appearing infrequently may be expressed by a numeral with a spelled-out unit.

700 kilograms

6-minute intervals

Periods are not ordinarily used with abbreviations for units of measure.

Hz

gal

kg

kWh

But: To distinguish the preposition **in**, **in.** should be used as the abbreviation for **inch** when it stands alone (for example, 6 in.). When used with an exponent (in^2) or as part of a compound unit of measure (in/s), the period is omitted.

The singular and plural forms of most abbreviated units of measure are the same.

1 m; 40 m

1 bbl, 5 bbl

1 Btu, 100 Btu

The plurals of spelled-out units of measure are formed in the usual way 1 volt, 15 volts

1 joule, 200 joules

1 ohm, 100 ohms

Spelled-out units of measure are singular when the absolute quantity is less than 1. 3/4 kilometer

0.5 volt 10^{-18} curie

0.09 mill

A singular verb is ordinarily used with a unit of measure conveying the idea of a whole, regardless of the quantity given.

The record showed that 300 t/d was solid waste.

Of the total budget, $2,172,000 goes to research.

A unit of measure or a symbol is usually not repeated in a range or a series if the unit follows the numeral.

1–5%

1, 5, and 10° F (-17.2, -15, and -12.2°C)

300 to 500 microseconds

x 6-ft (1.8- x 1.8-m) facility

However, if a symbol representing the unit of measure precedes the numeral, it is repeated.

$10–$20

$6 million to $10 million

For temperatures and angles, the degree symbol should be used rather than the spelled-out form or an abbreviation.

100° C

180° angle

But: 5 K

A space (preferred) or a hyphen is used to indicate multiplication in spelled-out compound units of measure.

newton meter

newton-meter

When the compound is abbreviated, a dot centered vertically (multiplication symbol) is used.

N·m

The word **per** is used to indicate division in spelled-out units of measure.

meter per second

A slash is used when the compound is abbreviated.

m/s

kg/m

Only one slash should be used in an expression unless parentheses are used.

J/(mol·K) or (J/mol)/K

In display **per** is used in the text.

300/h

Numbers

Use English units, followed by SI (International System of Units) units in parentheses. For further information, see the *American National Standard for Metric Practice.* Institute of Electrical and Electronics Engineers, Inc. New York. October 1992.

In all cases involving numbers, Arabic numerals are preferred to Roman numerals except as page numbers in front matter.

In general, a numerical figure is easier to understand than a numerical word expression, particularly in technical and scientific text. However, the following represent some exceptions:

Use words to express the following:

- Numbers from zero through nine that are not used with units of measure
- A number that begins a sentence, whether it is greater or less than 10 (if possible, recast a sentence to avoid beginning it with a spelled-out number)
- Fractions, except with units of measure or scale

  two-thirds of the scientists one-half of the samples

- Ordinal numbers when used in text

  third phase

  first priority twentieth century twenty-third report

Numerals are preferred for all numbers in the following cases:

- All numbers 10 and above
- In tables and illustrations
- With units of measure (which include units of time less than a day), whether these units are spelled out, abbreviated, or expressed in symbols

  5-mg doses

  4000 Btu/h (4420 KJ/h)

  10 L/min 12°C

  5 Hz

  4 in.

- Percentages, as in a 30% heat loss
- Arithmetic expressions, as in divided by 8
- Decimals or fractions used with units of measure or scale

  1.63 cm

  3/4-in (1.9-cm) pipe

  1/4-scale reactor

  0.001 ml

- Ratios, as in 1:1000

- Clock times and dates (except centuries)

    The meeting will be held at 10:30 a.m.

    The workshop, held October 5–6, 1995, attracted 300 utility representatives.

- Page numbers, as in seen on page 7
- Sums of money
- Points on a scale, as in a Richter reading of 6.8
- Actual numerals, as in excluding rows 4 through 9
- Series of four or more numbers, as in 2, 4, 6, and 8
- Acidity or alkalinity, as in a pH of 3
- Size or configuration

    x 6-ft (1.8- x 1.8m) facility 9 x 9 assemblies

    70x magnification

Numerals may be combined with units of millions and above but not with thousands

    400 million people

    But: 220,000, not 220 thousand

Use scientific notation for numbers over 1k.

    10^6 for million or 10^9 for billion

    $3{,}480{,}000 = 3.48 \times 10^6$

When two numbers are used in sequence, one number (usually the first) is spelled out. At that time, the company had designed eleven 2.5-MW prototypes.

Similar numbers within a sentence or a paragraph are treated alike, usually following the style of the highest number.

    The risk is 1 in 100.

    The three phases of the study will take 5, 8, and 10 years, respectively.

However, numbers in different categories need not be treated alike, even if they appear in the same sentence, and numbers in the same category need not be treated alike if one begins the sentence.

    EPRI has scheduled 23 projects to begin over the next six years. Twenty-four of the scientists were men, and 16 were women.

Commas are ordinarily used in numerals of five digits or more but not in four-digit numerals.

1563 rad/s

$75,000

However, in table columns combining four-digit numerals and numerals of five digits or more, commas should be used for all.

32,000	1000
4,500	2000
126,300	3000
164,000	6000

A zero is ordinarily used before a decimal point.

0.01%

Plurals of spelled-out numbers take **s** without an apostrophe, so do plurals of numerals unless they would be misread.

in twos and threes

the nineties

1980s

1s, 2s, and 3s

But: three Roman numeral I's.

Ratios may be expressed several ways:

- Numerical ratios usually take a colon
- Symbolic ratios usually take a slash, such as in the x/y ratio
- Ratios expressed in words usually take a hyphen, such as in a cost-benefit ratio
- For clarity, the word **to** may be used with either words or numerals.

signal-to-noise ratio

a ratio of 1000 to 1

When enumerating items in a sentence, use a number with a single parenthesis and divide items by commas.

The field test and analytical measurements included: 1) coal and tire-derived fuel consumption, 2) boiler thermocouple readings, and 3) laboratory analyses of coal, bottom ash, and fly ash samples collected during each test.

Equations

Displayed equations may or may not contain punctuation. If punctuation is used in one series of equations, it must be used in all.

One space is generally inserted before and after each operation sign (+, -, /, x, =) in an equation. When not in equations, operational signs or other symbols immediately precede the numeral with no space (for example, +/-800, <50).

Equations in a report should be numbered by section. The style for text references to equations is Eq. 1.

6 MISCELLANEOUS LOCATIONS AND DIRECTIONS

Nouns and adjectives designating parts of the world or regions of a continent or a country generally are caps and lowercase, but compass directions and adjectives that are not part of an accepted geographic name are lowercase.

Southeast Asia

coalfields west of the Rockies

the West

eastern coal

southern California

Middle East

Trademarks

An effort should be made to determine if a name, slogan, or other form of commercial identification used in the text has been trademarked. The trademark should be used as an adjective followed by the generic name of the product. Trademarks should not be used in plural or possessive cases.

Lucite acrylic

Kleenex tissue

Masonite hardboard

Inconel alloy 600

Note: If the trademark is an acronym, it may take full caps.

LOMI decontamination process

To designate a trademark or service mark (service-related trademark) held by EPRI, capitalize the first letter of the trademark (unless it is an acronym, in which case it takes full caps) and follow the name with a superior ô (which represents the owners claim to the term as a trademark) ® or (registered trade- or service mark).

Clor-n-Oil® detection kit

Polysil®, dielectric material

If a company uses a ™ or ®, the trademark should be cited at first reference in the title, Table of Contents, and text. Thereafter, *if the company allows it*, the term may be cited without the ™ or ®.

Acronyms

When an acronym is introduced, the words from which it derives are given first and the acronym follows, full caps and in parentheses. Thereafter, only the acronym need be used.

> The lockout program has been demonstrated to dramatically reduce the volume of solid low level waste (LLW) generated and to substantially decrease the cost of LLW management programs.

Acronyms should be avoided in product titles.

Computer Programs

The terms from which a computer program name derives are upper and lower case.

> the Transmission Line Workstation (TLWorkstation™)

If including the version of the program, cite: TLWorkstation™ Version 2.4.

If using the program and version in a sentence, cite it in the following manner: TLWorkstation™ Version 2.4 ties together several transmission line programs.

Generic Terms

In text, generic terms are lowercase, even when they are used to refer to specifics.

> Wilsonville pilot plant volumes 4 and 5
>
> section 10
>
> phase 3
>
> class A rating

When referencing a multivolume report, cite it in the following manner:

> A comprehensive study of methods for increasing SO2 removal at Merom Station is found in EPRI report TR-103923, Vols. 1–3.

Notes

Explanatory footnotes should be used sparingly; information important enough to be given at all can usually be incorporated in the text without disrupting continuity. If a footnote is required (for example, to clarify ambiguous terms), it usually appears at the foot of the page or column where it is cited.

In addition to explanatory footnotes, a note may be inserted to credit the source (document, date, and page number) of previously published materials, to acknowledge sponsorship or aid,

or to comment on the table or illustration as a whole. A source note may be introduced by the word **source** or **sources**, a general note, by the word **note**.

Source: *Electrical World*, September 1995, p. 64.

Phone Numbers

Phone numbers should be written as follows.

650.855.2121

When including a general EPRI contact phone number in a document, use the EPRI Customer Assistance Center number, 800.313.3774, and the number 650.855.2121, which can be accessed outside the United States. Do not use alpha designations in phone numbers because many phones outside the United States do not have letters to correspond with numbers.

Emphasis

Terms defined in text should be in italics.

Acceleration is defined here as the rate of change in velocity.

Terms in a glossary should be bold.

acceleration. The rate of change in velocity.

If emphasis is required, use bold, but use it sparingly. Avoid underlining, all caps, and any combination of these.

Lists

Use a bulleted list rather than a numbered list when the sequence of the items is not important.

Use a list for three or more items.

Capitalize the first word in each list item.

If at least one item in a list is a complete sentence, end each item with a period. If no items are complete sentences, do not use periods on any of the items.

Check for parallel construction of list items.

Introduce a list by using a lead-in sentence followed by a colon.

7 PUNCTUATION

Commas

Always use a comma before the conjunction in a series.

> She brought bacon, eggs, and tomatoes.

Don't use a comma in a date that consists of month and year only.

> June 1994

Don't use a comma to separate parts of a compound phrase or compound predicate.

> She tried to see the project manager but found that he was out of town.

Em Dash

Use em dashes, as appropriate, in text instead of a colon or comma—when you want a definite break in a sentence. Create with Ctrl + Alt + - (minus on the numeric keypad). There should be no spaces on either side of an em dash.

En Dash

Use between numbers instead of a hyphen to show a range. Create with Ctrl + - (minus on the numeric keypad). There should be no spaces on either side of an en dash.

> June 24–28

Quotation Marks

Avoid unnecessary quotation marks. When they are needed, use double quotes, rather than single quotes. Periods and commas go inside quotes; semicolons and colons go outside.

Ampersands

Use ampersands in abbreviations only. Spell out "and" in all other instances unless it is a proper noun (company or product name) that uses an ampersand.

> O&M
>
> Proctor & Gamble Co.
>
> But: Operations and maintenance

Spacing

There should be a single space following a colon and between sentences.

8 SI CONVERSIONS

EPRI uses the International System of Units (SI) measures to meet the global information needs of its customers. In reports where both U.S. and SI units are used, the U.S. unit is followed by the SI unit in parentheses. It is permissible to use SI units only.

It is permissible to include a list or table of conversion factors in the front matter or introduction of a report that covers all units used in the report. This way, any conversions present in the original text may remain, and any instances of U.S. units alone are acceptable.

Sample SI Conversion Table

English to SI units	SI to English units
Area	
1 ft^2 = 0.0929 m^2 1 ft^2 = 144 in^2 1 ft^2 = 929 cm^2 1 in^2 = 654.2 mm^2	1 m^2 = 10.76 ft^2
Distance	
1 in. = 2.54 cm or 25.4 mm 1 ft = 0.3048 m 1 mil = 0.025 mm	1 mm = 0.039 in. 1 km = 0.621 mi
Energy and Specific Energy (enthalpy)	
1 ft-lbf = 1.356 J 1 Btu = 778.17 ft-lbf 1 Btu – 1055 J 1 Btu/lb = 2/326 kJ/kg 1 lb/hr·ft^2 = 4.881 kg/hr·m^2 1 Btu/lb = 2.326 kJ/kg	1 J = 1 N·m = 0.73756 ft-lbf 1 kJ = 1000 J 1 kJ/kg = 0.42992 Btu/lb 1 kg/hr·m^2 = 0.2049 lb/hr·ft^2
Flow	
1 gpm = 3.785 L/m 1 gpm = 0.063 L/s	1 L/m = 1 L/m = .26417 gpm
Heat Transfer	
1 Btu/hr·ft^2·°F = 20.44 kJ/hr·m^2·°C 1 Btu/hr·ft^2·°F = 5.678 W/m^2·°C 1 Btu/hr·ft·°F = 6.23 kJ/hr m·°C 1 Btu·°F/lb = 1.29 kJ·°C/kg	1 kJ/hr·m^2·°C = 0.0489 Btu/hr·ft^2·°F 1 W/m^2·°C = 0.176 Btu/hr·ft^2·°F 1 kJ/hr m·°C = 0.1605 Btu/hr·ft·°F 1 kJ·°C/kg = 0.774 Btu·°F/lb

English to SI units	SI to English units
Length	
1 inch = 25.4 mm or 2.54 cm 1 ft – 0.3048 m or 30.48 cm	1 mm = 0.03937 inch 1 m = 3.281 ft
Mass Flow	
1 lbm/h = 0.000126 kg/s 1 lbm/s = 0.454 kg/s	
Pressure	
1 lb/in^2 = 1 psi 1 psi = 6.8948 kPa Std. Atm. Pressure = 14.696 psi 1 inHg = 3.386 kPa	1 N/m^2 = 1 Pa 1 MPa√m = 0.91 ksi√in 1 kPa = 0.145 psi Std. Atm Pressure = 1.01325 bar 1 bar = 1 x 10^5 Pa
Rate of Heat Flow	
Btu/hr	W
Specific Energy	
1 Btu/lb	kJ/kg
Temperature	
°F = (°C x 9/5) +32 °F = °R -459.67 °R = 5/9°K °F = (1.8 x K) – 459.6 ΔºC = ºF x 5/9	°C = (°F -32) x 5/9 °C = K – 273.15 K = 1.8 x °R °C = K – 273.15 K = (°F +459.67)/1.8 °C = K – 273.15 K = (°C) + 273.15
Velocity	
1 ft/min = 0.0051 m/s or 0.51 cm/s 1 ft/s =	m/s
Volumetric Flow	
1 ft^3/min = 0.000472 m^3/s	

English to SI units	SI to English units
Volume	
1 ft^3 = 0.02832 m^3 1 ft^3 = 28.3 L 1 gallon (US) = 3.785 L 1 ft^3 = 7.4805 gallons (US) 1 ft^3/lbm = 1/16 m^3/kg	1 m^3 = 35.31 ft^3 1 L = 0.2642 gallon (US) 1 m^3 = 1000 L
Volume rate of flow	
1 ft^3/s 1 cfm	m^3/s m^3/s
Weight	
1 lb = 0.45 kg	1 kg = 2.20462 lb

9 REFERENCES

A list of references, either at the end of each report section or in a separate section at the end of the report, is preferred to a bibliography. In proceedings, references are presented at the end of each technical paper. Number each entry using a number followed by a period.

Reference citations may occur anywhere in a sentence. The citation precedes all punctuation except dashes. Indicate the citation using a bracketed number: [1].

Entries in reference lists are single-spaced, with one line of space between entries. Numbered references should correspond to text citations. The following examples indicate EPRI's style preferences:

Book

Robert Jastrow, William Nirenberg, and Frederic Seitz. *Scientific Perspectives in the Greenhouse Problem.* Marshall Press, Ottawa, IL 1990, p. 71–98.

D. E. Czernik. *Gaskets – Design, Selection and Testing*. McGraw-Hill 1996.

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E. C. Rodabaugh, "Developing Stress Intensification Factors: (1) Standardized Method for Developing Stress Intensification Factors for Piping Components." *Welding Research Council Bulletin*, No. 329, June 1994.

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J. Mott, R. King, and W. Radtke. "A Generalized System State Analyzer for Plant Surveillance," *Artificial Intelligence and Other Innovative Computer Applications in the Nuclear Industry.* M. Majumdar et al., eds. Plenum Press, New York, NY, 1988.

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Pipe Flanges and Fitting. American Society of Mechanical Engineers, 1988. ASME B16.5-1988.

U.S. Nuclear Regulatory Commission. Comparisons of ASME Code Fatigue Evaluation Methods for Nuclear Class 1 Piping with Class 2 or 3 Piping. NUREG/CR3243, ORNL/sub/82-22252/1, June 1983.

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B. S. Phull, T. S. Lee, N. Martin, and B. C. Syrett, “Corrosion Inhibitors for FGD Systems.” Paper No. 252, presented at the NACE Annual Conference, San Francisco, CA (March 1987).

E. Makay, “Significant Developments in Utility Pump Technology and Applications.” Paper presented at EPRI symposium, Power Plant Pumps: Broadening Subject Matter (March 1987).

D. A. Dickey and J. C. Brocklebank, “Checking for Autocorrelation in Regression Residuals,” *Proceedings of the 11th SAS Users Group International Conference.* I:959, Atlanta, GA (February 9–12, 1986).

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William R. Jones, Culture Technique. Email message to James Larson, Nov. 15, 1990.

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Long Term Operations: Subsequent License Renewal Electrical Handbook: Phase 1. EPRI, Palo Alto, CA: 2017. 3002010402.

Risk Mitigation of Underground Structures: Test Approach and Results. EPRI, Palo Alto, CA: 2017. 3002011647.

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U.S. Nuclear Regulatory Commission. Office of Analysis and Evaluation of Operational Data. *Report to Congress on Abnormal Occurrences – Fiscal Year 2016*. NUREG-0090, Volume 39. Washington, D.C.: p. 191.

Letters

EPRI-NMAC letter to GE Nuclear Energy dated July 29, 2017. This letter requested test criteria information and clarification from GE and GENE.

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N. Jones, E. Makay, and W. Saxton, “Modify Problem Boiler Feed Pumps to Perform Better, Run Cheaper.” *Power*, March 30, 1990: pp. 48–64, 101-115.

"Building a Plug-and-Play Distribution System." Power Delivery and Utilization Sector Report, *EPRI Journal*, Winter 2014, p. 24.

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ABB Instruction Bulletin-6.1.2.7-1H, "Installation /Maintenance Instructions. Low Voltage Power Circuit Breaker Types K-225 Through 2000 and K-600S Through 2000S." Replaced by IB-6.1.2.12.1-1A.

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Military Standardization Handbook – Rubber. MIL-HDBK-149B.

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Nancy Frishberg and Bonnie Gough, "Time on Our Hands." Working paper, Salk Institute for Biological Studies, La Jolla, Calif., 1974.

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E. Makay and J. A. Barrett, "Successful Field Fixes on Power Plant Pumps: Case Histories," EPRI Symposium: Power Plant Pumps, New Orleans, LA (March 1987). *EPRI Symposium Proceedings* (June 1988). CS-5857.

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Pro-Cite, Version 1.4, Ann Arbor, Mich.: *Personal Bibliographic Software*, August 1988. (software program)

COSMOS, A General Purpose Finite Element Analysis Computer Program. Structural Research and Analysis Corporation, Los Angeles, CA. (software program)

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Sharkey, James. ABB Circuit Breaker Lubricant Equivalency Evaluation, EPRI NMAC, April 1999.

Utility Publication

Beaver Valley Power Station PM Procedures, 1/2PMP-37EJS-BKR-1E and 2PMP-37EJS-BKR-2E.

Entries in reference lists are single-spaced, with one line of space between entries. Numbered references should correspond to text citations:

1. 1. U.S. Department of Commerce. Bureau of the Census. *Statistical Abstract of the United States*, 2010. 129th ed. U.S. Census Bureau, Washington D.C. 2009.
2. 2. Robert Jastrow, William Nirenberg, and Frederick Seitz. *Scientific Perspectives in the Greenhouse Problem*. Marshall Press, Ottawa, IL 1990, pp. 71–98.
3. 3. "Building a Plug-and-Play Distribution System." Power Delivery and Utilization Sector Report, *EPRI Journal*, Winter 2014, p. 24.
4. 4. *Risk Mitigation of Underground Structures: Test Approach and Results.* EPRI, Palo Alto, CA: 2017. 3002011647.

Websites

Footnote or Endnote

1. Firstname Lastname, "Title of Web Page," Name of Website, Publishing Organization, publication or revision date if available, access date if no other date is available, URL.

    1. Justin DiNunzio. "The Impact of Poor Asset Information Handover," Digital Industries Software, Siemens, Accessed on December 20, 2023 at https://blogs.sw.siemens.com/teamcenter/the-impact-of-poor-asset-information-handover/

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> Justin DiNunzio. "The Impact of Poor Asset Information Handover," Digital Industries Software, Siemens, Accessed on December 20, 2023 at https://blogs.sw.siemens.com/teamcenter/the-impact-of-poor-asset-information-handover/

10 BIBLIOGRAPHY

A bibliography provides the reader with a general reading list of related materials. It is a separate section at the end of the report and takes a first-level head. Bibliography entries are not numbered, but listed alphabetically by author.

Entries in the bibliography are listed alphabetically by author and single-spaced, with one line of space between entries. Examples are shown below.

Buringh, P. “Organic Carbon in Soils of the World.” *The Role of Terrestrial Vegetation in the Global Carbon Cycle*. New York: Wiley, 1984.

Schwartz, Peter. *The Art of the Long View*. New York: Doubleday, 1991.

11 GLOSSARIES AND INDEXES

Glossaries and indexes are optional.

Glossaries

A glossary is a useful tool in a publication containing unfamiliar terms. Words to be defined should be arranged in alphabetical order, each on a separate line and followed by its definition. Examples are shown below:

> **acid-free paper.** Paper having a pH of 7, or close to 7.
>
> **adhesive binding**. A method of binding that employs glue instead of stitching to hold the pages together.
>
> **alteration.** A change from the manuscript copy introduced in proof.

Indexes

An index consists of entries that include a heading, locators (page numbers), subentries, and cross-references as needed. The heading of an index entry is normally a noun or noun phrase. The first word of a heading is normally capitalized only if capitalized in the text. Examples are shown below:

> agricultural collectivization, 143–46, 198
>
> Aron, Raymond, 312–14
>
> Bloomsbury group, 269
>
> capitalism, American commitment to, 383
>
> cold war, 396–437

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