

EMERGENCY OPERATING PROCEDURES  
WRITER'S GUIDE  
FOR THE  
INDIAN POINT UNIT NO. 3  
NUCLEAR POWER PLANT

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SECTION 1. INTRODUCTION

1.1 Purpose and Scope

The purpose of this writer's guide is to provide administrative and technical guidance on the preparation of Emergency Operating Procedures (EOPs). The writer's guide applies to the initial generation and subsequent revision of all EOP's.

## SECTION 2. PROCEDURAL CONTROLS

2.0 EOP Definition

EOPs are procedures that govern the plant operation during emergency conditions and specify operator actions to be taken to return the plant to a stable condition.

2.1 Procedure Designation

Each EOP shall be uniquely identified. This identification permits easy administration of the process of procedure preparation, review, revision, distribution, and operator use. A descriptive title is to be used that also designates the scope of the procedure or states the event which the procedure is intended to mitigate.

The emergency operating procedure designation shall be consistent with the Westinghouse Owner's Group (WOG) Emergency Response Guidelines (ERG), Rev. 1.

2.2 Cover Sheets

Each EOP shall have a cover sheet. The purposes of this cover sheet are to identify: (1) the procedure; (2) the authorized revision; and (3) the entry conditions required for the procedure.

2.3 EOP Numbering

The Emergency Operating Procedure numbering will follow the Westinghouse Owners Group Emergency Response Guideline letter designators for the generic ERGs as shown in Table 2-1. Number designators shall be assigned sequentially. Each E procedure number designator shall consist of a single integer. Each ES procedure shall consist of the number designator of the reference E procedure plus a sequentially assigned decimal integer. ECA procedures shall have designators consisting of an integer plus a decimal integer. Related ECAs shall be assigned sequential decimal integers.

Critical Safety Function Status Trees shall be designated by the letter F plus a number designator. Number designators shall consist of the number zero plus a decimal integer which shall be assigned sequentially. Letter and number designators shall be separated by a hyphen.

Function Restoration Procedures shall be designated by the letters FR plus an additional letter which corresponds to the respective Critical Safety Function. All the separate procedures related to a particular Critical Safety Function are assigned decimal integers in increasing order. The procedure letter and decimal integers are separated from the FR designator by a hyphen.

#### 2.4 Revision Numbering

Two digits following the "Rev" abbreviation will be used to designate revision levels. Example:

Rev 01

The initial distribution of an Emergency Operating Procedure shall be designated as Rev. 00.

#### 2.5 Revision Identification

A change bar located in the left margin alongside the text change will be used to indicate a left-hand column change; a change bar located in the right margin alongside the text change will be used to indicate a right-hand column change. For cautions, notes, and other information that is presented in a single column format, the change bar will be located in the right margin alongside the text change.

TABLE 2-1DEFINITIONS OF LETTER DESIGNATORS FOR EOPs

- E - a guideline for diagnosis and recovery from design basis events
- ES - a guideline which supplements the recovery actions of an E guideline
- ECA - a guideline which supplements both the E and ES guidelines by providing recovery actions for low probability or unique event sequences which are not easily covered in the E or ES guidelines or which may complicate or reduce the effectiveness of these guidelines.
- F - a guideline for diagnosis of challenges to a Critical Safety Function - represented in tree format
- FR - a guideline for restoration of a Critical Safety Function (CSF) to a satisfied condition
- S - designator for SUBCRITICALITY CSF
- C - designator for CORE COOLING CSF
- H - designator for HEAT SINK CSF
- P - designator for INTEGRITY CSF
- Z - designator for CONTAINMENT CSF
- I - designator for INVENTORY CSF

## 2.6 Page Identification and Numbering

Each page of the procedure will be identified by:

1. The procedure title
2. The procedure number
3. The revision number and date
4. The page number, written as "Page \_\_\_ of \_\_\_ ."

The procedure title will be centered at the top of the page. The procedure number will be located at the top of the page and to the left of the title. The procedure revision and effective date will be located at the top of the page and to the right of the title. The page number will be centered at the bottom of each page. The last page of instructions shall have the word "END" following the last instruction step.



## SECTION 3. FORMAT

The following format is to be utilized for all EOPs.

### 3.1 Page Format

A dual-column format will be used in which the left-hand column is designated for operator actions (Action/Expected Response), and the right-hand column is designated for contingency actions (Response Not Obtained) to be taken when the expected response to the operator action is not obtained. Example page formats are shown in Figures 3-1 and 3-2.

### 3.2 Procedure Organization

The following section headings will be used for all EOPs.

1. TITLE - The title will be stated on each page of the procedure.
2. PURPOSE - A brief description of the procedure is given.
3. ENTRY CONDITIONS - The entry conditions will be those plant parameters which, when exceeded, require entry into and execution of the EOP. Entry into procedures may also be by instruction from other procedures.
4. OPERATOR ACTIONS - The operator actions will be succinct, identifiable instructions that give appropriate directions to the user.
5. FIGURES (as required) - presents usually graphical data to supplement action steps.
6. ATTACHMENTS (as required) - presents non-graphical information to supplement action steps.

Number:	Title:	Rev. Issue/Date:
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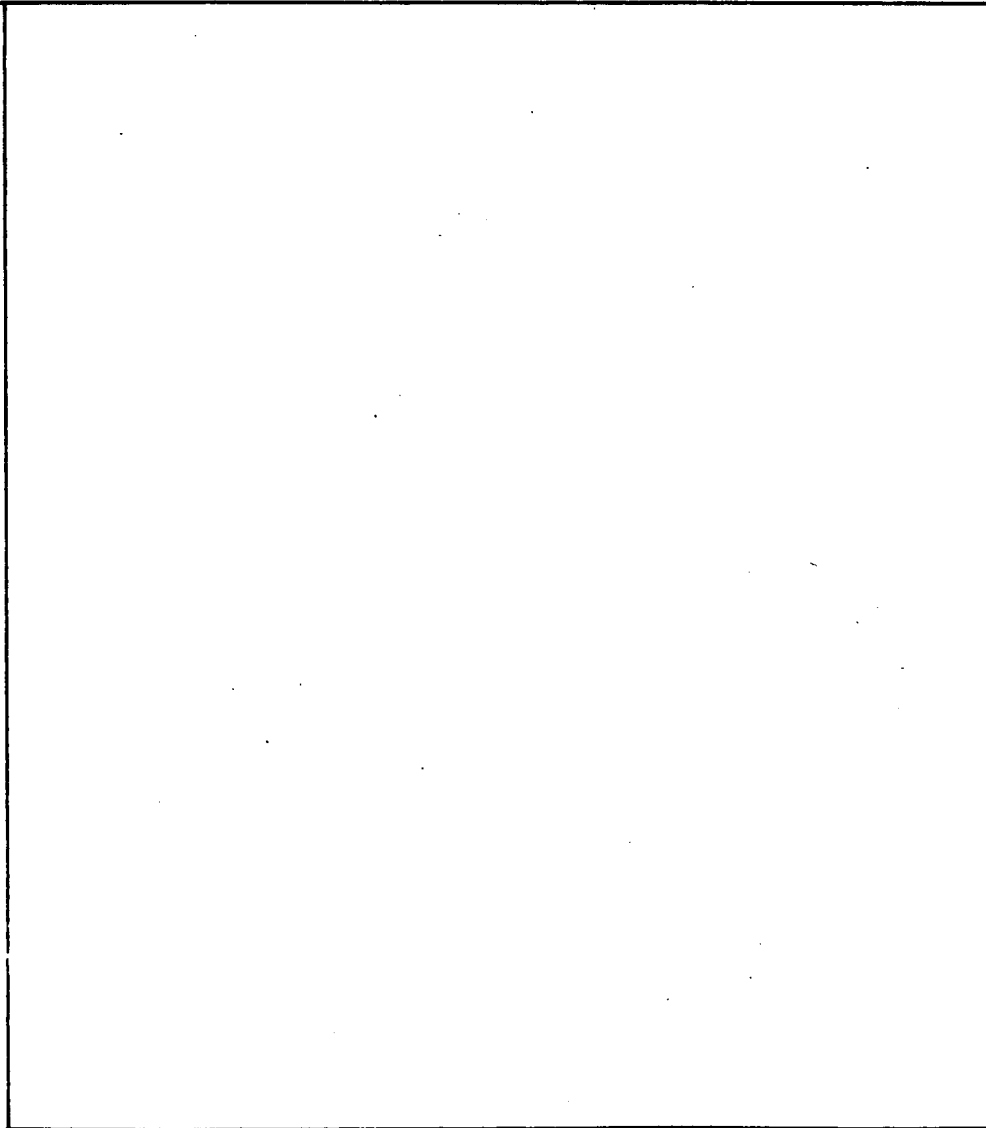


Figure 3-1. IP3 EOP Title Page Format

Number:	Title:	Rev. Issue/Date:
---------	--------	------------------

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

Figure 3-2. IP3 EOP Page Format

### 3.3 Instructional Step Numbering

Procedure steps will be numbered as follows:

- 1 High-level step
  - a. Substep (if necessary)
    - 1) Detailed instructions (if necessary)

Substeps are lettered sequentially according to expected order of performance. If the order of substep performance is not important, the substeps are designated by bullets (o). If the logical OR is used, both choices must be designated by bullets. This numbering scheme is to be used in both the right-hand and left-hand columns of the procedures.

#### 3.3.1 Immediate Action Steps

For those procedures which are the entry procedures into the EOP set, certain initial steps may be designated "immediate actions". This designation implies that those steps may be performed by the operator, based on his memory, without reference to the written procedure. These steps should be limited to verifications, if possible. Immediate action steps are identified by a NOTE (see Section 4.3) prior to the first action step.

#### 3.3.2 Continuous Steps

Many of the operator actions provided in a procedure imply continuous performance throughout the remainder of the procedure. This intent is conveyed by the use of appropriate action verbs such as monitor, maintain, or control.

## SECTION 4. WRITING INSTRUCTIONAL STEPS

4.1 Instruction Step Length and Content

Instruction steps will be succinct and precise and will be located in the left column of the page. Succinctness denotes brevity; preciseness means exactly and correctly defined. General rules to be used in meeting these objectives are as follows:

1. Instruction steps should deal with one idea or task only.
2. Short, simple sentences shall be used.
3. Complex evolutions should be broken down into composite parts.
4. Objects of operator actions should be specifically stated.
5. For instructional steps that involve an action verb relating to four or more objects, the objects will be listed vertically.
6. Limits shall be expressed quantitatively.
7. Identification of components and parts shall be technically correct and complete.
8. When actions are required based upon receipt of an annunciated alarm, the alarm set point should be listed.
9. When additional confirmation of system response is considered necessary, describe the additional verification(s) required.

#### 4.1.1 Instruction Steps, Left-Hand Column

The left-hand column of the two-column format will be used for operator instruction steps and expected responses. The following rules of construction apply:

1. High Level Action steps should begin with an appropriate verb, or verb with modifier. The first letter of each word is capitalized and the entire statement is underlined for emphasis.
2. Expected responses to operator actions are shown in ALL CAPITAL LETTERS.
3. If a step requires multiple substeps, then each substep will have its own expected response.

Example:

Check SI Accumulator Isolation Valve Status:

- a. Power to isolation valves - AVAILABLE
  - b. Isolation valves - OPEN
4. If only a single task is required by the step, the high-level step contains its own expected response.

Example: Check RCP Status - AT LEAST ONE RUNNING

5. Left-hand column tasks should be specified in sequence as if they could be performed in that manner. The user would normally move down the left hand column when the expected response to a particular step is obtained.
6. When the expected response is not obtained, the user is expected to move to the right-hand column for contingency instructions.

All procedures should end with a transition to another EOP, a transition to a plant procedure, or with direction to consult the plant engineering staff for guidance.

#### 4.1.2 Instructions Steps, Right-Hand Column

The right-hand column is used to present contingency actions which are to be taken in the event that a stated condition, event, or task in the left-hand column does not represent or achieve the expected result. Contingency actions will be specified for steps or substeps for which useful alternatives are available. The following rules apply to the right-hand column:

1. Contingency actions should identify directions to override automatic controls and to initiate manually what is normally initiated automatically.
2. Contingency actions should be numbered consistently with the expected response/action for substeps only. A contingency for a single-task high-level step will not be separately numbered but will appear on the same line as its related step.
3. Unlike the left-hand column, contingency instructions are to be written in sentence format.
4. If the right-hand column contains multiple contingency actions for a single high-level action in the left-hand column, the phrase "Perform the following:" should be used as the introductory high-level statement.
5. If the right-hand column contains multiple contingency actions which do not correspond to multiple substeps in the left-hand column, then different designators should be used in the two columns.

**Example:****Establish Letdown:**

- a.
- b.
- c.

**Establish excess letdown:**

- 1)
- 2)
- 3)

6. The user is expected to proceed to the next step or substep in the left-hand column after taking contingency action in the right-hand column.
7. As a general rule, all contingent transitions to other procedures take place out of the right-hand column. (Deliberate transitions may be made from the left-hand column.)
8. If a contingency action cannot be completed, the user is expected to proceed to the next step or substep in the left-hand column unless specifically instructed otherwise.
9. If a contingency action must be completed prior to continuing, that instruction must appear explicitly in the right-hand column step or substep.

#### 4.2 Use of Logic Terms

The logic terms AND, OR, NOT, IF NOT, WHEN, can NOT, and THEN, are to be used to describe precisely a set of conditions or a sequence of actions. Logic terms will be highlighted for emphasis by capitalizing and underlining.

1. Avoid the use of AND and OR within the same action. When used together the logic can be very ambiguous.
2. When action steps are contingent upon certain conditions, the step shall begin with the words IF or WHEN followed by a description of those conditions, a comma, the word THEN, and the action to be taken.



3. IF is used for an unexpected, but possible condition.
4. WHEN is used for an expected condition.
5. AND calls attention to combinations of conditions and shall be placed between each condition. If more than two conditions are to be combined, a list format is preferred.
6. OR implies alternative combinations or conditions. OR means either one, or the other, or both (inclusive).
7. IF . . . NOT or IF . . . can NOT should be used when an operator must respond to the second of two possible conditions. IF should always be used to specify the first condition. (The right-hand column of the two-column format contains an implicit IF NOT).

#### 4.3 Cautions and Notes

Because the present action step wording is reduced to the minimum essential, certain additional information is sometimes desired or necessary. This non-action information is presented as either a NOTE or a CAUTION.

1. To distinguish this information from action steps, it will extend across the entire page and will immediately precede the step to which it applies. The descriptor term will be capitalized and underlined. Cautions will be preceded and followed by a single line of asterisks crossing the entire page, and will be fully capitalized.
2. CAUTION denotes some potential hazard to personnel or equipment associated with the following instructional step. NOTE is used to present advisory or administrative information necessary to support the following action instruction. A CAUTION or NOTE may also be used to provide a contingent transition based on changes in plant conditions.

3. As a general rule, neither a CAUTION nor a NOTE will contain an instruction/operator action; however, reference may be made to expected actions in progress.
4. CAUTIONs precede NOTEs when they occur together unless the NOTE contains information which clarifies the CAUTION.

#### 4.4 Calculations

Mathematical calculations should be avoided in EOPs; a chart or graph should be used if a value has to be determined. Parameter tolerances should be expressed as a range of values, not as a value plus or minus tolerance.

#### 4.5 Component Identification

The following rules are to be followed with regard to component identification:

1. Equipment, controls, and displays will be identified in operator language (common usage) terms.
2. When the engraved names and numbers on legend plates and alarm windows are specifically the item of concern in the procedure, the engraving should be quoted verbatim and emphasized by using all capitals.
3. The names of plant systems titles are emphasized by initial capitalization.
4. If the component is seldom used or difficult to locate, location information should be given.
5. Component abbreviations used are listed in Table 4.1.

TABLE 4.1  
ABBREVIATIONS USED IN EOPs

AC	- alternating current (electrical power)
AFW	- auxiliary feedwater
ATWS	- anticipated transient without scram
BAT	- boric acid (storage) tank
BIT	- boron injection tank
CCW	- component cooling water
CRDM	- control rod drive mechanism
CST	- condensate storage tank
CVCS	- chemical and volume control system
DC	- direct current (electrical power and signals)
HHSI	- high-head safety injection
LHSI	- low-head safety injection
LOCA	- loss of coolant accident
MOV	- motor-operated valve
MSIV	- main steamline isolation valve
PD	- positive displacement (in reference to pumps)
PORV	- power operated relief valve
PRT	- pressurizer relief tank
PRZR	- pressurizer
RCP	- reactor coolant pump
RCS	- reactor coolant system
RHR	- residual heat removal
RWST	- refueling water storage tank
SI	- safety injection
SG	- steam generator
SGTR	- steam generator tube rupture
SUR	- startup rate
TC	- thermocouple
VCT	- volume control tank

#### 4.6 Level of Detail

The level of detail required is the detail that a newly trained and licensed operator would desire during an emergency condition. Information which an operator is required to know (based on training and experience) should not be included.

1. For control circuitry that executes an entire function upon actuation of the control switch, the action verb appropriate to the component suffices without further amplification of how to manipulate the control device; recommended action verbs to be utilized are:

"start/stop" for power-driven rotating equipment.

"open/close/throttle" for valves.

"control" to describe a manually maintained process variable (flow, level, temperature, pressure).

"trip/close" for electrical breakers.

"place in standby" to refer to equipment when actuation is to be controlled by available (e.g., not reset or blocked) automatic logic circuitry.

#### 4.7 Printed Operator Aids

When information is presented using graphs, charts, tables, and figures, these aids must be self-explanatory, legible, and readable.

##### 4.7.1 Units of Measure

Units of measure on figures, tables, and attachments should be given for numerical values that represent observed data, measurement data, or calculated results.

#### 4.7.2 Titles and Headings

Capitalization should be used for references to tables and figures, titles of tables and figures within text material, and column headings within a table.

#### 4.7.3 Figures

If needed to clarify operator action instructions, figures shall be added to a procedure. Any figure used will be constructed to fit within the pre-printed page format (see Figure 3-2). Certain rules of construction apply:

1. All wording on the figure shall be at least as legible (type size and spacing) as the instruction steps in the procedure.
2. Each figure will occupy a complete page and will be uniquely identified by a figure number and title. The figure number will consist of the procedure designator, without punctuation, followed by a hyphen and an integer. Multiple figures will be assigned sequential integers.

Examples: Figure ESO3-1

Figure FRI3-1

3. Figure titles will explain the intent or content of the figure.
4. The figure number and title will be placed at the bottom of the page just above the pre-printed border.
5. If the figure is a graph, all the numbers and wording will be horizontal. By convention, the independent variable is plotted on the horizontal (X) axis. Grid line density should be consistent with the resolution expected from the graph. Any labeling required on the graph will have a white (not graph) background.

6. All figures for a procedure are numbered sequentially and are located immediately after the instruction step pages. Figure pages are numbered as pages of that procedure. Any figures required for an ATTACHMENT are numbered in sequence with the procedure figures.
7. References to a figure from an action step should use only the figure number and not the title.

#### 4.7.4 Tables

Tables may be used within the text of a procedure to clearly present a large number of separate options. A table will immediately follow the step or substep which makes use of it. Therefore, it does not require a unique number and title. Any table will be completely enclosed by a distinct outline; if necessary, it may extend into the adjacent column because of this delineation.

1. All information presented in a table shall be at least as legible (type size and spacing) as the instruction steps in the procedure.
2. All columns and rows of information in a table will be defined by solid lines.
3. All column and row headings shall be presented in ALL CAPITAL LETTERS.
4. Absence of a table element will be indicated by a dash.

#### 4.7.5 Attachments

Supplementary information or detailed instructions which would unnecessarily complicate the flow of a procedure may be placed in an attachment to that procedure.

Attachments are identified by the title "ATTACHMENT" followed by a single number designator. This title is centered at the top of a standard format page. The pre-printed title blocks will be the same as for the procedure. Attachments will use a single-column, full-page-width format.

Physically, Attachments will be located after any Figures belonging to the procedure. Attachment pages are numbered in sequence, beginning with 1 for the first page of each attachment. Pages will be numbered with "Page \_\_\_ of \_\_\_."

## SECTION 5. MECHANICS OF STYLE

5.1 Spelling

Spelling should be consistent with modern usage. When a choice of spelling is offered by a dictionary, the first spelling should be used.

5.2 Hyphenation

Hyphens are used between elements of a compound word when required by modern usage. The following rules apply:

1. When doubt exists, the compound word should be restructured to avoid hyphenation.
2. Hyphens should be used in the following circumstances:
  - a. in compound numerals from twenty-one to ninety-nine.
  - b. in fractions.
  - c. in compounds with "self".
  - d. when the last letter of the first word is the same vowel as the first letter of the second word.
  - e. when misleading or awkward consonants would result by joining the words.
  - f. to avoid confusion with another word.
  - g. when a letter is linked with a noun.

5.3 Punctuation

Punctuation should be used only as necessary to aid reading and prevent misunderstanding. Punctuation should be in accordance with the following rules:



### 5.3.1 Brackets

Brackets are used to denote setpoint or parameter changes due to an adverse containment atmosphere.

### 5.3.2 Colon

Use a colon to indicate that a list of items is to follow.

### 5.3.3 Parentheses

Parentheses shall be used to indicate alternative items in a procedure, instruction, or equipment numbers.

### 5.3.4 Period

Use a period at the end of complete sentences and for indicating the decimal place in numbers.

### 5.3.5 Comma

Use a comma after conditional phrases for ease of reading.

### 5.3.6 Dash

Use a dash to separate a required action and its expected response and also to indicate a null table element.

## 5.4 Capitalization

Capitalization shall be used in the procedures for emphasis in the following cases:

1. Logic terms will be capitalized and underlined.

2. Expected responses (lef-hand column of instructions) are capitalized.
3. Titles of procedures will be completely capitalized whenever referenced within any procedure.
4. Operator action steps may be capitalized for emphasis.
5. Abbreviations (see Table 4.1) are commonly capitalized.

#### 5.5 Vocabulary

Words used in procedures should convey the proper understanding to the trained person. The following rules apply:

1. Use simple words (ie: short words of few syllables).
2. Use common terms.
3. Use words that are concrete rather than vague, specific rather than general, familiar rather than formal, precise rather than blanket.
4. Define key words that may be understood in more than one sense.
5. Verbs with specific meanings should be used. Attachment 1 lists action verbs and their intended meanings.
6. Equipment status should be denoted as follows:
  - a. Operable/Operability - These words mean that a system, subsystem, train, component or device is properly installed and capable of performing its intended function(s) in the intended manner as verified by testing and tested at the frequency required by the Technical Specifications, as applicable.
  - b. Operating - This word means that a system, subsystem, train, component, or device is in operation and is performing its intended function in the intended manner.

- c. Available - This word means that a system, subsystem, train component, or device is operable and can be used as desired.

#### 5.6 Numerical Values

The use of numerical values should be consistent with the following rules:

1. Arabic numerals should be used.
2. For numbers less than unity, the decimal point should be preceded by a zero; for example: 0.1.
3. The number of significant digits should be equal to the number of significant digits available from the display.
4. Acceptance values should be specified in such a way that addition and subtraction by the user is avoided if possible. This can be done by stating acceptance values as limits (e.g., use 35 to 45 instead of  $40 \pm 5$ ).
5. Engineering units should always be specified for numerical values of process variables, and should be the same as these used on control board instrumentation.

#### 5.7 Abbreviations and Acronyms

Abbreviations may be used where necessary to save time and space, and when their meaning is unquestionably clear to the intended reader. Consistency should be maintained throughout the procedure.

Abbreviations and acronyms should be limited to those commonly used by operators. Table 4.1 lists the common ones to be used for the procedures. Abbreviations and acronyms will be uniformly capitalized whenever they are used.

WRITERS GUIDE FOR EMERGENCY RESPONSE GUIDELINESATTACHMENT 1ACTION VERBS

actuate	to put into action or motion; commonly used to refer to automated, multi-faceted operations  Examples: Actuate SI, Actuate Phase A
align	to arrange components into a desired configuration  Examples: Align the system for normal charging, Align valves as appropriate
block	to inhibit an automatic actuation  Example: Block SI actuation
check	to note a condition and compare with some procedure requirement  Example: Check PRZR level - GREATER THAN 20%
close	to change the physical position of a mechanical device. Closing a valve prevents fluid flow. Closing a breaker allows electrical current flow.
complete	to accomplish specified procedure requirements
continue	to go on with a particular process  Example: Continue with this procedure
control	to manually operate equipment as necessary to satisfy procedure requirements on process parameters: pressure, temperature, level, flow, etc.

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ACTION VERBS

determine to calculate or evaluate using formulae or graphs

Example: Determine maximum venting time

energize to supply electrical energy to (something); commonly used to describe an electrical bus or other dedicated electrical path

Examples: Energize AC emergency buses

establish to make arrangements for a stated condition

Example: Establish normal PRZR pressure and level control

evaluate to examine and decide; commonly used in reference to plant conditions and operations

Example: Evaluate plant conditions

equalize to make the value of a given parameter equal to the value of another parameter

Example: Equalize charging and letdown flow

initiate to begin a process

Example: Initiate flow to all SGs

ATTACHMENT 1

ACTION VERBS

load	to connect an electrical component or unit to a source of electrical energy, may involve a "start" in certain cases
	Example: Load the high-head SI pump on the AC emergency bus
maintain	to control a given plant parameter to some procedure requirement continuously
	Example: Maintain SG level in the narrow range
minimize	to make as small as possible
	Example: Minimize secondary system contamination
monitor	similar to "check", except implies a continuous activity
open	to change the physical position of a mechanical device to the unobstructed position. Opening a valve permits fluid flow. Opening an electrical breaker prevents current flow.
operate	to turn on or turn off as necessary to achieve the stated objective
	Example: Operate PRZR heaters to increase pressure

ATTACHMENT 1ACTION VERBS

place

to move a control to a stated position

Example: Place controls in MANUAL

place in standby

to return a piece of equipment to an inactive status but ready for start on demand; commonly used to refer to a mid-position on a switch labeled AUTO

Example: Stop the SI pumps and place in standby

reset

to remove an active output signal from a retentive logic device even with the input signal still present; commonly used in reference to protection/safeguards logics in which the actuating signal is "locked-in". The reset allows equipment energized by the initial signal to be deenergized.

Examples: Reset SI, Reset Phase A

record

to document specified characteristics

Example: Record RCS average temperature

sample

to take a representative portion for the purpose of examination; commonly used to refer to chemical or radiological examination

Examples: Sample for RCS boron concentration,  
Sample for secondary side radioactivity

ATTACHMENT 1

ACTION VERBS

set to physically adjust an adjustable feature to a specified value

Example: Set diesel speed to 1200 rpm

shut an adjective associated with the action verb "close" used to describe the physical condition of a device

shut down to deenergize equipment and place in standby

Example: Shut down unnecessary equipment

start to originate motion of an electrical or mechanical device, either directly or by remote control

Example: Start one RCP

stop to terminate motion of an electrical or mechanical device

Example: Stop both diesel-generators

throttle to operate a valve in an intermediate position to obtain a certain flow rate

Example: Throttle charging flow control valve to establish desired flow



ATTACHMENT 1ACTION VERBS

- trip** to manually actuate a semiautomatic feature.  
Commonly, "trip" is used to refer to component deactuation.
- Examples:** Trip the reactor, trip the turbine,  
trip a breaker
- try** to make a continued effort when success may not be immediately obtainable
- Example:** Try to restore outside power
- turn on** to supply electrical energy to a non-mechanical component
- Example:** Turn on PRZR heaters
- vent** to permit a gas or liquid confined under pressure to escape at a vent
- Examples:** Vent the BIT
- verify** to observe that an expected characteristic or condition exists. Typically the expectation comes from some previous automatic or operator action. The appropriate contingency, either stated or implied, is to establish the expected condition.
- Examples:** Verify Reactor Trip, Verify SI Pumps -  
RUNNING

## 5.0 EOP TRAINING PROGRAM

### 5.1 General

The IP-3 training program will be developed to support implementation of the EOPs. During the on-going development of the EOPs and for future revisions an interface is established with the Training Department to ensure a supportive program. The overall training goals for the EOP training program are as follows:

- o to enable the operators to understand the structure of the EOPs
- o to enable the operators to understand the technical bases of the EOPs
- o to enable the operators to have a working knowledge of the technical content of the EOPs
- o to enable the operators to use the EOPs under all operational conditions.

Training program objectives to support these goals will be developed for each lesson plan.

### 5.2 Training Methods

The EOP training program is established to instruct operators in the EOPs. It consists of classroom instruction, control room walk-throughs and/or simulator exercises.

#### 5.2.1 Classroom Instruction

Classroom instruction sessions will be conducted. Included in the information presented during this method will be the following:

- o the logic behind the development of EOPs
- o the process used to develop the EOPs
- o the EOPs themselves, including supporting technical and human-factors information.

#### 5.2.2 Control Room Walk-Throughs and Simulator Exercises

Training will be conducted utilizing either control room walk-throughs or a full scope control room simulator, if available. The simulator to be used is the Consolidated Edison Indian Point Simulator. During training the team approach in using EOPs will be stressed. Training will be conducted with all licensed operators performing their normal control room functions. Additional training will be conducted where the members of a crew alternate responsibilities. This additional training is important to promote understanding of the other operators' responsibilities in the overall conduct of the actions, and it should lead to enhanced communications within the control room. If the simulator is not available, complicated scenarios will be discussed during classroom instruction and control room walk-throughs.