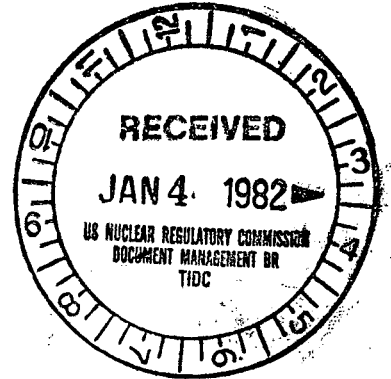


TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
400 Chestnut Street Tower II

December 29, 1981

Director of Nuclear Reactor Regulation
Attention: Ms. E. Adensam, Chief
Licensing Branch No. 4
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555



Dear Ms. Adensam:

In the Matter of the Application of) Docket Nos. 50-390
Tennessee Valley Authority) 50-391

Enclosed for NRC review is a copy of TVA's fire brigade members and fire incident commander course for Watts Bar Nuclear Plant. This provides more detailed information than the program description provided by my letter to you dated November 9, 1981.

If you have any questions concerning this matter, please get in touch with D. P. Ormsby at FTS 858-2682.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills
L. M. Mills, Manager
Nuclear Regulation and Safety

Sworn to and subscribed before me
this 29th day of Dec., 1981.

Bryant M. Lowery
Notary Public

My Commission Expires 4/4/82

Enclosure

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ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2

32-Hour Fire Brigade Members Course

Monday
1 pm - 5 pm

Introduction to Firefighting

Topics:

Completion of forms

Meet instructors

Course objectives

Pre-test

Review drill field safety rules

Chemistry of fire

Stages of fire

Extinguishing agents

Protective clothing

Objectives:

1. The fire brigade member shall describe fire behavior as to chemistry of fire, fire extension, flashover, stages of fire, classes of fire, and heat transfer.
2. The fire brigade member shall describe the various types and effects of fire suppression agents.
3. The fire brigade member shall demonstrate donning protective clothing.

Tuesday
8 am - 12 m

Self-Contained Breathing Apparatus

Topics:

Reasons for using SCBAs

Types of SCBAs

Introduction to the use of MSA 401 Pressure-Demand Breathing Apparatus

Cleaning and maintaining breathing apparatus

Practical: Use of breathing apparatus in smoke and dark environments

Objectives:

1. The fire brigade member shall demonstrate donning self-contained breathing apparatus, while wearing protective clothing.
2. The fire brigade member shall demonstrate the proper use and safety procedures, in a dense smoke environment, of the self-contained breathing apparatus provided.
3. The first brigade member shall demonstrate proper procedures for cleaning and sanitizing self-contained breathing apparatus for future use.

Tuesday
1 pm - 5 pm

Selection and Use of Portable Fire Extinguishers

Topics:

Classification and rating of extinguishers

Fire attack procedures using portable fire extinguishers

Practical: Use on small flammable liquid fires

Pans

Trench

Objectives:

1. The fire brigade member, given a group of different extinguishers, shall demonstrate the appropriate extinguisher for various classes and sizes of fires.
2. The fire brigade member, using a portable fire extinguisher, shall effectively extinguish different size Class B fires including one fire 10 square feet in excess of the extinguisher rating.

Wednesday
8 am - 12 m

Principles of Firefighting

Topics:

Nine Fundamentals of Firefighting

1. Size-up
2. Rescue
3. Cover exposure
4. Salvage
5. Ventilation
6. Confine
7. Extinguishment
8. Overhaul
9. Critique

Types of building construction

Ideal rate of flow formula

Handling electrical fires

Staging areas

Objectives:

1. The fire brigade member shall list the nine fundamentals of firefighting in the proper order, state the function of each, and state how they complement each other in the overall firefighting plan.
2. The fire brigade member shall describe the effects of fire on different types of building construction and fireproofing.
3. The fire brigade member shall describe the quantity of water needed and the correct application method to extinguish an enclosed structure fire.
4. The fire brigade member shall describe the correct principles and practices of extinguishing a fire involving energized electrical equipment using water fog.
5. The fire brigade member shall describe the tactical use and importance of a staging area.

Wednesday
1 pm - 5 pm

Water and Wheeled Dry-Chemical Extinguishment

Topics:

Hoses and nozzles

Hose handling

Types of foam

Proper application of foam

Use of wheeled dry-chemical extinguishers

Electrically approved fog nozzles

Practical: Use of water and wheeled dry-chemical extinguishers to extinguish flammable liquid fires.

Practical: Use of foam on flammable liquid fires.

Objectives:

1. The fire brigade member shall identify and explain the types, uses, and different application methods of fluoroprotein and aqueous film forming foam.
2. The fire brigade member shall extinguish a flammable liquid fire using foam, water, and/or wheeled dry-chemical extinguishers.
3. The fire brigade member shall identify and explain various electrically approved fog nozzles.

Thursday
8 am - 12 m

Closed Containers and Fire

Topics:

Boiling liquid expanding vapor explosions

Effect of fire on ordinary and pressure vessels

Types and contents of closed containers located in power plants

Decisionmaking flow chart for closed containers involved in fires

Methods for closing fuel supply valves involved in a fire

Practical: Extinguishment of pressurized gas fires

Objectives:

1. The fire brigade member shall describe the types, contents, and potential hazards of closed containers involved in a fire.
2. The fire brigade member shall describe the correct principles and practices involved in controlling a fire involving different types of closed containers.
3. The fire brigade member shall demonstrate the correct method of moving in to shut off a fuel supply valve involved in a fire.

Thursday
1 pm - 5 pm
1 hr. 20 min.

Fixed Fire Protection Systems

Topics:

Hydrants

Sprinkler systems

Objectives:

1. The fire brigade member shall describe the operation of fire hydrants.
2. The fire brigade member shall describe the types, operation, and benefits of sprinkler systems.

1 hr. 20 min.

Hose Line Hydraulics and Hose Carts

Topics:

Friction loss in fire hose

Effect of elevation on fire hose

Hose carts

Practical: Hose cart evolutions

Objectives:

1. The fire brigade member shall describe the effects of friction loss and elevation when using fire hose lines of various flows and lengths.
2. The fire brigade member shall demonstrate various hose cart loads and lays.

1 hr. 20 min.

Ground Ladders

Topics:

Parts

Climbing

Carries

Working from

Raises

Advancing hose lines up ladders

Rescue

Practical: The proper uses of ground ladders

Ground Ladders (continued)

Objectives:

1. The fire brigade member shall demonstrate how to correctly carry, raise, climb, and work from ground ladders.
2. The fire brigade member shall demonstrate how to bring a conscious and unconscious victim down a ground ladder.

Friday
8 am - 12 m
1 hour

Fire Ground Organization and Power Plant Fires

Topics:

Chain of command
Sectoring
Coordinated fire attack
Past examples of power plant fires

Objectives:

1. The fire brigade member shall describe effective fire ground organization in a power plant.

1 hr. 30 min.

Drum Storage Fires

Topics:

Hazards involved
Proper attack procedures
Practical: Attacks on drum storage fires

Objectives:

1. The fire brigade member shall demonstrate proper fire attack techniques associated with drum storage fires.

1 hr. 30 min.

Review and Evaluations

Topics:

Review
Post-test
Instructor evaluation

Objectives:

1. Allow the fire brigade member an opportunity to ask questions pertaining to plant firefighting techniques and policies.
2. Evaluate students as to benefits of fire training course.
3. Evaluate effectiveness of instructors and course.