Entergy
Nuclear Northeast

James A. FitzPatrick

Emergency Plan

Volume 3
Implementing Procedures

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 3
UPDATE LIST

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EAP-29	EOF VENTILATION ISOLATION DURING AN EMERGENCY	REV. 5	02/98	Informational
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SAP-1	MAINTAINING EMERGENCY PREPAREDNESS	REV. 17	02/03	Informational
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SAP-3	EMERGENCY COMMUNICATIONS TESTING	REV. 73	02/03	Reference

EMERGENCY PLAN IMPLEMENTING PROCEDURES/VOLUME 3
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Procedure Number	Procedure Title	Revision Number	Date of Last Review	Use of Procedure
SAP-4	NYS/OSWEGO COUNTY EMERGENCY PREPAREDNESS PHOTO IDENTIFICATION CARDS	REV. 10	05/03	Informational
SAP-5	DELETED (3/98)			
SAP-6	DRILL/EXERCISE CONDUCT	REV. 19	03/03	Informational
SAP-7	MONTHLY SURVEILLANCE PROCEDURE FOR ON-CALL EMPLOYEES	REV. 36	08/02	Informational
SAP-8	PROMPT NOTIFICATION SYSTEM FAILURE/SIREN SYSTEM FALSE ACTIVATION	REV. 13	12/02	Informational
SAP-9	DELETED (02/94)			
SAP-10	METEOROLOGICAL MONITORING SYSTEM SURVEILLANCE	REV. 11	03/02	Informational
SAP-11	EOF DOCUMENT CONTROL	REV. 11	06/02	Informational
SAP-13	EOF SECURITY AND FIRE ALARM SYSTEMS DURING NORMAL OPERATIONS	REV. 4	06/02	Informational
SAP-14	DELETED (02/95)			
SAP-15	DELETED (11/92)			
SAP-16	UTILIZING EPIC IDT TERMINALS FROM DESTINY SYSTEM	REV. 4	06/02	Informational
SAP-17	EMERGENCY RESPONSE DATA SYSTEM (ERDS) QUARTERLY TESTING	REV. 7	07/00	Continuous
SAP-19	SEVERE WEATHER	REV. 4	01/01	Informational
SAP-20	EMERGENCY PLAN ASSIGNMENTS	REV. 21	08/02	Informational
SAP-21	DELETED (04/01)			
SAP-22	EMERGENCY PLANNING PROGRAM SELF ASSESSMENT	REV. 2	05/03	Informational

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EOF VENTILATION ISOLATION DURING AN EMERGENCY
EAP-29
REVISION 6

APPROVED BY: _____ DATE: 5/14/03
RESPONSIBLE PROCEDURE OWNER

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REVISION SUMMARY SHEET

REV. NO.	CHANGE AND REASON FOR CHANGE
6	• Name change on cover sheet to Entergy Nuclear Operations, Inc.
	• Revised Section 5.0 to add steps for JNC and revise wording for EOF.
	• Changed NRC office to JAF IT/Tech Assessment Room in Section 5.1.1.
5	• Change to the designation of Recovery Manager office to NRC office due to reorganization of the EOF for joint use.
4	• Reformat per AP-02.01, Rev. 5.
	• Change description that was part of a procedure step into a NOTE for better clarity.

TABLE OF CONTENTS

1.0 PURPOSE

The purpose of this procedure is to provide instruction necessary to shut down the ventilation system during use of the Emergency Operation Facility (EOF) in an emergency.

2.0 REFERENCES

2.1 Performance References

None

2.2 Developmental References

2.2.1 NUREG-0696, FUNCTIONAL CRITERIA FOR EMERGENCY RESPONSE FACILITIES

2.2.2 IAP-2, CLASSIFICATION OF EMERGENCY CONDITIONS

2.2.3 EAP-14.2, EOF ACTIVATION

2.2.4 EAP-14.6, HABITABILITY OF THE EMERGENCY FACILITIES

3.0 INITIATING EVENTS

A decision has been made by the Radiological Support Coordinator to implement this procedure.

4.0 RESPONSIBILITIES

4.1 The EOF Manager will have the ultimate responsibility to ensure that this procedure is enacted, if necessary.

4.2 As EOF personnel arrive, they shall ascertain if the EOF is being activated per the EOF activation procedure, currently EAP-14.2. If necessary, the EOF Manager will instruct personnel to initiate this procedure.

5.0 PROCEDURE

NOTE: The EOF and Environmental Lab, located approximately 11 miles from JAFNPP, are considered in this procedure two separate facilities. Each has its own separate ventilation system and controls.

5.1 If radiological conditions warrant isolation of EOF ventilation, perform the following:

5.1.1 Manually turn the EOF ventilation system to the OFF position using the thermostat located in the JAF IT/Tech Assessment Room.

5.1.2 Manually turn the Environmental Lab ventilation system to the OFF position using the thermostat located in the Environmental Supervisor's office.

5.1.3 The Environmental Lab fume exhaust hoods should normally be turned off to minimize the infiltration of outside air into the building.

5.1.4 Consider securing the ventilation system of the adjacent JNC in a similar manner.

NOTE: NUREG-0696, Functional Criteria For Emergency Response Facilities (Table 2, pg. 18) does not require ventilation isolation past 10 miles from JAFNPP.

6.0 **ATTACHMENTS**

NONE

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EMERGENCY TERMINATION AND TRANSITION TO RECOVERY
EAP-30
REVISION 1

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REVISION SUMMARY SHEET

REV. NO.	CHANGE AND REASON FOR CHANGE
1	• Change company to on cover sheet to Entergy Nuclear Northeast. • Periodic Review
0	• New procedure

TABLE OF CONTENTS

1.0 PURPOSE

The purpose of this procedure is to provide the Emergency Director with guidance for performing actions following the termination of a classified emergency and for the transition to recovery.

2.0 REFERENCES

2.1 Performance References

2.1.1 IAP-2, Classification of Emergency Conditions

2.2 Developmental References

2.2.1 10 CFR 50, Appendix E, Part H, Recovery

3.0 INITIATING EVENTS

3.1 Emergency conditions have been controlled and/or corrected and the emergency terminated as per IAP-2, Classification of Emergency Conditions, and entry into the Recovery phase is required.

4.0 PROCEDURE

NOTE: The steps in this procedure are not required to be performed in sequential order, and all steps may not be required as determined by the scope of the emergency.

4.1 When the termination criteria of IAP-2, Classification of Emergency Conditions, have been met, the Emergency Director DECLARES that the emergency is terminated.

4.2 If a Recovery phase is required based on the scope of the event, TURNOVER recovery responsibilities to the Recovery Manager using Attachment 1.

5.0 ATTACHMENTS

1. Emergency Director to Recovery Manager Turnover Checklist

EMERGENCY DIRECTOR TO RECOVERY MANAGER TURNOVER CHECKLIST

When the Emergency Director is relieved by the Recovery Manager, the following checklist should be used to effectively turnover responsibilities:

Emergency Director:

_____

Recovery Manager:

_____

Date: _____ Time: _____

The following items should be discussed:

1. Summary of Event

2. Current Status of:

   A. Corrective Actions

   B. Plant Conditions and Plant Equipment

   C. Radiological Conditions

      In Plant
      Onsite
      Offsite
      Status of Release

3. Protective Action Recommendations Made to Local Authorities

4. Protective Actions Taken by Local Authoritie

5. Status of Communications with Offsite Organizations:

   A. NYS/Oswego County
   B. NRC
   C. INPO
   D. ANI

6. Security Readiness

7. Current Facility Readiness

   A. Current/Expected Level of Staffing
   B. Shift Schedules

8. Status of Offsite Support and Contractual Information

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

RECOVERY MANAGER
EAP-31
REVISION 2

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REVISION SUMMARY SHEET

REV. NO.

2
- Title changes
- Added Emergency Plant Manager
- Editorial Corrections

1
- Updated title page to reflect the company's new name.
- Updated titles in sections 1.0, 4.1.2, and 4.3.3 - 4.3.5

0
- New Procedure

TABLE OF CONTENTS

1.0 PURPOSE

The purpose of this procedure is to provide instruction to the Recovery Manager. The Recovery Manager provides the overall planning, direction, and coordination of Recovery operations.

This procedure is implemented by the corporate Director - Oversight or alternate in the event of an emergency at the plant, which requires the coordination of corporate resources during the EMERGENCY PHASE, and/or activation of the Recovery Organization during the RECOVERY PHASE.

The Recovery Manager is responsible for:

- Notifying the Chief Nuclear Officer of emergencies and keeping him informed of the emergency status.
- Providing coordination between the plant and ENN corporate organization.
- Providing overall planning and direction of Recovery operations.

2.0 REFERENCES

2.1 Performance References

2.1.1 Section 9, Recovery

2.1.2 EAP-30 Emergency Termination and Transition of Recovery

2.1.3 EAP-33, Development of a Recovery Action Plan

2.2 Developmental References

NONE

3.0 INITIATING EVENTS

3.1 Emergency conditions have been declared as per IAP-2, Classification of Emergency Conditions (FOR STEPS 4.1 AND 4.2).

3.2 Emergency conditions have been controlled and/or corrected and the emergency terminated as per IAP-2, Classification of Emergency Conditions, and entry into the Recovery phase is required (FOR STEPS 4.3 AND 4.4).

4.0 **PROCEDURE**

4.1 **Notifications**

4.1.1 Receive notification of any emergency from the Recovery Support Group Manager (RSGM) or plant staff.

4.1.2 Notify the Chief Operating Officer of SITE AREA OR GENERAL EMERGENCIES, at a minimum.

4.2 **Activation**

4.2.1 Establish and maintain communications as appropriate with the Emergency Plant Manager and/or Emergency Director during the EMERGENCY PHASE.

4.2.2 Provide support to the Emergency Plant Manager and Emergency Director during the EMERGENCY PHASE as requested.

4.2.3 Direct the Recovery Support Group Manager (RSGM) to coordinate corporate resources to support the plant during the EMERGENCY PHASE.

4.2.4 IF RECOVERY OPERATIONS ARE REQUIRED, request that EAP-30, Emergency Termination and Transition to Recovery, be implemented by the Emergency Director.

4.2.5 Determine location of the Recovery Center.

4.3 Recovery Operations

4.3.1 Develop Initial Recovery Organization.

A. Select Recovery Organization members based on need, availability, and expertise.

B. Assign a Shift Onsite Recovery Coordinator to manage onsite recovery actions and, if needed, a Recovery Support Group Manager to manage offsite recovery actions.

C. Determine corporate capabilities required for Recovery Support Group (see JAFNPP Plan section 9).

D. Request that the Recovery Support Group Manager coordinate corporate resources to support Recovery operations and also coordinate request for personnel, equipment and materials, and support services.

E. Lead discussion with Recovery organization members to determine assignment of functions.

F. Develop shift-rotation schedule.

4.3.2 Implement EAP-33, Development of a Recovery Action Plan.

4.3.3 Maintain communications with Site VP-Operations regarding plant-related aspects of the emergency.

4.3.4 Establish and maintain communications with the Entergy Spokesperson.

4.3.5 Continue to update the Chief Operating Officer on the status of Recovery operations.

4.3.6 Monitor progress of Recovery Organization and Recovery Action Plan and provide direction where appropriate.

4.3.7 Determine resource requirements for Recovery functions considering the following:

A. Need for additional personnel required for long-term recovery efforts.

B. Need for offsite technical assistance.

C. Need for supplies, equipment, parts, and other material.

4.4 **Termination Recovery Operations**

4.4.1 Determine that normal plant organization can manage remaining restoration activities.

4.4.2 Consult with Federal, State, and local authorities regarding the termination of recovery.

4.4.3 Provide final status report on recovery operations to the news media.

4.4.4 Review and document actions taken during recovery.

5.0 ATTACHMENTS

NONE

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

DEVELOPMENT OF A RECOVERY ACTION PLAN
EAP-33
REVISION 1

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REVISION SUMMARY SHEET

REV. NO.

1
- Name change on cover sheet to Entergy Nuclear Operations, Inc.
- Change Site Executive Officer to Site VP - Operations in Section 1.0.
- Change NYPA to Entergy in Step 4.1.15.
- Add Step 4.4.B.

0
- New procedure

TABLE OF CONTENTS

1.0 **PURPOSE**

The purpose of this procedure is to provide guidance to the Recovery Manager and the Recovery Organization on the development of a Recovery Action Plan.

The Recovery Manager, in coordination with the Site VP - Operations and the Recovery Organization, is responsible for the development of a Recovery Action Plan to address the consequences of an emergency requiring recovery. This Recovery Action Plan will be reviewed and revised to reflect additional recovery actions, additional resources requirements, and any changes in the schedule for completion of recovery action(s) as conditions change.

2.0 **REFERENCES**

2.1 **Performance References**

2.1.1 Section 9, Recovery

2.2 **Developmental References**

2.2.1 JAF Administrative Procedure AP-03.12, Action Plans.

3.0 **INITIATING EVENTS**

3.1 Emergency conditions have been controlled and/or corrected and the emergency terminated as per IAP-2, Classification of Emergency Conditions, and entry into the Recovery phase is required.

4.0 **PROCEDURE**

4.1 Develop a Recovery Action Plan following the guidance of appropriate plant procedures and consider the following (include appropriate tasks in Action Plan):

4.1.1 Coordination with government agency(s) interface.

4.1.2 Coordination with media interface.

4.1.3 Identification of areas (within site boundary) requiring immediate re-entry.

4.1.4 Isolation, control and minimization of hazards.

4.1.5 Identification of components/equipment needing repair.

4.1.6 Prioritization of equipment needing repair.

4.1.7 Development of task schedule.

4.1.8 Identification of material and personnel resources.

4.1.9 Initiation of event cause investigation.

4.1.10 Initiation of damage assessment.

4.1.11 Initiation of comprehensive radiological surveillance plan.

4.1.12 Evaluation of controlled releases that may result from recovery operations prior to release initiation and remain cognizant of offsite consequences.

4.1.13 Initiation of estimates of total population exposure.

4.1.14 Compliance with radiation limits.

4.1.15 Development of support program for Entergy employees and their families (see JAFNPP Plan section 9).

4.1.16 Determination of criteria for termination of recovery.

4.2 Review and revise Recovery Action Plan as required. Consider changes in onsite and/or offsite conditions.

4.3 Finalize and schedule for recovery actions.

4.4 Modify Recovery Action Plan as appropriate for Extended Recovery Operations.

A. Institute long-term recovery organization.

B. Provide for extended administrative controls.

C. Update recovery task list and schedule.

D. Develop schedule for periodic recovery organization briefings.

5.0 **ATTACHMENTS**

NONE

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

ACCEPTANCE OF ENVIRONMENTAL SAMPLES AT THE EOF DURING AN EMERGENCY

EAP-34
REVISION 4

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REVISION SUMMARY SHEET

REV. NO.	CHANGE AND REASON FOR CHANGE
4	• Reworded Section 7.2 and 7.5 to remove survey criteria - now refers to EAP-5.3.
3	• Reformat per AP-02.01, Rev. 5. • Added >1 mR/hr to Sections 7.2 and 7.5 to clarify "high" readings. • Deleted reference 2.2.2 - this has been deleted by Oswego County.

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1.0 **PURPOSE**

This procedure provides instruction for the acceptance, identification and logging of environmental samples received at the Emergency Operations Facility/Environmental Laboratory during an emergency.

2.0 **REFERENCES**

2.1 **Performance References**

2.1.1 EAP-5.3, ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING

2.2 **Developmental References**

2.2.1 EAP-5.3, ONSITE/OFFSITE DOWNWIND SURVEYS AND ENVIRONMENTAL MONITORING

3.0 **PREREQUISITES**

3.1 The EOF Radiological Support Coordinator, the TSC Radiological Support Coordinator, or designee has requested the collection of environmental samples and,

3.2 The samples have been properly packaged and labeled by the persons responsible for their collection.

4.0 **PRECAUTIONS**

Samples collected during a radiological emergency may contain radioactivity and should be handled with care to insure that the sample contents do not spill or leak from the sample container. Care should also be taken when receiving or handling samples to prevent sample cross-contamination.

5.0 **MATERIALS/EQUIPMENT**

5.1 Environmental Sample Logbook

5.2 Sample tags/labels

5.3 Permanent marker

6.0 **INITIATING EVENTS**

None

7.0 PROCEDURE

7.1 On receipt of environmental samples, the integrity of sample containers will be checked. If the sample is bagged, it is examined for rips or punctures. If the sample is a liquid, it is examined for leakage. If the integrity of the sample container has been compromised or is in questionable condition, notify supervising personnel.

7.2 All samples are to be screened for radioactivity and redirected as needed per EAP-5.3, Onsite/Offsite Downwind Surveys and Environmental Monitoring.

7.3 Identification numbers will be assigned to each sample. All sample identification and other pertinent information will be recorded in the Environmental Sample Logbook. Attachment 1 shows the format of the pages for the logbook.

7.4 All samples will be tagged or labeled with their identification number readily visible and legible. Identification tags or labels will be written in permanent ink; DO NOT use pencil or water-soluble markers to identify samples.

7.5 When the identification/logging of samples has been completed, place the samples in designated areas per EAP-5.3.

8.0 ATTACHMENTS

1. FORMAT OF PAGES IN ENVIRONMENTAL SAMPLE LOGBOOK

FORMAT OF PAGES IN ENVIRONMENTAL SAMPLE LOGBOOK

Sample Number	Log-In Date/Time	Sample Collector	Collection Date/Time	Sample Collection Location	Sample Type	Survey Reading	Comments

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EOF TLD ISSUANCE DURING AN EMERGENCY
EAP-35
REVISION 7

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REVISION SUMMARY SHEET

REV. NO.	CHANGE AND REASON FOR CHANGE
7	• Added SRD's to Section 4.4.2
6	• Reformat per AP-02.01, Rev. 5. • Editorial changes. • Change level of use to informational from continuous.

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1.0 **PURPOSE**

To describe the method for minimizing radiological exposure to emergency workers entering the 10 mile EPZ through the use of Thermoluminescent Dosimeters (TLDs) and Radiation Exposure Records. Use this procedure within the EOF only if instructed to do so by the Emergency Director

2.0 **REFERENCES**

2.1 **Performance References**

None

2.2 **Developmental References**

2.2.1 10CFR20, STANDARDS FOR PROTECTION AGAINST RADIATION

2.2.2 ICRP-28, PRINCIPALS AND GENERAL PROCEDURES FOR HANDLING EMERGENCY AND ACCIDENTAL EXPOSURES OF WORKERS

2.2.3 NCRP-38, BASIC RADIATION PROTECTION CRITERIA

3.0 **INITIATING EVENTS**

Emergency Director directs issuance of TLDs.

4.0 **PROCEDURE**

4.1 The Radiological Engineer, under the direction of the Emergency Operations Facility (EOF) Radiation Support Coordinator, is responsible for coordinating the efforts of the EOF Radiation Protection Technician.

4.2 The Radiation Protection Technician, under the direction of the Radiological Engineer, is responsible for the implementation of this procedure.

4.3 The Emergency Director is responsible for authorizing radiation exposures to emergency workers in excess of USEPA Protective Action Guidelines (PAGs) for the general public.

4.4 **TLD ISSUANCE**

NOTE: Consideration shall be given to the range of SRD an individual should be issued.

4.4.1 The Dosimetry Issuance Area will be established in the main lobby of the Emergency Operations Facility (EOF). A Radiation Protection Technician should obtain all needed equipment from the storage area.

4.4.2 Distribute the TLDs/SRD's to all emergency workers entering the Emergency Planning Zone (EPZ). If immediate action is needed, enlist additional personnel to assist in distribution.

4.4.3 Use Emergency Workers TLD/SRD Issuance Record and TLD Badge Identification List (Attachment 1 and Attachment 2 respectively) for logging TLD issuance.

4.4.4 EOF Issuance Briefing Outline

Review the following with each emergency worker before the worker reports for his/her assignment.

A. Briefly instruct emergency workers on how and where the TLD will be read.

B. Inspect the TLD for damage.

C. Handling of TLD.

D. TLD should not be submerged in water.

E. The TLD records Whole Body Dose.

F. Wear TLD on the upper torso, i.e., in a shirt pocket or clipped to a shirt in that area. If the area being entered is contaminated or wet, wear the TLD inside the outer clothing. Take care not to contaminate the TLD when removing wet or contaminated clothing.

G. Inform your supervisor immediately if you lose or damage your TLD.

4.4.5 Ensure that all sections of the Attachment 1 are completed and legible.

4.4.6 Direct the emergency worker to keep a copy of the completed form(s). The originals will remain on file at the EOF until the worker's shift is over.

4.5 **READING TLDs**

4.5.1 Thermoluminescent Dosimeters (TLDs)

A TLD consists of a small piece of plastic-like crystal. Due to its intrinsic characteristics, the TLD provides a permanent record of the individual's exposure to radiation. The TLD is an accurate device providing more useful information to the reader than a direct-reading dosimeter and is the device preferred for documenting worker exposure.

A TLD cannot be read by the emergency worker; it has to be processed to determine the exposure received by the emergency worker.

A. TLDs measure beta, gamma and X-ray radiation.

B. A TLD reading can be performed only once. The act of reading the TLD eliminates further measurements and the TLD has to be processed in order to be used again.

4.5.2 At the end of each shift, the emergency worker will return to the Emergency Operations Facility (EOF) for monitoring and possible decontamination. At this time, the TLD will be collected by the Radiation Protection Technician and attached to Attachment 1 filed at the EOF.

4.5.3 Check the name and serial number against those on Attachment 2.

4.6 Check the general condition of the TLD and note any abnormalities on Attachment 1.

4.7 When the TLDs have been returned, they will be packaged and returned to the dosimetry group at JAFNPP for processing in accordance with existing dosimetry procedures and station practice.

4.8 The exposure data will be copied and sent to the EOF for use when issuing additional TLDs.

5.0 SURVEILLANCE OF DOSIMETRY EQUIPMENT

5.1 TLDs

Approximately 50 TLDs will be stored at the EOF facility, along with associated forms needed for TLD issuance. In accordance with existing dosimetry procedures, the TLDs at the EOF will remain in their current calibration sequence and will be exchanged and replaced with current calibrated TLDs.

5.2 Forms

In addition to TLDs, the Issuance Forms that are stored at the EOF will be checked before and after usage. If additional copies are needed, they will be produced at the time of surveillance.

6.0 ATTACHMENTS

1. EMERGENCY WORKER TLD/SRD ISSUANCE RECORD
2. TLD BADGE IDENTIFICATION LIST

EMERGENCY WORKER TLD/SRD ISSUANCE RECORD

Name _____

Social Security Number _____

Date of Birth: _____

Sex: _____

Affiliation: _____

Address: _____

_____

_____

TLD Number: _____

Date Issued: _____

Time Issued: _____

Date Returned: _____

Time Returned: _____

SRD Issued (circle one): YES NO SRD Range:_____

Date Issued: _____

Time Issued: _____

Beginning Reading: _____ Beginning Reading: _____

Ending Reading: _____ Ending Reading: _____

TLD BADGE IDENTIFICATION LIST Page 1 of 1

	EMERGENCY WORKER'S NAME	TLD BADGE SERIAL NUMBER
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

ENVIRONMENTAL LABORATORY USE DURING AN EMERGENCY
EAP-36
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RESPONSIBLE PROCEDURE OWNER

EFFECTIVE DATE: May 22, 2003

FIRST ISSUE ☐ FULL REVISION ☒ LIMITED REVISION ☐

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PERIODIC REVIEW DUE DATE: May 2008

REVISION SUMMARY SHEET

REV. NO.	CHANGE AND REASON FOR CHANGE
5	• Changed name on cover sheet to Entergy Nuclear Operations, Inc.
	• Updated procedure names/titles.
4	• Reformat per AP-02.01, Rev. 5.
	• Added >1 mR/hr to Section 7.1 to provide guidance and clarification of "high."
	• In Section 7.4, substituted "contaminated" for "hot" and deleted 7.4.1 "floor covering" as it is unnecessary in that facility.
	• Added 7.4.8 - step-off pads to control contamination.
	• Converted Step 7.5 to 7.5 and 7.6 and added editorial corrections.

TABLE OF CONTENTS

1.0 PURPOSE

This procedure provides a description of the capabilities and operation of the Environmental Laboratory during an emergency.

2.0 REFERENCES

2.1 Performance References

2.1.1 EAP-34, ACCEPTANCE OF ENVIRONMENTAL SAMPLES AT THE EOF DURING AN EMERGENCY

2.1.2 RT-04.02, ENVIRONMENTAL LABORATORY SAFETY PROCEDURE

2.1.3 RT-04.11, ENVIRONMENTAL LABORATORY SAMPLE RECEIPT AND STORAGE

2.2 Developmental References

2.2.1 IAP-2, CLASSIFICATION OF EMERGENCY CONDITIONS

2.2.2 EAP-34, ACCEPTANCE OF ENVIRONMENTAL SAMPLES AT THE EOF DURING AN EMERGENCY

2.2.3 RT-04.02, ENVIRONMENTAL LABORATORY SAFETY PROCEDURE

2.2.4 RT-04.11, ENVIRONMENTAL LABORATORY SAMPLE RECEIPT AND STORAGE

3.0 INITIATING EVENTS

None

4.0 PREREQUISITES

4.1 An Alert, Site Area Emergency or General Emergency has been declared in accordance with IAP-2, CLASSIFICATION OF EMERGENCY CONDITIONS, and

4.2 Environmental sampling has been requested by the TSC Radiological Support Coordinator, the EOF Radiological Support Coordinator, or designee.

5.0 **PRECAUTIONS**

5.1 Environmental samples collected during a radiological emergency may contain radioactivity and should be handled with care to insure that the sample contents do not spill or leak from the containers. Care should also be taken when receiving or handling samples to prevent cross-contamination. (Refer to RT-04.02, ENVIRONMENTAL LABORATORY SAFETY PROCEDURE, for specific guidelines.)

5.2 The risks of cross-contamination of environmental samples can be reduced by insuring that extra, clean supplies (i.e. Marinelli flasks, counting vessels, etc.) are on hand.

5.3 Accumulation of prepared samples in the counting room or in close proximity to counting equipment should be avoided in order to maintain a stable background for counting samples. (Refer to RT-04.11, ENVIRONMENTAL LABORATORY SAMPLE RECEIPT AND STORAGE, for specific guidelines.)

6.0 **CAPABILITIES**

The Environmental Laboratory has the capability of handling, storing, preparing and analyzing environmental samples received during a radiological emergency.

7.0 **PROCEDURE**

7.1 All emergency environmental samples will be surveyed and logged on receipt as per procedure EAP-34, ACCEPTANCE OF ENVIRONMENTAL SAMPLES AT THE EOF DURING AN EMERGENCY. Samples showing unexpectedly high radiation measurements (>1 mR/hr) will be isolated from the other samples and placed in a designated area for "hot" samples.

7.2 Preparation and analyses of emergency environmental samples should be performed in sequence of increasing radioactivity as an effort to avoid contamination of the laboratory or equipment with radioactive material from heavily contaminated samples. However, this routine may be altered by a directive from the TSC Radiological Support Coordinator, the EOF Radiological Support Coordinator or designee if the analyses of emergency environmental samples have been prioritized.

7.3 The preparation and analyses of emergency environmental samples will take priority over the preparation and analyses of routine environmental samples.

7.4 Prior to the preparation of contaminated emergency environmental samples, the following steps should be taken:

7.4.1 cover counter tops,

7.4.2 place absorbent material on counters,

7.4.3 line bottom of fume hood if it is to be used,

7.4.4 place absorbent material in fume hood,

7.4.5 don protective clothing as determined necessary by supervising personnel,

7.4.6 place receptacle for radioactive waste in appropriate position, and

7.4.7 place receptacle for used protective clothing in an appropriate position.

7.4.8 Consider the use of step-off pads to control spread of contamination.

7.5 Preparation and analyses of emergency environmental samples should be performed in accordance with the appropriate Environmental Laboratory procedure.

7.6 Forward results to the TSC or EOF Radiological Support Coordinator.

7.7 If the number of emergency environmental samples is such that the capability of the Environmental Laboratory is exceeded, supervising personnel will initiate calls for assistance to those laboratories listed in Appendix C of the JAF Emergency Plan.

8.0 **ATTACHMENTS**

NONE

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

OBTAINING METEOROLOGICAL DATA
EAP-42
REVISION 19

APPROVED BY: _____ DATE: 5/16/03
RESPONSIBLE PROCEDURE OWNER

EFFECTIVE DATE: May 19, 2003

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PERIODIC REVIEW DUE DATE: May 2008

REVISION SUMMARY SHEET

REV. NO.

19
- Updated phone numbers for pages
- Added Sigma Theta and Delta to Attachment 6

18
- In section 1.0, 4.3.2 and attachment 3 added Security Alarm Station.
- In attachment 3 number 5 - added "or EOF" to the direct connect to Met Data.
- In section 4.2.2.D added SAS to the menu and added "direct connect OR" to the EOF.

17
- In section 4.4.1, 4.4.5, 4.4.6.A, 4.4.7 & 8.A-D updated the channels with numbers rather than letters.
- Replaced attachments 4, 5 and 7 with updated pictures.
- Made Attachment 7 posted attachment A.
- Added note in section 4.4.7 to make user aware that they may use posted attachment A for notification requirements.

16
- Deleted the words Niagara Mohawk due to their company change.
- In section 4.4.2 - updated the information to check when attempting to obtain data from the strip chart recorders and deleted the section following 4.4.3.
- Added Attachment 7 that shows atmospheric stability.

15
- Added NIMO Mete contact information to sections 4.6.1 and 4.5.3.
- An adjustment was made to the cover sheet to reflect the company name change.

14
- Added the TSC as an alternate location for performing forecasting of mete data.
- In section 4.2.2., deleted step G, and changed its test to a NOTE prior to step 4.2.B.

13
- On Attachment 1, in the EDAMS box, changed "F4" for requery to select "Requery" with the mouse. Also in same box deleted If "locked up" or stalled, Attachment 3 for recovery.

12
- Section 4.2 is changed to incorporate the new windows design of EDAMS and the method to obtain Met data.
- Original Attachment 3 was deleted, this attachment is no longer needed with the windows version. It is being replaced with a new Attachment 3 titled "Guide For Using EDAMS Computer To Obtain Meteorology Data".

TABLE OF CONTENTS

1.0 PURPOSE

This procedure provides instructions for accessing meteorological data in the Control Room, Technical Support Center, Emergency Operations Facility or Secondary Alarm Station and includes provisions for long-term forecasting.

2.0 REFERENCES

None

2.1 Developmental References

2.1.1 EAP-4, DOSE ASSESSMENT CALCULATIONS

2.1.2 Emergency Dose Assessment Model System (EDAMS) System Design Specification

3.0 INITIATING EVENTS

3.1.1 An emergency has been declared in accordance with IAP-2, CLASSIFICATION OF EMERGENCY Conditions, **or**

3.1.2 EAP-4, DOSE ASSESSMENT CALCULATIONS, has been implemented.

4.0 PROCEDURE

4.1 Description of Available Methods

Meteorological data is available from the following sources:

A. Emergency Dose Assessment Modeling System (EDAMS)

B. Nine Mile Point Units 1 or 2 Control Rooms

C. Analog strip charts in Control Room or Technical Support Center

D. Any JAF Networked PC

E. National Weather Service

The general methodology involved would concern providing meteorological data dependent on type of release. An elevated release (stack) would utilize 200' level data; and if unavailable, would progress in decreasing order to 100', 30' and backup tower data (90'). Likewise, a ground release (any other than stack) would utilize 30' level data, and if unavailable, would progress in increasing order to 100', 200' and backup tower data (90').

This list does not delineate a required order of priority but provides a listing of resources based on accessibility timeliness and accuracy of 15 minute averaged data.

NOTE: Flowchart (Attachment 1) is provided as a quick reference and may be utilized by the operator familiar with the body of this procedure.

It is optional to record met data on Attachment 2, Obtaining Meteorological Data for Manual Computer Input; this may provide some convenience.

4.2 Obtaining Meteorological Data from EDAMS

4.2.1 If the EDAMS computer is on-line:

A. The computer will automatically requery the met system and update the data every 15 minutes on the quarter hour (eg. 1300, 1315, 1330, etc.). A beep may be heard when the update occurs.

B. When recording data, the operator should confirm the time and date displayed are the most current (ie. within the last 15 minutes of the current time).

C. The operator may select "Requery" to ensure the most current data is displayed.

4.2.2 If EDAMS is **NOT** on-line, log onto the system as follows:

NOTE: Attachment 3 may be used to guide the operator through the steps to activate the EDAMS computer and obtain meteorological data.

A. Ensure black switch on CR or TSC meteorological panels is positioned to the Niagara Mohawk ("B") position.

NOTE: Select "Continue" at the plant picture screen.

B. Energize the EDAMS computer power strip to provide power to the computer, monitor and printer.

C. Select the "Login" icon from the EDAMS icons and select "Continue" at the plant picture screen.

D. Select the appropriate menu item based on your location as follows:

Location:	Menu Choice
CR	Direct Connect to Met Data
TSC	Direct Connect to Met Data
EOF	Direct Connect **OR** Automatic Dial-in to Met Data
SAS	Automatic Dial-in to Met Data
SIMULATOR	Automatic Dial-in to Met Data

E. When the login routine finishes, close the login screen by selecting "OK".

F. From the EDAMS icons, select "Emergency Met Report".

G. Select "James A. FitzPatrick" and "Both" for unit and release height, then select "OK". The emergency meteorology data will be displayed.

H. Ensure that "Continuous Requery?" is enabled.

I. The computer will automatically requery the met system and update the data every 15 minutes on the quarter hour (eg. 1300, 1315, 1330, etc.). A beep may be heard when the update occurs.

4.3 Obtaining Meteorological Data from Nine Mile

4.3.1 From the Control Room, use the direct line phone to Unit 1 or 2 Control Room and request latest 15 minute averaged data.

4.3.2 If for some reason direct line unavailable, from TSC EOF or SAS, use a commercial phone with one of the following numbers:

A. NMP1: 349-2841, 349-2842 or 349-2843

B. NMP2: 349-2168, 349-2169 or 349-2170

4.4 Obtaining Meteorological Data from Analog Strip Charts

4.4.1 Description of analog strip charts and information available.

There are four (4) analog strip chart recorders available in the Control room and TSC to provide meteorological data.

Each of the three recorders (D, G, J) have two channels (1 and 2) to provide wind speed and direction.

Channel 1=wind speed in mph (0-100 mph) traced on left

Channel 2 = wind direction in degrees(arc) (540° range) traced on right

Recorders used for wind speed and direction	
D	Main Tower 200' level
G	JAF Backup Tower 90' level
J	Main Tower 30' or 100' level (selector switch provided)

Recorder K is provided for stability class determination.

Recorder K has the following four traces:	
1	Provides temperature in °F at 30' level
2	Provides ΔT in °F from 30' to 100' level
3	Provides ΔT in °F from 30' to 200' level
4	Selectable sigma theta (wind direction variation)

Trace 4 has four selectable channels to trace for:	
A	High main tower (200')
B	Mid main tower (100')
C	Low main tower (30')
D	Backup tower (90')

4.4.2 Before attempting to obtain data from any of the strip chart recorders, ensure they are functioning by verifying the date and time on the display is correct. The strip chart runs at 1"/hr. Time indicated is Eastern Standard Time.

4.4.3 When manually retrieving meteorological data, primary concern is given to wind speed and direction, and to the stability class at particular elevations, dependent on the type of release.

4.4.4 In order to properly estimate the last 15 minutes on the strip chart, measure the last 1/4" of data for each parameter, if not readily visible, and/or the chart has not already been advanced, do so in order to average the last 15 minutes of data properly. Obtain a minimum of 4 data points within that 1/4" of chart and average.

4.4.5 Meteorological data for a Ground or both a Ground and Elevated release are to be determined as follows:

A. There are 3 recorders, which record wind speed and direction (Recorders D, G, and J). For each chart, wind speed (the left trace) is labeled Channel 1 and is in MPH (the range is 0 to 100 MPH and spans the left side of the chart) and wind direction (the right trace) is labeled Channel 2 and is in degrees arc (the range is 0 to 540 degrees and spans the right side of the chart). Consult Attachment 4.

To obtain wind direction and speed for a ground or ground and elevated release, you must first determine whether the Recorder "J" toggle switch is set for 30 or 100 foot (Main Tower). If it is set for 30 foot (Main), average the wind speed and direction as per step 4.4.5.

If the Recorder "J" toggle switch is set for 100 foot (Main Tower) and/or there is no 30 foot data, adhere to the following hierarchy of substeps:

1. Average the wind speed and direction as per step 4.4.5 for Recorder "G", which is meteorological data for the JAF Back-up Tower 90 foot level.

2. If Recorder "G" is inoperable average the wind speed and direction as per step 4.4.5 for Recorder "D", which is meteorological data for the Main Tower 200 foot level.

3. If both Recorder "G & D" are inoperable average the wind speed and direction as per step 4.4.5 for Recorder "J" which is meteorological data for either the 30 or 100 foot Main Tower levels, as determined by the toggle switch position.

4. If NO strip chart wind speed and direction data is available, proceed to section 4.5 after completing 4.4.8.

4.4.6 Meteorological data for an elevated release is to be determined as follows:

A. There are 3 recorders, which record wind speed and direction (Recorders D, G and J). For each chart, wind speed (the left trace) is in MPH (the range is 0 to 100 MPH, and spans the left side of the chart) and wind direction (the right trace) is in degrees arc (the range is 0 to 540 degrees and spans the right side of the chart). Consult Attachment 4.

To obtain wind speed and direction for an elevated release, adhere to the following substeps:

1. Average the wind speed and direction as per step 4.4.5 for Recorder "D", which is meteorological data for the Main Tower 200 foot level.

2. If Recorder "D" is inoperable average the wind speed and direction as per step 4.4.5 for Recorde "G", which is meteorological data for the JAF Back-up Tower 90 foot level.

3. If both Recorder "D & G" are inoperable average the wind speed and direction as per step 4.4.5 for Recorder "J" which is meteorological data for either the 30 or 100 foot Main Tower levels, as determined by the toggle switch position.

4. If NO strip chart wind speed and direction data is available, proceed to section 4.5 after completing 4.4.8.

4.4.7 To determine stability class for either a ground or elevated release, you must utilize Recorder "K" information, which contains 4 channels that span the full chart:

NOTE: Prior to declaring the TSC Operational, POSTED ATTACHMENT A, EXAMPLES OF ATMOSPHERIC STABILITY may be used in the Control Room and/or TSC to provide quick stability class estimation to meet offsite agency notification requirements.

A. Trace labeled "1" provides ambient temperature, on a 40 to +110 scale and indicates the current temperatu in degrees F at the Main Tower 30 foot level.

B. Trace "2" provides temperature difference (delta T) between the 30 and 100 foot level on the Main Tower, and is on the -8 to +20 scale in degrees F.

C. Trace "3" provides temperature difference between the 30 and 200 foot level on the Main Tower, and is on the same -8 to +20 scale in degrees F.

D. Trace "4" provides sigma theta (wind direction variation), on a scale of 0 to 30 degrees, at a level dependant on the switch position on the front of the TIGRAPH recording panel:

Switch Position	Level	Tower
A	200 ft.	Main (Primary)
B	100 ft.	Main (Primary)
C	30 ft.	Main (Primary)
D	90 ft.	JAF (Back-up)
Consult Attachment 5.		

4.4.8 To derive stability class for either a ground or elevated release, or both, utilize Attachment 4 and adhere to the following hierarchy of substeps:

A. Average the trace "4" (sigma theta) on Recorder "K", utilizing the 0 to 30 scale, as per step 4.4.5, noting the switch position, and consulting Attachment 6 to determine letter stability class.

NOTE: If data is invalid, you may want to switch another switch position to get the most representative data (for the next 15 minute average). For example, for an elevated release you should utilize switch position A, then B, D and finally C, and for a ground release, the progression is C, B, D and then A.

B. If Trace "4" is unavailable, average the Trace "3" (temperature difference 30 - 200 foot) on Recorder "K", utilizing the -8 to +20 degree F scale as per step 4.4.5 and consulting Attachment 6 to determine letter stability class.

C. If Traces "4" and "3" are unavailable, average the Trace "2" (temperature difference 30 - 100 foot) on Recorder "K", utilizing the -8 to +20 degree F scale as per step 4.4.5 and consulting Attachment 6 to determine letter stability class.

D. If Traces "4","3", and "2"" are unavailable, estimate stability by comparing wind direction and speed traces to the samples posted on the side of the TIGRAPH 200 housing and/or utilizing the "Atmospheric Stability Characterization" table on Attachment 6.

E. If All Recorders are unavailable for meteorological data, proceed to section 4.5.

4.5 Obtaining Meteorological Information From Other Sources

4.5.1 If meteorological data is not obtained via the primary method (digital) or secondary method (analog strip charts) information on local wind speed and direction, and stability class can be obtained through other sources.

4.5.2 Meteorological data is also available from any JAF networked PC.

4.5.3 Nine Mile Meteorological Data

A. Telephone the Nine Mile Point Nuclear Station #1 Control Room via the "hot line" or dial phone, and request pertinent meteorological data needed.

B. In addition, supplemental information may be obtained through Nine Mile via their Meteorological Building. Contact one of the following people for assistance:

Tom Galetta - 349-2715 (Office) *Pager # 1193
Joe Blakeley - 349-1179 (Office) *Pager # 1040

* To access the Constellation pager, call 1-877-472-7874.

4.5.4 National Weather Service Meteorological Data

Data may be obtained via telephone on 716-565-0014. Indicate what meteorological data is needed and note the source of the information.

4.5.5 Stability Estimation

Consult Attachment 6 and estimate stability class via a characterization of the local meteorological conditions.

4.6 Meteorological Forecasting

Meteorological forecasting capabilities during an emergency at JAF will be handled from the EOF (primary) or TSC (alternate) by assigned personnel using the Internet or an on-line service.

4.6.1 For assistance in forecasting, contact one of the following people:

Tom Galetta - 349-2715 (Office) *Pager # 1193
Joe Blakeley - 349-1179 (Office) *Pager # 1040

* To access the Constellation pager call 1-877-472-7874

4.6.2 Assigned personnel will establish a connection with the Internet or on-line service to become familiar with the current and forecast weather situation.

4.6.3 Assigned personnel will provide JAF Dose Assessment Group a weather forecast.

4.6.4 Provide weather condition and forecast updates until the event requiring support is formally terminated. The frequency of updates will be based upon factors such as the variability of weather conditions and the needs of JAF emergency personnel.

5.0 ATTACHMENTS

1. MET DATA ACQUISITION QUICK REFERENCE FLOWCHART
2. OBTAINING METEOROLOGICAL DATA FOR MANUAL COMPUTER INPUT
3. GUIDE FOR USING EDAMS COMPUTER TO OBTAIN METEOROLOGY DATA
4. ANALOG WIND SPEED AND DIRECTION, RECORDERS D, G AND J
5. RECORDER "K"
6. CLASSIFICATION OF ATMOSPHERIC STABILITY

A. POSTED ATTACHMENT A - EXAMPLES OF ATMOSPHERIC STABILITY

ATTACHMENT 1

MET DATA ACQUISITION QUICK REFERENCE FLOWCHART

EDAMS	
• Select "Requery" with the mouse.	

Nine Mile	
• Direct phone line to Unit 1 or 2 Control Room	Unit 1 CR: 349-2841 349-2842 349-2843
• Commercial phone	Unit 2 CR: 349-2168 349-2169 349-2170

Analog Strip Charts

Any JAF Networked PC

Other Resources
• Nine Mile Meteorological Building
• National Weather Service (716-565-0014)

OBTAINING METEOROLOGICAL DATA FOR MANUAL COMPUTER INPUT

Date: _____ Time: _____

Release Type: _____

Meteorology

Wind Speed: _____ MPH @ _____ ft. level on _____ Tower

Other (Specify) _____

Wind Direction: _____ deg. @ _____ ft level on _____ Tower

Other (Specify) _____

Stability Class: _____ (A - G)

Method: _____ (Sigma Theta - wind variation)

_____ (Temp. Difference - 30 - 200 ft)

_____ (Temp. Difference - 30 - 100 ft)

_____ Estimation

Other (Specify) _____

Additional information _____

_____

_____

_____

_____

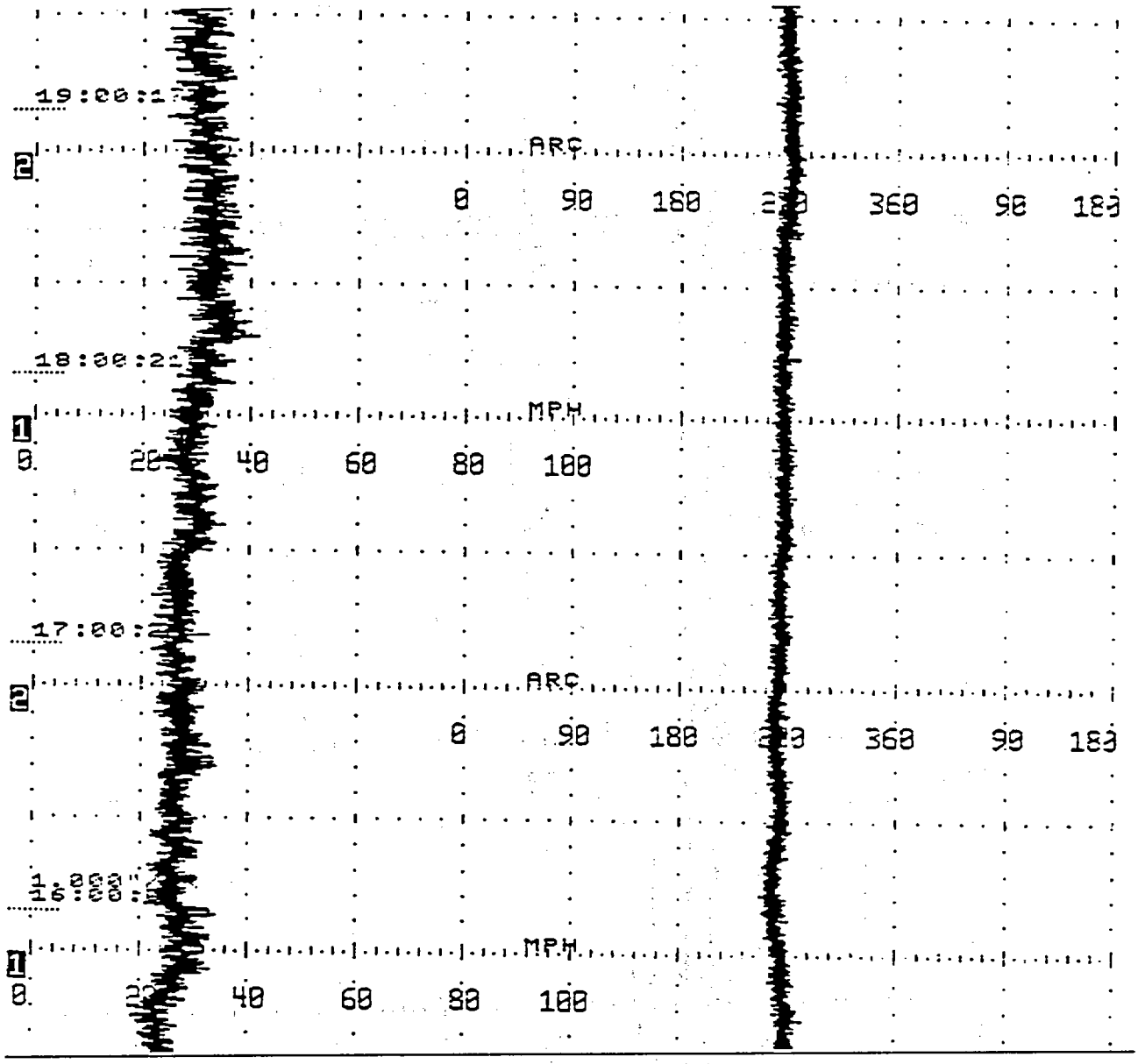
_____

_____

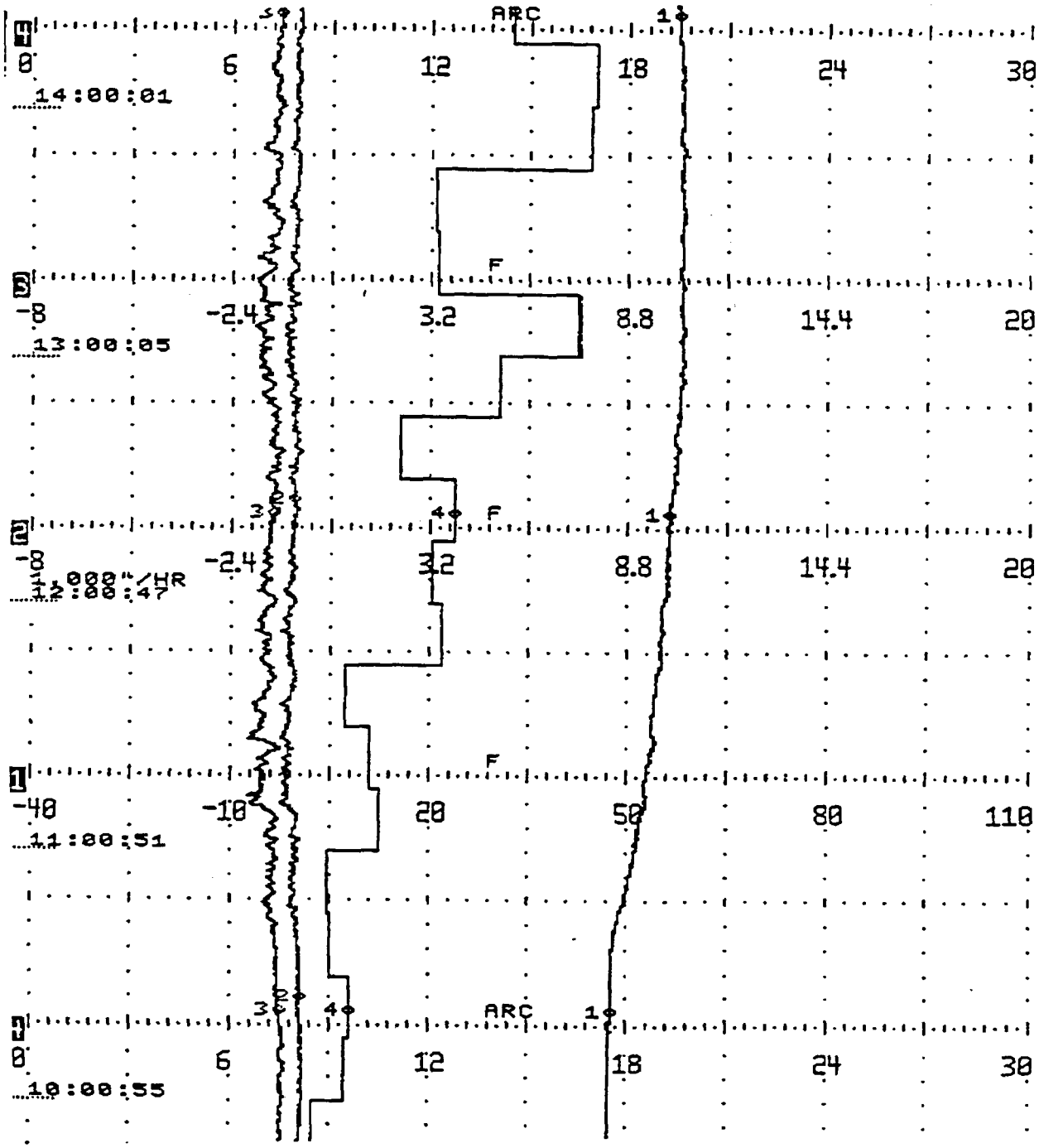
ATTACHMENT 3
GUIDE FOR USING EDAMS COMPUTER TO
OBTAIN METEOROLOGY DATA

1. If in the CR or TSC, then ensure black switch on met panels is set to Niagara Mohawk "B" position.
2. Ensure power to computer, monitor, and printer.
3. Select the "Login" icon from the EDAMS icons.
4. Select "Continue" at the plant picture screen.
5. For the CR, TSC or EOF select "Direct Connect to Met Data". For SAS or simulator, select "Automatic Dial-in to Met Data".
6. When prompted, following login, select "Ok".
7. From the EDAMS icons select "Emergency Met Report".
8. Select "Continue" at the plant picture screen.
9. Select "James A. FitzPatrick" and "Both", then select "Ok".
10. If a stack release is occurring, or projected, then utilize Elevated data.
11. If a release from any source other than the stack is occurring, or projected, then utilize Ground data.
12. If no release is occurring, or projected, then utilize Elevated data.
13. If no data is available from the EDAMS computer, then utilize EAP-42 to obtain meteorological data from other sources.

ATTACHMENT 4
ANALOG WIND SPEED AND DIRECTION
RECORDERS D, G AND J



ATTACHMENT 5
RECORDER "K"



ATTACHMENT 6 Page 1 of 1

CLASSIFICATION OF ATMOSPHERIC STABILITY

CLASSIFICATION OF ATMOSPHERIC STABILITY BY THE VERTICAL TEMPERATURE DIFFERENCE AND BY THE STANDARD DEVIATION OF THE HORIZONTAL WIND DIRECTION TYPING SCHEMES

STABILITY CLASSIFICATION	PASQUILL CATEGORIES	Temperature Change with height °c/100m*	Sigma Theta °θ degrees	°θ degrees Median Value
Extremely unstable	A	$\Delta T/\Delta Z \leq -1.9$	$\sigma\theta \geq 22.5$	25.0
Moderately unstable	B	$-1.9 < \Delta T/\Delta Z \leq -1.7$	$22.5 > \sigma\theta \geq 17.5$	20.0
Slightly unstable	C	$-1.7 < \Delta T/\Delta Z \leq -1.5$	$17.5 > \sigma\theta \geq 12.5$	15.0
Neutral	D	$-1.5 < \Delta T/\Delta Z \leq -0.5$	$12.5 > \sigma\theta \geq 7.5$	10.0
Slightly stable	E	$-0.5 < \Delta T/\Delta Z \leq 1.5$	$7.5 > \sigma\theta \geq 3.8$	5.0
Moderately stable	F	$1.5 < \Delta T/\Delta Z \leq 4.0$	$3.8 > \sigma\theta \geq 2.1$	2.5
Extremely stable	G	$4.0 < \Delta T/\Delta Z$	$2.1 > \sigma\theta$	1.7

STABILITY CLASSIFICATION	PASQUILL CATEGORIES	Delta T 100' Temperature Change with height °F/70 Feet**	Delta T 100' Temperature Change with height °F/170 Feet †
Extremely unstable	A	$\Delta T/\Delta Z \leq -0.73$	$\Delta T/\Delta Z \leq -1.77$
Moderately unstable	B	$-0.73 < \Delta T/\Delta Z \leq -0.65$	$-1.77 < \Delta T/\Delta Z \leq -1.59$
Slightly unstable	C	$-0.65 < \Delta T/\Delta Z \leq -0.58$	$-1.59 < \Delta T/\Delta Z \leq -1.40$
Neutral	D	$-0.58 < \Delta T/\Delta Z \leq -0.19$	$-1.40 < \Delta T/\Delta Z \leq -0.47$
Slightly stable	E	$-0.19 < \Delta T/\Delta Z \leq 0.58$	$-0.47 < \Delta T/\Delta Z \leq 1.40$
Moderately stable	F	$0.58 < \Delta T/\Delta Z \leq 1.53$	$1.40 < \Delta T/\Delta Z \leq 3.73$
Extremely stable	G	$1.53 < \Delta T/\Delta Z$	$3.73 < \Delta T/\Delta Z$

ATMOSPHERIC STABILITY	CHARACTERIZATION
A	MID-AFTERNOON ONLY, WITH CLEAR SKIES OR SKIES WITH VERY FEW THIN CLOUDS; LATE SPRING TO EARLY FALL, WINDS USUALLY ARE BELOW 6 MILES PER HOUR.
B	LATE MORNING TO MID-AFTERNOON ONLY, WITH CLEAR OR PARTLY CLOUDY SKIES; MID-SPRING TO MID-FALL, WINDS ARE USUALLY BELOW 9 MILES PER HOUR.
C	LATE MORNING TO LATE AFTERNOON ONLY, WITH PARTLY CLOUDY SKIES; SPRING THROUGH FALL, WINDS ARE USUALLY BELOW 11 MILES PER HOUR.
D	ALL DAYTIME, WITH OVERCAST OR PARTLY CLOUDY SKIES OR EARLY MORNING AND LATE AFTERNOON WITH CLEAR OR PARTLY CLOUDY SKIES, ALL NIGHT TIME WITH OVERCAST SKIES OR PARTLY CLOUDY, YEAR AROUND, WINDS ARE MODERATE TO HIGH (GREATER THAN 6 MILES PER HOUR).
E	NIGHT TIME ONLY, WITH THIN OVERCAST OR PARTLY CLOUDY SKIES ALL YEAR AROUND, WINDS LESS THAN 10 MILES PER HOUR.
F	NIGHT TIME ONLY, WITH CLEAR TO PARTLY CLOUDY SKIES, ALL YEAR AROUND, WINDS LESS THAN 7 MILES PER HOUR.
G	NIGHT TIME ONLY, WITH CLEAR SKIES OR VERY FEW THIN CLOUDS, ALL YEAR AROUND, WINDS LESS THAN 5 MILES PER HOUR.

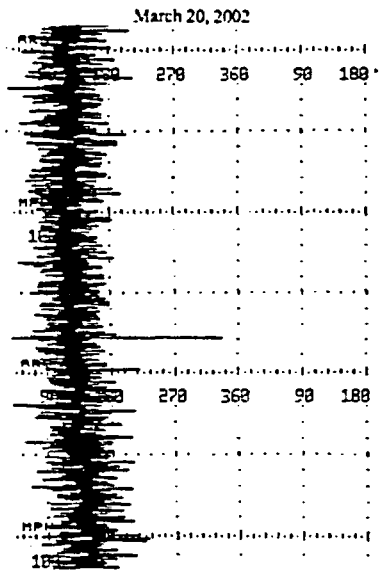
* PER NRC REGULATORY GUIDE 1.123

** ADJUSTED TO CORRESPOND TO THE ΔT MEASURED BETWEEN THE 30-FOOT AND 100-FOOT LEVELS.

† ADJUSTED TO CORRESPOND TO THE ΔT MEASURED BETWEEN THE 30-FOOT AND 200-FOOT LEVELS.

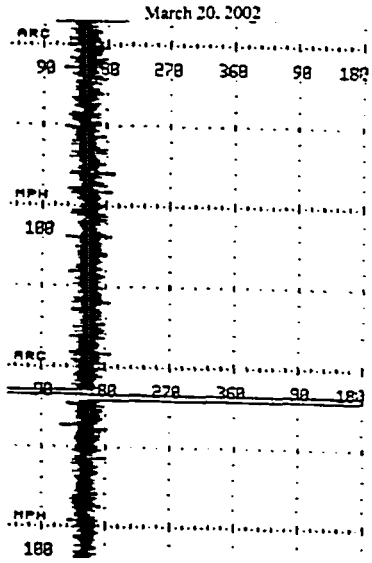
PASQUILL: A
VERY UNSTABLE

BROOKHAVEN CLASS 1



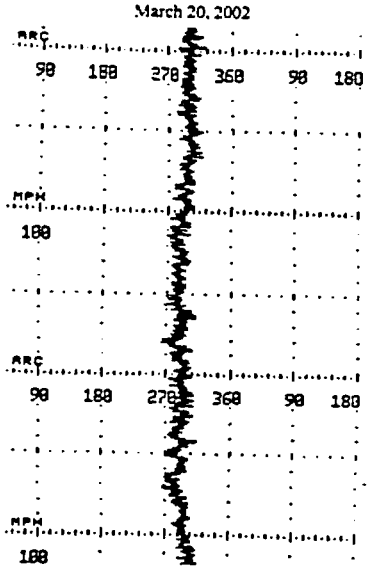
PASQUILL: B,C
UNSTABLE

BROOKHAVEN CLASS 2



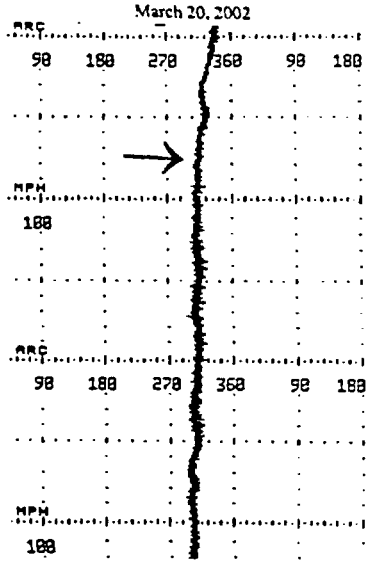
PASQUILL: D,E
NEUTRAL

BROOKHAVEN CLASS 3



PASQUILL: F, G
STABLE

BROOKHAVEN CLASS 4



NOTE:
Recorders D, G, J:
Wind speed increments----(trace 1, left side) Each dot (·) = 2 units, Each vertical line (|)= 4 units
Wind direction increment-(trace 2, right side) Each dot (·) = 9 units, Each vertical line (|)= 18 units

Recorder K:
Air temperature increment-(trace 1) Each dot (·) = 1.5 units, Each vertical line (|) = 3 units
Delta T increment---(Trace 2 and 3) Each dot (·) = 0.28 units, Each vertical line (|) = 0.56 units
Sigma Theta $^{\delta}\theta$ increment---(Trace 4)Each dot (·) = 0.3 units, Each vertical line(|) = 0.6 units

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

OSWEGO COUNTY EMERGENCY PREPAREDNESS PHOTO IDENTIFICATION CARD SAP-4 REVISION 10

APPROVED BY: _____ DATE: 5/4/03
RESPONSIBLE PROCEDURE OWNER

EFFECTIVE DATE: May 22, 2003

FIRST ISSUE ☐ FULL REVISION ☐ LIMITED REVISION ☒

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PERIODIC REVIEW DUE DATE: June 2007

REVISION SUMMARY SHEET

REV. NO.

10
- Changed the title.
- Deleted NYS ID cards.
- Changed Emergency Planning Coordinator to Emergency Planning Manager.

9
- Changed Power Authority title to Entergy throughout entire procedure due to company name change.
- In section 4.1 changed Form SAP-4.1 to Attachment 1.
- Deleted attachment 3 - ID System Control Cards and reference to it (section 4.2).

8
- Updated the Oswego County Emergency Management Office photo ID card,
- Added Drill and Walkthrough dates to attachment 1.

7
- Section 4.1 deleted sentence stating that Personnel Dept. will collect the ID cards and will forward them to the E-Plan Coord.
- Section 4.4 deleted sentence stating forms for original card will be returned to the E-Plan Dept.

6
- Editorial corrections in section 4.2. 6 Reformat per AP-02.01, Rev. 5.
- Editorial corrections to the following sections: 4.1, 4.2 and 5.0.

TABLE OF CONTENTS

1.0 PURPOSE

This procedure describes the process to be followed for the issuance and control of Oswego County Emergency Preparedness Photo Identification Cards. The identification cards are to be used to provide a means of identification for Entergy personnel and vendors who may be called upon to cross police or military barriers during an emergency at the JAFNPP.

2.0 REFERENCES

None

3.0 INITIATING EVENTS

None

4.0 PROCEDURE

4.1 Authorization and Control of ID Cards

ID cards will be issued after the completion of Attachment 1, Authorization for Issuance of the Oswego County Emergency Preparedness Photo Identification Card. Forms require the signature of a Training Department representative and the Emergency Planning Manager or designee before cards can be issued. The completed Attachment 1 will be maintained by the Security Department.

4.2 Issuance of Identification Cards

Identification cards, as illustrated on Attachment 2, will be issued by the Security Department. Photographs will be taken, and cards produced upon security receiving Attachment 1.

4.3 Display of Identification Cards

Cards are issued to Emergency Team Members to allow emergency access through Military and/or Police Control Points throughout Oswego County during an emergency at the JAFNPP. Cards should be used only for this purpose.

4.4 **Replacement of Identification Cards**

If a photo identification card is lost or becomes unusable through damage or contamination, a replacement photo identification card shall be issued following the same procedure listed above.

5.0 **ATTACHMENTS**

1. AUTHORIZATION FOR ISSUANCE OF THE OSWEGO COUNTY EMERGENCY PREPAREDNESS PHOTO IDENTIFICATION CARD

2. OSWEGO COUNTY PHOTO IDENTIFICATION CARD

AUTHORIZATION FOR ISSUANCE OF THE OSWEGO COUNTY EMERGENCY PREPAREDNESS PHOTO IDENTIFICATION CARD

Authorization Request for

_____ _____
NAME SOCIAL SECURITY NO.

_____ _____
Date of Issuance Identification # from Card

_____
Expiration Date

The above designated individual has completed all pertinent Emergency Plan Training, and I request that an Identification Card be issued for his/her use.

_____ _____
Training Dept. Representative Date Training Received

_____ _____
Training Dept. Representative Date of Last Drill

_____ _____
Training Dept. Representative Date of Walkthrough

The above individual is authorized to receive an Identification Card.

_____ _____
Emergency Planning Manager Date

This form will be retained by the Security Department. A copy will be forwarded to the Training Manager.

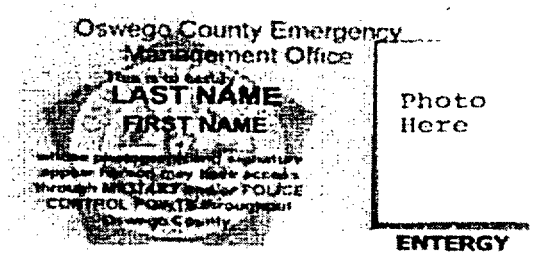
_____
Date of Card Returned

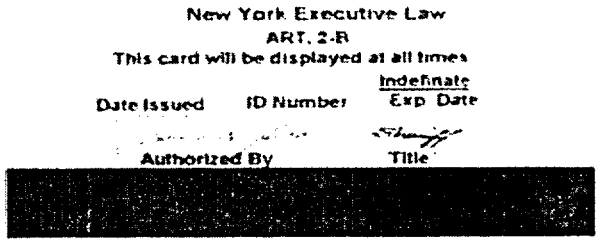
ATTACHMENT 2

OSWEGO COUNTY PHOTO IDENTIFICATION CARD

(Sample)

AUTHORIZED ACCESS CONTROL IDENTIFICATION CARD (Example)





Black on Light Green

ENTERGY NUCLEAR OPERATIONS, INC.
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EMERGENCY PLANNING PROGRAM SELF ASSESSMENT
SAP-22
REVISION 2

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☐ INFORMATIONAL USE	☐ TSR
☐ ADMINISTRATIVE	CONTROLLED COPY # 34

PERIODIC REVIEW DUE DATE: May 2008

REVISION SUMMARY SHEET

REV. NO.

2
- Added criteria for senior management participation in critique process.
- Changed NYPA to Entergy.
- Updated References.
- Changed Emergency Planning Coordinator to Emergency Planning Manager.

1
- Added the word Example to 5.1 Performance Measures and Criteria.
- Changed formatting in section 5.2.1, so staff complies with AP-03.07
-

0
- New procedure to perform the following:
- To provide a methodology for conducting periodic Emergency Planning self assessment.

TABLE OF CONTENTS

1.0 **PURPOSE**

To provide direction for performing Emergency Planning self assessment. This document provides attributes of an effective Emergency Planning program. It also provides objective criteria to consider when conducting EP self assessments using a "questioning" format.

2.0 **REFERENCES**

2.1 ENN-LI-104 Self-Assessment and Benchmark Process.

3.0 **INITIATING EVENTS**

None

4.0 **SPECIAL INSTRUCTIONS**

The following documents may also be utilized for guidance in the performance of self assessment.

4.1 INPO 85-014, Generic Guidance for Emergency Preparedness Program Review.

4.2 NRC Inspection Modules.

4.3 NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.

5.0 **PROCEDURE**

5.1 **Performance Measures and Criteria Examples**

5.1.1 The Emergency Response Organization can provide a quality response to actual plant events and drill/ exercise scenarios.

Criteria:

A. Were plant events correctly diagnosed?

B. Were timely offsite notifications performed?

C. Were Emergency Response Facilities staffed in a timely manner?

D. Were correct recommendations made to offsite agencies?

E. Were plant repair and radiological field teams rapidly deployed?

F. Was all needed information available from logs and records?

G. Is industry experience used in resolution of problems?

H. Are causes of plant events correctly identified to prevent recurrence?

5.1.2 Senior management is supportive and involved in EP activities.

Criteria:

A. Are management expectations clearly communicated to Emergency Response Organization members?

B. Are personnel held accountable for emergency preparedness activities?

C. Do senior staff and managers participate in drills on a periodic basis?

D. Is senior plant staff kept current on the status of EP program activities?

E. Do senior staff managers attend EP, QA and NRC entrance and exit meetings?

F. Do senior staff members attend required EP training without last minute cancellations or causing special classes to be offered?

G. Do senior staff and managers participate in the drill critique process?

5.1.3 Plant departments are involved in, and display strong support for, the EP program.

Criteria:

A. Do plant departments suggest topics or continuing training needs for their ERO members?

B. Do managers participate in drills/exercises?

C. Do plant personnel exhibit a positive attitude toward drills and exercises (good drillsmanship)?

D. Are plant departments willing to participate in scenario development?

5.1.4 EP training develops and maintains the knowledge and skills necessary for ERO personnel to effectively respond to an emergency.

Criteria:

A. Is EP training an ongoing function and not limited to preparing for observed exercises?

B. Are only trained and qualified personnel assigned to the ERO? Is training tracked?

C. Is training integrated into the drill/exercise corrective action/improvement program?

D. Is training feedback effectively used to improve the EP program?

5.1.5 A strong state and local interface builds and maintains trust in JAF's capability to effectively operate the plant and emphasizes Entergy's concern for the protection of the general public.

Criteria:

A. Is there an atmosphere of trust and cooperation between key plant staff and offsite officials?

B. Are there an excessive number of unresolved offsite issues?

C. Are there any 10CFR50.54(t) review offsite issues? Is this number excessive?

D. Are significant offsite issues resolved using formal methods of communication/correspondence?

E. Are State and local agencies involved in media training? Is the media responsive to this method?

5.1.6 EP open items are effectively resolved.

Criteria:

A. Is there a procedure for the generation and resolution of open items?

B. Are requests for extensions of due dates processed in accordance with procedures?

C. Are methods in place to track and resolve:

1. significant issues (NRC, QA, FEMA findings)

2. areas for improvement

3. significant recurring issues?

5.1.7 A strong ongoing improvement program is being maintained.

Criteria:

A. Are NRC, QA and FEMA inspections/audits given appropriate attention?

B. Is EP integrated into the JAF Business Plan?

C. Are "lessons learned" developed and distributed to appropriate personnel?

D. Is feedback from internal and external sources factored back into the program?

E. Is the resolution of open items formally assigned to staff members?

5.1.8 Emergency facility and equipment adequately support emergency response operations.

Criteria:

A. Is a scheduled periodic review of ERFs performed to ensure operational readiness?

B. Is verification of equipment operability during drills or actual events documented and resolved?

C. Is surveillance/maintenance of emergency equipment given to departments normally responsible for similar equipment?

5.1.9 Administrative procedures are in effect for handling administrative details associated with the routine maintenance of the program.

Criteria:

A. Have feedback comments, received from training or other activities regarding the need to change the procedures, been incorporated into the plan or procedures?

B. Are actual event reports, surveillances, corrective actions and drill reports processed in accordance with procedures?

5.2 **Format and Special Information**

5.2.1 Assessments will be conducted in accordance with ENN-LI-104, Self Assessment and Benchmark Process.

5.2.2 The self assessment shall be performed by the Emergency Planning Manager or an individual(s) assigned.

5.2.3 The performance measure(s) should be benchmarked with another utility, that has been recognized for excellence in the designated area.

6.0 **ATTACHMENTS**

None