123 Main Street
White Plains, New York 10601
914 681 6200

J. Phillip Bayne
Executive Vice President
Nuclear Generation

May 31, 1984
JPN-84-32

Dr. Thomas E. Murley, Regional Administrator
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Subject: James A. FitzPatrick (JAF) Nuclear Power Plant
Docket No. 50-333
JAF Site Emergency Preparedness Exercise Scenario

Dear Sir:

Attachment I to this letter provides the scenario for the James A. FitzPatrick site emergency preparedness exercise. The New York State Radiological Emergency Preparedness Group is providing the exercise scenario to the Federal Emergency Management Agency.

The Authority requests that the scenario be withheld from public disclosure until the exercise has been completed, to ensure that only individuals who have a "need-to-know" are aware of the scenario.

Should you have any questions, please contact Mr. J. A. Gray, Jr. of my staff.

Very truly yours,

J. P. Bayne
Executive Vice President
Nuclear Generation

Enc.

Office of the Resident Inspector
U. S. Nuclear Regulatory Commission
P. O. Box 136
Lycoming, New York 13093

IE35
1/1

Emergency Response Plan Exercise Manual for the James A. FitzPatrick Nuclear Power Plant

July 18, 1984

New York Power Authority

James A. FitzPatrick
Nuclear Power Plant
P.O. Box 41
Lycoming, New York 13093
315 342.3840

Rev. 0

New York Power Authority

Memorandum

July 18, 1984

TO: All Exercise Participants

FROM: Nicholas Avrakotos
JAFNPP Emergency Planning Coordinator

SUBJECT: Exercise Ground Rules

THIS IS A DRILL

DO NOT initiate actions affecting normal plant operations.

All exercise participants are required to observe the following Exercise Ground Rules for the entire duration of the Exercise. If you have any questions, ask an Exercise Controller for clarification at this time.

1. Ensure that all communications indicate that this is only an exercise. Make a positive statement that this is an exercise-related message at the beginning and end of all messages or conversations. If communication lines are kept open for extended periods, periodically repeat the caution. This is especially critical when transmitting messages over communications facilities that are monitored by non-Power Authority personnel.

2. Take no actions that affect plant or non-exercise related operations.

3. Take immediate action(s) to restore safe operation, if an unsafe condition exists. Ignore exercise situation if actual safety becomes a concern.

4. Use only the information provided in accordance with the exercise ground rules or derived from approved procedures. Do not improvise information.

5. Be sure that the Observer/Controller is aware of your actions (actual or simulated).

6. Make all required notifications.

7. If samples inside or outside the site are deemed necessary, they will actually be collected, if possible, and their analysis conducted or simulated, if directed. Observer/Controllers will accompany the survey teams and repair teams, both onsite and offsite.

8. NRC and other personnel also will be evaluating the performance of the participants at each location.

9. This exercise is conducted to evaluate our plans and procedures. The exercise is also a training vehicle for members of the JAFNPP Emergency Response Organization to practice working together and with outside organizations. Please make note of any improvements in any area that you observe as a participant and submit them to the Observer/Controllers at the conclusion of the exercise.

10. Controllers will provide appropriate information at the location where that information would normally be available (e.g., Reactor status at the Control Room, dose rate readings with field teams, etc.).

11. Only selected parameters and readings will be provided. The selected information will be sufficient to make decisions in accordance with JAFNPP plans and procedures.

12. DO NOT BECOME OVERLY CONCERNED WITH THE MECHANICS OF THE REACTOR OR THE CAUSE OF THE ACCIDENT. THIS EXERCISE IS DESIGNED TO TEST JAFNPP PLANS AND PROCEDURES AND IS NOT CONCERNED WITH ESTABLISHING THE PROBABILITY, FEASIBILITY OR DETAILED MECHANICS OF THE SIMULATED ACCIDENT.

13. There will be one or more Observer/Controller at each important location. Controllers will provide information and clarification on which actions are to be simulated or are outside the scope of this exercise in order to keep the exercise progressing in accordance with the scenario. Observer/Controllers will also observe all aspects of the exercise to prepare an in-house evaluation of plans, procedures and training.

14. If, during any part of the exercise, you are having trouble accomplishing your required duties, confusion arises, or clarification is necessary, ask your Controller. Controller assistance or clarification does not necessarily imply failure on your part. Your Controller will know the limitations of information he can provide you, and will assist you only to the extent necessary.

15. Finally, thank you for your participation and adherence to these rules.

N Avrakotos

NICHOLAS AVRAKOTOS
NA/mam

1984 Nuclear Regulatory Commission Observed Exercise

July 18, 1984

James A. FitzPatrick Nuclear Power Plant

TABLE OF CONTENTS

SECTION 1

NEW YORK POWER AUTHORITY

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

FULL SCALE EXERCISE OBJECTIVES

July 18, 1984

1984 NRC Observed Exercise
James A. FitzPatrick Nuclear Power Plant

July 18, 1984

Objectives

A. PURPOSES

This document provides guidance for the conduct of the 1984 Nuclear Regulatory Commission (NRC) observed radiological emergency exercise at the James A. FitzPatrick Nuclear Power Plant (JAFNPP). It shall be used by JAFNPP and by all participating Federal, State and local agencies.

The scope of this exercise, with some exceptions, will endeavor to demonstrate by actual performance a number of primary emergency preparedness functions. At no time will the exercise be permitted to interfere with the safe operation of JAFNPP, and the plant management may, at their discretion, suspend the exercise for any period of time necessary to ensure this goal.

This exercise will include the appropriate notification to the Nine Mile Point Nuclear Station (NMPNS). Active participation by the NMPNS organizations is not expected.

This exercise will include the appropriate notifications to Oswego County and New York State. Participation by these organizations is expected.

B. EXERCISE OBJECTIVES

1. Radiological Emergency Preparedness Plans

   a. Demonstrate the adequacy and capability of implementation of the New York State, Oswego County and the James A. FitzPatrick radiological emergency plans.

   b. Demonstrate the emergency response capabilities of State authorities, local support agencies, JAFNPP and appropriate Federal agencies.

2. Notification Procedures

   a. Demonstrate the ability of JAFNPP staff to classify actual or potential emergencies in accordance with JAFNPP Emergency Plan Implementing Procedures as to
      - Notification of Unusual Event,
      - Alert,
      - Site Area Emergency,
      - General Emergency.

   b. Demonstrate the capability of JAFNPP to notify the State, local and Federal levels of government in accordance with Federal guidance and established protocols.

c. Demonstrate the capability to communicate technical information among JAFNPP, New York State, and Oswego County. JAFNPP will also demonstrate communicating technical information with the NRC via the NRC Emergency Notification System (ENS).

d. Demonstrate the capability of the State, Oswego County and JAFNPP to activate emergency response personnel.

e. Demonstrate the capability of Oswego County and the State to alert and notify the affected permanent and transient public within the Plume Exposure Emergency Planning Zone (EPZ) of an incident at JAFNPP and to follow up with information as required. This will include activation of the prompt notification system (sirens and tone alert radios) and the Emergency Broadcast System (EBS).

f. Demonstrate, as appropriate, the notification and request for assistance to Federal agencies such as the radiological assistance from the Department of Energy.

g. Demonstrate, as appropriate, the notification to counties and provinces within the ingestion Emergency Planning Zone (EPZ) and to agencies, such as the railroad, by the State and Oswego County.

3. Emergency Communications

a. Demonstrate the JAFNPP communication capabilities among the Control Room, Technical Support Center (TSC), Emergency Operations Facility (EOF), Operations Support Center (OSC), the Joint News Center (JNC) and the Headquarters Emergency Response/Recovery Center, and the ability to maintain communications with the Federal Government.

b. Demonstrate emergency communications capability among Oswego County, New York State and JAFNPP, including the Radiological Emergency Communications System (RECS-Hot line).

c. Demonstrate the adequacy of JAFNPP, local and State emergency communications to:

   1. Transmit instructions to activate essential staff.

   2. Disseminate essential information to assisting agencies.

   3. Operate a 24 hour per day alert and notification system.

d. Demonstrate the ability of JAFNPP and Oswego County to coordinate, control and deploy radiological monitoring teams via the respective field communications system.

4. Emergency Response Facilities

a. Demonstrate the adequacy of the staffing and setting-up, as appropriate, of emergency response facilities as well as demonstrating the adequacy for management of radiological emergency at:

JAFNPP Control Room (CR)
JAFNPP Technical Support Center (TSC)
JAFNPP Operational Support Center (OSC)
JAFNPP Emergency Operations Facility (EOF)
State Emergency Operations Center (EOC)
ODP Central District EOC
Oswego County EOC
Joint News Center (JNC)
Headquarters Emergency Response/Recovery Center

b. Demonstrate the adequacy of internal communications in the State and County Emergency Operations Centers (EOC).

c. Demonstrate the adequacy of the State, Oswego County and JAFNPP staff to operate the emergency response facilities.

d. Demonstrate the adequacy of access control and security for emergency response facilities.

5. Direction and Control

a. Demonstrate the ability of key emergency personnel at all levels of government and JAFNPP to initiate and coordinate timely and effective decisions with respect to a radiological emergency and clearly demonstrate "who is in charge".

b. Demonstrate that there is effective organizational control (direction and control) and integrated radiological emergency response including deployment of field monitors, receipt and analysis of field data and sharing of field data at JAFNPP, New York State and Oswego County for evaluation and verification.

c. Demonstrate the capability of State and County emergency response agencies to identify and provide for resource requirements. Any required Federal response activities may be simulated.

d. Demonstrate the capability of government officials in implementing appropriate radiological emergency response actions.

6. Public Information

a. Demonstrate the adequacy of the operation of and interaction among the State, Oswego County and JAFNPP public information systems.

b. Demonstrate the activation and manning of the Joint News Center by JAFNPP, State and Oswego County public information personnel and provide for periodic public information releases and rumor control.

c. Demonstrate that the offsite authorities and the licensee can effectively provide information to the media in the event of an accident.

7. Accident Assessment and Evaluation

a. Demonstrate the activation, operation and reporting procedures of JAFNPP and Oswego County field monitoring teams. JAFNPP teams will be dispatched within and beyond the site boundary. Field monitoring teams will be provided with simulated data at assigned times and specific locations consistent with the simulated release from the plant.

b. Demonstrate the ability of JAFNPP, Oswego County and the State to receive and assess radiological data from both County and licensee field teams in accordance with their respective radiological emergency plans.

c. Demonstrate the ability of JAFNPP, the State and Oswego County to calculate dose projections, compare the projections to the Protective Action Guides (PAGs) and determine appropriate protective actions.

d. Demonstrate the capability of JAFNPP personnel to simulate the operation of the Post Accident Sampling System (PASS) and interpret the results.

8. Protective Response

a. Demonstrate the capability of State and Oswego County emergency response organizations to make decisions and to implement appropriate protective action response options. The response options may include sheltering and evacuation (simulated) of onsite and offsite areas, informing the public on the development of the accident, identification and provision for special populations, activation of reception and congregate care facilities and ingestion exposure pathway considerations.

b. Demonstrate JAFNPP employee accountability following the requirements of their Emergency Plan Implementing Procedures.

c. Demonstrate the ability of JAFNPP personnel to make protective recommendations to the State and Oswego County.

9. Radiological Exposure Control

a. Demonstrate the decision process for limiting exposure of emergency workers.

b. Evaluate the capability of offsite emergency response personnel to implement access control procedures.

c. Demonstrate methods and resources for distribution of dosimetry to emergency workers.

d. Demonstrate the capability of emergency personnel for keeping records of individuals' radiation exposures.

10. Medical Support

a. Medical support shall not be demonstrated at this exercise. The initial treatment of an injured worker with contamination at JAFNPP, transport to and subsequent treatment at a hospital will be demonstrated at a medical drill tentatively scheduled for the Fall of 1984.

11. Re-entry and Recovery

a. Demonstrate the capability of emergency personnel to identify requirements, assess and simulate implementation of procedures for re-entry.

b. Demonstrate the capability of emergency personnel to identify requirements, programs and policies governing damage assessment and recovery.

C. INTENT OF THE FITZPATRICK EXERCISE SCENARIO

The licensee (New York Power Authority), New York State and Oswego County plan a coordinated exercise of their respective emergency plans for both the onsite and offsite support agencies on July 18, 1984. In order to minimize the impact on scheduling and agendas, the exercise scenario will be completed in a time frame of approximately a routine working day.

The exercise is intended to demonstrate many, but not all, of the JAFNPP capabilities to respond to a wide range of emergency conditions. This scenario is designed to activate the JAFNPP

Emergency Plan through its various action levels. Although this scenario accurately simulates operating events, it is not intended to assess all of the Operator's diagnostic capabilities, but rather provides sequences which ultimately demonstrate the Operator's ability to respond to events, and which results in exercising both onsite and offsite emergency plans and procedures. Free play is encouraged and the referees will interfere only if operator/player action prematurely terminates the exercise or excessively deviates from the drill schedule.

In order to provide a conservative exercise, in terms of offsite doses, adverse meteorology was developed since actual meteorology would probably lead to projected radiological doses below established Protective Action Guides (PAGs).

D. CONCEPT OF OPERATIONS AND CONTROL OF THE EXERCISE

The licensee and the State of New York will supply official controllers/evaluators for locations where an emergency response is being demonstrated for the exercise. Prior to the exercise, the controllers and evaluators will be provided with the appropriate locations, maps, time periods, guidelines (as appropriate training in the use of equipment and procedures), and an observer evaluation checklist for their exercise assignments.

The exercise initiating events will be controlled by the lead referee at the JAFNPP. Simulated initiating events will consist of two types of information: (1) information and data provided to Control Room personnel by the Control Room referee, (2) onsite and offsite dose rate data (simulated gamma and iodine dose rate measurements) provided to the site, County and Federal (if they participate) monitoring teams by controllers/referees.

The lead referee (onsite) and the State Exercise Director (offsite) will have the responsibility to control and coordinate the time sequence of initiating events to ensure an orderly flow of exercise events.

The state controllers or evaluators may supply "problems" for offsite participants (such as a disabled vehicle or a farmer who must return to his farm after the evacuation). All other actions during the exercise will occur through a free play response as the licensee, State and County participants respond to the initiating events.

As the initiating events are provided to the JAFNPP staff, they will determine the nature of the emergency and implement appropriate plant emergency response procedures. These procedures include a determination of the emergency classification in accordance with the JAFNPP Emergency Plan. After the emergency classification has been determined, the appropriate Federal, State and local authorities will be notified in accordance with the JAFNPP emergency response procedures.

Upon notification of the simulated accident at the JAFNPP, the State and Oswego County will complete their initial notifications in accordance with their emergency plans and procedures. State and local personnel and facilities will be activated based on the initial accident classification provided by the site and confirmed by direct communication between appropriate agencies and the James A. FitzPatrick Nuclear Power Plant.

The simulated accident will continue to develop based on data and information provided to the Control Room personnel by the Control Room referee. As the situation develops, information will be forwarded to New York State and the County assessment teams. These agencies will analyze and act on the information as they would in a real emergency.

Where information would normally be confirmed via an independent source, the confirmation data will be obtained. If the confirmation data conflicts with simulation data provided by the site, the simulation data will be utilized for accident assessment purposes. If any inconsistencies are noted in the initiating events, these inconsistencies should be questioned by the accident assessment teams as they would be in a real emergency.

Certain inconsistencies (such as plume width, release duration, technical reason for the simulated release, etc.) may be intentional and required due to the nature of simulating an accident that has never occurred, and the requirement to provide an exercise basis which tests the site, State, and local capabilities to the maximum extent feasible in a limited time frame. If an inconsistency is known or determined to be intentional, then the accident assessment group will note the inconsistency and ignore it. The lead referee shall have the authority to resolve or explain any inconsistencies or problems that may occur during the exercise.

With the exception of the aforementioned potential inconsistencies, the internal operation of the site, State and local command centers shall be identical with their intended operation in a real emergency.

E. PUBLIC INFORMATION AND AWARENESS

Prior to the exercise, the public, within the affected area, will be informed of the impending conduct of a radiological emergency exercise through joint press releases. The New York Power Authority, New York State and Oswego County will develop coordinated press releases.

Agencies should make every effort to prevent the public from being misinformed about the nature of the exercise. Therefore, it is important to inform members of the public that an exercise is in progress and that their involvement is not required, whenever public contact occurs in the field.

A pre-exercise briefing will also be conducted for the news media.

F. MAINTAINING EMERGENCY READINESS

During the performance of an exercise, the ability to recognize a real emergency, terminate the exercise, and respond to the new situation must be maintained. Therefore, the exercise scenario and actions of participants shall not include any actions which degrade the condition of systems, equipment or supplies, or affect the detection, assessment or response capability to radiological or other emergencies.

Actions taken by the participants shall also avoid actually reducing plant or public safety. The potential for creating real radiological or other emergencies shall be specifically avoided. All messages about real events shall be clearly identified as such. For example, precede a real message with "This is NOT, repeat, NOT an exercise message".

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

SCOPE

The following is a list of the emergency facilities and functions to be demonstrated or simulated during the JAFNPP Full Scale Exercise.

I. Functions and Facilities to be Demonstrated

Control Room (Training Shift used in Exercise)
Operational Support Center
Technical Support Center
Emergency Operations Facility
Emergency Response Center
Dose Assessment
Restricted Area Evacuation and Assembly
Offsite Radiological Monitoring
Onsite Communications
Offsite Communications
Onsite Radiological Measuring
Onsite Repair and Corrective Actions
Accident Assessment
Notifications
Communications Systems
Environmental Sampling
Joint News Center
Accountability

II. Functions and Facilities to be Simulated

Post Accident Sampling System
Protective Action Recommendations
Facility Ventilation Isolation
Security Access Control to Site
Site Evacuation
Alternate EOF or OSC Facility Activation
Re-entry and Recovery

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

SAFETY PRECAUTIONS

During the performance of an exercise, the ability to recognize a real emergency, terminate the exercise, and respond to the new situation must be maintained. Therefore, the exercise scenario shall not include any actions which degrade the condition of systems, equipment or supplies, or affect the detection, assessment or response capability to radiological or other emergencies at JAFNPP.

Actions taken by the participants shall also avoid actually reducing plant or public safety. The potential for creating real radiological or other emergencies shall be specifically avoided. If a local emergency occurs during an exercise requiring the local agency to terminate its participation in the exercise, the agency should notify the State and Oswego County Emergency Operations Centers of the situation. All messages about real events shall be clearly identified as such. For example, precede a real message with "This is NOT, repeat, NOT an exercise message".

The following JAFNPP personnel may cancel or stop the exercise at any time that plant or public safety is jeapardized by the conduct of that exercise.

1. Resident Manager
2. Superintendent of Power
3. (On Shift) Shift Supervisor
4. Emergency Planning Coordinator

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

OPERATIONS AND CONTROL

Exercises at JAFNPP are conducted under the guidance of Emergency Plan Procedure SAP-1 "Maintaining Emergency Preparedness" (attached). This procedure lists the specific requirements for drills and exercises, and includes the requirements for the development of scenarios for drills and exercises.

Drills and exercises are controlled under guidelines established by Emergency Plan Procedure SAP-6 "Drill/Exercise Conduct" (attached). This procedure defines the requirements for exercise controllers and exercise observers, ad the method for feedback to improve the operational aspects of the Emergency Plan and Procedures.

Please review the two procedures named above for specific information concerning the operation and control of this exercise.

NEW YORK POWER AUTHORITY
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EMERGENCY PLAN VOLUME II

PROCEDURE NO.: SAP-1

TITLE: MAINTAINING EMERGENCY PREPAREDNESS*

UNCONTROLLED

PORC Review No./Date: Meeting No.. 83-164 Date 10-7-83

Approved By: W dir. R Carr
Resident Manager

Approved By: Eric Mulcahy
Radiological and Environmental
Services Superintendent

PAGE NO.	1	2	3	4	5	6	7	8	9	10	11
REV. NO.	1	1	1	1	1	1	1	1	1	1	1
PAGE NO.	12	13	14	15	16	17	18	19	20	21	22
REV. NO.	1	1	2	2	2	2	1	1	1	1	1

Rev. No. 2

Date: 10/83

EMERGENCY PLAN IMPLEMENTING PROCEDURE

SAP-1

MAINTAINING EMERGENCY PREPAREDNESS*

1.0 PURPOSE

This procedure details the actions to be taken to maintain emergency preparedness at the JAFNPP site. The procedure establishes a method for the conduct and evaluation of a drill or exercise at the JAFNPP. This procedure also outlines the management controls used to ensure that corrective actions are implemented.

2.0 REFERENCES

2.1 NUREG-0654 - "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants."

2.2 JAFNPP Emergency Plan, Volume #1.

2.3 ITP-1 MANAGEMENT OF TRAINING GROUP RECORDS.

2.4 ITP-3 GENERAL EMPLOYEE TRAINING.

2.5 ITP-12 EMERGENCY RESPONSE TRAINING.

2.6 AP-6.2 PROCEDURE FOR CONTROL AND DISTRIBUTION OF THE EMERGENCY PLAN AND PROCEDURES

2.7 QA-18.1 QUALITY ASSURANCE AUDIT PROGRAM-PLANT

2.8 SAP-6 DRILL/EXERCISE CONDUCTS

2.9 SAP-3 COMMUNICATIONS TESTING

2.10 IAP-2 CLASSIFICATION OF EMERGENCY CONDITIONS

2.11 JAFNPP EMERGENCY PLAN IMPLEMENTING PROCEDURES, VOLUME 2

2.12 NRC Generic Letter 82-23

2.13 Volume 10 Code of Federal Regulations, Part 50.55

3.0 INITIATING EVENTS

Not Applicable

4.0 PROCEDURE

4.1 General - Emergency preparedness at JAFNPP is maintained through an integrated program of training, drills, exercises, plan and procedure maintenance, and audits.

4.1.1 Training - Plant staff and outside support agencies are given formal classroom training in accordance with ITP-12 - EMERGENCY PREPAREDNESS TRAINING. Formal training consists of classroom instruction and written quizzes and examinations. Drills and exercises are utilized to evaluate emergency preparedness, and the results of these are input to subsequent training.

4.1.2 Drills - A drill is a hands on, supervised instruction period aimed at testing, developing and maintaining skills in a particular operation. Drills at JAFNPP are conducted in accordance with the schedule and guidelines of section 4.3 of this procedure.

4.1.3 Exercises - As defined in NUREG-0654, an exercise is an event that tests the integrated capability and a major portion of the basic elements existing within emergency plans and organizations. Exercises at JAFNPP are conducted in accordance with the schedule and guidelines of section 4.4 of this procedure.

4.1.4 Plan and Procedure Maintenance - Maintenance of the JAFNPP Emergency Plan and Implementing procedures consists of document control activities including distribution control, change control, procedure review, and cross reference review. Plan and procedure maintenance is in accordance with AP-6.2 - PROCEDURE FOR CONTROL AND DISTRIBUTION OF THE EMERGENCY PLAN AND IMPLEMENTING PROCEDURES

4.1.5 Audits - The JAFNPP emergency preparedness program (in accordance with reference 2.12) is audited at least once every 12 months in accordance with Quality Assurance Manual Procedure 18.1 - QUALITY ASSURANCE AUDIT PROGRAM - PLANT. Findings and corrective action records shall be maintained by the QA department in accordance with their procedures.

4.1.6 Drill/Exercise Documentation - Documentation for drills and exercises shall be maintained by the Training Superintendent. Documentation shall be developed in accordance with section 4.5.

4.1.7 Drill/Exercise Conduct, Observation, Critiques and Deficiencies - A formalized method for evaluating a drill or exercise has been established. SAP-6 - DRILL/EXERCISE CONDUCT details the method for conducting the Drill/Exercise Observation Program, Critique, and Deficiency action.

4.2 Training - The responsibility for training is shared by the Training Coordinator and the Emergency Planning Coordinator.

4.2.1 Training Coordinator - The Training Coordinator is responsible for the formal classroom training of on-site and off-site individuals who have duties in the emergency organization. The Training Coordinator is also responsible for specialized training services such as fire fighting and emergency medical services. The Training Coordinator is responsible for fire brigade drills.

4.2.2 Emergency Planning Coordinator - The Emergency Planning Coordinator is responsible for communications, medical emergency (contaminated injury), radiological monitoring and radiation protection drills.

4.2.3 Initial training and periodic retraining shall be conducted in accordance with ITP-1, ITP-3, and ITP-12.

4.2.4 Formal training shall be documented using a Training Report (Form SAP-1.1).

4.2.5 The Training Coordinator shall be responsible for maintaining all Emergency Plan training records. This shall include records of all formal training sessions, drills and exercises.

4.3 Drills - Responsibility for the conduct of drills is divided between the Emergency Planning Coordinator (EPC) and the Fire Protection Supervisor (FPS). There are five drill areas:

A. Communication Drills - Emergency Planning Coordinator.

Communications with State and local governments within the plume exposure pathway Emergency Planning Zone shall be tested monthly. Communications with Federal emergency response organizations and States within the ingestion pathway shall be tested quarterly. Communications between the nuclear facility, State and local emergency operations centers, and field assessment teams shall be tested annually. Communication drills shall also include the aspect of understanding the content of messages via the observer evaluation. Documentation for communication drills shall be in accordance with procedure SAP-3 - EMERGENCY COMMUNICATIONS TESTING. Communication drills shall be considered supervised instruction upon review of the Communications checklists by the Emergency Planning Coordinator.

B. Fire Drills - Fire Protection Supervisor.

Fire drills shall be conducted in accordance with the plant technical specifications and Fire Protection Procedures. Response to an actual fire may be counted as a drill. Documentation of Fire Drills shall be done by completing Form SAP 1.2 "Drill Report" and providing a completed copy to the Training Superintendent.

C. Medical Emergency Drills - Emergency Planning Coordinator, Fire Protection Supervisor.

A medical emergency drill involving a simulated contaminated individual which contains provisions for participation by the local support services agencies (i.e., Oswego Hospital, Upstate Medical Center, and the Oswego Fire Department Ambulance) shall be conducted annually. The off-site portions of the medical drill may be performed as part of the required annual exercise. Response to an actual medical emergency may be counted as a drill. Documentation of Medical Emergency Drills shall be done by completing Form SAP 1.2 "Drill Report" and a drill scenario and providing a completed copy to the Training Superintendent.

D. Radiological Monitoring Drills - Emergency Planning Coordinator.

Plant environs and radiological monitoring drills (onsite and offsite) shall be conducted annually. These drills shall include collection and analysis of all sample media (e.g., water, vegetation, soil and air), and provisions for communications and record keeping. This drill may be conducted as part of the JAFNPP Annual Exercise. Documentation for Radiological Monitoring Drills shall be done by completing Form SAP 1.2 "Drill Report" and a drill scenario and providing a completed copy to the Training Superintendent.

E. Radiation Protection Drills - Emergency Planning Coordinator.

(1) Radiation Protection drills shall be conducted semi-annually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment.

(2) Analysis of inplant liquid samples with actual or simulated elevated radiation levels including use of the post-accident sampling system shall be included in Radiation Protection drills. This drill may be conducted as part of the JAFNPP Annual Exercise. Documentation of Radiation Protection Drills shall be done by completing Form SAP 1.2 "Drill Report" and drill scenario and providing a completed copy to the Training Superintendent. Response to an incident involving elevated airborne or liquid activity or elevated radiation levels may be counted as a drill.

4.3.1 Drill Scheduling - The Emergency Planning Coordinator shall be responsible for the scheduling of all drills with the exception of Fire Drills, which is the responsibility of the Fire Protection Supervisor. To the greatest extent possible drills should be scheduled in conjunction with each other to minimize interference with plant operating schedules. (Example: Exercising fire, medical and communications aspects of the emergency plan in conjunction with the JAFNPP Annual Exercise.)

4.4 Exercises

An emergency response exercise is an event that tests the integrated capability of a major portion of the basic elements contained in the JAFNPP Emergency Plan. An exercise can be comprised of numerous drills conducted simultaneously.

The purpose of the annual exercise, as described in NUREG-0654 is to test a full scale response capabilities of the plant, State, Local and Federal agencies. The Plant is directly involved and is evaluated on its response to the simulated emergency situation.

As it now exists, the JAFNPP is required to conduct an exercise annually. The exercise shall either be a full scale exercise which will include full participation by State and Local agencies or a small scale exercise that shall include only limited participation of State and Local agencies. The decision as to the above exercise choice is dependent on state and local resource availability.

4.4.1 All personnel at JAFNPP may participate in an emergency exercise. (Note: Only Fire Brigade personnel may participate in a fire drill.)

4.4.2 An exercise shall be developed to include the Site Area or General Emergency.

4.4.3 The scenario should be varied from year to year such that all major elements of the plans and preparedness organizations are tested within a five year period. Once every six years an exercise shall start between the hours of 1800 and 2400 hours and one shall start between 2400 and 0600 hours. Some exercises should be unannounced.

4.4.4 Offsite support agencies should be contacted and included in the development of a JAFNPP Exercise, and requested to supply observers.

4.4.5 Exercises of emergency preparedness should simulate an emergency that results in offsite radiological releases which would require responses by offsite authorities.

4.4.6 Exercises should be conducted under various weather conditions. To facilitate this, since

the Emergency Planning Coordinator cannot reliably schedule drills in advance to coincide with adverse weather, it is advisable not to cancel or postpone drills based on unexpected inclemencies unless continuation would constitute undue risk to the participants or to the plant.

4.4.7 The annual exercises shall be planned in advance via a formal scenario incorporating simulated plant, environmental, and personnel related events (input by controllers) to guide the action and allow for free play.

4.4.8 Depending on the nature of the exercise, it may be desirable to brief the exercise participants as to their duties. In some cases, such as an unannounced exercise, this would not be appropriate. The Emergency Planning Coordinator, with the advice of the Plant Operations Review Committee will make this determination.

4.4.9 Documentation of the exercise shall be conducted in a manner consistent with section 4.5 of this procedure.

4.5 Drill and Exercise Development and Documentation

4.5.1 Development Responsibilities - The Emergency Planning Coordinator shall insure the development, planning, scheduling and coordination of all drills/exercises involving the JAFNPP Emergency Plan.

4.5.1.1 The Training Superintendent shall be responsible for the maintenance of copies of all approved drill/exercise scenarios and associated documents in accordance with approved Training Department procedures.

4.5.1.2 The Fire Protection Supervisor shall assist the Emergency Planning Coordinator in preparing drill/exercise scenarios.

4.5.1.3 The Superintendent of Operations shall provide assistance to the Emergency Planning Coordinator in preparing drill/exercise scenarios.

4.5.1.4 The Superintendent of Radiological and Environmental Services shall provide assistance to the Emergency Planning Coordinator in preparing drill/exercise scenarios.

4.5.1.5 The Superintendent of Power shall provide assistance to the Emergency Planning Coordinator in preparing drill/exercise scenarios.

4.5.1.6 The Vice President of Public Relations shall provide assistance to the Emergency Planning Coordinator in preparing the drill/exercise scenarios.

4.5.1.7 A representative of the PORC with a senior reactor operator's license shall review drill/exercise scenarios.

4.5.2 Drill Scenario Development and Documentation - As a minimum, a drill scenario shall be organized to include the following (See form SAP 1.5):

(1) Drill Title: (e.g., Refueling accident, loss of coolant accident, etc.). Refer to IAP-2, CLASSIFICATION OF EMERGENCY CONDITIONS for information.

(2) Objectives: The basic objective of the drill.

(3) Scope: Date, time, duration, location, and participating onsite and offsite organizations.

(4) Safety Precautions: Safety precautions to be followed.

(5) Time Schedule: A time schedule of initiating events including expected or simulated plant alarms, indications, or emergency classifications.

(6) Summary: A narrative summary describing the conduct of the events to include such things as simulated casualties, offsite department assistance, rescue of personnel, evacuation required, use of protective clothing, deployment of radiological monitoring teams, and public information activities.

(7) Data: Data related to drill in question.

(8) Drill Report: (With arrangements for qualified observers.) This report describes information pertinent to the understanding of the drill intent. A sign-off sheet for PORC representative, and a list of observers and controllers.

4.5.3 Exercise Scenario Development and Documentation - An exercise scenario shall be organized to include (See Form SAP 1.5):

(1) Exercise Title: (e.g., Refueling accident, loss of coolant accident, etc.) Refer to IAP-2, CLASSIFICATION OF EMERGENCY CONDITIONS for information.

(2) Objectives: State basic objectives of the proposed exercise and which portions of the Emergency Plan will be tested.

(3) Scope: Date, time, duration, location, and participating onsite and offsite organizations. Also to include, date, time, and location of observer briefings and critique.

(4) Safety Precautions: Safety Precautions to be followed.

(5) Concept of Operation and Control: Discuss conduct and responsibilities. Describe the method to be used in controlling flow of exercise events.

(6) Overview

a. Exercise Time Schedule - Provide a condensed time schedule of real and simulated events. Provide a time schedule of emergency classifications.

b. Narrative Summary - A narrative summary describing the conduct of the events to include such things as simulated casualties, offsite department assistance, rescue of personnel, evacuations required, use of protective clothing, deployment of radiological monitoring teams, and public information activities.

c. Simulated Events Initiating Emergency Conditions - State simulated events to be used during exercise for initiating and controlling emergency actions.

(7) Critique: State the time, location, and attendees participating in the exercise/ drill critique.

(8) Plant Data: Include completed sheets for use in the exercise detailing activities, events, time, and sequence. The Controller Sheet (Form SAP 1.3), the Message Sheet (Form SAP 1.4), and the Plant Data Sheet (Form EAP 1.7).

(9) Radiological Data: Include completed data sheets for use in the exercise detailing activities, events, time and sequence. This should include a plume map, offsite simulated data, radiological data, and meteorology.

(10) Arrangements for Qualified Observers: Include a listing of observers to be used to evaluate the exercise, the standard to which evaluation shall be made, and a list of observer support documentation.

5.0 FIGURES, FORMS AND ATTACHMENTS

SAP 1.1 "TRAINING REPORT"

SAP 1.2 "DRILL REPORT"

SAP 1.3 "CONTROLLER SHEET"

SAP 1.4 "MESSAGE SHEET"

SAP 1.5 "DRILL AND EXERCISE SCENARIO DEVELOPMENT"

TRAINING REPORT

POWER AUTHORITY OF THE STATE OF NEW YORK
James A. FitzPatrick Nuclear Power Plant

TRAINING REPORT

Program: _____

TO: TRAINING COORDINATOR

A. TOPIC: _____

B. INCLUSIVE DATE(S): _____ HOURS: _____

C. INSTRUCTOR: _____

LOCATION: _____

D. DESCRIPTION OF TRAINING: Complete reverse side of this report and/or attach other data necessary for a complete description of the training performed.

E. ATTENDANCE:

Typed or Printed Name	Signature	Employer or Department	Perf. Eval.	File Code

F. REVIEWED: _____
Training Coordinator or Representative

G. DOCUMENTATION COMPLETE _____

TRAINING REPORT

DESCRIPTION OF TRAINING

TRAINING OBJECTIVE: (What was the training to have accomplished in terms of performance?)

REFERENCES AND AIDS: (What materials were used by the person(s) providing the instruction?)

DESCRIPTION OF TRAINING: (What was taught and how was it taught? How was the training evaluated?)

(Attach results of quiz, examination or other evaluation.)

JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN

DRILL REPORT

Drill/Exercise Title: _____

Drill/Exercise Date: _____

Reviewed By: _____ _____
Emergency Planning Coordinator/ Date
Fire Protection Supervisor

Reviewed By: _____ _____
PORC Representative Date

Copies to:

1. JAFNPP EMERGENCY PLANNING COORDINATOR
2. JAFNPP TRAINING SUPERINTENDENT
3. JAFNPP FIRE PROTECTION SUPERVISOR (FIRE DRILLS ONLY)

DRILL REPORT

1. Time Frame

   a. Drill/Exercise date _____

   b. Date of last similar drill/exercise _____

   c. Real time span of drill _____ hours, _____ days

   d. Drill/Exercise time frame _____ hours, _____ days

   e. Season (circle one)

      Winter Spring Summer Fall

   f. Period of the week (circle one)

      Weekday Weekend Holiday

   g. What shift shall the drill begin on?

      7 a.m. - 3 p.m. 3 p.m. - 11 p.m. 11 p.m. - 7 a.m.

2. Maximum level of emergency classification during the drill/exercise (check one).

   _____ Notification of Unusual Event

   _____ Alert

   _____ Site Area Emergency

   _____ General Emergency

   _____ Does not apply

3. Organization Involvement (Circle applicable)

   a. NYPA

      Control Room Staff Yes / No

      Technical Support Center (TSC) Yes / No

      Emergency Operations Facility (EOF) Yes / No

DRILL REPORT

3. Organization Involvement (Circle applicable) (Continued)

Site Security	Yes / No
Fire Brigade	Yes / No
White Plains Office (WPO)	Yes / No
Joint News Center (JNC)	Yes / No
Operational Support Center (OSC)	Yes / No
Alternate Operating Support Center (AOSC)	Yes / No
Alternate Emergency Operating Facility (AEOF)	Yes / No
First Aid Team	Yes / No

b. Non NYPA

NY State Radiological Emergency Preparedness Group (REPG)	Yes / No
NY State Department of Health	Yes / No
NY State Office of Disaster Preparedness	Yes / No
NY State Bureau of Radiological Health	Yes / No
US Nuclear Regulatory Commission	Yes / No
US Department of Energy	Yes / No
US Coast Guard	Yes / No
Nine Mile Point Unit #1	Yes / No
Oswego County Office of Emergency Preparedness	Yes / No
Oswego County Sheriff	Yes / No

DRILL REPORT

3. Organization Involvement (Circle applicable) (Continued)

Oswego Hospital	Yes / No
Upstate Medical Center	Yes / No
Oswego Fire Department Ambulance	Yes / No
General Electric	Yes / No

Other (Specify) _____

4. Communications

a. Shall the JAFNPP Radio System be used for communications?
Yes / No

b. Should a news release be prepared?
Yes / No

c. Activation of Joint News Center?
Yes / No

d. Activation of Public Notification System/EBS?
Yes / No

5. Drill/Exercise Elements

a. Will key emergency response positions be filled by alternate?
Yes / No

b. Is a contaminated medical injury to be involved?
Yes / No

If yes, (1) Onsite response by First Aid Team Yes / No
(2) Offsite response Yes / No

(Circle Agencies Involved)

Oswego Hospital
Upstate Medical Center
Oswego Fire Department Ambulance

DRILL REPORT

5. Drill/Exercise Elements (Continued)

c. Will the exercise involve a simulated fire? Yes / No

(1) Onsite response Yes / No
(2) Offsite response Yes / No

(Circle Agencies Involved)

Oswego Fire Department
Scriba Volunteer Fire Department
Volney Volunteer Fire Corporation
Alcan Fire Department
Minetto Volunteer Fire Department

d. Will the Security Force response be tested? Yes / No

(1) Sabotage/Bomb Yes / No
(2) Intruder Yes / No
(3) Accountability Yes / No

6. Radiological Release Yes / No

a. Meteorological capabilities.

(1) Will real-time meteorology be used? Yes / No
(2) Will fixed meteorology be used? Yes / No

b. Dose Assessment.

(1) Will dose projection be made using computerized model? Yes / No

(2) Will dose projection be made using manual calculator overlay wheel? Yes / No

(3) Will field monitoring teams be dispatched? Yes / No

(4) Will dose projections warrant protective action recommendations? Yes / No

c. Post Accident Sampling.

(1) Are simulated samples of stack iodine/ particulate sample required? Yes / No

(2) Should a simulated reactor coolant sample be taken? Yes / No

DRILL REPORT

6. Radiological Release (Continued)

d. Enviornmental.

(1) Should environmental media be collected? Yes / No

(2) Should sampling devices be collected from environmental stations? Yes / No

7. Attached is a copy of the scenario used for this drill.

8. Drill Controllers/References

	Name	Location
1. Lead Controller		
Controller		
Controller		
Controller		
Controller		
Controller		
Controller		
Controller		
Controller		
Controller		

DRILL REPORT

9. Observers

Name	Organization	Area of Responsibility	Reference Procedures

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION

FORM SAP 1.4 Page ___ of ___

MESSAGE SHEET

MESSAGE NO. ____

Exercise Time: _____

Issued To: _____

Issued By: _____

MESSAGE

_____

FORM SAP 1.5

DRILL AND EXERCISE SCENARIO DEVELOPMENT
CHECKLIST

(Use this checklist as a handy reference for drill or exercise development.

DRILLS

_____ 1. Drill Title

_____ 2. Objectives

_____ 3. Scope

_____ 4. Safety Precautions

_____ 5. Time Schedule

_____ 6. Summary

_____ 7. Data

_____ 8. Drill Report

EXERCISES

_____ 1. Exercise Title

_____ 2. Objectives

_____ 3. Scope

_____ 4. Safety Precautions

_____ 5. Concept of Operation and Control

_____ 6. Overview

_____ a. Exercise Time Schedule

_____ b. Narrative Summary

_____ c. Simulated Events Initiating Emergency Conditions

_____ 7. Critique

_____ 8. Plant Data

_____ 9. Radiological Data

NEW YORK POWER AUTHORITY
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EMERGENCY PLAN VOLUME II

PROCEDURE NO.: SAP-6

TITLE: DRILL/EXERCISE CONDUCT*

PORC REVIEW NO.: Meeting No. 83-060 Date 9/8/83

APPROVED BY: _____
Resident Manager

APPROVED BY: _____
Radiological and Environmental
Services Superintendent

PAGE NO.	1	2	3	4	5	6	7	8	9	10
REV. NO.	0	0	0	1	0	0	0	0	0	0
PAGE NO.	11	12	13	14	15	16	17	18	19	20
REV. NO.	0	0	0	0	0	0	0	0	0	0
PAGE NO.	21	22	23	24	25	26	27	28	29	30
REV. NO.	0	0	0	0	0	0	0	0	0	0
PAGE NO.	31	32								
REV. NO.	0	0								

Rev. No. 1

Date: 09/83

EMERGENCY PLAN IMPLEMENTING PROCEDURE

SAP-6

DRILL/EXERCISE CONDUCT*

1.0 PURPOSE

To establish a procedure for the conduct and evaluation of all Emergency Plan Drills and Exercises at JAFNPP. This procedure also outlines the management controls used to ensure that corrective actions are implemented.

2.0 REFERENCES

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

2.2 JAFNPP Emergency Plan and Implementing Procedures, Volumes 1 and 2.

2.3 SAP-1 MAINTAINING EMERGENCY PREPAREDNESS*

2.4 Administrative Procedure 6.2 PROCEDURE FOR CONTROL & DISTRIBUTION OF THE EMERGENCY PLAN & IMPLEMENTING PROCEDURES*

3.0 INITIATING EVENTS

Not Applicable.

4.0 PROCEDURE

4.1 Drill Conduct is discussed in Section 5 of this procedure. This section delineates the minimum acceptable activity for a drill at JAFNPP.

4.2 Exercise Conduct is discussed in Section 6 of this procedure. This section delineates the minimum acceptable activity for an exercise at JAFNPP.

4.3 Observer Conduct is discussed in Section 7 of this procedure. This section specifies the minimum acceptable, preparation, training and response required for an observer of a JAFNPP drill or exercise.

4.4 Critiques and Corrective Actions are discussed in Section 8 of this procedure. This section specifies the method in which problems with Emergency Preparedness at JAFNPP are handled.

5.0 DRILL CONDUCT

5.1 Drills shall be directed with the frequency established by SAP-1 - MAINTAINING EMERGENCY PREPAREDNESS.

5.2 Drills shall be directed by a Lead Controller who shall be responsible for conducting the drill in accordance with the drill scenario and the drill report.

5.2.1 The Lead Controller may conduct a briefing with drill participants. The intent of such a briefing would be to insure that drill participants understand their function and purpose in the drill.

5.2.2 The Lead Controller may delegate controller responsibilities to other individuals. Controllers and observers can be used for this purpose. A controller shall be called such when that individuals sole responsibility is to assist in the conduct of a drill. An observer can function as a controller when assigned the task of providing information or instruction during a certain aspect of a drill.

5.2.3 The Lead Controller shall insure that plant safety is not compromised by a drill, and may stop a drill at any time if in his opinion plant safety may be affected.

5.2.4 The Lead Controller shall attempt to collect the signatures of as many participants as possible for training documentation. This responsibility can be delegated to other controllers, or observers.

5.2.5 The Lead Controller shall commence and end the Drill, upon approval from the JAFNPP Resident Manager.

5.2.6 The Lead Controller shall ensure that drill observers are stationed to properly observe the drill.

5.3 During a drill, when (public address system) announcements are made, those announcements shall be prefaced or followed by the words "This is a Drill".

5.4 During a drill when contacting any offsite or non-PASNY institution, the individual shall insure that

the organization fully realizes that no emergency exists onsite and that it is a test of the JAFNPP Emergency Plan.

5.5 Drills shall be conducted using the guidance established by Form SAP 6.1 "Drill Conduct Checklist".

5.6 The Emergency Planning Coordinator shall conduct an observer meeting prior to a drill. The meeting shall be to inform the observers of their specific tasks.

6.0 EXERCISE CONDUCT

An Exercise shall include all items specified for a drill with the following differences:

6.1 Exercises shall be conducted with the frequency established by SAP-1 - MAINTAINING EMERGENCY PREPAREDNESS.

6.2 A Lead Controller stationed in the Control Room shall be responsible for conducting the exercise in accordance with the written scenario. As a minimum, controllers shall also be present in the Technical Support Center, Operational Support Center, and the Emergency Operations Facility.

6.3 Every attempt should be made to include Federal, State and local input into the development of the exercise scenario.

6.3.1 The Exercise scenario shall be developed by a committee headed and organized by the Emergency Planning Coordinator at JAFNPP.

7.0 OBSERVER CONDUCT

7.1 Observers shall be used to record all significant events and the time at which they occur during a drill or exercise using Form SAP 6.2 "Drill/Exercise Observation Sheet". The drill or exercise scenario shall state the objectives of the drill or exercise which will determine the major areas for the observers to concentrate their observation. Actions to be observed include the ability to control the emergency, timely and proper notification; availability and use of equipment and personnel for control and recovery, assessment of consequences of the emergency actions taken by emergency personnel, and the necessity for off shift notifications.

7.2 Observers shall be selected with the concurrence of the Superintendent of Power.

7.3 There shall be enough observers to match all points specified in the drill/exercise scenario or drill form (SAP 1.2). The degree of observation shall be made based on the extent of the drill or scenario. As a general rule, however, observers shall be stationed to observe all expected major actions of the drill expected and as listed in objectives statement of the drill or exercise scenario. As a general rule of thumb, an observer shall be available at a ratio of one observer to each five participants. (With the exception of Plant accountability drills.) At least two observers must be available for drills and at least eight observers for an exercise.

7.4 In plant observers shall be badged following normal plant badging procedures, and are required to contact security during any accountability drills or exercises to identify themselves and their location.

7.5 Observers shall be visibly identified as observers, and they should take no part in the action of the drill or exercise except to:

7.5.1 Indicate simulated conditions to the exercise or drill participants, (e.g., survey meter readings, contamination levels, etc.), but only after instructions by the lead controller or individual acting on behalf of lead controller.

7.5.2 Observe poor communication techniques and procedures and note/correct such occurrences when they occur.

7.5.3 Prevent the communication of simulated emergency conditions as actual conditions outside of the exercise or drill area and to ensure that radio or telephone messages are periodically preceded and ended by the statement "This is a Drill".

7.5.4 Prevent actions which might create a hazard to personnel or equipment. In such cases, observers shall require personnel participating in the exercise or drill to indicate the action verbally.

7.6 Observers shall be briefed as to their duties prior to the commencement of the drill or exercise. Drill observers shall be briefed within four (4) hours of the commencement of a drill. Exercise observers shall be briefed within 24 hours of the commencement of an exercise and written aids and procedures shall be provided for use by the observers.

7.7 Training shall be provided to observers by the JAFNPP Training Department. The training provided for observers will entail the briefing listed in Section 7.6. The briefing shall include a review of the drill or exercise scenario, the observer duties with regard to the assigned areas of observation, and the key points to be noted. The Emergency Planning Coordinator shall provide the JAFNPP Training Department with a list of observers to be trained seven (7) days in advance of drill or exercise. Exceptions to the qualified observer list may be made by the Emergency Planning Coordinator. The exception shall be noted in a memorandum detailing why the exception was being made.

7.8 At the conclusion of the drill or exercise, the Emergency Planning Coordinator or the Fire Protection Supervisor shall collect the completed "Drill/ Exercise Observation Sheets", SAP 6.2, compile a list of participants and conduct a critique with the observers.

7.9 In addition to the "Drill Observation Sheets" observers shall complete SAP 6.3 "Exercise Observer Report" only during an exercise.

7.10 Observers shall familiarize themselves with the duties and action requirements of the personnel they are monitoring. The Drill Report SAP 1.2 shall list Observers, Name, Organization, Area of Responsibility, and Reference Procedures. Observers shall review referenced procedures. Observers shall use the following as guidelines.

7.10.1 Control Room

The observer shall observe the action of personnel assigned to the Control Room and personnel who report to the Control Room for assignment. In addition, special attention will be given to the following.

- Use of map and overlays.
- Notifications to onsite personnel and offsite agencies.
- Request for the call-in of off duty personnel.
- Operations handling of accident conditions.

- Instructions given to Search and Rescue, Repair and Corrective Action Teams and H.P. Tech's by the Shift Supervisor (SS), as applicable.

- Does the SS handle the emergency by directing people or by trying to do the work himself?

- Are the time frames of actions by the SS reasonable enough?

- Actions of personnel in the Control Room.

- Communications with the EOF.

- Communications with the TSC.

- Actions of the STA.

7.10.2 Control Point

It is to be noted that all normal practices such as sign out and use of frisker and the portal monitor are to be accomplished unless the H.P. Technician gives other directions because of radiological conditions. The observer will pay special attention to the above along with the following.

- No one is wearing radiological protection clothing when leaving.

- All alarms from monitoring equipment are acknowledged.

7.10..3 Assembly Area

Observe the following for assembly area personnel:

- They seek out their assembly area, generally stay together as a group and remain orderly.

- Time of assembly and completed accountability.

7.10.4 Emergency Operation Facility

This is the command post for the Emergency and it should seem so to the observer. Look for the following things:

- The Emergency Director is in command of the EOF.
- Any extra personnel, spectators and those awaiting orders, are quietly standing out of the way.
- The Emergency Director has assigned personnel to various functions, i.e., Communications, Radiological Assessment.
- Has the Emergency Director selected a Plant Operations Manager?
- The Radiation Protection or Support Personnel are performing duties in an efficient manner and reporting results to the Emergency Director.
- Instrumentation deployed in the EOF is placed in an non-interfering position.
- How problems with the radio and telephone are handled.
- Using time as criteria, release rates and thyroid and whole body exposures to the offsite population are calculated quickly after the receipt of data from the Control Room or the Offsite Monitoring Team(s).
- The time frame of updates to offsite agencies and the reporting of exposure data and changes to site meteorological conditions, to those same agencies.
- The Emergency Director assigns, where possible, the duty of making routine calls to someone else thereby leaving himself free to command the action.
- Assessment Teams methods to make protective actions to offsite populations.

7.10.5 Off-Site Monitoring Teams

The observers shall observe the following items:

- Received KI dose, if necessary.
- Operational check performed on survey instruments, sample counter and sample pump before leaving the site.
- Equipment check off performed.
- Assignment of TLD's and dosimeters before leaving the site.
- Silver Zeolite Cartridges made available before leaving the site.
- Survey instrument operationally checked out and turned on prior to leaving to take field readings.
- Radio check out by communicating to EOF or TSC before leaving.
- Beta and gamma field surveys performed on the way to sample point.
- Sampling and field surveys performed at sample location.
- Instrument calibration performed and samples counted.
- Work performed in a professional manner.

7.1.06 On-Site Monitoring Team

On-site monitoring teams may be assigned field survey work along the perimeter of the site. Check on the following items:

- Where do they receive their instructions?
- Dosimeter and film badge are being worn.
- What type of survey instruments used.
- Do they pick up a portable radio with survey kit?
- Radio check performed.
- Field readings taken along the route to the designated area.

- Work performed in a professional manner.

7.10.7 Security Force

- Are all security personnel accounted for?
- Does security direct people to the nearest assembly area for accountability?
- Are access and egress roads blocked off?

7.10.8 Technical Support Center

- The area maintained as a controlled area.
- Are communications initiated?
- Are H.P. Surveys performed and by whom?

7.10.9 Operations Support Center

- How is it staffed?
- What and how many teams are brought to the OSC?
- Are phones continuously manned?
- Are H.P. Surveys performed and by whom?

7.10.10 Radiation Protection Office

- Do they report to the Radiation Protection Office when an Evacuation Alarm Sounds?
- Do they receive instructions from whom?
- Are accurate protective measures taken if an entry into the controlled area is required?
- Who are survey results reported to? (CR and/or EOF)

7.10.11 Fire brigade

- Do they receive instructions and from whom?
- Are protective measures taken if an entry into a controlled are is required?

- Are Fire preplans consulted?

- Is assistance requested from local support fire departments?

8.0 CRITIQUES AND CORRECTIVE ACTIONS

8.1 Critique

A post exercise/drill critique should be held for observers and plant supervision by the Emergency Planning Coordinator. The critique should be held within 24 hours of the drill/exercise, at a time and place specified by the Emergency Planning Coordinator. This meeting shall be held to help resolve questions raised by various observers and plant supervisors and to develop a list of corrective actions as necessary. The observations should include those actions noted by the observers which were not in accordance with approved procedures. In addition, the exercise drill observers should identify any areas which require clarification, development or revision of procedures.

8.2 Emergency Plan Corrective Action Report

Following the critique, the Emergency Planning Coordinator shall develop a list of required Corrective Actions as identified at this critique. The required Corrective Actions shall be documented on SAP 6.4 "Emergency Plan Corrective Action Report". In addition to the items requiring corrective action identified at the critique, any additional items as identified on the SAP 6.2 Drill/Exercise Observation Sheet or through routine surveillances shall be detailed on SAP 6.4.

8.3 Review

Following the preparation of the Emergency Plan Corrective Action Reports, the Superintendent of Power shall review the contents of the reports.

8.3.1 The Superintendent of Power shall review and approve the final recommended corrective action to be taken, the individual assigned responsibility to complete the recommended corrective action, and the recommended completion dates.

8.3.2 Upon approval of the recommendations included in the Emergency Plan Corrective Action Report, the approved report shall be returned to the

Emergency Planning Coordinator. The EPC shall then prepare SAP 6.5 "Emergency Plan Corrective Action Log". This log shall be used for work tracking associated with the Emergency Plan Corrective Actions.

8.4 Close Out

8.4.1 Each individual assigned responsibility to complete the recommended corrective action shall be sent a copy of each form SAP 6.4 that has been assigned to that individual. The action addressees shall resolve the problem, indicate on the form the final corrective action taken, sign and date it, and forward it to the Emergency Planning Coordinator.

8.4.2 In the event that an action addressee can not complete the final corrective actions by the date specified on form SAP 6.4, a formal request for an extension (by memorandum) shall be presented to the Superintendent of Power. The request shall include the circumstances or reasons that necessitate the extension and an estimated completion date. The Superintendent of Power upon receipt of an extension request, shall review its justifications and, either approve or reject the request.

8.4.3 For approved extensions, the Superintendent of Power shall assign a revised completion data, and inform the action addressee of the extension. Furthermore, the Emergency Planning Coordinator shall be directed to update the Emergency Plan Corrective Action Log, and file the request for extension. For rejected extensions, the action addressee shall be informed and the request forwarded to the Emergency Planning Coordinator.

8.4.4 The Emergency Planning Coordinator shall, within 90 days of the preparation and review of an Emergency Plan Corrective Action Report, present the report(s) to the Plant Operating Review Committee (PORC) and the JAFNPP Training Department. The PORC shall review the report(s). This review shall be incorporated into the PORC meeting minutes. The JAFNPP Training Department shall maintain the active file on Emergency Plan Corrective Action Reports, along with Drill Reports, Training Reports, and Drill and Exercise Scenarios.

FORM SAP 6.1

DRILL OR EXERCISE CONDUCT CHECKLIST

_____	1.	Prepare a drill or exercise scenario.
_____	2.	Prepare a drill or exercise report.
_____	3.	Present the drill or exercise to the Plant Operating Review Committee Representative for approval.
_____	4.	Brief observers on the entire drill or exercise.
_____	5.	Brief the individual observers on specified tasks.
_____	6.	Issue Observer Aids and Drill/Exercise Observation Sheet.
_____	7.	Initiate the drill or exercise.
_____	8.	Ensure the "flow" of activity throughout the drill or exercise.
_____	9.	Terminate the drill or exercise when it's purpose is accomplished.
_____	10.	Conduct a critique with participants or observers.
_____	11.	Collect Drill/Exercise Observation Sheets.
_____	12.	Complete Emergency Plan Corrective Action Report, list all deficiencies and recommendations.
_____	13.	Present the Emergency Plan Corrective Action Report to PORC.
_____	14.	Complete action required on deficiencies.

FORM SAP 6.2

DRILL/EXERCISE OBSERVATION SHEET

Observers Name: _____ Exercise/Drill Date: _____

Observers Location: _____

Exercise/Drill Title: _____

Information to Provide: _____

_____

_____

_____

Time Drill/Exercise Commenced: _____

Time Drill/Exercise Terminated: _____

(PLEASE USE ADDITIONAL SHEET AS NEEDED)

OBSERVATIONS, COMMENTS & RECOMMENDATIONS Page ____ of ____

NOTE: Observations should include the proper and effective use of procedures, equipment, and personnel.

_____

_____

_____

_____

_____

_____

_____

_____

Observer Signature: _____ Title: _____

Emergency Planning Coordinator Signature: _____

Date: _____

FORM SAP 6.3

EXERCISE OBSERVER REPORT

Exercise - Use appropriate observer checklists as indicated. Check in space across from checklist indicates that you are responsible for completion of this checklist:

A. NOTIFICATIONS/COMMUNICATIONS

1. Notifications/Communications _____
2. Activation/Operations _____
3. Public and Media Information _____

B. FIRE

1. Activation/Operations _____

C. MEDICAL EMERGENCY

1. Activation/Operations _____
2. Radiation Exposure Control _____

D. RADIOLOGICAL MONITORING

1. Dose Assessment _____
2. Monitoring _____
3. Activation/Operations _____

E. RADIATION PROTECTION

1. Radiation Exposure Control _____
2. Decontamination/Relocation Facilities _____
3. Activation/Operations _____

Items not applicable to a particular operation shall be marked N/A on the Checklist.

Assigned to Observer: _____

at Location: _____

Assigned By: _____

Retain this sheet as cover page.

A. NOTIFICATIONS/COMMUNICATIONS

Observer Name: _____ Date: _____

Location: _____

1. Were incoming and outgoing notifications/communications;

   a. Logged? _____
   b. Accurate? _____
   c. Sufficiently detailed? _____

2. Were call lists completed accurately and in a timely manner? ____

3. Were notification/communication procedures followed? _____

4. Were the notifications and message contents verified if required? _____

5. Did the messages contain a statement identifying the communication as an exercise/drill message? _____

6. Were adequate forms available? _____

7. Were all primary communication circuits available and operational? If not were back-up communications used? _____

8. Were personnel familiar with the communication equipment and its intended use? _____

9. Were communications equipment adequate to ensure that the flow of information was timely and efficient? _____

10. Were there sufficient communications personnel to manage all of the circuits? if not, identify specific problems. _____

    _____

11. Were communications effectively passed to and from appropriate personnel? If not, identify problem. _____

    _____

12. When radios were utilized, were communication prechecks conducted? _____

12. NOTIFICATIONS/COMMUNICATIONS
OVERALL PERFORMANCE EVALUATION:

Provide your overall evaluation of the efficiency and effectiveness with which assigned tasks were performed. Your assessment should include a designation from the following categories: outstanding performance, acceptable performance or substandard performance. Please be specific with regard to substandard performance and indicate the basis for your evaluation. Specify whether additional training, equipment, or procedures are required to improve the emergency response.

B. ACTIVATION/OPERATIONS

Name: _____ Date: _____

Location: _____

1. Was activation for the emergency performed efficiently and in a timely manner? (State time of notification and time of activation)

_____

_____

_____

2. Did all personnel know their roles and responsibilities?

_____

3. Were personnel familiar with the relevant procedures?

_____

4. Were procedures consulted when necessary or when conditions changed?

_____

5. Was the Emergency Director (Shift Supervisor/team leader/ command person) clearly identifiable and did everyone know who that person was?

_____

6. Was there any confusion or lack of understanding on the part of the participants concerning the event to which they were responding?

_____

7. Were frequent briefings held to review available data and the emergency situation? _____

8. Did participants consult with each other to arrive at decisions and recommendations? _____

9. Did the command personnel adequately exercise command function? _____

10. Was data flow between facilities and teams accurate, timely, and complete? _____

11. Was there an effective mechanism for resolving "difference of opinion" concerning technical issues and actions to be taken? _____

_____

12. Did participating personnel become so overwhelmed with procedural requirements that they were distracted from exercising their role in the assessment and resolution of the emergency event? _____

_____

13. Were all the material, maps, displays, and equipment required for emergency activation and operations available and utilized effectively?

_____

14. Was all the equipment functional? _____

15. Did personnel check to ensure that all equipment was available and functional early in the activation sequence? _____

16. If equipment was either unavailable or not functional, was this fact reported to the appropriate personnel? _____

17. What provisions were made to accommodate missing or inoperative equipment? _____

18. If there was a transfer of responsibility for the facility or activities, was it accomplished efficiently, effectively, and in a timely manner? _____

19. If a transfer of responsibility occurred, were all personnel aware that such a transfer had occurred? _____

20. Were incoming messages handled efficiently and on a "need to know" basis? _____

21. Were security measures adequate? _____

22. If protective action decisions were made, was the implementation accomplished according to procedures in a timely manner? _____

_____

23. Were all required personnel in attendance? _____

24. Was the facility adequate in size and layout? _____

25. ACTIVATION/OPERATIONS
OVERALL PERFORMANCE EVALUATION:

Provide your overall evaluation of the efficiency and effectiveness with which assigned tasks were performed. Your assessment should include a designation from the following categories: Outstanding performance, acceptable performance or substandard performance. Please be specific with regard to substandard performance and indicate the basis for your evaluation. Specify whether additional training, equipment, or procedures are required to improve the emergency response.

C. DOSE ASSESSMENT

Name: _____ Date: _____

Location: _____

1. Do the dose assessment personnel understand the procedures? _____

2. If meteorological conditions changed, was the updated data utilized? _____

3. Was data passed between facilities effectively and accurately? _____

4. Was data logged appropriately? _____

5. Were maps and displays utilized effectively? _____

6. Was an estimation of release duration and exposure duration arrived at in a logical manner? _____

7. Were the appropriate diffusion factors (Xu/Q) used for an elevated or ground level release? _____

8. Was a comparison made between calculated dose projections and measured values from the monitoring teams? _____

9. Were dose calculations and the determination of protective action recommendations performed efficiently and in a timely manner? _____

10. Were the results of dose calculations and protective action recommendations transmitted through appropriate channels in an efficient and timely manner? _____

11. Was the Emergency Director receptive to emergency personnel recommendations? _____

12. When laboratory results of ingestion pathway samples are provided, are correct protective action recommendations made? _____

13. DOSE ASSESSMENT
OVERALL PERFORMANCE EVALUATION:

Provide your overall evaluation of the efficiency and effectiveness with which assigned tasks were performed. Your assessment should include a designation from the following categories: Outstanding performance, acceptable performance or substandard performance. Please be specific with regard to substandard performance and indicate the basis for your evaluation. Specify whether additional training, equipment, or procedures are required to improve the emergency response.

D. MONITORING

Name: _____ Date: _____

Location: _____

1. Did the monitoring team understand the procedures? _____

   _____

2. Were all radiation monitoring instruments op-checked according to procedures prior to deployment? _____

3. Were radio communications verified prior to deployment? ___

4. Were the teams briefed and deployed in a timely manner? ___

5. Did field monitoring personnel use their instruments properly? _____

6. Were pocket dosimeters checked periodically during the field assignment? _____

7. Was information relayed accurately and efficiently to designated personnel? _____

8. In transit, was the survey meter used to take readings? _____

9. If samples were taken, were sampling procedures followed? _____

10. If radio was not used for communications, did the team report their status periodically by telephone? _____

11. Did monitoring teams use good radiation protection procedures and protective equipment/clothing to avoid contamination? _____

12. MONITORING
OVERALL PERFORMANCE EVALUATION:

Provide your overall evaluation of the efficiency and effectiveness with which assigned tasks were performed. Your assessment should include a designation from the following categories: Outstanding performance, acceptable performance or substandard performance. Please be specific with regard to substandard performance and indicate the basis for your evaluation. Specify whether additional training, equipment, or procedures are required to improve the emergency response.

E. RADIATION EXPOSURE CONTROL

Name: _____ Date: _____

Location: _____

1. Were personnel briefed on dose rates, wind direction, and specifics regarding material released? _____
2. Were personnel briefed on the length of time they should remain in downwind areas? _____
3. Were a high-range pocket dosimeter and TLD issued and was the pocket dosimeter checked for zero reading? _____
4. Were dose record forms filled out and provided to personnel? _____
5. Was protective clothing available? _____
6. If necessary were personnel authorized emergency dose limits by the designated authorities? _____
7. If necessary, was respiratory equipment obtained and issued? _____
8. Were personnel briefed on decontamination locations and when to exit the area based on pocket dosimeter readings? _____
9. If transportation of a contaminated/injured person was demonstrated, were approved radiation protection procedures followed by ambulance personnel and hospital personnel? _____
10. Were dosimeters logged in and final dose readings recorded? _____
11. Were adequate dosimeters and dose record forms available? _____
12. Were personnel familiar with the procedures for their assignment? _____
13. Did the mechanism exist to send TLD badges to the processing facility and did the personnel responsible know the procedures? _____
14. Was access control maintained where necessary? _____

15. RADIATION EXPOSURE CONTROL
OVERALL PERFORMANCE EVALUATION:

Provide your overall evaluation of the efficiency and effectiveness with which assigned tasks were performed. Your assessment should include a designation from the following categories: Outstanding performance, acceptable performance or substandard performance. Please be specific with regard to substandard performance and indicate the basis for your evaluation. Specify whether additional training, equipment, or procedures are required to improve the emergency response.

F. EOF/AEOF FACILITIES

Name: _____ Date: _____

Location: _____

1. Was the facility activated efficiently and in a timely manner?

   _____

2. Was there adequate staffing? _____

3. Were there adequate supplies and equipment? _____

4. Did registration proceed in an efficient manner? _____

5. Were procedures followed to process evacuees/emergency workers? _____

6. Were communications between facilities adequate and was necessary information provided? _____

7. Was access control adequate? _____

8. Was traffic control adequate? _____

9. If problems or difficulties were presented, did the personnel know how to solve them? _____

10. For decontamination facilities; was the facility arranged according to good radiation protection criteria. _____

11. For decontamination facilities were procedures followed;

    a. To determine the need for decontamination? _____

    b. To properly decontaminate personnel? _____

    c. To dispose of contaminated material? _____

12. Was record keeping adequate? _____

13. EOF/AEOF FACILITIES
OVERALL PERFORMANCE EVALUATION:

Provide your overall evaluation of the efficiency and effectiveness with which assigned tasks were performed. Your assessment should include a designation from the following categories: Outstanding performance, acceptable performance or substandard performance. Please be specific with regard to substandard performance and indicate the basis for your evaluation. Specify whether additional training, equipment, or procedures are required to improve the emergency response.

G. PUBLIC AND MEDIA INFORMATION

Name: _____ Date: _____

Location: _____

1. Were the appropriate messages selected for county EBS transmission? _____
2. When protective actions were recommended, were the areas specified appropriate? _____
3. Was county EBS activation timely? _____
4. Were county EBS messages timely? _____
5. Were the sirens effective? _____
6. If route alerting was implemented, was it accomplished efficiently and in a timely manner? _____
7. Were press releases coordinated by all release agencies to ensure uniformity of information? _____
8. Was there a designated media spokesperson who had access to all necessary information? _____
9. Was security maintained at the Joint News Center? _____
10. Did the press releases provide adequate and appropriate information? _____
11. Were the press releases reviewed and authorized by designated personnel prior to their release to the media? _____
12. If technical information was required, was that information obtained from the appropriate personnel? _____
13. Were the displays adequate to provide technical details of plant conditions? _____
14. Was the Joint News Center facility adequate in size and layout? _____
15. Were press briefings held frequently and on a timely basis?

_____

16. Did the media spokesperson present material effectively?

17. Were questions by the media handled properly by the media spokesperson? _____

18. OVERALL PERFORMANCE EVALUATION:

Provide your overall evaluation of the efficiency and effectiveness with which assigned tasks were performed. Your assessment should include a designation from the following categories: Outstanding performance, acceptable performance or substandard performance. Please be specific with regard to substandard performance and indicate the basis for your evaluation. Specify whether additional training, equipment, or procedures are required to improve the emergency response.

FORM SAP 6.4

EMERGENCY PLAN CORRECTIVE ACTION REPORT

Prepared By: _____ Date: _____
Name/Title

Approved: _____
Superintendent of Power

Individual Assigned to Correct Deficiency _____
Name/Title

Reviewed: _____
PORC Date

TO BE COMPLETED BY INDIVIDUAL PREPARING FORM

ITEM DEFICIENCY-

DESCRIPTION AND/OR CAUSE-

RECOMMENDED CORRECTIVE ACTION-

CORRECTIVE ACTION TO BE COMPLETED BY _____
DATE

TO BE COMPLETED BY INDIVIDUAL ASSIGNED TO CORRECT DEFICIENCY

RESOLUTION- (Include Applicable Work Authorization Numbers or Purchase Authorizations)

SIGNATURE: _____
DATE: _____

PLEASE RETURN COMPLETED FORM TO THE JAFNPP EMERGENCY PLANNING COORDINATOR.

FORM SAP 6.5

EMERGENCY PLAN CORRECTIVE ACTION LOG

NO.	DEFICIENCY (Include references to forms, memos, etc.)	SCHEDULED COMPLETION DATE	PERSON ASSIGNED	ACTION TAKEN	DATE EVALUATED

EMERGENCY PLANNING COORDINATOR _____ DATE REVIEWED _____

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

SCENARIO OVERVIEW

I. Scenario Overview

II. Exercise Time Schedule

SCENARIO OVERVIEW

The plant is operating at 100% power, B and D emergency diesel generators are removed from service for maintenance. No other significant problems are identified at this time.

At 0530 the control room operator receives a Drywell floor sump leakage alarm. He notices the rate of rise in the sump has increased and the drywell floor sump pump is pumping. Actions are taken to try to identify and isolate the source of leakage. At 0645 the drywell floor sump pump's out again. Integrator readings are taken and it is determined that drywell unidentified leakage is seven gallons per minute. Notification of an Unusual Event is required at this time due to unidentified drywell leakage greater than five gallons per minute.

At 0730 the electrical relays on the #4 115kv line fail. The 10012 breaker fails to trip. The 10022 breaker (Lighthouse hill line) trips but fails to reclose. The control room operator opens MOD 10017 but still cannot reclose the 10022 breaker. Both incoming sources of 115kv power are lost. Electricians are called to investigate the breaker problems. Reactor shutdown is commenced by slowly reducing recirc flow.

At 0848 Drywell unidentified leakage progresses to 60 gallons per minute. An Alert should be declared at this time. The Reactor Analyst has delivered a shutdown rod sequence to the control room and Reactor shutdown continues.

At 1039 a crack widens on the RWCU suction line upstream of the inboard isolation valve (12 MOV 15). This is the source of the unidentified leakage. Drywell pressure increases rapidly causing a Reactor Scram and isolation. All rods go full in and a complete isolation occurs. A & B RHR pumps and A core spray initiate and inject. HPCI and RCIC initiate, increase in speed, then isolate on low Reactor pressure. Reactor level increases and the control room operator is able to secure A core spray and place A RHR in Torus cooling. A Site Emergency should be declared at this time due to a loss of coolant accident with proper ECCS function.

At 1057 a loud noise is heard in the Torus area. Investigation reveals leakage from a Drywell-Torus vacuum breaker. This is caused by failure of the double O ring seal on the vacuum breaker. It results in a radioactive release to the Reactor building and loss of a fission barrier.

At 1246 the A & C Emergency diesel generators oscillate and trip due to loss of fuel. The transfer pump fuel oil strainers are clogged. This results in a Total loss of all AC power and all ECCS pumps are lost. The core uncovers. A General Emergency is required to be declared based on a LOCA with degraded ECCS.

The loss of all AC power causes a service air isolation due to loss of air compressors. The air boots on both Reactor Building Track bay doors deflate breaching secondary containment and causing a ground level release from the Reactor Building.

At 1452 the cause of the malfunction in the 10022 breaker is determined to be a faulty relay. The relay is replaced and the breaker reclosed. C & D RHR pumps and/or B core spray can be started to reflood the core. At 1515, the Emergency Plan can be downgraded and recovery operations started.

DRILL TIME SCHEDULE

Time	Key Events
0515	The plant is operating at 100% power. B & D EDGs are removed from service for maintenance. No other significant problems are identified at this time.
0530	Drywell floor sump leakage alarm. Drywell floor sump pump pumping. Rate of drywell floor sump fill has increased.
0645	Drywell floor sump pump pumps out again. Drywell leak rate is determined to be 7 gallons per minute.
0705	An Unusual Event should have been declared.
0730	The Electrical relays in the #4 115kv line fail. The 10012 breaker fails to open. The 10022 breaker opens but fails to re-close.
0848	Drywell unidentified leakage progresses to 60 gallons per minute.
0852	An Alert should have been declared.
1039	Drywell high pressure alarm Rx Scram. Lo Lo water level isolation. All rods full in, full isolation occurs. A & B RHR pumps, A core spray inject HPCI & RCIC initiate increase in speed than trip on low pressure. Able to maintain level with one RHR pump.
1044	A Site Area Emergency should be declared at this time.
1057	A loud noise is heard emanating from the Torus Area.
1110	Investigation reveals leakage from the top flange on a Drywell Torus vacuum breaker caused by failure of the double O ring seal.
1246	Emergency Generator EDG A Engine Trouble shutdown annunciator. Emergency Generator EDG C Engine Trouble shutdown annunciator Diesels oscillate and trip. Results in a total loss of all AC. Core uncovers.

DRILL TIME SCHEDULE

Time	Key Events
1251	A General Emergency should be declared.
1257	Cause of the diesel trip is clogged fuel (#60.1) strainers.
1310	The total loss of AC power has caused an isolation of service air. The air boots on both track bay doors have deflated, breaching secondary containment.
1452	The 10022 breaker is repaired and can be reclosed.
1515	The Emergency Plan should be downgraded at this time.

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

CRITIQUE INFORMATION

A critique is scheduled for controllers and observers at 10:00 A.M. on July 19, 1984. The critique shall be held in the classroom of the Energy Information Center.

A separate exit meeting shall be held at the Energy Information Center immediately following the controller observer critique. The NRC shall present their findings to the plant department heads, the Superintendent of Power, the Resident Manager, and the Emergency Planning Coordinator at this meeting.

The Emergency Planning Coordinator shall comply with all provisions for subsequent action as provided in SAP-6 upon the completion of this exercise.

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

PLANT DATA

I. Controller Sheets
II. Message Sheets
III. Plant Parameter Sheets (A) } Sequentially
IV. Plant Parameter Sheets (B) }

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0515	1	Control Room	Plant Initial Conditions - 100% Power - B & D Emergency Diesel Generators are removed from service	N/A	N/A

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0530	2	Control Room	Drywell Floor Sump leakage annunciator. DW Equipment Sump or floor drain rate of rise high annunciator. Drywell Floor Sump pump starts. Drywell Floor Sump high level computer alarm.	Calculation of leak rate	N/A

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0645	3	Control Room	Drywell Floor Sump leakage annunciator. DW Floor Sump high level computer alarm. Drywell Floor Sump pump starts. Drywell leak rate is determined by calculation to be 7 gpm.	Determine if Emergency Plan in effect.	N/A

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0705	4	Shift Super-visor	A notification of Unusual Event should have been declared.		Unusual Event
0715	5	Shift Super-visor	Plant Conditions as noted on Data Sheets.		Unusual Event

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0730	6	Control Room	115 KV lines Bkr 10022 - 1012 failure annunciator. 115 KV NMP-FP4 secondary line relay trip annunciator. 115 KV system loss of voltage annunciator. 115 KV FP LH3 Bkr. 10022 trip annunciator. 115 Bus voltages indicate zero. Commence Reactor shutdown due to loss of 115 KV combined with drywell leakage.		Unusual Event
0745	7	Control Room	Plant Conditions as noted on Data Sheets.		Unusual Event
0800	8	Control Room	Plant Conditions as noted on Data Sheets.		Unusual Event
0815	9	Control Room	Plant Conditions as noted on Data Sheets.		Unusual Event
0830	10	Control Room	Plant Conditions as noted on Data Sheets.		Unusual Event
0845	11	Control Room	Plant Conditions as noted on Data Sheets.		Unusual Event

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0848	12	Control Room	Drywell floor sump high level alarm. Drywell floor sump pump pumps out sump. Leakage calculated to be 60 gpm.		Unusual Event

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
0900	13	Shift Supervisor	An Alert should have been declared.		Alert
0915	14	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Alert
0930	15	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Alert
0945	16	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Alert
1000	17	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Alert
1015	18	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Alert
1030	19	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Alert

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1039	20	Control Room	High drywell pressure alarm. Drywell high temperature alarm. Drywell high humidity alarm. Drywell high radiation alarm. Drywell sump monitor alarms. EDG's A & C start. Reactor Scram. Turbine trip. A core spray, A & B RHR pumps start. HPCI and RCIC start and trip. A SGT starts. Group II isolation with associated alarms.		Alert

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1044	21	Shift Supervisor	A Site Area Emergency should be declared.		Site Area Emergency

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1057	22	Reactor Building Auxiliary Operator	A loud noise is heard coming from the Torus area. Sounds like air escaping.		Site Area Emergency

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1110	23	Reactor Building Auxiliary Operator	Investigation reveals leakage from the Top flange on a Drywell to Torus vacuum breaker. Caused by failure of the double O ring seal.		Site Area Emergency
1115	24	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Site Area Emergency
1130	25	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Site Area Emergency
1145	26	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Site Area Emergency
1200	27	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Site Area Emergency
1215	28	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Site Area Emergency
1230	29	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Site Area Emergency
1245	30	Shift Supervisor	Plant Conditions as noted on Data Sheets.		Site Area Emergency

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1246	31	Control Room	Emerg Gen EDG A Engine Trouble shutdown annunciator. Emerg Gen EDG C Engine Trouble shutdown annunciator. Emerg Gen EDG A Brk 10502 Trip. Emerg Gen EDG C Brk 10512 Trip. A & C Diesels oscillate and trip. Shift to DC lighting. Total loss of all AC. Core uncovers. NOTE: To all participants, Release may be expected to last 10 hours.		Site Area Emergency

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1251	32	Shift Supervisor	A General Emergency should be declared.		General Emergency

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1257	33	Mechanics in Diesel Bay	Investigation reveals clogged strainers in the fuel oil transfer system.		General Emergency

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1300	34	Shift Supervisor	Plant Conditions as noted on Data Sheets.		General Emergency
1310	35	Security	A guard hears noise in the Reactor Building Track Bay area. Investigation reveals the boot has deflated on the doors, allowing a release to the atmosphere.		General Emergency

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1315	36	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1330	37	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1345	38	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1400	39	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1415	40	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1430	41	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1445	42	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency

FORM SAP 1.3

CONTROLLER SHEET

TIME	MESSAGE NUMBER	ISSUED TO	SUMMARY OF MESSAGE CONTENTS	ANTICIPATED RESULTS AND COMMENTS	EMERGENCY CLASSIFICATION
1452	43	I & C Investigating 115 KV breakers	The faulty relay on the 10022 breaker has been identified and repaired. The 10022 breaker may be reclosed.		General Emergency
1500	44	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1515	45	Control Room	Plant Conditions as noted on Data Sheets.		General Emergency
1530	46	ALL	CONCLUDE EXERCISE		

MESSAGE SHEET

MESSAGE NO. 1

Exercise Time: 0515

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Initial Scenario Conditions

- Plant is operating at 100% Power.
- B & D Emergency Diesel Generators are removed from service for maintenance.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	1005	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	500	°F
Cleanup Inlet Temp.	498	°F
Main Steam Pressure	970	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	120	°F
Torus Ave. Water Temp.	78	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	2	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH (Yes) / No

#4 NMP (Yes) / No

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / (Standby) / OOS

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / (Standby) / OOS

D. In Service / (Standby) / OOS

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0515

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 1

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 8.7 MPH

Wind Direction (From) 171 °

Stability Class D

General Weather Conditions

Temp. 50° F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	0.9
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	1.75
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	8.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0515

Message No. 1

MESSAGE SHEET

MESSAGE NO. 2

Exercise Time: 0530

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Drywell Floor Sump leakage annunciator.

DW Equipment Sump or floor drain rate of rise high annunciator.

Drywell Floor Sump pump starts.

Drywell Floor Sump high level computer alarm.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	202 inches
Reactor Level Trend	⟷ TAF
Reactor Vessel Pressure	1005 psig
Reactor Pressure Trend	⟷
Vessel Bottom Drain Temperature	500 °F
Cleanup Inlet Temp.	498 °F
Main Steam Pressure	970 psig
Drywell Pressure	16.5 psia
Drywell Ave. Temp.	120 °F
Torus Ave. Water Temp.	78 °F
Torus Pressure	14.7 psia
Torus Water Level	-1.0 inches above normal
Drywell Floor Leak Rate	2 gpm
CST Level	290 inches
Drywell Equipment Leak Rate	2 gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH (Yes) / No

#4 NMP (Yes) / No

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / (Standby) / OOS

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / (Standby) / OOS

D. In Service / (Standby) / OOS

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0530

Message No. 2

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 8.7 MPH

Wind Direction (From) 171 °

Stability Class D

General Weather Conditions

Temp. 50° F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	0.9
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	1.75
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	8.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0530

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 2

MESSAGE SHEET

MESSAGE NO. 3

Exercise Time: 0645

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Drywell Floor Sump leakage annunciator.

Drywell Floor Sump high level computer alarm.

Drywell Floor Sump pump starts.

Drywell leak rate is determined by calculation to be 7 gpm.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	202 inches
Reactor Level Trend	⟷ TAF
Reactor Vessel Pressure	1005 psig
Reactor Pressure Trend	⟷
Vessel Bottom Drain Temperature	300 °F
Cleanup Inlet Temp.	498 °F
Main Steam Pressure	970 psig
Drywell Pressure	16.5 psia
Drywell Ave. Temp.	120 °F
Torus Ave. Water Temp.	78 °F
Torus Pressure	14.7 psia
Torus Water Level	-1.0 inches above normal
Drywell Floor Leak Rate	7 gpm
CST Level	290 inches
Drywell Equipment Leak Rate	2 gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH (Yes) / No

#4 NMP (Yes) / No

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / (Standby) / OOS

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / (Standby) / OOS

D. In Service / (Standby) / OOS

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0645

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 3

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 8.4 MPH

Wind Direction (From) 171 °

Stability Class C

General Weather Conditions

Temp. 51° F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.05
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	11.0
26	West CRD HYD Control	16.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0645

Message No. 3

MESSAGE SHEET

MESSAGE NO. 4

Exercise Time: 0700

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

A notification of Unusual Event should have been declared.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	←→	TAF
Reactor Vessel Pressure	1005	psig
Reactor Pressure Trend	←→	
Vessel Bottom Drain Temperature	500	°F
Cleanup Inlet Temp.	498	°F
Main Steam Pressure	970	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	120	°F
Torus Ave. Water Temp.	78	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	7	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH (Yes) / No

#4 NMP (Yes) / No

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / (Standby) / OOS

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / (Standby) / OOS

D. In Service / (Standby) / OOS

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0700

Message No. 4

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 6.2 MPH

Wind Direction (From) 171 °

Stability Class C

General Weather Conditions

Temp. 53° F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0700

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 4

MESSAGE SHEET

MESSAGE NO. 5

Exercise Time: 0715

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	⟷	TAF
Reactor Vessel Pressure	1005	psig
Reactor Pressure Trend	⟷	
Vessel Bottom Drain Temperature	500	°F
Cleanup Inlet Temp.	498	°F
Main Steam Pressure	970	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	120	°F
Torus Ave. Water Temp.	78	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	7	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHN (Yes) / No

#4 NMP (Yes) / No

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / (Standby) / OOS

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Date 7/18/84

Time 0715

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 5

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METERCLOGICAL DATA

Wind Speed 6.2 MPH

Wind Direction (From) 171 °

Stability Class C

General Weather Conditions

Temp. 53°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0715

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 5

MESSAGE SHEET

MESSAGE NO. 6

Exercise Time: 0730

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

115 KV lines Bkr 10022 - 1012 failure annunciator.

115 KV NMP-FP4 secondary line relay trip annunciator.

115 KV system loss of voltage annunciator.

115 KV FP LH3 Bkr 10022 trip annunciator.

115 Bus voltages indicate zero.

Commence Reactor shutdown due to loss of 115 KV combined with drywell leakage.

Part III

PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	202 inches
Reactor Level Trend	↔ TAF
Reactor Vessel Pressure	1005 psig
Reactor Pressure Trend	↔
Vessel Bottom Drain Temperature	500 °F
Cleanup Inlet Temp.	498 °F
Main Steam Pressure	970 psig
Drywell Pressure	16.5 psia
Drywell Ave. Temp.	120 °F
Torus Ave. Water Temp.	78 °F
Torus Pressure	14.7 psia
Torus Water Level	-1.0 inches above normal
Drywell Floor Leak Rate	7 gpm
CST Level	290 inches
Drywell Equipment Leak Rate	2 gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0730

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 6

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 6.2 MPH

Wind Direction (From) 171 °

Stability Class C

General Weather Conditions

Temp. 53°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	11.0
26	West CRD HYD Control	16.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0730

Message No. 6

MESSAGE SHEET

MESSAGE NO. 7

Exercise Time: 0745

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	⟷	TAF
Reactor Vessel Pressure	1005	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	495	°F
Cleanup Inlet Temp.	492	°F
Main Steam Pressure	960	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	7	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LRH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0745

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 7

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 6.2 MPH

Wind Direction (From) 171 °

Stability Class C

General Weather Conditions

Temp. 53°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	16.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0745

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 7

MESSAGE SHEET

MESSAGE NO. 8

Exercise Time: 0800

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	⇆	TAF
Reactor Vessel Pressure	980	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	493	°F
Cleanup Inlet Temp.	490	°F
Main Steam Pressure	958	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0 above normal	inches
Drywell Floor Leak Rate	7	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0800

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 8

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.2 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 55°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.-
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	9.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. RIP Machines	13.0
25	East CRD HYD Control	11.0
26	West CRD HYD Control	16.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0800

Message No. 8

MESSAGE SHEET

MESSAGE NO. 9

Exercise Time: 0815

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	970	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	490	°F
Cleanup Inlet Temp.	487	°F
Main Steam Pressure	957	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	7	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0815

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 9

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.2 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 55°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	11.0
26	West CRD HYD Control	16.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	35.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0815

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 9

MESSAGE SHEET

MESSAGE NO. 10

Exercise Time: 0830

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	970	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	490	°F
Cleanup Inlet Temp.	485	°F
Main Steam Pressure	956	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	7	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0830

Message No. 10

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range & Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.2 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 55°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	11.0
26	West CRD HYD Control	16.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	38.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0830

Message No. 10

MESSAGE SHEET

MESSAGE NO. 11

Exercise Time: 0845

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	202 inches
Reactor Level Trend	↔ TAF
Reactor Vessel Pressure	966 psig
Reactor Pressure Trend	↓
Vessel Bottom Drain Temperature	490 °F
Cleanup Inlet Temp.	485 °F
Main Steam Pressure	954 psig
Drywell Pressure	16.5 psia
Drywell Ave. Temp.	121 °F
Torus Ave. Water Temp.	79 °F
Torus Pressure	14.7 psia
Torus Water Level	-1.0 inches above normal
Drywell Floor Leak Rate	7 gpm
CST Level	290 inches
Drywell Equipment Leak Rate	2 gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / [Standby] / OOS

B. In Service / [Standby] / OOS

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / [Standby] / OOS

RCIC In Service / [Standby] / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0845

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 11

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.2 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 55°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	13.0
25	East CRD HYD Control	11.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	38.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0845

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 11

MESSAGE SHEET

MESSAGE NO. 12

Exercise Time: 0848

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Drywell Floor Sump high level alarm.

Drywell Floor Sump pump pumps out sump.

Leakage calculated to be 60 gpm.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	⟷	TAF
Reactor Vessel Pressure	966	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	490	°F
Cleanup Inlet Temp.	485	°F
Main Steam Pressure	954	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	60	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / [Standby] / OOS

B. In Service / [Standby] / OOS

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / [Standby] / OOS

RCIC In Service / [Standby] / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0848

Message No. 12

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.2 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 55°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	8.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	15.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	40.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0848

Message No. 12

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	963	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	487	°F
Cleanup Inlet Temp.	483	°F
Main Steam Pressure	953	psig
Drywell Pressure	16.5	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	60	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0900

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 13

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 2.9 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 60°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	15.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	40.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0900

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 13

MESSAGE SHEET

MESSAGE NO. 14

Exercise Time: 0915

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	959	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	485	°F
Cleanup Inlet Temp.	482	°F
Main Steam Pressure	951	psig
Drywell Pressure	16.6	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	01.0	inches above normal
Drywell Floor Leak Rate	60	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0915

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 14

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 2.9 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 60°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	15.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	40.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0915

Message No. 14

MESSAGE SHEET

MESSAGE NO. 15

Exercise Time: 0930

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	955	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	483	°F
Cleanup Inlet Temp.	480	°F
Main Steam Pressure	950	psig
Drywell Pressure	16.6	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	60	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0930

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 15

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 2.9 MPH

Wind Direction (From) 171 °

Stability Class B

General Weather Conditions

Temp. 60°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	20.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	45.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0930

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 15

FORM SAP 1.4 Page 16 of 46

MESSAGE SHEET

MESSAGE NO. 16

Exercise Time: 0945

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	950	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	482	°F
Cleanup Inlet Temp.	480	°F
Main Steam Pressure	947	psig
Drywell Pressure	16.7	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	60	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / [Standby] / OOS

B. In Service / [Standby] / OOS

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / [Standby] / OOS

RCIC In Service / [Standby] / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 0945

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 16

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 15 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 2.9 MPH

Wind Direction (From) 309 °

Stability Class B

General Weather Conditions

Temp. 60°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	8.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	20.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	40.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	70.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 0945

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 16

FORM SAP 1.4 Page 17 of 46

MESSAGE SHEET

MESSAGE NO. 17

Exercise Time: 1000

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	948	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	480	°F
Cleanup Inlet Temp.	479	°F
Main Steam Pressure	946	psig
Drywell Pressure	16.7	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	60	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / [Standby] / OOS

B. In Service / [Standby] / OOS

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / [Standby] / OOS

RCIC In Service / [Standby] / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1000

Message No. 17

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 150 mR/hr

Stack Rad Monitor 3000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range Monitor 1350 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 0.3 MPH

Wind Direction (From) 309 °

Stability Class B

General Weather Conditions

Temp. 62°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	40.0
25	East CRD HYD Control	12.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	45.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	70.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 1000

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 17

MESSAGE SHEET

MESSAGE NO. 18

Exercise Time: 1015

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202 inches	
Reactor Level Trend	↔ TAF	
Reactor Vessel Pressure	947 psig	
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	479 °F	
Cleanup Inlet Temp.	479 °F	
Main Steam Pressure	945 psig	
Drywell Pressure	16.7 psia	
Drywell Ave. Temp.	121 °F	
Torus Ave. Water Temp.	79 °F	
Torus Pressure	14.7 psia	
Torus Water Level	-1.0 inches above normal	
Drywell Floor Leak Rate	60 gpm	
CST Level	290 inches	
Drywell Equipment Leak Rate	2 gpm	

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. In Service / (Standby) / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / (Standby) / OOS

RCIC In Service / (Standby) / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1015

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 18

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 90 mR/hr

Stack Rad Monitor 1000 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1350 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 5.3 MPH

Wind Direction (From) 309 °

Stability Class B

General Weather Conditions

Temp. 62°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	7.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	4.0
24	Rx. Bldg. TIP Machines	40.0
25	East CRD HYD Control	11.0
26	West CRD HYD Control	17.0
27	Equip. Dr. Sump 227' East	50.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	100.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 1015

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 18

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 19

Exercise Time: 1030

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	202	inches
Reactor Level Trend	←→	TAF
Reactor Vessel Pressure	945	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	477	°F
Cleanup Inlet Temp.	476	°F
Main Steam Pressure	942	psig
Drywell Pressure	16.7	psia
Drywell Ave. Temp.	121	°F
Torus Ave. Water Temp.	79	°F
Torus Pressure	14.7	psia
Torus Water Level	-1.0	inches above normal
Drywell Floor Leak Rate	60	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	2	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

Diesel Generators

A. Running Loaded/Running Unloaded/(Standby)/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/(Standby)/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / [Standby] / OOS

B. In Service / [Standby] / OOS

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / [Standby] / OOS

RCIC In Service / [Standby] / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Date 7/18/84

Time 1030

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 19

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 80 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range $ Monitor
1340 R/hr

Main Steam Line Rad Monitor
_____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 5.3 MPH

Wind Direction (From) 309 °

Stability Class B

General Weather Conditions

Temp. 62°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	9.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	5.0
24	Rx. Bldg. TIP Machines	200.0
25	East CRD HYD Control	13.0
26	West CRD HYD Control	18.0
27	Equip. Dr. Sump 227' East	150.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	500.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 1030

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 19

MESSAGE SHEET

MESSAGE NO. 20

Exercise Time: 1039

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

High drywell pressure alarm.

Drywell high temperature alarm.

Drywell high humidity alarm.

Drywell high radiation alarm.

Drywell sump monitor alarms.

EDG's A & C start.

Reactor Scram.

Turbine trip.

A core spray, A & B RHR pumps start.

HPCI and RCIC start and trip.

A SGT starts.

Group II isolation with associated alarms.

Part II

PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	150 inches
Reactor Level Trend	↑ TAF
Reactor Vessel Pressure	50 psig
Reactor Pressure Trend	↓
Vessel Bottom Drain Temperature	isol. °F
Cleanup Inlet Temp.	isol. °F
Main Steam Pressure	0 psig
Drywell Pressure	23 psia
Drywell Ave. Temp.	130 °F
Torus Ave. Water Temp.	80 °F
Torus Pressure	16 psia
Torus Water Level	-1.0 inches above normal
Drywell Floor Leak Rate	isol. gpm
CST Level	290 inches
Drywell Equipment Leak Rate	isol. gpm

Primary Containment Isolation Complete (Yes)/No

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. (In Service) / Standby / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. [In Service] / Standby / OOS

B. [In Service] / Standby / OOS

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. [Running Loaded]/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. [Running Loaded]/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1039

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 20

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1340 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 5.3 MPH

Wind Direction (From) 104.5 °

Stability Class B

General Weather Conditions

Temp. 62°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	9.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	5.0
24	Rx. Bldg. TIP Machines	300.0
25	East CRD HYD Control	13.0
26	West CRD HYD Control	18.0
27	Equip. Dr. Sump 227' East	200.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	700.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 1039

Message No. 20

FORM SAP 1.4 Page 21 of 46

MESSAGE SHEET

MESSAGE NO. 21

Exercise Time: 1044

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

A Site Area Emergency should be declared.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	200 inches
Reactor Level Trend	↔ TAF
Reactor Vessel Pressure	17 psig
Reactor Pressure Trend	↓
Vessel Bottom Drain Temperature	isol. °F
Cleanup Inlet Temp.	isol. °F
Main Steam Pressure	0 psig
Drywell Pressure	23 psia
Drywell Ave. Temp.	130 °F
Torus Ave. Water Temp.	82 °F
Torus Pressure	18 psia
Torus Water Level	-0.9 inches above normal
Drywell Floor Leak Rate	isol. gpm
CST Level	290 inches
Drywell Equipment Leak Rate	isol. gpm

Primary Containment Isolation Complete (Yes)/No

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / Standby / (OOS)

RCIC In Service / Standby / (OOS)

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Date 7/18/84

Time 1044

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 21

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	150	CPM
Refuel Floor	180	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1330 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 5.3 MPH

Wind Direction (From) 310 °

Stability Class B

General Weather Conditions

Temp. 62°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	0.2
2	Admin. Bldg. Change Area	0.2
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	1.0
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	2.0
15	Cleanup Precoat Tank Area	15.0
16	Cleanup Ht. Ex. Entrance	3.5
17	Fuel Pool Pumps	80.0
18	Contam. Equip. Storage	20.0
19	Rx. Cleanup Pump Area	10.0
20	Rx. Sample Sta Area	9.0
21	Closed Cool Water Hx.	1.0
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	5.0
24	Rx. Bldg. TIP Machines	350.0
25	East CRD HYD Control	13.0
26	West CRD HYD Control	18.0
27	Equip. Dr. Sump 227' East	300.0
28	Rx. CRD Removal Hatch	9.0
29	Fl. Dr. Sump 227' West	900.0
30	South Fuel Floor Rx Bldg.	0

Date 7/18/84

Time 1044

Message No. 21

MESSAGE SHEET

MESSAGE NO. 22

Exercise Time: 1057

Issued To: Rx. Bldg. Auxiliary Operator

Issued By: Lead Controller

MESSAGE

A loud noise is heard coming from the Torus area. Sounds like air escaping.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	200 inches
Reactor Level Trend	↔ TAF
Reactor Vessel Pressure	15 psig
Reactor Pressure Trend	↓
Vessel Bottom Drain Temperature	isol. °F
Cleanup Inlet Temp.	isol. °F
Main Steam Pressure	0 psig
Drywell Pressure	23 psia
Drywell Ave. Temp.	130 °F
Torus Ave. Water Temp.	82 °F
Torus Pressure	18 psia
Torus Water Level	-0.9 inches above normal
Drywell Floor Leak Rate	isol. gpm
CST Level	290 inches
Drywell Equipment Leak Rate	isol. gpm

Primary Containment Isolation Complete (Yes)/No

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / Standby / (OOS)

RCIC In Service / Standby / (OOS)

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1057

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 22

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1330 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.1 MPH

Wind Direction (From) 310 °

Stability Class B

General Weather Conditions

Temp. 65°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1057

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 22

MESSAGE SHEET

MESSAGE NO. 23

Exercise Time: 1110

Issued To: Rx. Bldg. Auxiliary Operator

Issued By: Lead Controller

MESSAGE

Investigation reveals leakage from the Top flange on a Drywell to Torus vacuum breaker. Caused by failure of the double O ring seal.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	200 inches
Reactor Level Trend	↔ TAF
Reactor Vessel Pressure	12 psig
Reactor Pressure Trend	↔
Vessel Bottom Drain Temperature	isol. °F
Cleanup Inlet Temp.	isol. °F
Main Steam Pressure	0 psig
Drywell Pressure	21 psia
Drywell Ave. Temp.	129 °F
Torus Ave. Water Temp.	82 °F
Torus Pressure	18 psia
Torus Water Level	-0.9 inches above normal
Drywell Floor Leak Rate	isol. gpm
CST Level	290 inches
Drywell Equipment Leak Rate	isol. gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / Standby / (OOS)

RCIC In Service / Standby / (OOS)

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1110

Message No. 23

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1330 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.1 MPH

Wind Direction (From) 310 °

Stability Class B

General Weather Conditions

Temp. 65°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
	Rx. Bldg. 344' elv. South	5.5
	[illegible]w Fuel Vault	O/S
	[illegible]anup Precoat Tank Area	O/S
	[illegible]eanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1110

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 23

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 24

Exercise Time: 1115

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	200	inches
Reactor Level Trend	⟷	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	⟷	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	20	psia
Drywell Ave. Temp.	128	°F
Torus Ave. Water Temp.	82	°F
Torus Pressure	18	psia
Torus Water Level	-0.9	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / OOS

D. In Service / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1115

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 24

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1330 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.1 MPH

Wind Direction (From) 310 °

Stability Class B

General Weather Conditions

Temp. 65°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5 5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1115

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 24

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 25

Exercise Time: 1130

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	200 inches
Reactor Level Trend	↔ TAF
Reactor Vessel Pressure	10 psig
Reactor Pressure Trend	↔
Vessel Bottom Drain Temperature	isol. °F
Cleanup Inlet Temp.	isol. °F
Main Steam Pressure	0 psig
Drywell Pressure	20 psia
Drywell Ave. Temp.	127 °F
Torus Ave. Water Temp.	81 °F
Torus Pressure	18 psia
Torus Water Level	-0.9 inches above normal
Drywell Floor Leak Rate	isol. gpm
CST Level	290 inches
Drywell Equipment Leak Rate	isol. gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1130

Message No. 25

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1320 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.1 MPH

Wind Direction (From) 310 °

Stability Class B

General Weather Conditions

Temp. 65°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1130

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 25

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 26

Exercise Time: 1145

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	200	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	19	psia
Drywell Ave. Temp.	125	°F
Torus Ave. Water Temp.	81	°F
Torus Pressure	17	psia
Torus Water Level	-0.9	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / OOS

D. In Service / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1145

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 26

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1320 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.1 MPH

Wind Direction (From) 310 °

Stability Class B

General Weather Conditions

Temp. 65°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1145

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 26

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 27

Exercise Time: 1200

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	200	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	19	psia
Drywell Ave. Temp.	125	°F
Torus Ave. Water Temp.	81	°F
Torus Pressure	17	psia
Torus Water Level	-0.9	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete (Yes)/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / OOS

D. In Service / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1200

Message No. 27

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1320 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / o	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.2 MPH

Wind Direction (From) 337 °

Stability Class A

General Weather Conditions

Temp. 68°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1200

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 27

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 28

Exercise Time: 1215

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	200	inches
Reactor Level Trend	⟷	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	⟷	
Vessel Bottom Drain Temperature	isol	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	19	psia
Drywell Ave. Temp.	125	°F
Torus Ave. Water Temp.	81	°F
Torus Pressure	17	psia
Torus Water Level	-0.9	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

Diesel Generators

A. (Running Loaded) / Running Unloaded / Standby / OOS

B. Running Loaded / Running Unloaded / Standby / (OOS)

C. (Running Loaded) / Running Unloaded / Standby / OOS

D. Running Loaded / Running Unloaded / Standby / (OOS)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / OOS

D. In Service / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Date 7/18/84

Time 1215

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 28

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1310 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.2 MPH

Wind Direction (From) 337 °

Stability Class A

General Weather Conditions

Temp. 68°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1215

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 28

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 29

Exercise Time: 1230

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	200 inches	
Reactor Level Trend	↔ TAF	
Reactor Vessel Pressure	10 psig	
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	isol. °F	
Cleanup Inlet Temp.	isol. °F	
Main Steam Pressure	0 psig	
Drywell Pressure	19 psia	
Drywell Ave. Temp.	125 °F	
Torus Ave. Water Temp.	81 °F	
Torus Pressure	17 psia	
Torus Water Level	-0.9 inches above normal	
Drywell Floor Leak Rate	isol. gpm	
CST Level	290 inches	
Drywell Equipment Leak Rate	isol. gpm	

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / OOS

D. In Service / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1230

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 29

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1310 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.2 MPH

Wind Direction (From) 337 °

Stability Class A

General Weather Conditions

Temp. 68°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1230

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 29

FORM SAP 1.4

MESSAGE SHEET

MESSAGE NO. 30

Exercise Time: 1245

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	200	inches
Reactor Level Trend	↔	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	19	psia
Drywell Ave. Temp.	125	°F
Torus Ave. Water Temp.	81	°F
Torus Pressure	17	psia
Torus Water Level	-0.9	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / (Standby) / OOS

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / (Standby) / OOS

B. (In Service) / Standby / OOS

C. In Service / Standby / OOS

D. In Service / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. (Running Loaded)/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. (Running Loaded)/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1245

Message No. 30

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1310 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	(Yes) / No	Yes / No

METEROLOGICAL DATA

Wind Speed 3.2 MPH

Wind Direction (From) 337 °

Stability Class A

General Weather Conditions

Temp. 68°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1245

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 30

MESSAGE SHEET

MESSAGE NO. 31

Exercise Time: 1246

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Emergency Gen EDG A Engine Trouble shutdown annunciator.

Emergency Gen EDG C Engine Trouble shutdown annunciator.

Emergency Gen EDG A Brk 10502 trip.

Emergency Gen EDG C Brk 10512 trip.

A & C Diesels oscillate and trip shift to DC lighting.

Total loss of all AC core uncovers.

NOTE: To all participants, values calculated for offsite release have been increased by a factor of 10 from estimated values. Release may be expected to last 10 hours.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-20	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	↓	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	28	psia
Drywell Ave. Temp.	135	°F
Torus Ave. Water Temp.	85	°F
Torus Pressure	24	psia
Torus Water Level	-0.4	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes (No)

Secondary Isolation Complete Yes (No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/OOS

C. Running Loaded/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/OOS

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / OOS

1.B. In Service / Standby / OOS

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / Standby / OOS

B. In Service / Standby / OOS

C. In Service / Standby / OOS

D. In Service / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Date 7/18/84

Time 1246

Message No. 31

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1310 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.2 MPH

Wind Direction (From) 337 °

Stability Class A

General Weather Conditions

Temp. 68°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1246

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 31

FORM SAP 1.4 Page 32 of 46

MESSAGE SHEET

MESSAGE NO. 32

Exercise Time: 1251

Issued To: Shift Supervisor

Issued By: Lead Controller

MESSAGE

A General Emergency should be declared.

FORM SAP 1.4 Page 33 of 46

MESSAGE SHEET

MESSAGE NO. 33

Exercise Time: 1257

Issued To: Mechanics

Issued By: TSC Controller

MESSAGE

Investigation reveals clogged strainers in the fuel oil transfer system. Upon investigation, it can be concluded that the fuel oil system can be repaired within 10 hours.

FORM SAP 1.4 Page 34 of 46

MESSAGE SHEET

MESSAGE NO. 34

Exercise Time: 1300

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-30	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	29	psia
Drywell Ave. Temp.	137	°F
Torus Ave. Water Temp.	85	°F
Torus Pressure	26	psia
Torus Water Level	-0.4	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete Yes/(No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / (No)

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / (OOS)

1.B. In Service / Standby / (OOS)

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / (OOS)

B. In Service / Standby / (OOS)

C. In Service / Standby / (OOS)

D. In Service / Standby / (OOS)

HPCI In Service / Standby / (OOS)

RCIC In Service / Standby / (OOS)

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/(OOS)

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/Standby/(OOS)

D. Running Loaded/Running Unloaded/Standby/(OOS)

Date 7/18/84

Time 1300

Message No. 34

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale CPM
Refuel Floor	offscale CPM
Turbine Building	375 CPM
Radwaste	110 CPM
Control Room (inlet)	100 CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0 mR/hr
Turbine Building	0 mR/hr
Radwaste Building	0 mR/hr

Containment Hi Range δ Monitor 1300 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.4 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1300

Message No. 34

MESSAGE SHEET

MESSAGE NO. 35

Exercise Time: 1310

Issued To: Security

Issued By: Lead Controller

MESSAGE

A guard hears noise in the Reactor Building Track Bay area. Investigation reveals the boot has deflated on the doors allowing a release to the atmosphere.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-37	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	11	psig
Reactor Pressure Trend	↗	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	30	psia
Drywell Ave. Temp.	138	°F
Torus Ave. Water Temp.	85	°F
Torus Pressure	27	psia
Torus Water Level	-0.4	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes / (No)

Secondary Isolation Complete Yes / (No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

Date 7/18/84

Time 1310

Message No. 35

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1300 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.4 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1310

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 35

FORM SAP 1.4 Page 36 of 46

MESSAGE SHEET

MESSAGE NO. 36

Exercise Time: 1315

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT
Reactor Shutdown	Yes/No
Reactor Vessel Level	-40 inches
Reactor Level Trend	↓ TAF
Reactor Vessel Pressure	12 psig
Reactor Pressure Trend	↗
Vessel Bottom Drain Temperature	isol. °F
Cleanup Inlet Temp.	isol. °F
Main Steam Pressure	0 psig
Drywell Pressure	30 psia
Drywell Ave. Temp.	140 °F
Torus Ave. Water Temp.	85 °F
Torus Pressure	27 psia
Torus Water Level	-0.4 inches above normal
Drywell Floor Leak Rate	isol. gpm
CST Level	290 inches
Drywell Equipment Leak Rate	isol. gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete Yes/(No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Date 7/18/84

Time 1315

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 36

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1300 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.4 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	875.0

Date 7/18/84

Time 1315

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 36

MESSAGE SHEET

MESSAGE NO. 37

Exercise Time: 1330

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-50	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	14	psig
Reactor Pressure Trend	↗	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	32	psia
Drywell Ave. Temp.	160	°F
Torus Ave. Water Temp.	86	°F
Torus Pressure	28	psia
Torus Water Level	-0.4	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes / (No)

Secondary Isolation Complete Yes / (No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

Date 7/18/84

Time 1330

Message No. 37

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1270 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.4 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	719.0

Date 7/18/84

Time 1330

Message No. 37

MESSAGE SHEET

MESSAGE NO. 38

Exercise Time: 1345

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-60	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	16	psig
Reactor Pressure Trend	↗	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	34	psia
Drywell Ave. Temp.	165	°F
Torus Ave. Water Temp.	86	°F
Torus Pressure	28	psia
Torus Water Level	-0.3	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes / (No)

Secondary Isolation Complete Yes / (No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

Date 7/18/84

Time 1345

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 38

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1230 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 4.4 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	150.0
2	Admin. Bldg. Change Area	10.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	719.0

Date 7/18/84

Time 1345

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 38

MESSAGE SHEET

MESSAGE NO. 39

Exercise Time: 1400

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-70	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	17	psig
Reactor Pressure Trend	↗	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	35	psia
Drywell Ave. Temp.	170	°F
Torus Ave. Water Temp.	87	°F
Torus Pressure	30	psia
Torus Water Level	-0.3	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete Yes/(No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

Date 7/18/84

Time 1400

Message No. 39

Part III PLANT PARAMETERS (B)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale CPM
Refuel Floor	offscale CPM
Turbine Building	375 CPM
Radwaste	110 CPM
Control Room (inlet)	100 CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0 mR/hr
Turbine Building	0 mR/hr
Radwaste Building	0 mR/hr

Containment Hi Range δ Monitor 1190 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.1 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	135.0
2	Admin. Bldg. Change Area	9.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	647.0

Date 7/18/84

Time 1400

Message No. 39

MESSAGE SHEET

MESSAGE NO. 40

Exercise Time: 1415

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-80	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	20	psig
Reactor Pressure Trend	↗	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	37	psia
Drywell Ave. Temp.	175	°F
Torus Ave. Water Temp.	87	°F
Torus Pressure	33	psia
Torus Water Level	-0.8	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/(No)

Secondary Isolation Complete Yes/(No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

Date 7/18/84

Time 1415

Message No. 40

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1175 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.1 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	135.0
2	Admin. Bldg. Change Area	9.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	647.0

Date 7/18/84

Time 1415

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 40

MESSAGE SHEET

MESSAGE NO. 41

Exercise Time: 1430

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-90	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	21	psig
Reactor Pressure Trend	↗	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	37	psia
Drywell Ave. Temp.	175	°F
Torus Ave. Water Temp.	87	°F
Torus Pressure	33	psia
Torus Water Level	-0.8	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes / (No)

Secondary Isolation Complete Yes / (No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Date 7/18/84

Time 1430

Message No. 41

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 1050 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.1 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	114.0
2	Admin. Bldg. Change Area	7.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	549.0

Date 7/18/84

Time 1430

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 41

MESSAGE SHEET

MESSAGE NO. 42

Exercise Time: 1445

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-100	inches
Reactor Level Trend	↓	TAF
Reactor Vessel Pressure	22	psig
Reactor Pressure Trend	↑	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	38	psia
Drywell Ave. Temp.	178	°F
Torus Ave. Water Temp.	88	°F
Torus Pressure	34	psia
Torus Water Level	-0.8	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes / (No)

Secondary Isolation Complete Yes / (No)

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH Yes / [No]

#4 NMP Yes / [No]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / [OOS]

1.B. In Service / Standby / [OOS]

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. In Service / Standby / [OOS]

D. In Service / Standby / [OOS]

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Date 7/18/84

Time 1445

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 42

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 980 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	Yes / (No)

METEROLOGICAL DATA

Wind Speed 3.1 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	114.0
2	Admin. Bldg. Change Area	7.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	549.0

Date 7/18/84

Time 1445

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 42

MESSAGE SHEET

MESSAGE NO. 43

Exercise Time: 1452

Issued To: I & C Investigating 115 KV Breakers

Issued By: Lead Controller

MESSAGE

The faulty relay on the 10022 breaker has been identified and repaired. The 10022 breaker may be reclosed.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	-70	inches
Reactor Level Trend	↑	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	39	psia
Drywell Ave. Temp.	180	°F
Torus Ave. Water Temp.	89	°F
Torus Pressure	34	psia
Torus Water Level	-0.8	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH (Yes) / No

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / (OOS)

1.B. (In Service) / Standby / OOS

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / OOS

B. In Service / Standby / OOS

C. (In Service) / Standby / OOS

D. (In Service) / Standby / OOS

HPCI In Service / Standby / OOS

RCIC In Service / Standby / OOS

SAFETY RELIEF VALVE POSITIONS

(11 Valves)

A	OPEN	CLOSED
B	OPEN	CLOSED
C	OPEN	CLOSED
D	OPEN	CLOSED
E	OPEN	CLOSED
F	OPEN	CLOSED
G	OPEN	CLOSED
H	OPEN	CLOSED
J	OPEN	CLOSED
K	OPEN	CLOSED
L	OPEN	CLOSED

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/OOS

B. Running Loaded/Running Unloaded/Standby/OOS

C. Running Loaded/Running Unloaded/Standby/OOS

D. Running Loaded/Running Unloaded/Standby/OOS

Date 7/18/84

Time 1452

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 43

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale CPM
Refuel Floor	offscale CPM
Turbine Building	375 CPM
Radwaste	110 CPM
Control Room (inlet)	100 CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0 mR/hr
Turbine Building	0 mR/hr
Radwaste Building	0 mR/hr

Containment Hi Range & Monitor 895 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	(Yes) / No

METEROLOGICAL DATA

Wind Speed 3.4 MPH

Wind Direction (From) 298 °

Stability Class A

General Weather Conditions

Temp. 70°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	114.0
2	Admin. Bldg. Change Area	7.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	549.0

Date 7/18/84

Time 1452

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 43

FORM SAP 1.4 Page 44 of 46

MESSAGE SHEET

MESSAGE NO. 44

Exercise Time: 1500

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

MAJOR PARAMETERS

Reactor Power Level	___ MWE ___ MWT	
Reactor Shutdown	Yes/No	
Reactor Vessel Level	0	inches
Reactor Level Trend	↑	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	↔	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	38	psia
Drywell Ave. Temp.	179	°F
Torus Ave. Water Temp.	88	°F
Torus Pressure	34	psia
Torus Water Level	-0.8	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes/No

Secondary Isolation Complete Yes/No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH (Yes) / No

#4 NMP Yes / (No)

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/(OOS)

B. Running Loaded/Running Unloaded/Standby/(OOS)

C. Running Loaded/Running Unloaded/Standby/(OOS)

D. Running Loaded/Running Unloaded/Standby/(OOS)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / (OOS)

1.B. (In Service) / Standby / OOS

LPCI (4 Pumps ∿ 10,000 gpm each)

A. In Service / Standby / (OOS)

B. In Service / Standby / (OOS)

C. (In Service) / Standby / OOS

D. (In Service) / Standby / OOS

HPCI In Service / Standby / (OOS)

RCIC In Service / Standby / (OOS)

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	(CLOSED)
B	OPEN	(CLOSED)
C	OPEN	(CLOSED)
D	OPEN	(CLOSED)
E	OPEN	(CLOSED)
F	OPEN	(CLOSED)
G	OPEN	(CLOSED)
H	OPEN	(CLOSED)
J	OPEN	(CLOSED)
K	OPEN	(CLOSED)
L	OPEN	(CLOSED)

Date 7/18/84

Time 1500

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 44

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 710 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	(Yes) / No

METEROLOGICAL DATA

Wind Speed 3.4 MPH

Wind Direction (From) 280 °

Stability Class B

General Weather Conditions

Temp. 67°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	3.0
2	Admin. Bldg. Change Area	1.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/s
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	164.0

Date 7/18/84

Time 1500

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 44

FORM SAP 1.4 Page 45 of 46

MESSAGE SHEET

MESSAGE NO. 45

Exercise Time: 1515

Issued To: Control Room

Issued By: Lead Controller

MESSAGE

Plant Conditions as noted on Data Sheets.

Part III PLANT PARAMETERS (A)

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

MAJOR PARAMETERS

Reactor Power Level	___ MWE	___ MWT
Reactor Shutdown	Yes/No	
Reactor Vessel Level	30	inches
Reactor Level Trend	↑	TAF
Reactor Vessel Pressure	10	psig
Reactor Pressure Trend	⇐⇒	
Vessel Bottom Drain Temperature	isol.	°F
Cleanup Inlet Temp.	isol.	°F
Main Steam Pressure	0	psig
Drywell Pressure	36	psia
Drywell Ave. Temp.	130	°F
Torus Ave. Water Temp.	87	°F
Torus Pressure	32	psia
Torus Water Level	-0.7	inches above normal
Drywell Floor Leak Rate	isol.	gpm
CST Level	290	inches
Drywell Equipment Leak Rate	isol.	gpm

Primary Containment Isolation Complete Yes / (No)

Secondary Isolation Complete (Yes) / No

ELECTRICAL POWER

115KV Reserve Power Available

#3 LHH (Yes) / No

#4 NMP Yes / (No)

ENGINEERED SAFEGUARDS (Circle)

Core Spray Pumps

(Flow Rate 4625 gpm)

1.A. In Service / Standby / (OOS)

1.B. (In Service) / Standby / OOS

LPCI (4 Pumps ~ 10,000 gpm each)

A. In Service / Standby / [OOS]

B. In Service / Standby / [OOS]

C. [In Service] / Standby / OOS

D. [In Service] / Standby / OOS

HPCI In Service / Standby / [OOS]

RCIC In Service / Standby / [OOS]

SAFETY RELIEF VALVE POSITIONS (11 Valves)

A	OPEN	[CLOSED]
B	OPEN	[CLOSED]
C	OPEN	[CLOSED]
D	OPEN	[CLOSED]
E	OPEN	[CLOSED]
F	OPEN	[CLOSED]
G	OPEN	[CLOSED]
H	OPEN	[CLOSED]
J	OPEN	[CLOSED]
K	OPEN	[CLOSED]
L	OPEN	[CLOSED]

Diesel Generators

A. Running Loaded/Running Unloaded/Standby/[OOS]

B. Running Loaded/Running Unloaded/Standby/[OOS]

C. Running Loaded/Running Unloaded/Standby/[OOS]

D. Running Loaded/Running Unloaded/Standby/[OOS]

Date 7/18/84

Time 1515

Message No. 45

Part III PLANT PARAMETERS (B)

RADIATION MONITORS

Building Vent Rad Monitors

Rx. Building	offscale	CPM
Refuel Floor	offscale	CPM
Turbine Building	375	CPM
Radwaste	110	CPM
Control Room (inlet)	100	CPM

Off-Gas Rad Monitor 40 mR/hr

Stack Rad Monitor 10 Cps

High Range Effluent Monitors

Stack	0	mR/hr
Turbine Building	0	mR/hr
Radwaste Building	0	mR/hr

Containment Hi Range δ Monitor 710 R/hr

Main Steam Line Rad Monitor _____ R/hr

STANDBY GAS TREATMENT

	A	B
In Service	Yes / (No)	(Yes) / No

METEROLOGICAL DATA

Wind Speed 5.0 MPH

Wind Direction (From) 310 °

Stability Class B

General Weather Conditions

Temp. 67°F

AREA RADIATION MONITORS

No.	Location	mR/hr
1	Admin. Building	3.0
2	Admin. Bldg. Change Area	1.0
3	Admin. Bldg. Control Room	0.06
4	Turb Floor HP end	0.6
5	Turb Floor LP end	1.0
6	Turb Bldg. Hogging Pump	0.25
7	Reactor Feed Pump Area	0.7
8	Radwaste Control Room	6.0
9	Radw. Filt/Valve Op. Area	25.0
10	Radw. Drum Storage Area	30.0
11	Radwaste Pump Room	35.0
12	Spent Fuel Area	O/S
13	Rx. Bldg. 344' elv. South	5.5
14	New Fuel Vault	O/S
15	Cleanup Precoat Tank Area	O/S
16	Cleanup Ht. Ex. Entrance	O/S
17	Fuel Pool Pumps	O/S
18	Contam. Equip. Storage	O/S
19	Rx. Cleanup Pump Area	O/S
20	Rx. Sample Sta Area	O/S
21	Closed Cool Water Hx.	O/S
22	Cond. Demin Valve Area	0.8
23	Rx. Bldg. Access	O/S
24	Rx. Bldg. TIP Machines	O/S
25	East CRD HYD Control	O/S
26	West CRD HYD Control	O/S
27	Equip. Dr. Sump 227' East	O/S
28	Rx. CRD Removal Hatch	O/S
29	Fl. Dr. Sump 227' West	O/S
30	South Fuel Floor Rx Bldg.	164.0

Date 7/18/84

Time 1515

NEW YORK POWER AUTHORITY JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Message No. 45

FORM SAP 1.4 Page 46 of 46

MESSAGE SHEET

MESSAGE NO. 46

Exercise Time: 1530

Issued To: All Participants

Issued By: Lead Controller

MESSAGE

Conclude Exercise.

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

RADIOLOGICAL DATA

Offsite Receptor Points Rad. Data

1. Table A-1 Classification of Atmospheric Stability
2. Table A-2 Accident Isotopic Distributions
3. Table A-3 Radiological Release Data Overview
4. Table A-4 Keys to Fixed Survey Points
5. Onsite Fixed Survey Point Data
6. Offsite Fixed Survey Point Data
7. Field Data

TABLE A-1

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

Stability Classification	Pasquill Categories	Temperature Change With Height, °C/100 m*	σ_θ, degrees	σ_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	Temperature Change With Height, °F/70 Feet**	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.

TABLE A-2

PERCENT ISOTOPIC DISTRIBUTION FOR FIVE CLASSES OF ACCIDENTS INCLUDED IN THE NMPNS AND JAFNPP CLASS A MODELING*

Isotope	Steam Line Break	Loss of Coolant or Contaminant Design Basis		Refueling	Control Rod Drop
		Filters Operational	No Allowance for Filters		
Noble					
Kr-83M			2.66	2.6375	2.6225
Kr-85M		6.8	5.67	5.6475	5.6225
Kr-87	0.4	9.2	8.08	8.1375	8.0255
Kr-88	0.4	14.7	14.14	13.6275	14.0325
Xe-133		45.6	46.23	46.51	46.01
Xe-135M	0.33	6.7	6.72	6.69	6.69
Xe-135	0.33	7.6	7.59	7.58	7.64
Xe-138	0.63	9.3	9.34	9.30	9.36
Iodine					
I-131	6.5	6.6×10^{-3}	1.39×10^{-4}	1.2×10^{-2}	5.0×10^{-5}
I-132	16.9	9.3×10^{-3}	1.95×10^{-4}	1.7×10^{-2}	8.0×10^{-5}
I-133	26.1	1.37×10^{-2}	2.93×10^{-4}	2.48×10^{-2}	1.1×10^{-4}
I-134	24.1	1.28×10^{-2}	2.67×10^{-4}	2.33×10^{-2}	1.1×10^{-4}
I-135	24.1	1.19×10^{-2}	2.45×10^{-4}	2.16×10^{-2}	9.0×10^{-5}
Particulate					
H-3	Sb-125		<1**		
Mn-54	Te-132				
Co-58	Cs-134				
Co-60	Cs-136				
Fe-59	Cs-137				
Zn-65	Be-140				
Sr-89	La-140				
Sr-90					

TABLE A-3

RADIOLOGICAL RELEASE DATA OVERVIEW

Assumptions		Stack		HREM.		
K factor		2.1μCi/Sec/CPS		2.54 Ci/Sec/mR/hr.		
Scenario Time	Wind Direction Degrees From	Stack Releases CPS*	Stack HREM mR/hr.	Ci/Sec	Wind Speed 30' Elevation	°F 70' ΔT
1000	309°	3E+3	0.1	N/A	.3	-0.71
1015	309°	1E+3	0.1	N/A	5.3	-0.71
1030	309°	1E+2	0.1	N/A	5.3	-0.71
1045	309°	8E+1	0.1	N/A	5.3	-0.71
1100	310°	10	0.1	N/A	4.1	-0.72
1115	310°	10	0.1	N/A	4.1	-0.72
1130	310°	10	0.1	N/A	4.1	-0.72
1145	310°	10	0.1	N/A	4.1	-0.72
1200	337°	10	0.1	N/A	3.2	-0.74
1215	337°	10	0.1	N/A	3.2	-0.74
1230	337°	10	0.1	N/A	3.2	-0.74
1245	337°	10	0.1	N/A	3.2	-0.74
1300	298°	10	0.1	500	4.4	-0.75
1315	298°	10	0.1	411	4.4	-0.75
1330	298°	10	0.1	411	4.4	-0.75
1345	298°	10	0.1	370	4.4	-0.75
1400	298°	10	0.1	370	3.1	-0.74
1415	298°	10	0.1	347	3.1	-0.74
1430	298°	10	0.1	347	3.1	-0.74
1445	298°	10	0.1	347	3.1	-0.74
1500	280°	10	0.1	2.2E-2	3.4	-0.72
1515	310°	8E+3	0.1	1.68E-2	5	-1°

Table A-4

KEYS TO FIXED SURVEY POINTS

The following key provides the location of the fixed survey points located on the onsite and offsite Nine Mile Point Emergency Planning Maps.

Data for these fixed survey points can be interpolated from the following Field Data Tables.

Key to On-Site Survey/Sample Locations

Site	Angle	Miles	Site	Angle	Miles
N-1	264	0.90	D-1	274	0.23
M-1	255	0.91	D-2	63	0.37-1950'
L-1	244	0.85-4500'	D-3	73	10.18
L-2	234	1.45-7650'	D-4	79	9.5
L-3	228	3.91	D-5	66	12.51
L-4	231	6.23	E-1	264	0.30-1600'
L-5	231	7.36	E-2	109	0.37-1950'
L-6	234	8.94	E-3	115	1.16
L-7	223	10.46	E-4	113	2.02
K-1	236	0.89	E-5	105	3.86
K-2	212	2.21	E-6	106	5.89
K-3	216	3.26	E-7	98	7.13
K-4	204	4.55	E-8	89	9.33
K-5	208	6.4	F-1	124	0.63
K-6	199	8.26	F-2	121	0.68
K-7	206	9.8	F-2	153	.79
J-1	227	0.57	F-3	137	1.63
J-2	198	1.97	F-4	120	3.45
J-3	194	2.72	F-5	130	5.21
J-4	189	4.14	F-6	123	6.81
J-5	185	5.9	F-7	121	8.72
J-6	183	8.31	G-1	254	0.41-2100'
J-7	181	11.48	G-2	210	0.43-2250'
H-1	218	0.48-2550'	G-3	189	0.43-2256'
H-2	184	1.74	G-4	165	1.87
H-3	172	2.66	G-5	153	2.58
H-4	174	3.77	G-6	136	4.61
H-5	159	5.13	G-7	143	5.89
H-6	169	7.18	G-8	144	7.18
H-7	161	9.21	G-9	143	9.53

* NOTE: Centerpoint - FitzPatrick Reactor Building

ONSITE FIXED SURVEY POINT DATA

KEY TO ON-SITE SURVEY/SAMPLE LOCATIONS

SITE	SITE	ANGLE	MILES
N-1	1	257	.99
M-1	2	251	1.02
L-1	3	242	.99
K-1	4	235	1.06
J-1	5	229	.75
H-1	6	222	.66
G-1	7	249	.52
G-2	8	216	.57
G-3	9	202	.56
E-1	10	251	.48
D-1	11	261	.36
E-2	12	143	.25
F-1	13	140	.54
F-2	14	136	.59
D-2	15	50	.21

TIME: 1246
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	BKGRND	BKGRND	BKGRND
13	BKGRND	BKGRND	BKGRND
14	BKGRND	BKGRND	BKGRND
15	BKGRND	BKGRND	BKGRND

TIME: 1255

ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	6.4E+3	7.7E+3	1.4E+3
13	4.9E+2	5.9E+2	1.1E+2
14	BKGRND	BKGRND	BKGRND
15	BKGRND	BKGRND	BKGRND

TIME: 1300

ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	6.4E+3	7.7E+3	1.4E+3
13	4.9E+2	5.9E+2	1.1E+2
14	9.1E+1	1.1E+2	2.1E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1315
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	1.1E+2	1.3E+2	2.5E+1
13	4.3E+1	5.1E+1	9.9E+0
14	1.6E+2	2.1E+2	3.8E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1330
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	9.1E+1	1.1E+2	2.1E+1
13	3.5E+1	4.2E+1	8.1E+0
14	1.3E+2	1.6E+2	3.1E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1345
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	9.1E+1	1.1E+2	2.1E+1
13	3.5E+1	4.2E+1	8.1E+0
14	1.3E+2	1.6E+2	3.1E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1400
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	1.1E+2	1.3E+2	2.5E+1
13	4.2E+1	5.1E+1	9.7E+0
14	1.6E+2	1.9E+2	3.8E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1415
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	1.1E+2	1.3E+2	2.5E+1
13	4.2E+1	5.1E+1	9.7E+0
14	1.6E+2	1.9E+2	3.8E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1430
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	1.1E+2	1.2E+2	2.3E+1
13	3.9E+1	4.7E+1	9.1E+0
14	1.5E+2	1.8E+2	3.5E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1445
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	1.1E+2	1.2E+2	2.3E+1
13	3.9E+1	4.7E+1	9.1E+0
14	1.5E+2	1.8E+2	3.5E+1
15	BKGRND	BKGRND	BKGRND

TIME: 1500
ONSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
1	BKGRND	BKGRND	BKGRND
2	BKGRND	BKGRND	BKGRND
3	BKGRND	BKGRND	BKGRND
4	BKGRND	BKGRND	BKGRND
5	BKGRND	BKGRND	BKGRND
6	BKGRND	BKGRND	BKGRND
7	BKGRND	BKGRND	BKGRND
8	BKGRND	BKGRND	BKGRND
9	BKGRND	BKGRND	BKGRND
10	BKGRND	BKGRND	BKGRND
11	BKGRND	BKGRND	BKGRND
12	BKGRND	BKGRND	BKGRND
13	BKGRND	BKGRND	BKGRND
14	BKGRND	BKGRND	BKGRND
15	BKGRND	BKGRND	BKGRND

OFFS1TE FIXED SURVEY POINT DATA

KEY TO OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	SITE	ANGLE	MILES
L-2	16	232	1.82
L-3	17	228	3.91
L-4	18	231	6.23
L-5	19	231	7.36
L-6	20	234	8.94
L-7	21	223	10.46
K-2	22	212	2.21
K-3	23	216	3.26
K-4	24	204	4.55
K-5	25	208	6.4
K-6	26	199	8.26
K-7	27	206	9.8
J-2	28	198	1.97
J-3	29	194	2.72
J-4	30	189	4.14
J-5	31	185	5.9
J-6	32	183	8.31
J-7	33	181	11.48
H-2	34	184	1.74
H-3	35	172	2.66
H-4	36	174	3.77
H-5	37	159	5.13
H-6	38	169	7.18
H-7	39	161	9.21
G-4	40	165	1.87
G-5	41	153	2.58
G-6	42	136	4.61
G-7	43	143	5.89
G-8	44	144	7.18
G-9	45	143	9.53
F-2	46	153	.79
F-3	47	137	1.63
F-4	48	120	3.45
F-5	49	130	5.21
F-6	50	123	6.81
F-7	51	121	8.72
E-3	52	115	1.16
E-4	53	113	2.02
E-5	54	105	3.86
E-6	55	106	5.89
E-7	56	98	7.13
E-8	57	89	9.33
D-3	58	73	10.18
D-4	59	79	9.5
D-5	60	66	12.51

TIME: 1246
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	BKGRND	BKGRND	BKGRND
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	BKGRND	BKGRND	BKGRND
53	BKGRND	BKGRND	BKGRND
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1255

OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	BKGRND	BKGRND	BKGRND
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	BKGRND	BKGRND	BKGRND
53	BKGRND	BKGRND	BKGRND
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1300
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	3.1E+3	3.7E+3	7.2E+2
47	BKGRND	BKGRND	BKGRND
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	BKGRND	BKGRND	BKGRND
53	BKGRND	BKGRND	BKGRND
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1315
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	8.2E+0	9.9E+0	1.9E+0
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	1.2E+3	1.5E+3	2.9E+2
53	3.6E+2	4.3E+2	9.3E+1
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1330
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	8.2E+0	9.9E+0	1.9E+0
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	1.2E+3	1.5E+3	2.9E+2
53	3.6E+2	4.3E+2	8.3E+1
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1345
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	6.8E+0	8.1E+0	1.5E+0
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	1.1E+3	1.2E+3	2.4E+2
53	2.9E+2	3.3E+2	6.8E+1
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1400
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	9.1E+0	1.1E+1	2.1E+0
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	1.4E+3	1.6E+3	3.2E+2
53	3.9E+2	4.7E+2	9.1E+1
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1415
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	8.1E+0	9.7E+0	1.8E+0
48	2.5E+2	3.1E+2	5.9E+1
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	1.2E+3	1.5E+3	2.9E+2
53	3.9E+2	4.7E+2	9.1E+1
54	1.5E+1	1.8E+1	3.5E+0
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1430
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	6.4E-1	7.7E-1	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	8.1E+0	9.7E+0	1.8E+0
48	2.1E+2	2.5E+2	4.9E+1
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	1.2E+3	1.5E+3	2.9E+2
53	3.5E+2	4.2E+2	8.1E+1
54	1.2E+1	1.5E+1	2.8E+0
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1445
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	5.3E-1	6.4E-1	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	7.6E+0	9.1E+0	1.7E+0
48	2.1E+2	2.5E+2	4.8E+1
49	1.4E+1	1.6E+1	3.2E+0
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	1.1E+3	1.4E+3	2.7E+2
53	3.5E+2	4.2E+2	8.1E+1
54	1.2E+1	1.5E+1	2.8E+0
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

TIME: 1500
OFFSITE SURVEY/SAMPLE LOCATIONS

SITE	CLOSED WINDOW MR/HR	OPEN WINDOW MR/HR	IODINE SAMPLE CPM
16	BKGRND	BKGRND	BKGRND
17	BKGRND	BKGRND	BKGRND
18	BKGRND	BKGRND	BKGRND
19	BKGRND	BKGRND	BKGRND
20	BKGRND	BKGRND	BKGRND
21	BKGRND	BKGRND	BKGRND
22	BKGRND	BKGRND	BKGRND
23	BKGRND	BKGRND	BKGRND
24	BKGRND	BKGRND	BKGRND
25	BKGRND	BKGRND	BKGRND
26	BKGRND	BKGRND	BKGRND
27	BKGRND	BKGRND	BKGRND
28	BKGRND	BKGRND	BKGRND
29	BKGRND	BKGRND	BKGRND
30	BKGRND	BKGRND	BKGRND
31	BKGRND	BKGRND	BKGRND
32	BKGRND	BKGRND	BKGRND
33	BKGRND	BKGRND	BKGRND
34	BKGRND	BKGRND	BKGRND
35	BKGRND	BKGRND	BKGRND
36	BKGRND	BKGRND	BKGRND
37	BKGRND	BKGRND	BKGRND
38	BKGRND	BKGRND	BKGRND
39	BKGRND	BKGRND	BKGRND
40	BKGRND	BKGRND	BKGRND
41	BKGRND	BKGRND	BKGRND
42	BKGRND	BKGRND	BKGRND
43	BKGRND	BKGRND	BKGRND
44	BKGRND	BKGRND	BKGRND
45	BKGRND	BKGRND	BKGRND
46	BKGRND	BKGRND	BKGRND
47	BKGRND	BKGRND	BKGRND
48	BKGRND	BKGRND	BKGRND
49	BKGRND	BKGRND	BKGRND
50	BKGRND	BKGRND	BKGRND
51	BKGRND	BKGRND	BKGRND
52	BKGRND	BKGRND	BKGRND
53	BKGRND	BKGRND	BKGRND
54	BKGRND	BKGRND	BKGRND
55	BKGRND	BKGRND	BKGRND
56	BKGRND	BKGRND	BKGRND
57	BKGRND	BKGRND	BKGRND
58	BKGRND	BKGRND	BKGRND
59	BKGRND	BKGRND	BKGRND
60	BKGRND	BKGRND	BKGRND

FIELD DATA

10 Mile EPZ Survey Points.

Noble Gas Dose Rates in mr/hr.
Open Window Dose Rates in mr/hr.
Net CPM for 25 Cu. Ft. Iodine Sample.

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1246

CLOCKWISE ANGLE FROM PLANT IN DEGREES

	135	140	145	150	155	160	165	170	175
0.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1246

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1246

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1255

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	6.1E+2	3.1E+3	9.2E+3	1.8E+4	2.6E+4	2.5E+4	1.6E+4	7.6E+3	2.2E+3
0.50 MI	8.2E+1	5.7E+2	2.2E+3	5.2E+3	7.7E+3	7.4E+3	4.5E+3	1.7E+3	4.1E+2
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1255

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	7.2E+2	3.6E+3	1.1E+4	2.2E+4	3.1E+4	3.1E+4	2.1E+4	9.1E+3	2.7E+3
0.50 MI	9.9E+1	6.8E+2	2.6E+3	6.2E+3	9.3E+3	8.9E+3	5.4E+3	2.1E+3	4.9E+2
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1255

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	1.3E+2	6.9E+2	2.1E+3	4.3E+3	6.1E+3	5.7E+3	3.8E+3	1.7E+3	5.2E+2
0.50 MI	1.9E+1	1.3E+2	5.1E+2	1.2E+3	1.7E+3	1.7E+3	1.1E+3	4.1E+2	9.4E+1
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1300

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	6.1E+2	3.1E+3	9.2E+3	1.8E+4	2.6E+4	2.5E+4	1.6E+4	7.6E+3	2.2E+3
0.50 MI	8.2E+1	5.7E+2	2.2E+3	5.2E+3	7.7E+3	7.4E+3	4.5E+3	1.7E+3	4.1E+2
0.75 MI	2.4E+1	2.1E+2	9.5E+2	2.4E+3	3.8E+3	3.6E+3	2.1E+3	7.3E+2	1.4E+2
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1300

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	7.2E+2	3.6E+3	1.1E+4	2.2E+4	3.1E+4	3.1E+4	2.1E+4	9.1E+3	2.7E+3
0.50 MI	9.9E+1	6.8E+2	2.6E+3	6.2E+3	9.3E+3	8.9E+3	5.4E+3	2.1E+3	4.9E+2
0.75 MI	2.9E+1	2.5E+2	1.1E+3	2.9E+3	4.5E+3	4.3E+3	2.5E+3	8.8E+2	1.7E+2
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1300

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	135	140	145	150	155	160	165	170	175
0.25 MI	1.3E+2	6.9E+2	2.1E+3	4.3E+3	6.1E+3	5.7E+3	3.8E+3	1.7E+3	5.2E+2
0.50 MI	1.9E+1	1.3E+2	5.1E+2	1.2E+3	1.7E+3	1.7E+3	1.1E+3	4.1E+2	9.4E+1
0.75 MI	5.5E+0	4.8E+1	2.1E+2	5.6E+2	8.7E+2	8.3E+2	4.8E+2	1.6E+2	3.3E+1
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1315

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.6E+3	5.7E+3	1.2E+4	1.8E+4	1.9E+4	1.4E+4	6.9E+3	2.2E+3	4.5E+2
0.50 MI	3.1E+2	1.3E+3	3.4E+3	5.5E+3	5.8E+3	3.9E+3	1.6E+3	4.3E+2	6.2E+1
0.75 MI	1.1E+2	5.5E+2	1.5E+3	2.7E+3	2.8E+3	1.8E+3	7.1E+2	1.5E+2	1.8E+1
1.00 MI	5.1E+1	2.9E+2	9.1E+2	1.6E+3	1.7E+3	1.1E+3	3.8E+2	7.5E+1	7.3E+0
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1315

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	2.1E+3	4.8E+3	1.5E+4	2.2E+4	2.3E+4	1.6E+4	8.3E+3	2.7E+3	5.4E+2
0.50 MI	3.6E+2	1.5E+3	4.1E+3	6.6E+3	6.9E+3	4.7E+3	2.1E+3	5.1E+2	7.4E+1
0.75 MI	1.2E+2	6.6E+2	1.9E+3	3.2E+3	3.4E+3	2.2E+3	8.5E+2	1.8E+2	2.1E+1
1.00 MI	6.1E+1	3.5E+2	1.1E+3	1.9E+3	2.1E+3	1.2E+3	4.6E+2	9.1E+1	8.8E+0
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1315

CLOCKWISE ANGLE FROM PLANT IN DEGREES

	100	105	110	115	120	125	130	135	140
0.25 MI	3.9E+2	1.3E+3	2.9E+3	4.3E+3	4.5E+3	3.2E+3	1.5E+3	5.1E+2	1.1E+2
0.50 MI	7.1E+1	3.1E+2	7.9E+2	1.2E+3	1.3E+3	9.1E+2	3.8E+2	9.8E+1	1.4E+1
0.75 MI	2.4E+1	1.2E+2	3.6E+2	6.2E+2	6.5E+2	4.2E+2	1.6E+2	3.6E+1	4.1E+0
1.00 MI	1.1E+1	6.7E+1	2.1E+2	3.7E+2	3.9E+2	2.4E+2	8.8E+1	1.7E+1	1.6E+0
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1330

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.3E+3	4.7E+3	1.1E+4	1.5E+4	1.6E+4	1.1E+4	5.7E+3	1.8E+3	3.7E+2
0.50 MI	2.5E+2	1.1E+3	2.8E+3	4.5E+3	4.7E+3	3.2E+3	1.3E+3	3.5E+2	5.1E+1
0.75 MI	8.8E+1	4.5E+2	1.3E+3	2.2E+3	2.3E+3	1.5E+3	5.8E+2	1.2E+2	1.4E+1
1.00 MI	4.1E+1	2.4E+2	7.5E+2	1.3E+3	1.4E+3	8.8E+2	3.1E+2	6.1E+1	6.1E+0
1.25 MI	2.7E+1	1.7E+2	5.9E+2	1.1E+3	1.1E+3	7.1E+2	2.3E+2	4.2E+1	3.5E+0
1.50 MI	1.6E+1	1.1E+2	4.1E+2	8.1E+2	8.5E+2	5.1E+2	1.5E+2	2.5E+1	1.9E+0
1.75 MI	1.1E+1	8.2E+1	3.1E+2	6.1E+2	6.4E+2	3.7E+2	1.1E+2	1.7E+1	1.1E+0
2.00 MI	7.2E+0	6.1E+1	2.3E+2	4.8E+2	5.1E+2	2.9E+2	8.4E+1	1.1E+1	7.2E-1
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1330

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.6E+3	5.6E+3	1.2E+4	1.8E+4	1.9E+4	1.3E+4	6.8E+3	2.2E+3	4.4E+2
0.50 MI	3.1E+2	1.3E+3	3.3E+3	5.4E+3	5.7E+3	3.8E+3	1.6E+3	4.2E+2	6.1E+1
0.75 MI	1.1E+2	5.4E+2	1.5E+3	2.6E+3	2.8E+3	1.8E+3	7.1E+2	1.5E+2	1.7E+1
1.00 MI	4.9E+1	2.8E+2	9.1E+2	1.6E+3	1.7E+3	1.1E+3	3.8E+2	7.4E+1	7.2E+0
1.25 MI	3.2E+1	2.1E+2	7.1E+2	1.3E+3	1.4E+3	8.4E+2	2.8E+2	5.1E+1	4.2E+0
1.50 MI	1.9E+1	1.4E+2	5.1E+2	9.6E+2	1.1E+3	6.1E+2	1.9E+2	3.1E+1	2.3E+0
1.75 MI	1.2E+1	9.9E+1	3.7E+2	7.3E+2	7.7E+2	4.4E+2	1.3E+2	2.1E+1	1.3E+0
2.00 MI	8.7E+0	7.2E+1	2.8E+2	5.7E+2	6.1E+2	3.4E+2	1.1E+2	1.4E+1	8.6E-1
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1330

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	3.2E+2	1.1E+3	2.3E+3	3.5E+3	3.6E+3	2.6E+3	1.3E+3	4.2E+2	8.5E+1
0.50 MI	5.8E+1	2.5E+2	6.4E+2	1.1E+3	1.1E+3	7.4E+2	3.1E+2	8.1E+1	1.1E+1
0.75 MI	2.1E+1	1.1E+2	3.1E+2	5.1E+2	5.4E+2	3.4E+2	1.3E+2	2.9E+1	3.4E+0
1.00 MI	9.4E+0	5.5E+1	1.7E+2	3.1E+2	3.2E+2	2.1E+2	7.2E+1	1.4E+1	1.3E+0
1.25 MI	6.2E+0	4.1E+1	1.3E+2	2.5E+2	2.6E+2	1.6E+2	5.4E+1	9.6E+0	BKGRND
1.50 MI	3.7E+0	2.7E+1	9.6E+1	1.8E+2	1.9E+2	1.1E+2	3.6E+1	5.9E+0	BKGRND
1.75 MI	2.4E+0	1.8E+1	7.1E+1	1.4E+2	1.4E+2	8.6E+1	2.6E+1	3.9E+0	BKGRND
2.00 MI	1.6E+0	1.3E+1	5.5E+1	1.1E+2	1.1E+2	6.6E+1	1.9E+1	2.7E+0	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1345

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.3E+3	4.7E+3	1.1E+4	1.5E+4	1.6E+4	1.1E+4	5.7E+3	1.8E+3	3.7E+2
0.50 MI	2.5E+2	1.1E+3	2.8E+3	4.5E+3	4.7E+3	3.2E+3	1.3E+3	3.5E+2	5.1E+1
0.75 MI	8.8E+1	4.5E+2	1.3E+3	2.2E+3	2.3E+3	1.5E+3	5.8E+2	1.2E+2	1.4E+1
1.00 MI	4.1E+1	2.4E+2	7.5E+2	1.3E+3	1.4E+3	8.8E+2	3.1E+2	6.1E+1	6.1E+0
1.25 MI	2.2E+1	1.4E+2	4.9E+2	9.1E+2	9.6E+2	5.8E+2	1.9E+2	3.4E+1	2.9E+0
1.50 MI	1.3E+1	9.6E+1	3.4E+2	6.5E+2	6.9E+2	4.1E+2	1.3E+2	2.1E+1	1.5E+0
1.75 MI	8.7E+0	6.7E+1	2.5E+2	5.1E+2	5.3E+2	3.1E+2	9.3E+1	1.4E+1	9.4E-1
2.00 MI	5.9E+0	4.9E+1	1.9E+2	3.9E+2	4.2E+2	2.3E+2	6.9E+1	9.7E+0	5.9E-1
2.25 MI	5.1E+0	4.6E+1	1.9E+2	3.9E+2	4.1E+2	2.3E+2	6.4E+1	8.5E+0	4.7E-1
2.50 MI	3.7E+0	3.5E+1	1.5E+2	3.2E+2	3.4E+2	1.8E+2	5.1E+1	6.3E+0	3.2E-1
2.75 MI	2.8E+0	2.8E+1	1.2E+2	2.7E+2	2.9E+2	1.5E+2	4.1E+1	4.8E+0	2.3E-1
3.00 MI	2.2E+0	2.3E+1	1.1E+2	2.3E+2	2.5E+2	1.3E+2	3.3E+1	3.7E+0	1.6E-1
3.25 MI	1.7E+0	1.9E+1	9.2E+1	2.1E+2	2.1E+2	1.1E+2	2.8E+1	3.1E+0	1.2E-1
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1345

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.6E+3	5.6E+3	1.2E+4	1.8E+4	1.9E+4	1.3E+4	6.8E+3	2.2E+3	4.4E+2
0.50 MI	3.1E+2	1.3E+3	3.3E+3	5.4E+3	5.7E+3	3.8E+3	1.6E+3	4.2E+2	6.1E+1
0.75 MI	1.1E+2	5.4E+2	1.5E+3	2.6E+3	2.8E+3	1.8E+3	7.1E+2	1.5E+2	1.7E+1
1.00 MI	4.9E+1	2.8E+2	9.1E+2	1.6E+3	1.7E+3	1.1E+3	3.8E+2	7.4E+1	7.2E+0
1.25 MI	2.6E+1	1.7E+2	5.8E+2	1.1E+3	1.1E+3	6.9E+2	2.3E+2	4.1E+1	3.5E+0
1.50 MI	1.6E+1	1.1E+2	4.1E+2	7.9E+2	8.3E+2	4.9E+2	1.5E+2	2.5E+1	1.9E+0
1.75 MI	1.1E+1	8.1E+1	3.1E+2	6.1E+2	6.4E+2	3.6E+2	1.1E+2	1.6E+1	1.1E+0
2.00 MI	7.1E+0	5.9E+1	2.3E+2	4.7E+2	5.1E+2	2.8E+2	8.3E+1	1.1E+1	7.1E-1
2.25 MI	6.2E+0	5.5E+1	2.2E+2	4.6E+2	5.1E+2	2.7E+2	7.7E+1	1.1E+1	5.7E-1
2.50 MI	4.5E+0	4.3E+1	1.8E+2	3.8E+2	4.1E+2	2.2E+2	6.1E+1	7.6E+0	3.9E-1
2.75 MI	3.4E+0	3.4E+1	1.5E+2	3.2E+2	3.5E+2	1.8E+2	4.9E+1	5.8E+0	2.7E-1
3.00 MI	2.6E+0	2.8E+1	1.2E+2	2.8E+2	3.1E+2	1.6E+2	4.1E+1	4.5E+0	2.1E-1
3.25 MI	2.1E+0	2.3E+1	1.1E+2	2.4E+2	2.6E+2	1.3E+2	3.3E+1	3.6E+0	1.4E-1
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1345

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	3.2E+2	1.1E+3	2.3E+3	3.5E+3	3.6E+3	2.6E+3	1.3E+3	4.2E+2	8.5E+1
0.50 MI	5.8E+1	2.5E+2	6.4E+2	1.1E+3	1.1E+3	7.4E+2	3.1E+2	8.1E+1	1.1E+1
0.75 MI	2.1E+1	1.1E+2	3.1E+2	5.1E+2	5.4E+2	3.4E+2	1.3E+2	2.9E+1	3.4E+0
1.00 MI	9.4E+0	5.5E+1	1.7E+2	3.1E+2	3.2E+2	2.1E+2	7.2E+1	1.4E+1	1.3E+0
1.25 MI	5.1E+0	3.3E+1	1.1E+2	2.1E+2	2.2E+2	1.3E+2	4.4E+1	7.9E+0	BKGRND
1.50 MI	3.1E+0	2.2E+1	7.9E+1	1.5E+2	1.6E+2	9.4E+1	3.1E+1	4.8E+0	BKGRND
1.75 MI	2.1E+0	1.5E+1	5.8E+1	1.1E+2	1.2E+2	7.1E+1	2.1E+1	3.2E+0	BKGRND
2.00 MI	1.3E+0	1.1E+1	4.5E+1	9.1E+1	9.7E+1	5.4E+1	1.5E+1	2.2E+0	BKGRND
2.25 MI	1.1E+0	1.1E+1	4.3E+1	9.1E+1	9.6E+1	5.3E+1	1.4E+1	1.9E+0	BKGRND
2.50 MI	BKGRND	8.2E+0	3.5E+1	7.4E+1	7.9E+1	4.3E+1	1.1E+1	1.4E+0	BKGRND
2.75 MI	BKGRND	6.6E+0	2.9E+1	6.3E+1	6.7E+1	3.6E+1	9.4E+0	1.1E+0	BKGRND
3.00 MI	BKGRND	5.3E+0	2.4E+1	5.4E+1	5.8E+1	3.1E+1	7.7E+0	BKGRND	BKGRND
3.25 MI	BKGRND	4.4E+0	2.1E+1	4.6E+1	5.1E+1	2.6E+1	6.4E+0	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1400

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.6E+3	5.6E+3	1.2E+4	1.8E+4	1.9E+4	1.3E+4	6.8E+3	2.2E+3	4.4E+2
0.50 MI	3.1E+2	1.3E+3	3.3E+3	5.5E+3	5.7E+3	3.8E+3	1.6E+3	4.2E+2	6.1E+1
0.75 MI	1.1E+2	5.4E+2	1.5E+3	2.6E+3	2.8E+3	1.8E+3	7.1E+2	1.5E+2	1.7E+1
1.00 MI	5.4E+1	3.2E+2	1.1E+3	1.8E+3	1.8E+3	1.1E+3	4.2E+2	8.2E+1	8.1E+0
1.25 MI	2.9E+1	1.9E+2	6.5E+2	1.2E+3	1.2E+3	7.7E+2	2.6E+2	4.6E+1	3.8E+0
1.50 MI	1.8E+1	1.2E+2	4.5E+2	8.7E+2	9.3E+2	5.4E+2	1.7E+2	2.8E+1	2.1E+0
1.75 MI	1.1E+1	9.1E+1	3.4E+2	6.6E+2	7.1E+2	4.1E+2	1.2E+2	1.8E+1	1.2E+0
2.00 MI	7.9E+0	6.6E+1	2.6E+2	5.2E+2	5.6E+2	3.1E+2	9.2E+1	1.3E+1	7.9E-1
2.25 MI	5.6E+0	5.1E+1	2.1E+2	4.2E+2	4.5E+2	2.5E+2	7.1E+1	9.3E+0	5.2E-1
2.50 MI	4.1E+0	3.9E+1	1.6E+2	3.5E+2	3.8E+2	2.1E+2	5.6E+1	6.9E+0	3.5E-1
2.75 MI	3.8E+0	3.8E+1	1.7E+2	3.6E+2	3.9E+2	2.1E+2	5.4E+1	6.4E+0	3.1E-1
3.00 MI	2.9E+0	3.1E+1	1.4E+2	3.1E+2	3.3E+2	1.7E+2	4.5E+1	5.1E+0	2.2E-1
3.25 MI	2.3E+0	2.5E+1	1.2E+2	2.7E+2	2.9E+2	1.5E+2	3.7E+1	4.1E+0	1.6E-1
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1400

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	2.1E+3	6.7E+3	1.4E+4	2.2E+4	2.3E+4	1.6E+4	8.2E+3	2.6E+3	5.3E+2
0.50 MI	3.6E+2	1.5E+3	4.1E+3	6.6E+3	6.8E+3	4.6E+3	1.9E+3	5.1E+2	7.3E+1
0.75 MI	1.2E+2	6.5E+2	1.8E+3	3.2E+3	3.3E+3	2.1E+3	8.4E+2	1.8E+2	2.1E+1
1.00 MI	6.5E+1	3.8E+2	1.2E+3	2.1E+3	2.2E+3	1.4E+3	5.1E+2	9.9E+1	9.6E+0
1.25 MI	3.5E+1	2.3E+2	7.8E+2	1.4E+3	1.5E+3	9.3E+2	3.1E+2	5.5E+1	4.6E+0
1.50 MI	2.1E+1	1.5E+2	5.5E+2	1.1E+3	1.1E+3	6.5E+2	2.1E+2	3.4E+1	2.5E+0
1.75 MI	1.4E+1	1.1E+2	4.1E+2	8.1E+2	8.5E+2	4.9E+2	1.4E+2	2.2E+1	1.5E+0
2.00 MI	9.5E+0	7.9E+1	3.1E+2	6.3E+2	6.7E+2	3.8E+2	1.1E+2	1.5E+1	9.4E-1
2.25 MI	6.8E+0	6.1E+1	2.5E+2	5.1E+2	5.4E+2	3.1E+2	8.5E+1	1.1E+1	6.2E-1
2.50 MI	4.9E+0	4.7E+1	2.1E+2	4.2E+2	4.5E+2	2.4E+2	6.7E+1	8.3E+0	4.2E-1
2.75 MI	4.5E+0	4.5E+1	2.1E+2	4.3E+2	4.7E+2	2.5E+2	6.9E+1	7.7E+0	3.7E-1
3.00 MI	3.5E+0	3.7E+1	1.7E+2	3.7E+2	4.1E+2	2.1E+2	5.4E+1	6.1E+0	2.6E-1
3.25 MI	2.7E+0	3.1E+1	1.4E+2	3.2E+2	3.5E+2	1.8E+2	4.4E+1	4.9E+0	1.9E-1
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1400

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	3.8E+2	1.3E+3	2.8E+3	4.2E+3	4.4E+3	3.1E+3	1.5E+3	5.1E+2	1.1E+2
0.50 MI	6.9E+1	3.1E+2	7.7E+2	1.2E+3	1.3E+3	8.9E+2	3.7E+2	9.7E+1	1.4E+1
0.75 MI	2.4E+1	1.2E+2	3.6E+2	6.1E+2	6.5E+2	4.1E+2	1.6E+2	3.5E+1	4.1E+0
1.00 MI	1.2E+1	7.3E+1	2.3E+2	4.1E+2	4.3E+2	2.7E+2	9.7E+1	1.8E+1	1.8E+0
1.25 MI	6.8E+0	4.4E+1	1.5E+2	2.7E+2	2.9E+2	1.7E+2	5.9E+1	1.1E+1	BKGRND
1.50 MI	4.1E+0	2.9E+1	1.1E+2	2.1E+2	2.1E+2	1.2E+2	4.1E+1	6.5E+0	BKGRND
1.75 MI	2.6E+0	2.1E+1	7.8E+1	1.5E+2	1.6E+2	9.4E+1	2.8E+1	4.3E+0	BKGRND
2.00 MI	1.8E+0	1.5E+1	6.1E+1	1.2E+2	1.2E+2	7.3E+1	2.1E+1	2.9E+0	BKGRND
2.25 MI	1.3E+0	1.1E+1	4.7E+1	9.8E+1	1.1E+2	5.8E+1	1.6E+1	2.1E+0	BKGRND
2.50 MI	BKGRND	9.1E+0	3.8E+1	8.1E+1	8.7E+1	4.7E+1	1.2E+1	1.6E+0	BKGRND
2.75 MI	BKGRND	8.8E+0	3.9E+1	8.4E+1	9.1E+1	4.8E+1	1.2E+1	1.4E+0	BKGRND
3.00 MI	BKGRND	7.1E+0	3.3E+1	7.2E+1	7.7E+1	4.1E+1	1.1E+1	1.1E+0	BKGRND
3.25 MI	BKGRND	5.9E+0	2.8E+1	6.2E+1	6.7E+1	3.5E+1	8.6E+0	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1415

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.6E+3	5.6E+3	1.2E+4	1.8E+4	1.9E+4	1.3E+4	6.8E+3	2.2E+3	4.4E+2
0.50 MI	3.1E+2	1.3E+3	3.3E+3	5.5E+3	5.7E+3	3.8E+3	1.6E+3	4.2E+2	6.1E+1
0.75 MI	1.1E+2	5.4E+2	1.5E+3	2.6E+3	2.8E+3	1.8E+3	7.1E+2	1.5E+2	1.7E+1
1.00 MI	4.9E+1	2.8E+2	9.1E+2	1.6E+3	1.7E+3	1.1E+3	3.8E+2	7.4E+1	7.2E+0
1.25 MI	2.6E+1	1.7E+2	5.8E+2	1.1E+3	1.1E+3	6.9E+2	2.3E+2	4.1E+1	3.5E+0
1.50 MI	1.6E+1	1.1E+2	4.1E+2	7.9E+2	8.3E+2	4.9E+2	1.5E+2	2.5E+1	1.9E+0
1.75 MI	1.1E+1	9.1E+1	3.4E+2	6.6E+2	7.1E+2	4.1E+2	1.2E+2	1.8E+1	1.2E+0
2.00 MI	7.9E+0	6.6E+1	2.6E+2	5.2E+2	5.6E+2	3.1E+2	9.2E+1	1.3E+1	7.9E-1
2.25 MI	5.6E+0	5.1E+1	2.1E+2	4.2E+2	4.5E+2	2.5E+2	7.1E+1	9.3E+0	5.2E-1
2.50 MI	4.1E+0	3.9E+1	1.6E+2	3.5E+2	3.8E+2	2.1E+2	5.6E+1	6.9E+0	3.5E-1
2.75 MI	3.1E+0	3.1E+1	1.4E+2	3.1E+2	3.2E+2	1.7E+2	4.5E+1	5.3E+0	2.5E-1
3.00 MI	2.4E+0	2.5E+1	1.1E+2	2.5E+2	2.7E+2	1.4E+2	3.7E+1	4.1E+0	1.8E-1
3.25 MI	1.8E+0	2.1E+1	1.1E+2	2.2E+2	2.4E+2	1.2E+2	3.1E+1	3.3E+0	1.3E-1
3.50 MI	1.8E+0	2.1E+1	1.1E+2	2.3E+2	2.5E+2	1.3E+2	3.1E+1	3.2E+0	1.2E-1
3.75 MI	1.4E+0	1.8E+1	9.2E+1	2.1E+2	2.2E+2	1.1E+2	2.6E+1	2.6E+0	BKGRND
4.00 MI	1.2E+0	1.5E+1	8.1E+1	1.8E+2	2.1E+2	1.1E+2	2.3E+1	2.1E+0	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1415

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	2.1E+3	6.7E+3	1.4E+4	2.2E+4	2.3E+4	1.6E+4	8.2E+3	2.6E+3	5.3E+2
0.50 MI	3.6E+2	1.5E+3	4.1E+3	6.6E+3	6.8E+3	4.6E+3	1.9E+3	5.1E+2	7.3E+1
0.75 MI	1.2E+2	6.5E+2	1.8E+3	3.2E+3	3.3E+3	2.1E+3	9.4E+2	1.8E+2	2.1E+1
1.00 MI	5.9E+1	3.4E+2	1.1E+3	1.9E+3	2.1E+3	1.2E+3	4.5E+2	8.9E+1	8.6E+0
1.25 MI	3.2E+1	2.1E+2	7.1E+2	1.3E+3	1.3E+3	8.3E+2	2.8E+2	4.9E+1	4.2E+0
1.50 MI	1.9E+1	1.3E+2	4.9E+2	9.5E+2	1.1E+3	5.9E+2	1.8E+2	3.1E+1	2.2E+0
1.75 MI	1.4E+1	1.1E+2	4.1E+2	8.1E+2	8.5E+2	4.9E+2	1.4E+2	2.2E+1	1.5E+0
2.00 MI	9.5E+0	7.9E+1	3.1E+2	6.3E+2	6.7E+2	3.8E+2	1.1E+2	1.5E+1	9.4E-1
2.25 MI	6.8E+0	6.1E+1	2.5E+2	5.1E+2	5.4E+2	3.1E+2	8.5E+1	1.1E+1	6.2E-1
2.50 MI	4.9E+0	4.7E+1	2.1E+2	4.2E+2	4.5E+2	2.4E+2	6.7E+1	8.3E+0	4.2E-1
2.75 MI	3.7E+0	3.7E+1	1.6E+2	3.6E+2	3.8E+2	2.1E+2	5.4E+1	6.4E+0	3.1E-1
3.00 MI	2.8E+0	3.1E+1	1.4E+2	3.1E+2	3.3E+2	1.7E+2	4.4E+1	4.9E+0	2.2E-1
3.25 MI	2.2E+0	2.5E+1	1.2E+2	2.6E+2	2.8E+2	1.5E+2	3.6E+1	3.9E+0	1.6E-1
3.50 MI	2.2E+0	2.5E+1	1.2E+2	2.8E+2	3.1E+2	1.5E+2	3.7E+1	3.8E+0	1.5E-1
3.75 MI	1.7E+0	2.1E+1	1.1E+2	2.5E+2	[illegible]7E+2	1.3E+2	3.2E+1	3.1E+0	1.1E-1
4.00 MI	1.4E+0	1.8E+1	9.7E+1	2.2E+2	2.4E+2	1.2E+2	2.7E+1	2.6E+0	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1415

CLOCKWISE ANGLE FROM PLANT IN DEGREES

	100	105	110	115	120	125	130	135	140
0.25 MI	3.8E+2	1.3E+3	2.8E+3	4.2E+3	4.4E+3	3.1E+3	1.5E+3	5.1E+2	1.1E+2
0.50 MI	6.9E+1	3.1E+2	7.7E+2	1.2E+3	1.3E+3	8.9E+2	3.7E+2	9.7E+1	1.4E+1
0.75 MI	2.4E+1	1.2E+2	3.6E+2	6.1E+2	6.5E+2	4.1E+2	1.6E+2	3.5E+1	4.1E+0
1.00 MI	1.1E+1	6.6E+1	2.1E+2	3.7E+2	3.9E+2	2.4E+2	8.7E+1	1.7E+1	1.6E+0
1.25 MI	6.2E+0	4.1E+1	1.3E+2	2.5E+2	2.6E+2	1.6E+2	5.3E+1	9.5E+0	BKGRND
1.50 MI	3.7E+0	2.6E+1	9.5E+1	1.8E+2	1.9E+2	1.1E+2	3.6E+1	5.8E+0	BKGRND
2.00 MI	1.8E+0	1.5E+1	6.1E+1	1.2E+2	1.2E+2	7.3E+1	2.1E+1	2.9E+0	BKGRND
2.25 MI	1.3E+0	1.1E+1	4.7E+1	9.8E+1	1.1E+2	5.8E+1	1.6E+1	2.1E+0	BKGRND
2.50 MI	BKGRND	9.1E+0	3.8E+1	8.1E+1	8.7E+1	4.7E+1	1.2E+1	1.6E+0	BKGRND
.75 MI	BKGRND	7.2E+0	3.2E+1	6.9E+1	.4E+1	3.9E+1	1.1E+1	1.2E+0	BKGRND
.00 MI	BKGRND	5.8E+0	2.7E+1	5.9E+1	..3E+1	3.3E+1	8.5E+0	BKGRND	BKGRND
3.25 MI	BKGRND	4.8E+0	2.3E+1	5.1E+1	5.5E+1	2.8E+1	7.1E+0	BKGRND	BKGRND
3.50 MI	BKGRND	4.9E+0	2.4E+1	5.4E+1	5.9E+1	3.1E+1	7.2E+0	BKGRND	BKGRND
3.75 MI	BKGRND	4.1E+0	2.1E+1	4.8E+1	5.2E+1	2.6E+1	6.1E+0	BKGRND	BKGRND
4.00 MI	BKGRND	3.5E+0	1.8E+1	4.3E+1	4.6E+1	2.3E+1	5.3E+0	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1430

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.5E+3	5.3E+3	1.1E+4	1.7E+4	1.8E+4	1.3E+4	6.4E+3	2.1E+3	4.1E+2
0.50 MI	2.8E+2	1.2E+3	3.1E+3	5.1E+3	5.3E+3	3.6E+3	1.5E+3	3.9E+2	5.7E+1
0.75 MI	9.9E+1	5.1E+2	1.4E+3	2.5E+3	2.6E+3	1.7E+3	6.5E+2	1.4E+2	1.6E+1
1.00 MI	4.9E+1	2.8E+2	9.1E+2	1.6E+3	1.7E+3	1.1E+3	3.8E+2	7.4E+1	7.2E+0
1.25 MI	2.6E+1	1.7E+2	5.8E+2	1.1E+3	1.1E+3	6.9E+2	2.3E+2	4.1E+1	3.5E+0
1.50 MI	1.6E+1	1.1E+2	4.1E+2	7.9E+2	8.3E+2	4.9E+2	1.5E+2	2.5E+1	1.9E+0
1.75 MI	1.1E+1	8.1E+1	3.1E+2	6.1E+2	6.4E+2	3.6E+2	1.1E+2	1.6E+1	1.1E+0
2.00 MI	7.1E+0	5.9E+1	2.3E+2	4.7E+2	5.1E+2	2.8E+2	8.3E+1	1.1E+1	7.1E-1
2.25 MI	5.1E+0	4.5E+1	1.8E+2	3.8E+2	4.1E+2	2.2E+2	6.3E+1	8.4E+0	4.6E-1
2.50 MI	3.7E+0	3.5E+1	1.5E+2	3.2E+2	3.4E+2	1.8E+2	5.1E+1	6.2E+0	3.2E-1
2.75 MI	3.1E+0	3.1E+1	1.4E+2	3.1E+2	3.2E+2	1.7E+2	4.5E+1	5.3E+0	2.5E-1
[illegible]00 MI	2.4E+0	2.5E+1	1.1E+2	2.5E+2	2.7E+2	1.4E+2	3.7E+1	4.1E+0	1.8E-1
[illegible]5 MI	1.8E+0	2.1E+1	1.1E+2	2.2E+2	2.4E+2	1.2E+2	3.1E+1	3.3E+0	1.3E-1
3.50 MI	1.5E+0	1.7E+1	8.7E+1	1.9E+2	2.1E+2	1.1E+2	2.5E+1	2.6E+0	1.1E-1
3.75 MI	1.2E+0	1.4E+1	7.5E+1	1.7E+2	1.8E+2	9.5E+1	2.2E+1	2.1E+0	BKGRND
4.00 MI	1.1E+0	1.2E+1	6.6E+1	1.5E+2	1.6E+2	8.4E+1	1.9E+1	1.8E+0	BKGRND
4.25 MI	1.1E+0	1.3E+1	7.1E+1	1.6E+2	1.8E+2	9.1E+1	2.1E+1	1.6E+0	BKGRND
4.50 MI	8.4E-1	1.1E+1	6.4E+1	1.5E+2	1.6E+2	8.1E+1	1.7E+1	1.5E+0	BKGRND
4.75 MI	7.1E-1	1.1E+1	5.7E+1	1.3E+2	1.5E+2	7.3E+1	1.5E+1	1.3E+0	BKGRND
5.00 MI	6.1E-1	9.1E+0	5.1E+1	1.2E+2	1.3E+2	6.6E+1	1.3E+1	1.1E+0	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1430

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.8E+3	6.3E+3	1.4E+4	2.1E+4	2.1E+4	1.5E+4	7.7E+3	2.4E+3	5.1E+2
0.50 MI	3.4E+2	1.4E+3	3.8E+3	6.1E+3	6.4E+3	4.3E+3	1.8E+3	4.7E+2	6.8E+1
0.75 MI	1.1E+2	6.1E+2	1.7E+3	3.1E+3	3.1E+3	2.1E+3	7.9E+2	1.7E+2	2.1E+1
1.00 MI	5.9E+1	3.4E+2	1.1E+3	1.9E+3	2.1E+3	1.2E+3	4.5E+2	8.9E+1	8.6E+0
1.25 MI	3.2E+1	2.1E+2	7.1E+2	1.3E+3	1.3E+3	8.3E+2	2.8E+2	4.9E+1	4.2E+0
1.50 MI	1.9E+1	1.3E+2	4.9E+2	9.5E+2	1.1E+3	5.9E+2	1.8E+2	3.1E+1	2.2E+0
1.75 MI	1.2E+1	9.7E+1	3.6E+2	7.2E+2	7.6E+2	4.4E+2	1.3E+2	2.1E+1	1.3E+0
2.00 MI	8.6E+0	7.1E+1	2.8E+2	5.7E+2	6.1E+2	3.4E+2	9.9E+1	1.4E+1	8.5E-1
2.25 MI	6.1E+0	5.4E+1	2.2E+2	4.6E+2	4.9E+2	2.7E+2	7.6E+1	1.1E+1	5.6E-1
2.50 MI	4.4E+0	4.2E+1	1.8E+2	3.8E+2	4.1E+2	2.2E+2	6.1E+1	7.5E+0	3.8E-1
2.75 MI	3.7E+0	3.7E+1	1.6E+2	3.6E+2	3.8E+2	2.1E+2	5.4E+1	6.4E+0	3.1E-1
3.00 MI	2.8E+0	3.1E+1	1.4E+2	3.1E+2	3.3E+2	1.7E+2	4.4E+1	4.9E+0	2.2E-1
3.25 MI	2.2E+0	2.5E+1	1.2E+2	2.6E+2	2.8E+2	1.5E+2	3.6E+1	3.9E+0	1.6E-1
3.50 MI	1.8E+0	2.1E+1	1.1E+2	2.3E+2	2.5E+2	1.3E+2	3.1E+1	3.2E+0	1.2E-1
3.75 MI	1.4E+0	1.7E+1	9.1E+1	2.1E+2	2.2E+2	1.1E+2	2.6E+1	2.6E+0	BKGRND
4.00 MI	1.2E+0	1.5E+1	8.1E+1	1.8E+2	2.1E+2	1.1E+2	2.2E+1	2.1E+0	BKGRND
4.25 MI	1.2E+0	1.6E+1	8.6E+1	2.1E+2	2.1E+2	1.1E+2	2.4E+1	2.1E+0	BKGRND
4.50 MI	1.1E+0	1.4E+1	7.6E+1	1.8E+2	1.9E+2	9.7E+1	2.1E+1	1.8E+0	BKGRND
4.75 MI	8.5E-1	1.2E+1	6.8E+1	1.6E+2	1.8E+2	8.7E+1	1.8E+1	1.5E+0	BKGRND
5.00 MI	7.2E-1	1.1E+1	6.2E+1	1.5E+2	1.6E+2	7.9E+1	1.6E+1	1.3E+0	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1430

CLOCKWISE ANGLE FROM PLANT IN DEGREES

	100	105	110	115	120	125	130	135	140
0.25 MI	3.6E+2	1.2E+3	2.6E+3	4.1E+3	4.1E+3	3.1E+3	1.4E+3	4.7E+2	9.5E+1
0.50 MI	6.5E+1	2.8E+2	7.3E+2	1.1E+3	1.2E+3	8.3E+2	3.5E+2	9.1E+1	1.3E+1
0.75 MI	2.2E+1	1.1E+2	3.3E+2	5.8E+2	6.1E+2	3.9E+2	1.5E+2	3.3E+1	3.8E+0
1.00 MI	1.1E+1	6.6E+1	2.1E+2	3.7E+2	3.9E+2	2.4E+2	8.7E+1	1.7E+1	1.6E+0
1.25 MI	6.2E+0	4.1E+1	1.3E+2	2.5E+2	2.6E+2	1.6E+2	5.3E+1	9.3E+0	BKGRND
1.50 MI	3.7E+0	2.6E+1	9.5E+1	1.8E+2	1.9E+2	1.1E+2	3.6E+1	5.8E+0	BKGRND
1.75 MI	2.4E+0	1.8E+1	7.1E+1	1.3E+2	1.4E+2	8.4E+1	2.5E+1	3.8E+0	BKGRND
2.00 MI	1.6E+0	1.3E+1	5.4E+1	1.1E+2	1.1E+2	6.5E+1	1.9E+1	2.6E+0	BKGRND
2.25 MI	1.1E+0	1.1E+1	4.3E+1	8.8E+1	9.4E+1	5.2E+1	1.4E+1	1.9E+0	BKGRND
2.50 MI	BKGRND	8.1E+0	3.5E+1	7.3E+1	7.8E+1	4.3E+1	1.1E+1	1.4E+0	BKGRND
2.75 MI	BKGRND	7.2E+0	3.2E+1	6.9E+1	7.4E+1	3.9E+1	1.1E+1	1.2E+0	BKGRND
3.00 MI	BKGRND	5.8E+0	2.7E+1	5.9E+1	6.3E+1	3.3E+1	8.5E+0	BKGRND	BKGRND
3.25 MI	BKGRND	4.8E+0	2.3E+1	5.1E+1	5.5E+1	2.8E+1	7.1E+0	BKGRND	BKGRND
3.50 MI	BKGRND	4.1E+0	2.1E+1	4.5E+1	4.8E+1	2.5E+1	5.9E+0	BKGRND	BKGRND
3.75 MI	BKGRND	3.4E+0	1.7E+1	3.9E+1	4.2E+1	2.1E+1	5.1E+0	BKGRND	BKGRND
4.00 MI	BKGRND	2.9E+0	1.5E+1	3.5E+1	3.8E+1	1.9E+1	4.3E+0	BKGRND	BKGRND
4.25 MI	BKGRND	3.1E+0	1.6E+1	3.8E+1	4.1E+1	2.1E+1	4.6E+0	BKGRND	BKGRND
4.50 MI	BKGRND	2.6E+0	1.4E+1	3.5E+1	3.7E+1	1.8E+1	4.1E+0	BKGRND	BKGRND
4.75 MI	BKGRND	2.3E+0	1.3E+1	3.1E+1	3.4E+1	1.6E+1	3.5E+0	BKGRND	BKGRND
5.00 MI	BKGRND	2.1E+0	1.1E+1	2.9E+1	3.1E+1	1.5E+1	3.1E+0	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1445

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.5E+3	5.3E+3	1.1E+4	1.7E+4	1.8E+4	1.3E+4	6.4E+3	2.1E+3	4.1E+2
0.50 MI	2.8E+2	1.2E+3	3.1E+3	5.1E+3	5.3E+3	3.6E+3	1.5E+3	3.9E+2	5.7E+1
0.75 MI	9.9E+1	5.1E+2	1.4E+3	2.5E+3	2.6E+3	1.7E+3	6.5E+2	1.4E+2	1.6E+1
1.00 MI	4.6E+1	2.7E+2	8.4E+2	1.5E+3	1.6E+3	9.9E+2	3.5E+2	6.9E+1	6.7E+0
1.25 MI	2.5E+1	1.6E+2	5.5E+2	1.1E+3	1.1E+3	6.5E+2	2.2E+2	3.8E+1	3.2E+0
1.50 MI	1.5E+1	1.1E+2	3.8E+2	7.4E+2	7.8E+2	4.6E+2	1.4E+2	2.3E+1	1.7E+0
1.75 MI	1.1E+1	8.1E+1	3.1E+2	6.1E+2	6.4E+2	3.6E+2	1.1E+2	1.6E+1	1.1E+0
2.00 MI	7.1E+0	5.9E+1	2.3E+2	4.7E+2	5.1E+2	2.8E+2	8.3E+1	1.1E+1	7.1E-1
2.25 MI	5.1E+0	4.5E+1	1.8E+2	3.8E+2	4.1E+2	2.2E+2	6.3E+1	8.4E+0	4.6E-1
2.50 MI	3.7E+0	3.5E+1	1.5E+2	3.2E+2	3.4E+2	1.8E+2	5.1E+1	6.2E+0	3.2E-1
2.75 MI	2.8E+0	2.8E+1	1.2E+2	2.7E+2	2.9E+2	1.5E+2	4.1E+1	4.8E+0	2.2E-1
3.00 MI	2.1E+0	2.3E+1	1.1E+2	2.3E+2	2.4E+2	1.3E+2	3.3E+1	3.7E+0	1.6E-1
3.25 MI	1.7E+0	1.9E+1	9.1E+1	2.1E+2	2.1E+2	1.1E+2	2.7E+1	2.9E+0	1.2E-1
3.50 MI	1.5E+0	1.7E+1	8.7E+1	1.9E+2	2.1E+2	1.1E+2	2.5E+1	2.6E+0	1.1E-1
3.75 MI	1.2E+0	1.4E+1	7.5E+1	1.7E+2	1.8E+2	9.5E+1	2.2E+1	2.1E+0	BKGRND
4.00 MI	1.1E+0	1.2E+1	6.6E+1	1.5E+2	1.6E+2	8.4E+1	1.9E+1	1.8E+0	BKGRND
4.25 MI	8.2E-1	1.1E+1	5.9E+1	1.3E+2	1.5E+2	7.4E+1	1.6E+1	1.5E+0	BKGRND
4.50 MI	6.9E-1	9.5E+0	5.2E+1	1.2E+2	1.3E+2	6.6E+1	1.4E+1	1.2E+0	BKGRND
4.75 MI	5.8E-1	8.3E+0	4.7E+1	1.1E+2	1.2E+2	6.1E+1	1.2E+1	1.1E+0	BKGRND
5.00 MI	4.9E-1	7.3E+0	4.2E+1	1.1E+2	1.1E+2	5.4E+1	1.1E+1	9.2E-1	BKGRND
5.50 MI	4.4E-1	7.1E+0	4.2E+1	1.1E+2	1.1E+2	5.4E+1	1.1E+1	8.4E-1	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRN	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1445

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	1.8E+3	6.3E+3	1.4E+4	2.1E+4	2.1E+4	1.5E+4	7.7E+3	2.4E+3	5.1E+2
0.50 MI	3.4E+2	1.4E+3	3.8E+3	6.1E+3	6.4E+3	4.3E+3	1.8E+3	4.7E+2	6.8E+1
0.75 MI	1.1E+2	6.1E+2	1.7E+3	3.1E+3	3.1E+3	2.1E+3	7.9E+2	1.7E+2	2.1E+1
1.00 MI	5.5E+1	3.2E+2	1.1E+3	1.8E+3	1.9E+3	1.1E+3	4.2E+2	8.3E+1	8.1E+0
1.25 MI	3.1E+1	1.9E+2	6.6E+2	1.2E+3	1.3E+3	7.8E+2	2.6E+2	4.6E+1	3.9E+0
1.50 MI	1.8E+1	1.3E+2	4.6E+2	8.9E+2	9.4E+2	5.5E+2	1.7E+2	2.8E+1	2.1E+0
1.75 MI	1.2E+1	9.7E+1	3.6E+2	7.2E+2	7.6E+2	4.4E+2	1.3E+2	2.1E+1	1.3E+0
2.00 MI	8.6E+0	7.1E+1	2.8E+2	5.7E+2	6.1E+2	3.4E+2	9.9E+1	1.4E+1	8.5E-1
2.25 MI	6.1E+0	5.4E+1	2.2E+2	4.6E+2	4.9E+2	2.7E+2	7.6E+1	1.1E+1	5.6E-1
2.50 MI	4.4E+0	4.2E+1	1.8E+2	3.8E+2	4.1E+2	2.2E+2	6.1E+1	7.5E+0	3.8E-1
2.75 MI	3.3E+0	3.4E+1	1.5E+2	3.2E+2	3.4E+2	1.8E+2	4.8E+1	5.7E+0	2.7E-1
3.00 MI	2.6E+0	2.7E+1	1.2E+2	2.7E+2	2.9E+2	1.5E+2	3.9E+1	4.4E+0	1.9E-1
3.25 MI	2.1E+0	2.2E+1	1.1E+2	2.4E+2	2.5E+2	1.3E+2	3.3E+1	3.5E+0	1.4E-1
3.50 MI	1.8E+0	2.1E+1	1.1E+2	2.3E+2	2.5E+2	1.3E+2	3.1E+1	3.2E+0	1.2E-1
3.75 MI	1.4E+0	1.7E+1	9.1E+1	2.1E+2	2.2E+2	1.1E+2	2.6E+1	2.6E+0	BKGRND
4.00 MI	1.2E+0	1.5E+1	8.1E+1	1.8E+2	2.1E+2	1.1E+2	2.2E+1	2.1E+0	BKGRND
4.25 MI	9.9E-1	1.3E+1	7.1E+1	1.6E+2	1.8E+2	8.9E+1	1.9E+1	1.8E+0	BKGRND
4.50 MI	8.3E-1	1.1E+1	6.3E+1	1.5E+2	1.6E+2	8.1E+1	1.7E+1	1.5E+0	BKGRND
4.75 MI	7.1E-1	1.1E+1	5.6E+1	1.3E+2	1.4E+2	7.2E+1	1.5E+1	1.2E+0	BKGRND
5.00 MI	5.9E-1	8.8E+0	5.1E+1	1.2E+2	1.3E+2	6.5E+1	1.3E+1	1.1E+0	BKGRND
5.50 MI	5.3E-1	8.5E+0	5.1E+1	1.2E+2	1.3E+2	6.5E+1	1.3E+1	1.1E+0	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1445

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	3.6E+2	1.2E+3	2.6E+3	4.1E+3	4.1E+3	3.1E+3	1.4E+3	4.7E+2	9.5E+1
0.50 MI	6.5E+1	2.8E+2	7.3E+2	1.1E+3	1.2E+3	8.3E+2	3.5E+2	9.1E+1	1.3E+1
0.75 MI	2.2E+1	1.1E+2	3.3E+2	5.8E+2	6.1E+2	3.9E+2	1.5E+2	3.3E+1	3.8E+0
1.00 MI	1.1E+1	6.2E+1	1.9E+2	3.4E+2	3.6E+2	2.2E+2	8.2E+1	1.6E+1	1.5E+0
1.25 MI	5.8E+0	3.7E+1	1.2E+2	2.3E+2	2.4E+2	1.5E+2	5.1E+1	8.9E+0	BKGRND
1.50 MI	3.5E+0	2.4E+1	8.9E+1	1.7E+2	1.8E+2	1.1E+2	3.3E+1	5.5E+0	BKGRND
1.75 MI	2.4E+0	1.8E+1	7.1E+1	1.3E+2	1.4E+2	8.4E+1	2.5E+1	3.8E+0	BKGRND
2.00 MI	1.6E+0	1.3E+1	5.4E+1	1.1E+2	1.1E+2	6.5E+1	1.9E+1	2.6E+0	BKGRND
2.25 MI	1.1E+0	1.1E+1	4.3E+1	8.8E+1	9.4E+1	5.2E+1	1.4E+1	1.9E+0	BKGRND
2.50 MI	BKGRND	8.1E+0	3.5E+1	7.3E+1	7.8E+1	4.3E+1	1.1E+1	1.4E+0	BKGRND
2.75 MI	BKGRND	6.5E+0	2.9E+1	6.2E+1	6.6E+1	3.5E+1	9.3E+0	1.1E+0	BKGRND
3.00 MI	BKGRND	5.3E+0	2.4E+1	5.3E+1	5.7E+1	3.1E+1	7.6E+0	BKGRND	BKGRND
3.25 MI	BKGRND	4.3E+0	2.1E+1	4.6E+1	4.9E+1	2.5E+1	6.3E+0	BKGRND	BKGRND
3.50 MI	BKGRND	4.1E+0	2.1E+1	4.5E+1	4.8E+1	2.5E+1	5.9E+0	BKGRND	BKGRND
3.75 MI	BKGRND	3.4E+0	1.7E+1	3.9E+1	4.2E+1	2.1E+1	5.1E+0	BKGRND	BKGRND
4.00 MI	BKGRND	2.9E+0	1.5E+1	3.5E+1	3.8E+1	1.9E+1	4.3E+0	BKGRND	BKGRND
4.25 MI	BKGRND	2.5E+0	1.3E+1	3.1E+1	3.4E+1	1.7E+1	3.8E+0	BKGRND	BKGRND
4.50 MI	BKGRND	2.2E+0	1.2E+1	2.8E+1	3.1E+1	1.5E+1	3.3E+0	BKGRND	BKGRND
4.75 MI	BKGRND	1.9E+0	1.1E+1	2.6E+1	2.8E+1	1.3E+1	2.9E+0	BKGRND	BKGRND
5.00 MI	BKGRND	1.7E+0	9.8E+0	2.3E+1	2.5E+1	1.2E+1	2.5E+0	BKGRND	BKGRND
5.50 MI	BKGRND	1.6E+0	9.8E+0	2.4E+1	2.6E+1	1.2E+1	2.5E+0	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NOBLE GAS DOSE RATES IN MR/HR
TIME: 1500

	CLOCKWISE ANGLE FROM PLANT IN DEGREES								
	100	105	110	115	120	125	130	135	140
0.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

OPEN WINDOW DOSE RATES IN MR/HR
TIME: 1500

CLOCKWISE ANGLE FROM PLANT IN DEGREES

	100	105	110	115	120	125	130	135	140
0.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

NET CPM FOR 25 CU FT IODINE SAMPLE
TIME: 1500

CLOCKWISE ANGLE FROM PLANT IN DEGREES

	100	105	110	115	120	125	130	135	140
0.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
0.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
1.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
2.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
3.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.25 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
4.75 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
5.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
6.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
7.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
8.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.00 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
9.50 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND
10.0 MI	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND	BKGRND

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

METEOROLOGICAL INFORMATION OVERVIEW

Date: July 18, 1984

Main Tower Readings

METEOROLOGICAL INFORMATION OVERVIEW
(Historical Data from July 3, 1983)

Time	Wind Speed (MPH) WSPL	WSPM	WSPU	Direction (Deg)(from) WDRL	WDRM	WDRU	Temp. °F/70ft.	Temp °F	Stability Class Pasquill	Brookhaven
0500-0600	4.7	8.7	10.2	171	171	222	-0.42	50	D	III
0600-0700	4.8	8.4	10.9	173	171	215	-0.62	51	C	II
0700-0800	4.4	6.2	8.7	172	171	198	-0.62	53	C	II
0800-0900	3.5	4.2	5.0	177	171	190	-0.68	55	B	II
0900-1000	2.3	2.9	2.6	309	171	190	-0.69	60	B	II
1000-1100	5.3	7.1	7.6	309	300	294	-0.71	62	B	II
1100-1200	4.1	5.7	6.6	310	300	294	-0.72	65	B	II
1200-1300	3.2	3.1	2.9	337	300	296	-0.74	68	A	I
1300-1400	4.4	3.8	2.8	298	300	296	-0.75	70	A	I
1400-1500	3.1	3.6	8.1	298	300	296	-0.74	70	A	I
1500-1600	3.4	5.9	8.1	280	300	296	-0.72	67	B	II
1600-1700	2.5	4.7	6.6	250	250	296	-0.71	64	B	II
1700-1800	2.7	3.9	5.4	230	250	296	-0.72	62	B	II
1800-1900	4.4	6.2	8.8	197	171	191	-0.73	61	A	I
1900-2000	4.1	6.5	9.4	173	170	182	-0.64	60	C	II
2000-2100	3.6	7.4	11.2	157	170	174	-0.62	58	C	II
2100-2200	4.3	9.2	14.2	156	171	171	-0.62	56	C	II
2200-2300	6.1	10.6	15.9	164	171	172	-0.61	55	C	II
2300-2400	7.2	11.3	16.4	166	171	174	-0.60	55	C	II

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

POST ACCIDENT SAMPLING SYSTEM DATA

1. Table 1, Reactor Water Radiation Levels
2. Table 2, PASS Sample Sink In-Line Dose Rates
3. Table 3, Reactor Water Sample Analysis

Table 1

REACTOR WATER RADIATION LEVELS

Location	Time (2)		Dose Rate (2) mR/hr
Sample Sink (1) Reactor Water	Prior to 1057		N/A
	1100	Contact:	447
		@ 1 ft.:	4.5
	1230	Contact:	184,000
		@ 1 ft.:	1,717
		@ 3 ft.:	340
	1400	Contact:	244,000
		@ 1 ft.:	2,237
		@ 3 ft.:	571
	1500	Contact:	17,000
		@ 1 ft.:	191
		@ 3 ft.:	61

(1) Data to be provided if the sink is operated.

(2) Data to be provided to Sample Team Member.

Table 2

PASS SAMPLE SINK IN-LINE DOSE RATES

Location	Time (2)	Dose Rate (2) mR/hr
PASS Sample Sink (1)	Prior to 1057	----------
	1100	In-Line: 447
	1230	In-Line: 184,000
	1400	In-Line: 244,000
	1500	In-Line: 17,000

(1) Data to be provided if the sink is operated.

(2) Data to be provided to Sample Team Member.

Table 3

REACTOR WATER SAMPLE ANALYSIS*

TOTAL CONCENTRATION μCi/ml

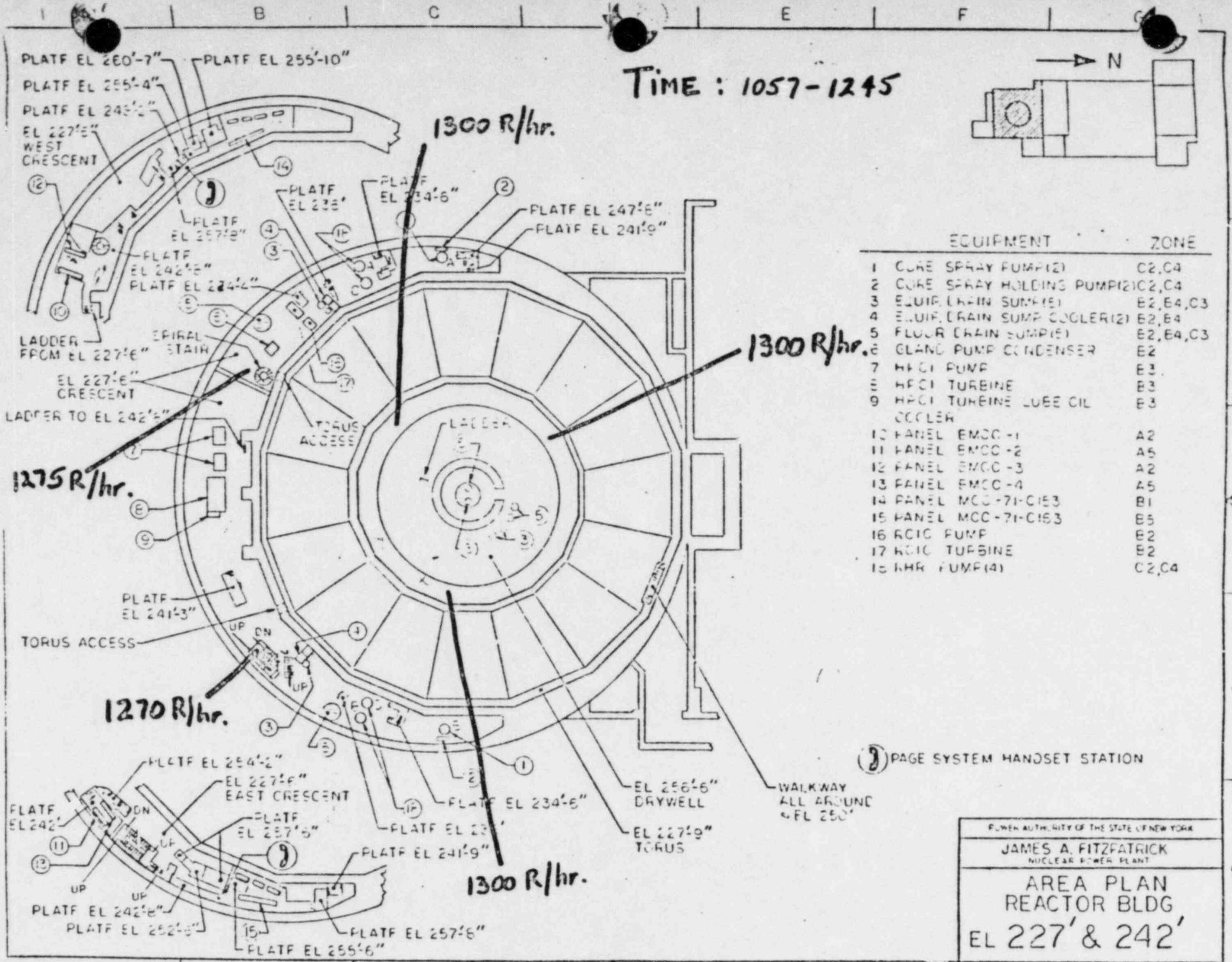
NUCLIDE	TIME PRIOR to 1057	TIME 1100	TIME 1230	TIME 1400	TIME 1400 and on to Exercise Termination
I-131	8.46E-5	1.46E-4	2.22E-1	1.75E+0	
132	4.43E-3	7.67E-3	3.12E-1	2.47E+0	
133	1.43E-3	2.48E-3	4.47E-1	3.50E+0	
134	1.57E-2	2.72E-2	4.95E-1	3.91E+0	
135	2.92E-3	5.06E-3	3.90E-1	3.09E+0	
Xe-133	1.67E-4	2.89E-4	4.43E-1	3.51E+0	
135	5.09E-3	8.82E-3	8.88E-2	7.02E-1	
Kr-85	-------	-------	1.73E-3	1.37E-2	
85m	-------	-------	6.28E-2	4.00E-1	
87	-------	-------	9.99E-2	9.68E-1	
88	-------	-------	1.78E-1	1.40E+0	
Te-132	-------	-------	3.12E-1	2.47E+0	
Cs-134	3.59E-6	6.21E-6	1.77E-2	1.58E-1	
137	-------	-------	1.25E-2	9.97E-2	
Co-58	1.89E-4	3.27E-4	2.60E-3	2.05E-2	
60	2.67E-4	4.62E-4	1.30E-3	1.02E-2	
Ce-141	-------	-------	3.90E-1	3.09E+0	
Ba-140	1.18E-4	2.04E-4	4.17E-1	3.29E+0	
La-140	1.18E-4	2.04E-4	4.17E-1	3.29E+0	

* Data provided reflects analysis results from samples taken at the indicated times.

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

INPLANT RADIOLOGICAL MAPS



	EQUIPMENT	ZONE
1	CORE SPRAY PUMP(2)	C2,C4
2	CORE SPRAY HOLDING PUMP(2)	C2,C4
3	EQUIP. DRAIN SUMP(5)	B2,B4,C3
4	EQUIP. DRAIN SUMP COOLER(2)	B2,B4
5	FLOOR DRAIN SUMP(5)	B2,B4,C3
6	GLAND PUMP CONDENSER	B2
7	HPCI PUMP	B3
8	HPCI TURBINE	B3
9	HPCI TURBINE LUBE OIL COOLER	B3
10	PANEL EMCC-1	A2
11	PANEL EMCC-2	A5
12	PANEL EMCC-3	A2
13	PANEL EMCC-4	A5
14	PANEL MCC-71-C1E3	B1
15	PANEL MCC-71-C1G3	B5
16	RCIC PUMP	B2
17	RCIC TURBINE	B2
18	RHR PUMP(4)	C2,C4

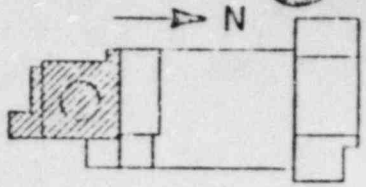
(J) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 227' & 242'

TIME: 1057 - 1245



1175 R/hr.

1100 R/hr.

1000 R/hr.

1280 R/hr.

1100 R/hr.

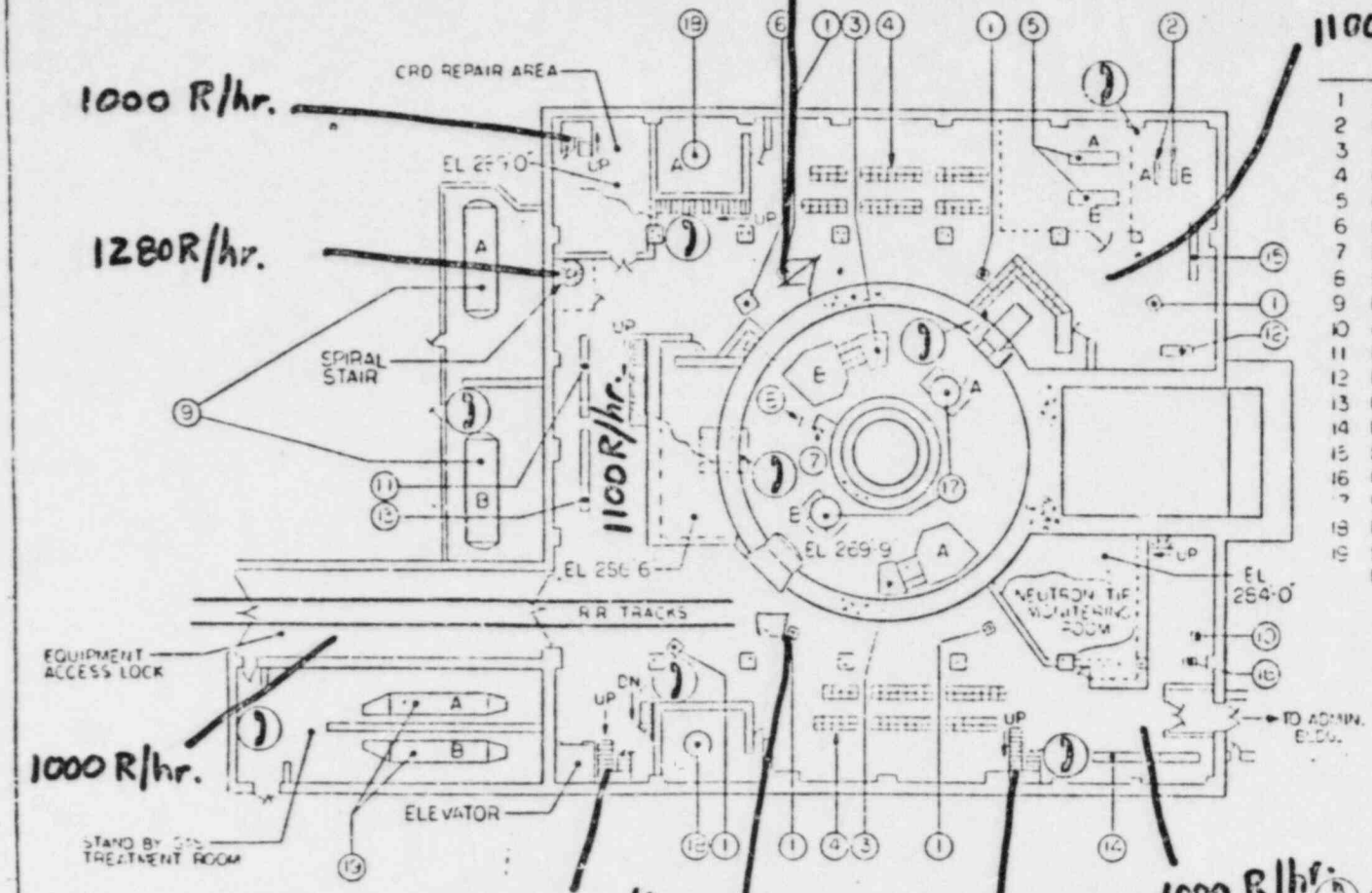
1000 R/hr.

1280 R/hr.

1295 R/hr.

1280 R/hr.

1000 R/hr.



	EQUIPMENT	ZONE
1	ACCESS HATCH TO TORUS (6)	C2,4,D2,4,E2
2	CONDENSATE TRANSFER PUMP (2)	E2
3	COOLING COILS & BLOWERS (2)	D3
4	CRD HYD CONTROL UNITS	D2,4
5	CRD WATER PUMP (2)	E2
6	EQUIPMENT HATCH TO TORUS	C2
7	LADDER TO EL 256'6"	D3
8	LADDER TO EL 272'0"	D3
9	LIQUID NITROGEN TANK (2)	B2,3
10	PANEL BMCC-6	E4
11	PANEL MCC C132, C151	C3
12	PANEL MCC C133	E3
13	PANEL MCC C142, C161	C3
14	PANEL MCC C143, C162	E4
15	PANEL MCC C152	E2
16	PANEL MCC C164	E4
17	RECIRC. PUMP (2)	D3
18	RHR HEAT EXCHANGER (2)	C2,4
19	STANDBY GAS TREATMENT FILTER TRAIN (2)	B4

(9) FACE SYSTEM HANDSET STATION

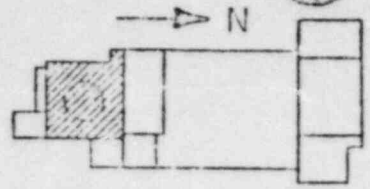
POWER AUTHORITY OF THE STATE OF NEW YORK

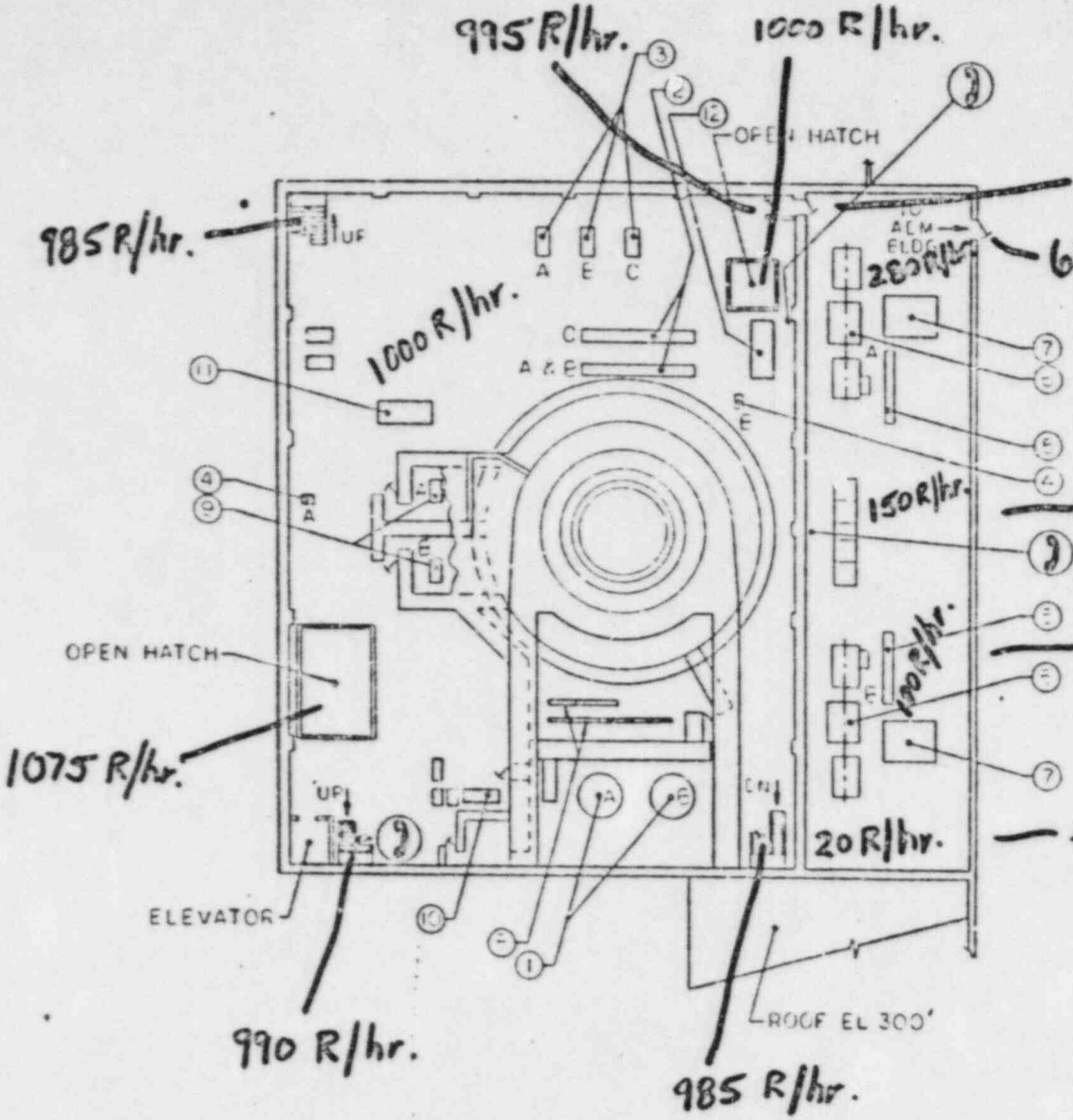
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG.

EL 272'

TIME: 1057-1245





	EQUIPMENT	ZONE
1	CLEANUP PHASE SEP. TANK (2)	C4
2	CLCW HEAT EXCHANGER (3)	C2
3	CLCW PUMP (3)	C2
4	DRYWELL INERTING SAMPLE PUMP (2)	B3, D3
5	MG FLUID COOLER (2)	D2, D3
6	MG FLUID DRIVE (2)	D2, D3, D4
7	MG FLUID DRIVE LUBE OIL PUMP ASSY (2)	D2, D4
8	RWCU NON-REGENERATIVE HEAT EXCHANGER (2)	C4
9	RWCU PUMP (2)	C3
10	SAMPLE STATION NO. 1	C4
11	SWGR. 600V. 71-L15	B3
12	SWGR. 600V. 71-L15	D2

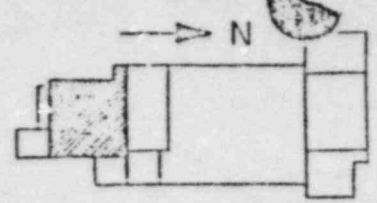
(9) PAGE SYSTEM HANDSET STATION

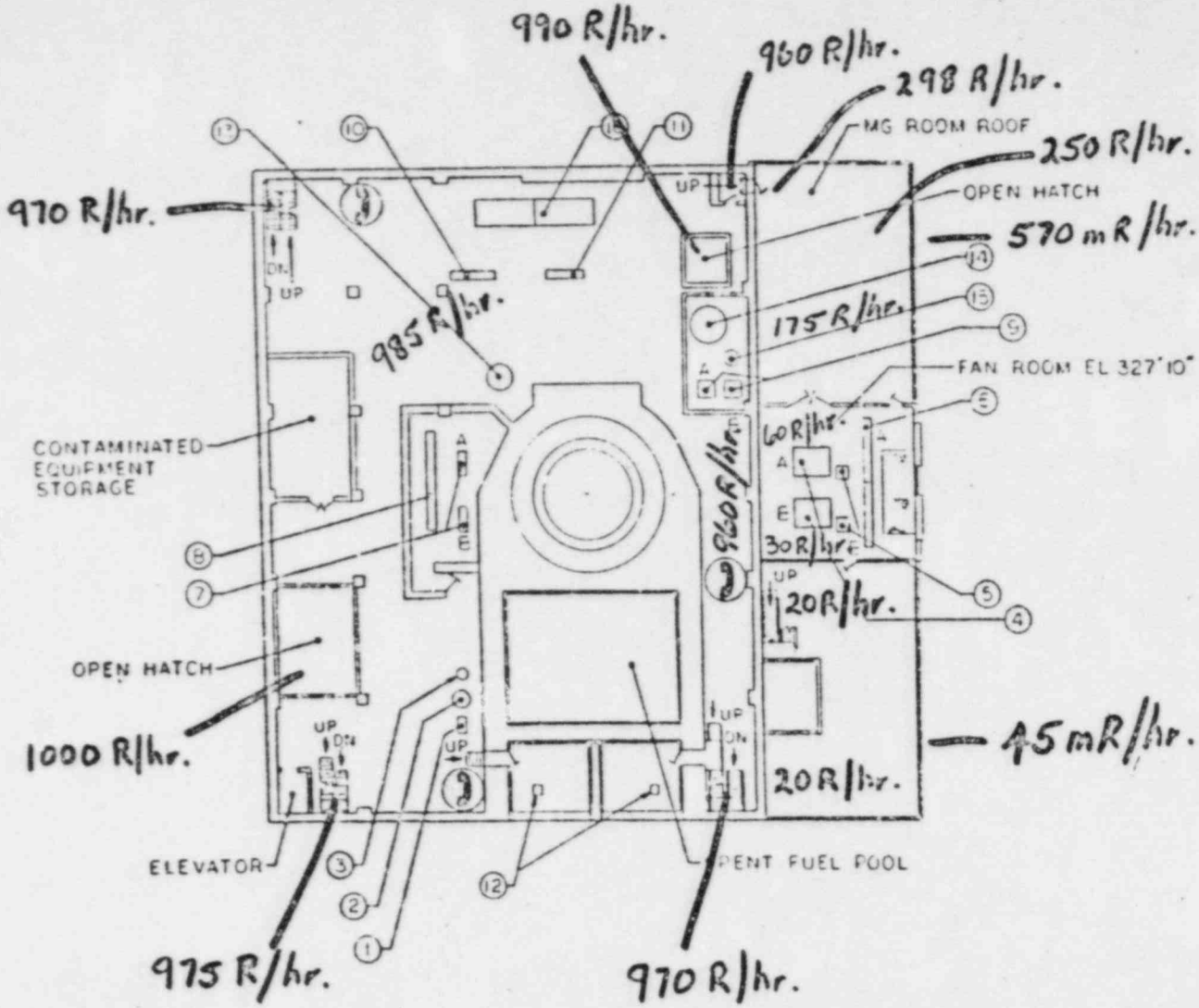
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 300'

TIME : 1057-1245





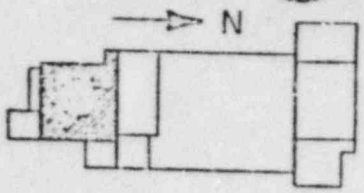
	EQUIPMENT	ZONE
1	CLEAN-UP PRECOAT PUMP	B4
2	CLEAN-UP PRECOAT TANK	B4
3	CLEAN-UP RESIN-FEED TANK	B4
4	FAN(2)	D3
5	FAN MOTOR(2)	D3
6	FILTER(2)	D3
7	FUEL POOL CLEAN UP RECIRC PUMP(2)	B3
8	FUEL POOL HEAT EXCH(2)	B3
9	LIQUID POISON PUMP(2)	C3,D3
10	PANEL, MCC 71-C13	C2
11	PANEL, MCC 71-C14	C2
12	RWCU HOLDING PUMP(2)	C4
13	REACTOR BLDG COOLING WATER MAKEUP TANK	C3
14	STANDBY LIQUID CONTROL TK	C2
15	STANDBY LIQUID CONTROL TEST TANK	D3
16	SWGR, 600v 71 L13/14	C2

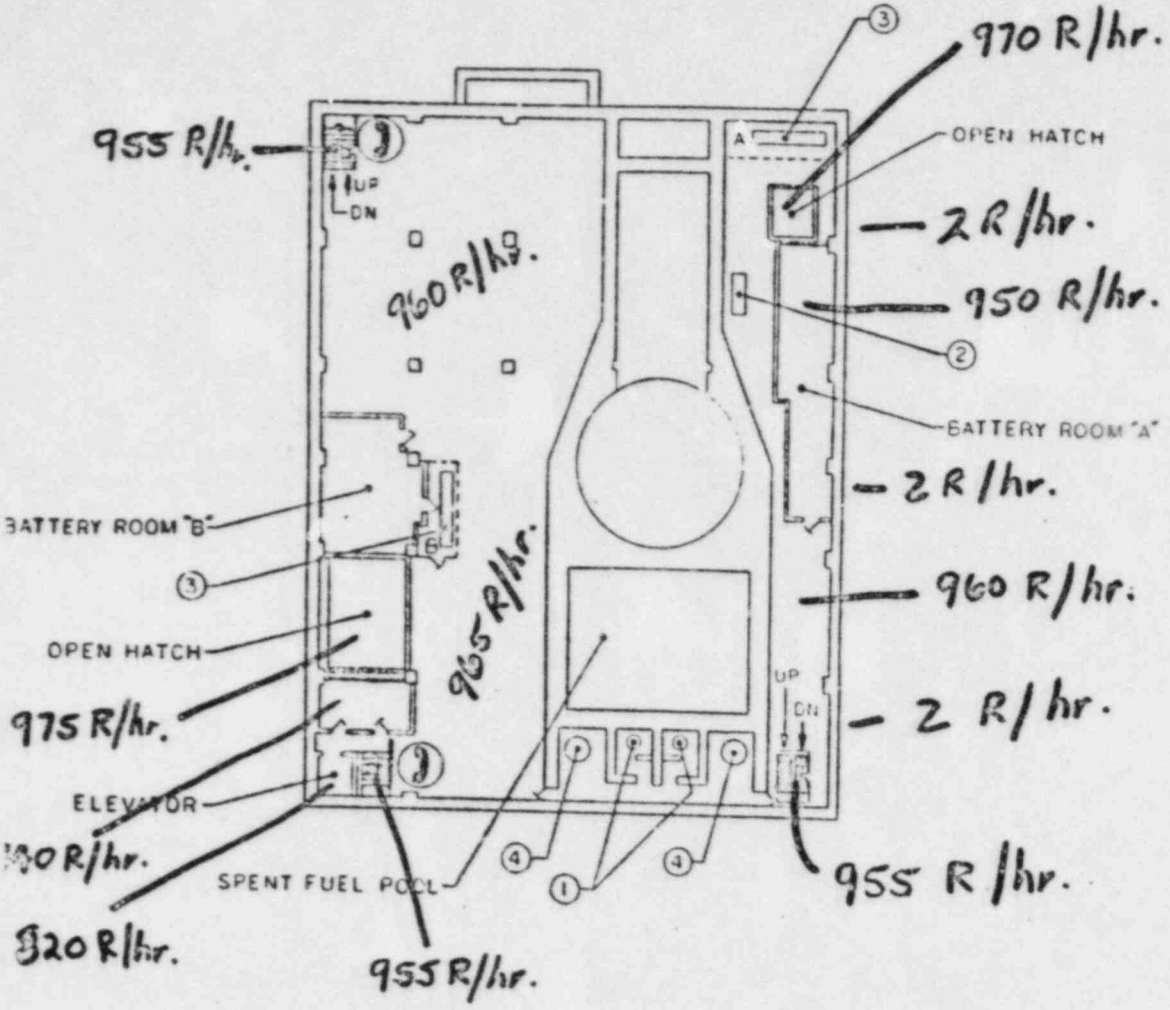
(P) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 326

TIME: 1057 - 1245





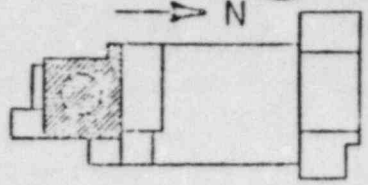
	EQUIPMENT	ZONE
1	CLEAN UP FILTER DEMIN(2)	C4
2	FILTER UNIT	C2
3	INVERTER(2)	B3,C2
4	SKIMMER SURGE TANK(2)	C4

(3) PAGE SYSTEM HANDSET STATION

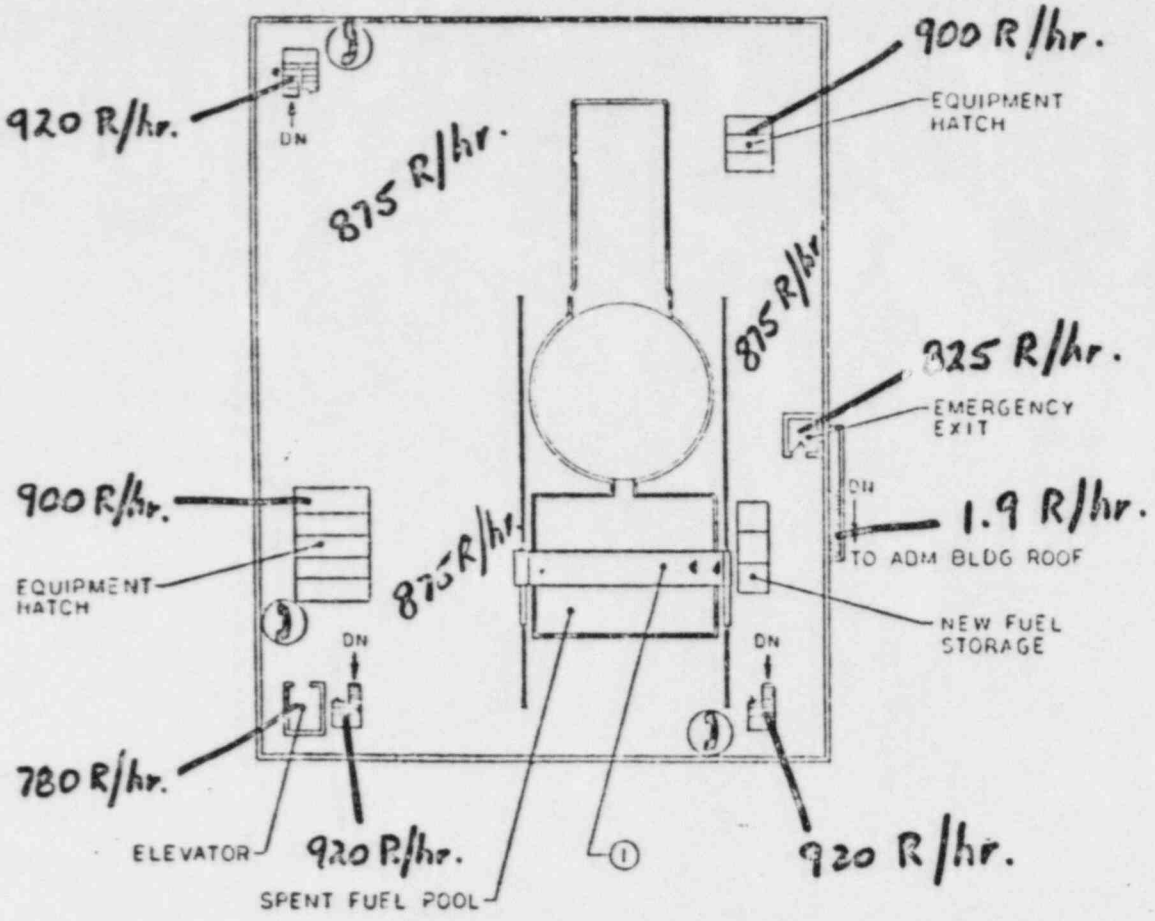
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 344'

TIME: 1057 - 1295



EQUIPMENT	ZONE
1 REFUELING PLATFORM	C4

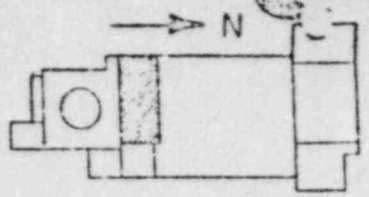


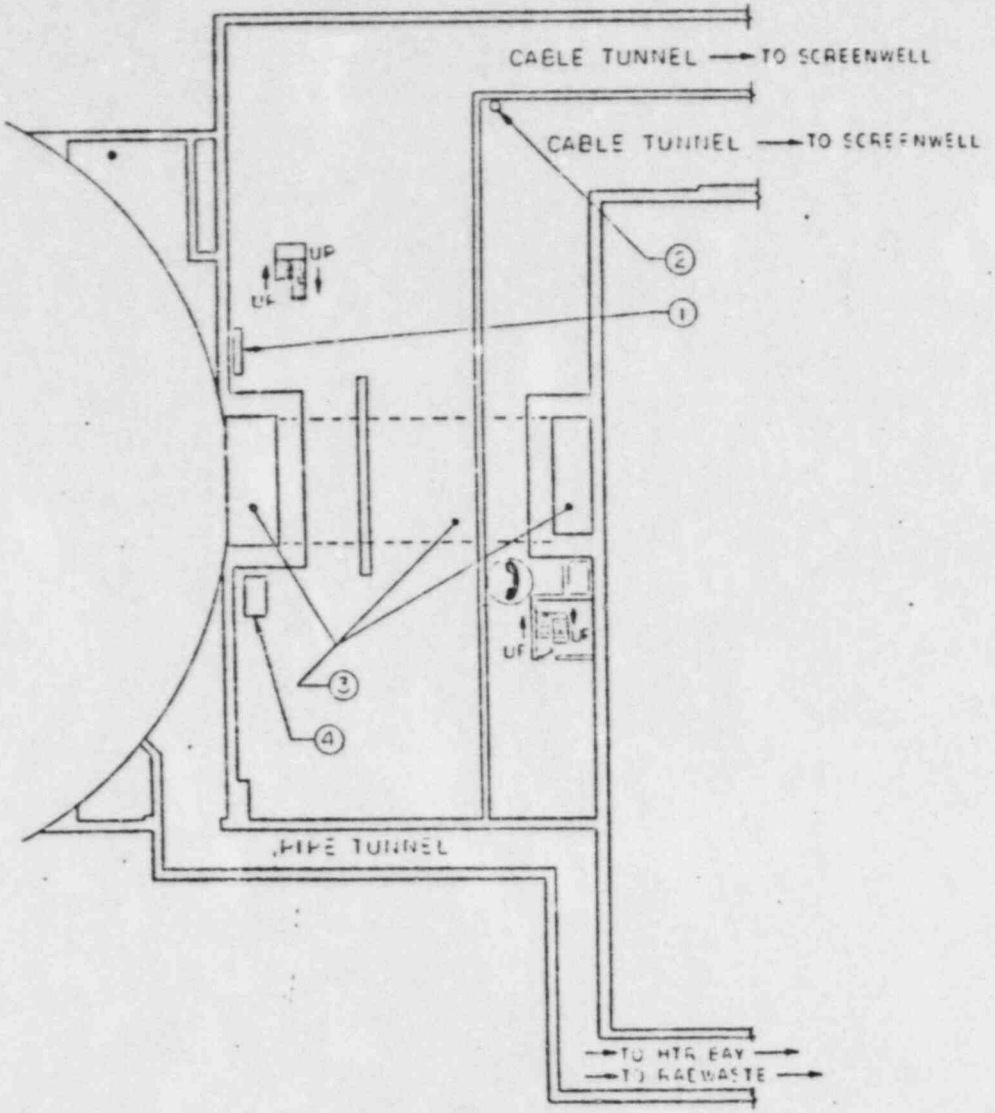
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 369'

Time : 1057 - 1245





	EQUIPMENT	ZONE
1	DELUGE STATION	B2
2	FLOOR DRAIN SUMP	C2
3	MAIN STEAM TUNNEL	C4
4	SHOWER WASTE TANK	B3

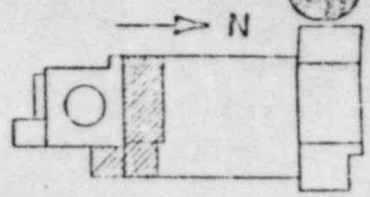
(2) PAGE SYSTEM HANDSET STATION

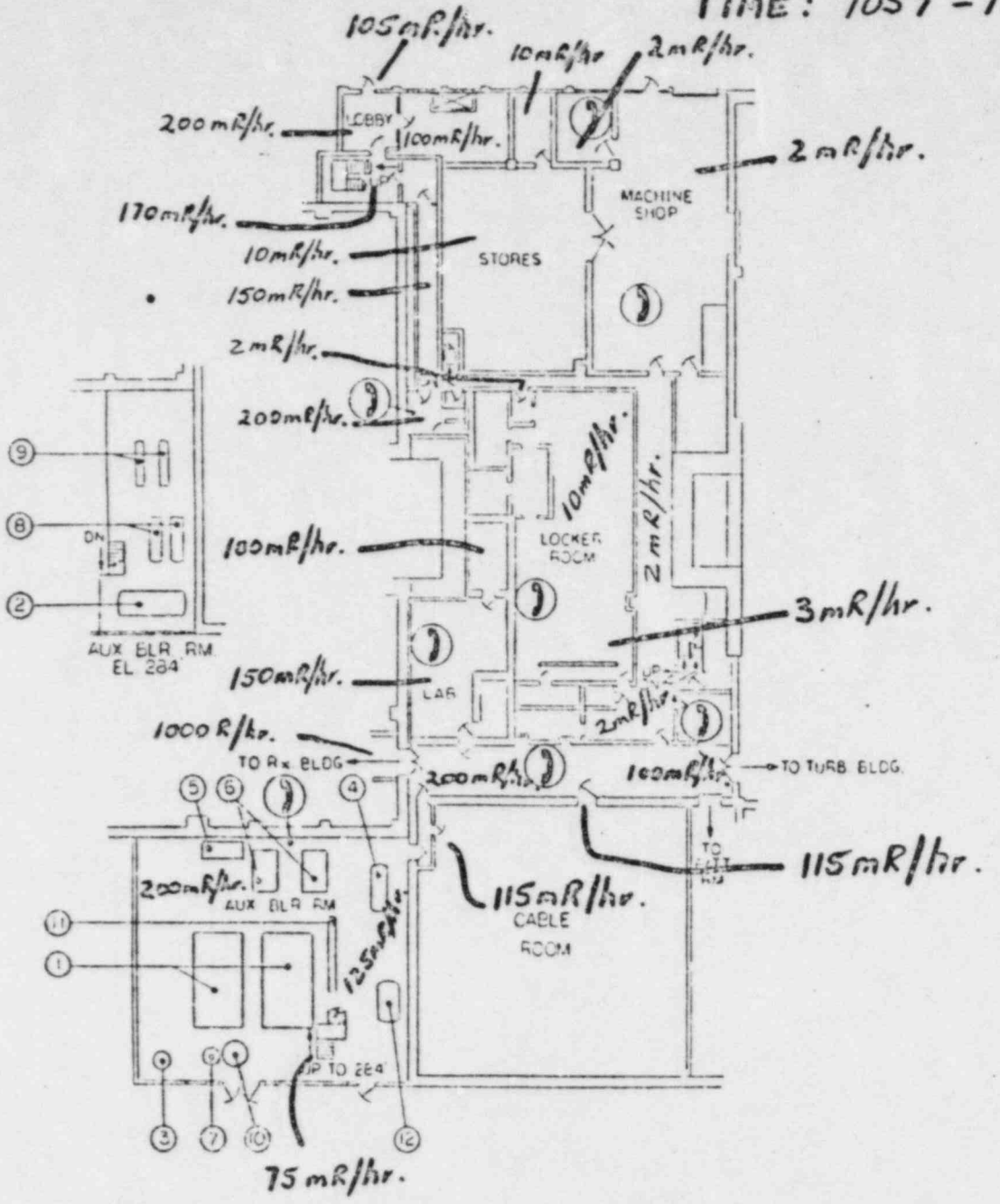
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN ADMINISTRATION BLDG EL 260'

TIME: 1057 - 1245





	EQUIPMENT	ZONE
1	AUXILIARY BOILER (2)	B3
2	AUXILIARY DEAERATOR	B3
3	BLOWDOWN TANK	E5
4	CONDENSATE TANK	C4
5	DOMESTIC HOT WATER TANK	E4
6	DUST COLLECTOR (2)	B4
7	GLYCOL EXP TANK	E5
8	GLYCOL-WTR HT EXCHANGER (2)	B3
9	HI TEMP HOT WTR HT EXCH (2)	B2
10	HOT WATER EXP TANK	E5
11	PANEL NCC 0232, 0242	C4
12	TRANSFER TANK	C5

(3) PAGE SYSTEM HANDSET STATION

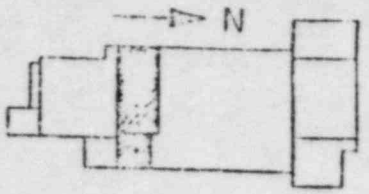
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

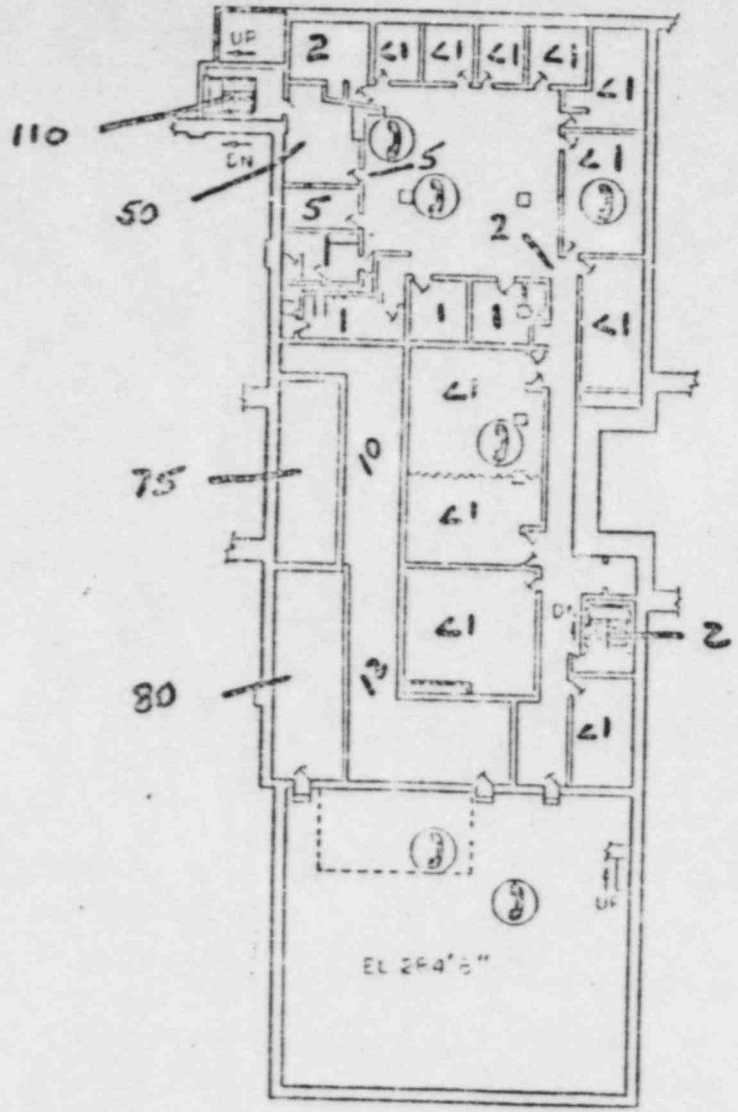
AREA PLAN ADMINISTRATION BLDG. AUX BLR RM.

EL 272'

TIME: 1057 - 1245

(All readings on this page in mR/hr.)





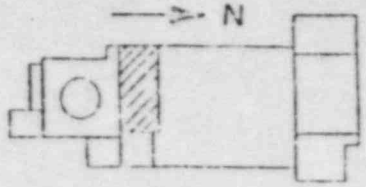
EQUIPMENT ZONE

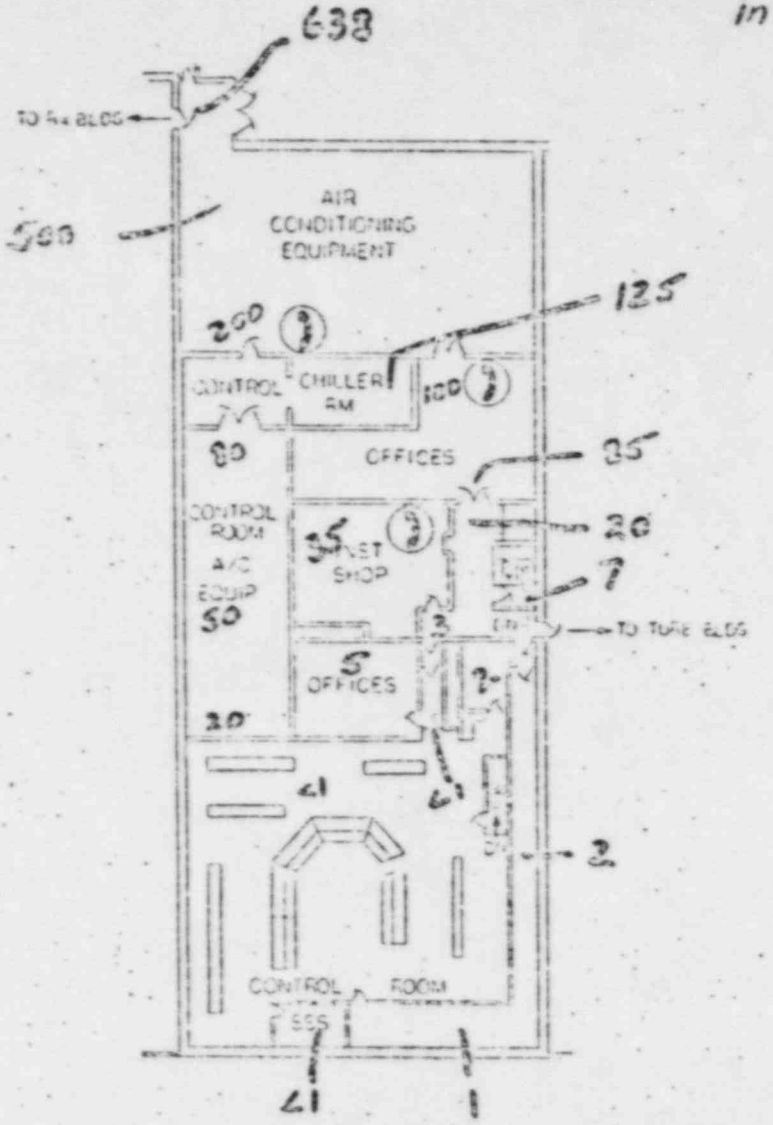
(3) PACE SYSTEM HANDSET STATION

AREA PLAN
ADMINISTRATION BLDG
EL 284' & 286'

TIME: 1057 - 1245

(All readings on this page in mR/hr.)





(5) FACE SYSTEM HANDSET STATION

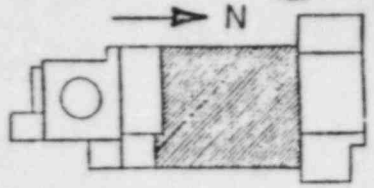
FOR THE AUTHORITY OF THE STATE OF NEW YORK

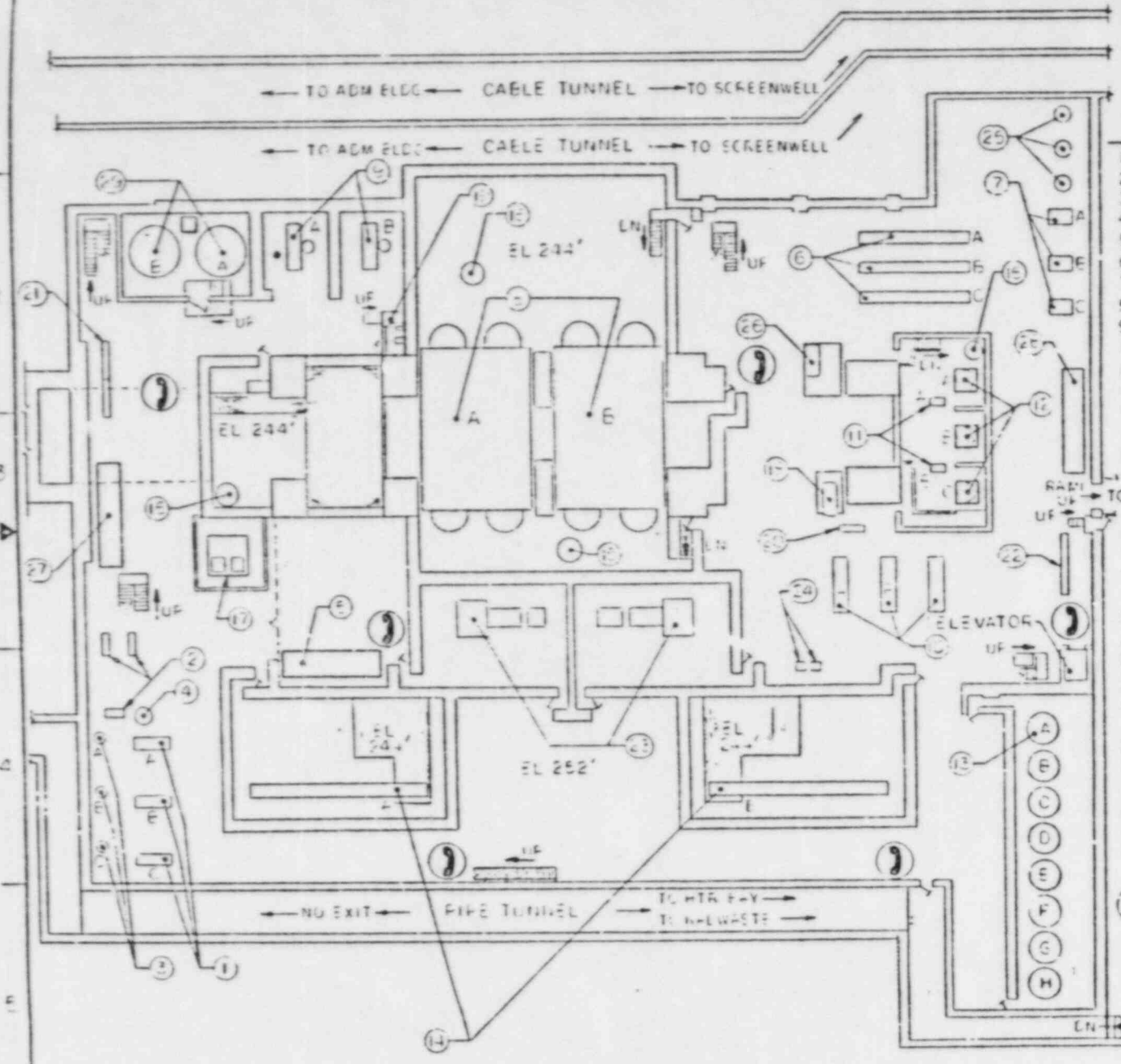
JAMES A. FITZPATRICK
POWER AUTHORITY

AREA PLAN
ADMINISTRATION BLDG.

EL 300'

Time: 1057 - 1245





	EQUIPMENT	ZONE
1	AIR COMPRESSORS(3)	A4
2	AIR DRYERS(3)	A3,A4
3	AIR RECEIVERS(3)	A4
4	BREATHING AIR RCC TANK	A4
5	CARBOX UNIT, 10 TON	E4
6	CLCW HEAT EXCHANGERS(3)	D2,E2
7	CLCW PUMPS(3)	E2
8	CONDENSERS(2)	C2,C3
9	COND AIR REMOVAL PUMPS(2)	E2
10	COND BOOSTER PUMPS(3)	D2,D3
11	COND SAMPLE PUMPS(2)	E2,E3
12	CONDENSATE PUMPS(3)	E2,E3
13	DEMINERALIZERS(6)	E4,E5
14	DRAIN COOLERS(2)	E4,D4
15	EQUIP DRAIN SUMP	C3
16	FLOOR DRAIN SUMPS(3)	A3,C2,E3
17	HYD FLUID PWR UNIT	A3
18	HYDROGEN SEAL OIL UNIT	D3
19	OFF GAS SAMPLE EQUIP	B2
20	PANEL, H_2 & STATOR H_2O	D3
21	PANEL, MCC 71-C231 & 71-C241	A2
22	PANEL, MCC 71-C431 & 71-C441	E3
23	R_x FEED PUMPS(2)	C3
24	R_x FEED PUMP SEAL WATER COOLER	D4
25	SERVICE WATER PUMP STR	E1,E2
26	STATOR WINDING LIQUID COOLING UNIT	D2
27	SWCR, EGCV, 71-L23/24	A3
28	SWCR, EGCV, 71-L43/44	E2
29	TURBINE LUBE OIL TANKS(2)	A2

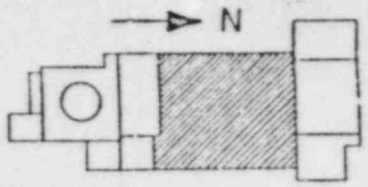
PAGE SYSTEM HANDSET STATION

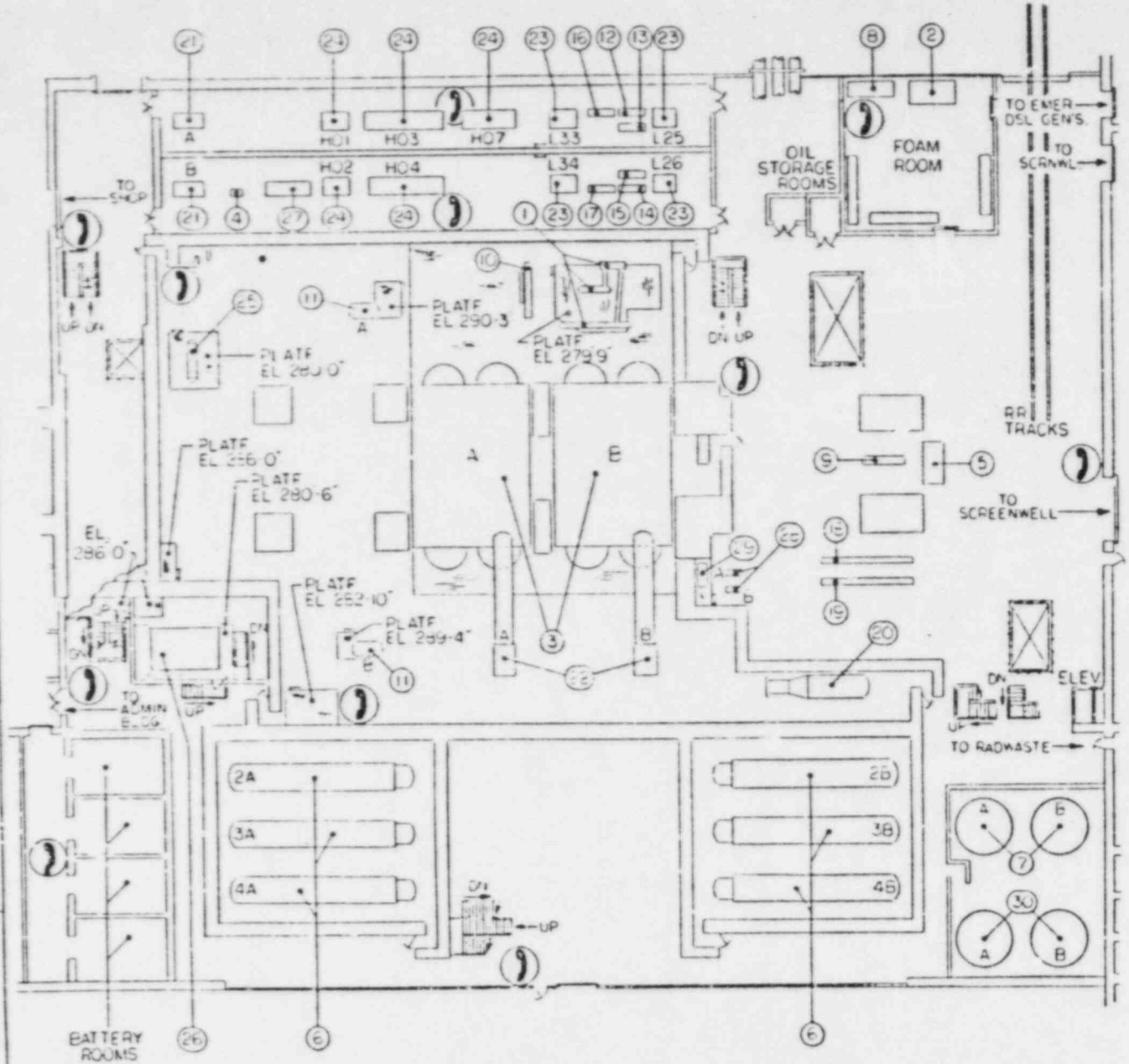
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB BLDG & HTR BAY
EL 244' & 252'

TIME: 1057 - 1245





	EQUIPMENT	ZONE
1	AIR EJECTOR	C2
2	CO_2 UNIT	E1
3	CONDENSER (2)	C3
4	CONTROL PANEL - 71UPP	B2
5	EXCITER SWITCHBOARD	E3
6	FEEDWATER HEATER (6)	B4,D4
7	FLOOR DRAIN SAMPLE TANK (2)	E4
8	FOAM UNIT	D1
9	GEN. NEUT. TRANSF. AND RES.	D3
10	GLAND STEAM EXHAUSTER	C2
11	MOISTURE SEPARATOR DRAIN TK. (2)	B2,3
12	PANEL MCC C251	C1
13	PANEL MCC C252	C1
14	PANEL MCC C261	C2
15	PANEL MCC C262	C2
16	PANEL MCC C331	C1
17	PANEL MCC C341	C2
18	PANEL MCC C434	D3
19	PANEL MCC C444	D3
20	REBOILER	D4
21	RPS MG SET (2)	A1,2
22	Rx FEED PUMP TURB. EXHAUST (2)	C3
23	SWITCHGEAR, 600 V. (4)	C1,2
24	SWITCHGEAR, 4160 V. (5)	B1,2,C1
25	TURBINE BY-PASS STEAM CHEST	A2
26	TURBINE LUBE OIL TANK	A3
27	UNINTERRUPTABLE MG SET-71UPS-1	B2
28	VACUUM PRIMING PUMP (2)	D3
29	VACUUM TANK	D3
30	WASTE SAMPLE TANK	E5

PAGE SYSTEM HANDSET STATION

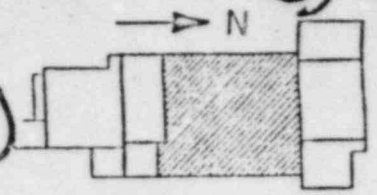
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB. BLDG., HTR. BAY, ELEC. BAY
EL 272'

TIME: 1057 - 1245

(All readings on this page in mR/hr.)



700 5 2

TO ELEC BAY ROOF

TO ELEC BAY ROOF

HOIST AREA

HOIST AREA

TO ADM BLDG ROOF

PLATE EL 323'-6"

15 UP

5 DN

TO ADM BLDG

UP

HOIST AREA

HEATER BAY EL 292'

TO HTR BAY ROOF

PLATE EL 314'-6"

ELEVATOR

CONTAMINATED INSTRUMENT REPAIR SHOP

	EQUIPMENT	ZONE
1	ALTERNATOR	D3
2	CLOW MAKEUP & SURGE TANK	E3
3	FEEDWATER HEATER (4)	B4, D4
4	GENERATOR	D3
5	HIGH PRESSURE TURBINE	B3
6	HYDROGEN COOLER (2)	D3
7	LOW PRESSURE TURBINE (2)	B3, C3
8	MOISTURE SEPARATOR REHEATER (2)	B2, B3
9	PANEL, MCC 435 & 445	C5
10	REHEAT DRAIN TK 1ST STAGE (2)	B2, B3
11	REHEAT DRAIN TK 2ND STAGE (2)	B2, B3

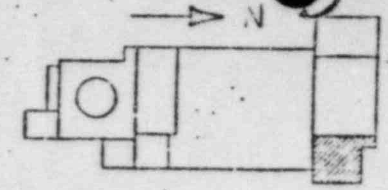
(9) PAGE SYSTEM HANDSET STATION

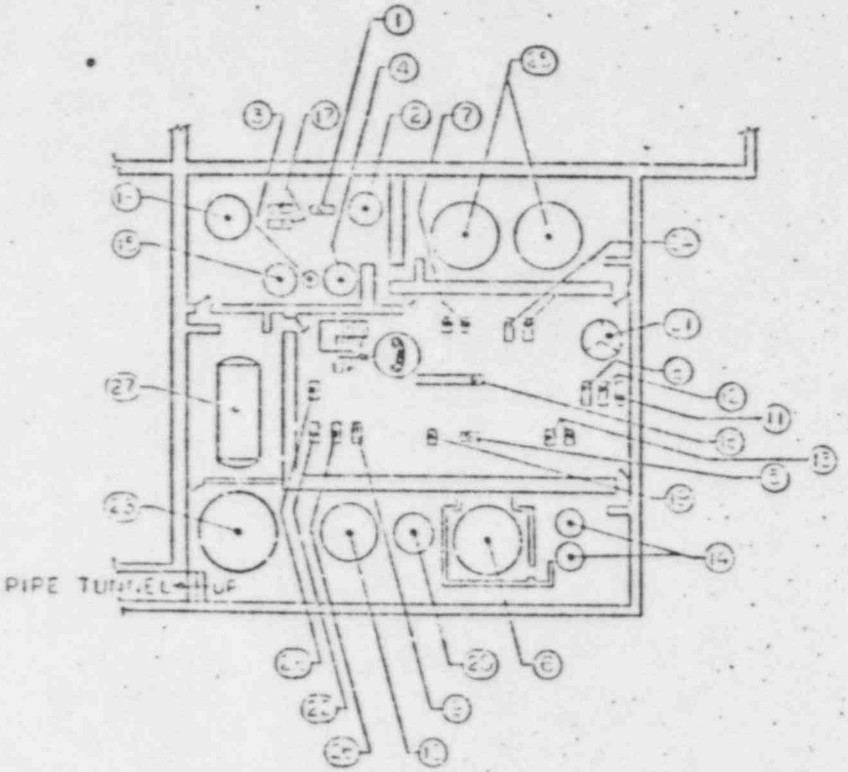
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
HTR BAY & TURB BLDG
EL 292' & 300'

TIME: 1057-1245





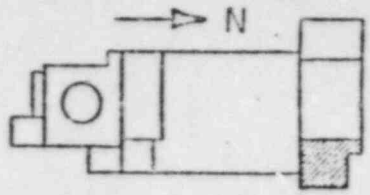
EQUIPMENT	ZONE
1 ACID RECOVERY PUMP	C2
2 ACID RECOVERY TANK	C2
3 ANION TANK	B3
4 CATION & RESIN SEP TANK	C3
5 CONCENTRATED WASTE PUMP	C3
6 CONCENTRATED WASTE TANK	C4
7 CONCENTRATOR FEED PUMP(2)	C3
8 EQUIPMENT DRAIN PUMP	D3
9 FLOOR DRAIN COLL PUMP	C3
10 FLOOR DRAIN COLL TANK	C4
11 FLOOR DRAIN PUMP	D3
12 HIGH COND DRAIN PUMP	D3
13 LAUNDRY DRAIN PUMP(2)	C3
14 LAUNDRY DRAIN TANK(2)	C4
15 MIX & STORAGE TANK	B3
16 PANEL MCC 432 & 442	C3
17 RINSE & SLUICE RCVY PUMP(2)	B2
19 RINSE & SLUICE RCVY TANK	B2
18 SPENT RESIN PUMP	C3
20 SPENT RESIN TANK	C4
21 SUMP TANK	D3
22 WASTE COLLECTOR PUMP	C3
23 WASTE COLLECTOR TANK	B4
24 WASTE NEUTRALIZER PUMP(2)	C3
25 WASTE NEUTRALIZER TANK(2)	C2
26 WASTE SLUDGE PUMP	C3
27 WASTE SLUDGE TANK	B3
28 WASTE PURGE PUMP	C3

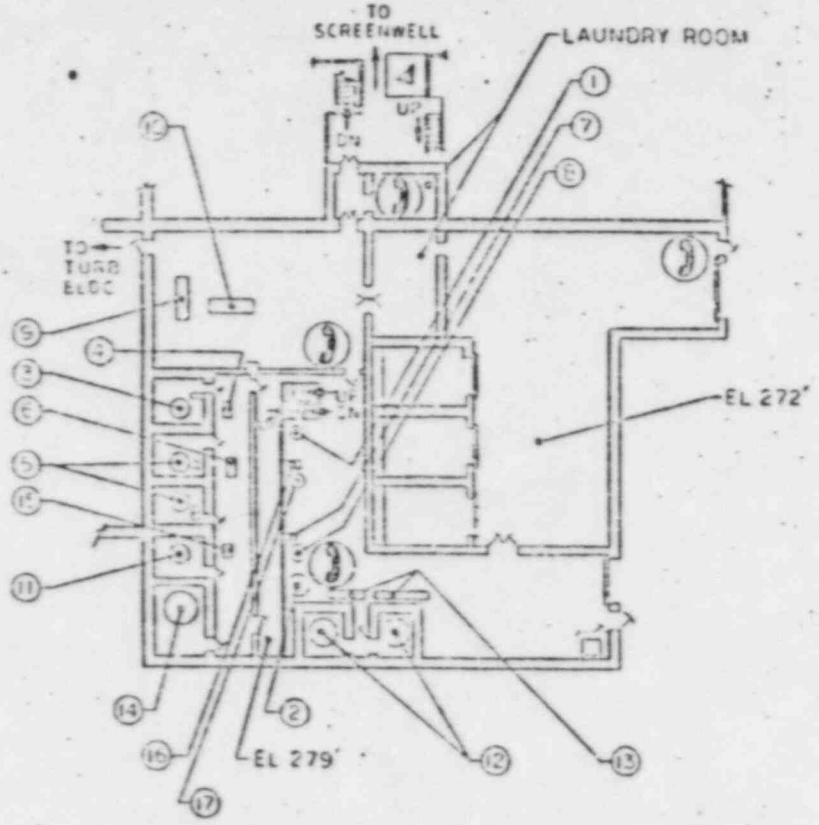
(R) PAGE SYSTEM HANDSET STATION

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 250′

TIME: 1057 - 1245





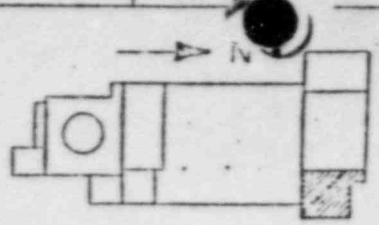
	EQUIPMENT	ZONE
1	CATION FLOCCULANT MIXING TK	C3
2	FILTER AID TANK	C4
3	FLOOR DRAIN FILTER	B3
4	FL DRAIN FLT HOLDING PUMP	B3
5	FUEL POOL FILTER DEMIN(2)	B3
6	FUEL POOL FILTER DEMIN HOLDING PUMP	B3
7	FUEL POOL PRECOAT PUMP	C3
8	FUEL POOL PRECOAT TANK	C3
9	SAMPLE PANEL	B3
10	SAMPLE SINK	B3
11	WASTE COLLECTOR FILTER	B3
12	WASTE CONCENTRATOR(2)	C4
13	WASTE CONC CONDENSER(2)	C4
14	WASTE DEMIN	B4
15	WASTE FILTER HOLDING PUMP	B3
16	WASTE PRECOAT PUMP	C3
17	WASTE PRECOAT TANK	C3

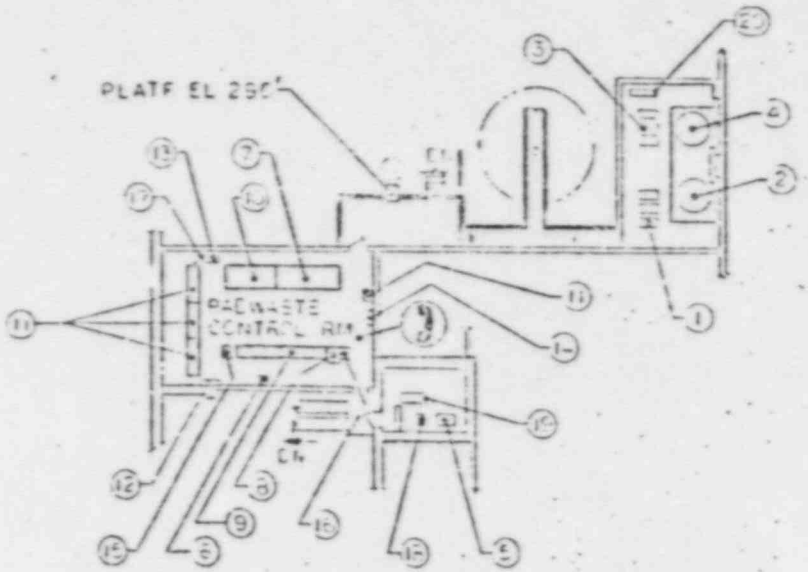
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 272' & 279'

TIME: 1057-1245





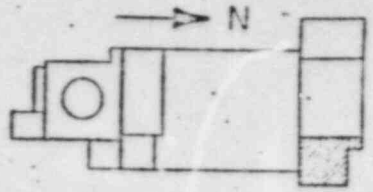
	EQUIPMENT	ZONE
1	ACID REGEN PUMP(3)	D3
2	ACID STORAGE TANK	D3
3	CAUSTIC REGEN PUMP(3)	D2
4	CAUSTIC STORAGE TANK	D2
5	MICRO CELL HOPPER DISCHARGE CHUTE	C3
6	PANEL,AR-RW	B3
7	PANEL,COND DEMIN	C3
8	PANEL,FUEL POOL	C3
9	PANEL,MCC 433 & 434	B3,C3
10	PANEL,FPC TREAT & MAKEUP	B3
11	PANEL,RADWASTE(4)	B3,C3
12	PANEL,RADWASTE FILTER	B3
13	PANEL,TPE	B3
14	PANEL,ULTRASONIC LEVEL MEASUREMENT	C3
15	PANEL,ULTRASONIC RESIN CLEANER	B3
16	PANEL,UPFLOW SAND FILTER	C3
17	PANEL,WASTE CONCENTRATOR	B3
18	PORTLAND CEMENT HOPPER DISCHARGE CHUTE	C2
19	THIN FILM EVAPORATOR	C3
20	WATER HEATER	D2

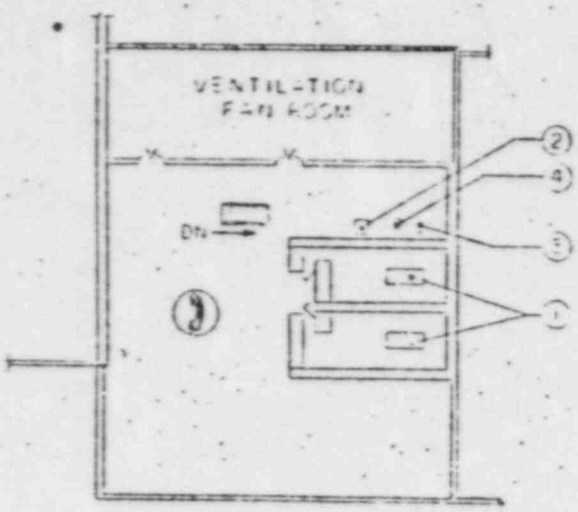
(2) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
RADWASTE & SCRNWELL
EL 284'

TIME: 1057-1245



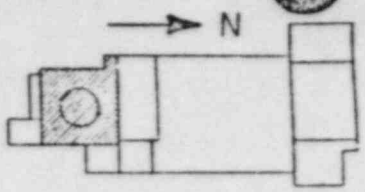


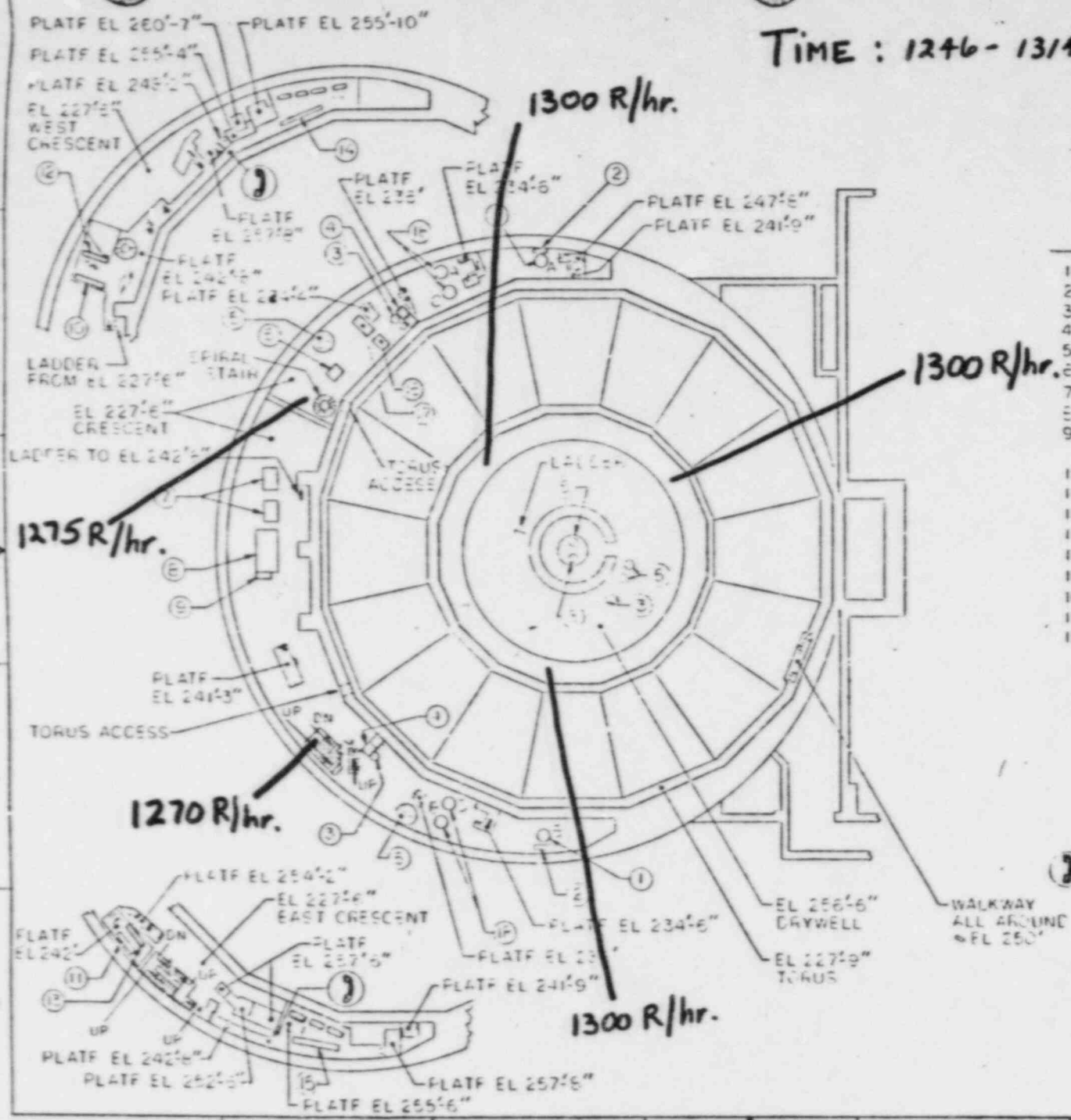
	EQUIPMENT	ZONE
1	CENTIFUGE(2)	C3
2	DUST COLLECTOR	C3
3	MICRO-CELL HOPPER	C3
4	PORTLAND CEMENT HOPPER	C3

(9) PACE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT
AREA PLAN
RADWASTE
EL 298'

TIME : 1246 - 1314





	EQUIPMENT	ZONE
1	CORE SPRAY PUMP(2)	C2,C4
2	CORE SPRAY BOOSTING PUMP(2)	C2,C4
3	EQUIP. DRAIN SUMP(1)	B2,B4,C3
4	EQUIP. DRAIN SUMP COOLER(2)	B2,B4
5	FLOOR DRAIN SUMP(1)	B2,B4,C3
6	CLNG PUMP CONDENSER	B2
7	HPCI PUMP	B3
8	HPCI TURBINE	B3
9	HPCI TURBINE LUBE OIL COOLER	B3
10	PANEL EMCC-1	A2
11	PANEL EMCC-2	A5
12	PANEL EMCC-3	A2
13	PANEL EMCC-4	A5
14	PANEL MCC-71-C163	B1
15	PANEL MCC-71-C163	B5
16	RCIC PUMP	B2
17	RCIC TURBINE	B2
18	RHR PUMP(4)	C2,C4

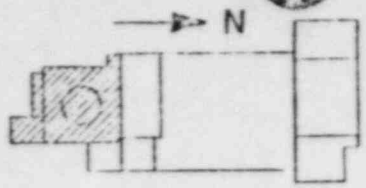
(J) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG. EL 227' & 242'

TIME: 1246 - 1314



1175 R/hr.

1100 R/hr.

1000 R/hr.

1280R/hr.

1100R/hr.

710 R/hr.

1000 R/hr.

1280 R/hr.

1295 R/hr.

1280 R/hr.

1000 R/hr.

CRD REPAIR AREA

EL 281'-0"

SPIRAL STAIR

EL 256'-6"

EL 269'-9"

EL 254'-0"

RR TRACKS

EQUIPMENT ACCESS LOCK

ELEVATOR

TO ADMIN. BLDG.

	EQUIPMENT	ZONE
1	ACCESS HATCH TO TORUS (6)	C2,1,D2,4,E2
2	CONDENSATE TRANSFER PUMP (2)	E2
3	COOLING COILS & BLOWERS (2)	D3
4	CRD HYD CONTROL UNITS	D2,4
5	CRD WATER PUMP (2)	E2
6	EQUIPMENT HATCH TO TORUS	C2
7	LADDER TO EL 256'6"	D3
8	LADDER TO EL 269'0"	D3
9	LIQUID NITROGEN TANK (2)	B2,3
10	PANEL EMCC-6	E4
11	PANEL MCC C132, C151	C3
12	PANEL MCC C133	E3
13	PANEL MCC C142, C161	C3
14	PANEL MCC C143, C162	E4
15	PANEL MCC C152	E2
16	PANEL MCC C164	E4
17	RECIRC. PUMP (2)	D3
18	RHR HEAT EXCHANGER (2)	C2,4
19	STANDBY GAS TREATMENT FILTER TRAIN (2)	B4

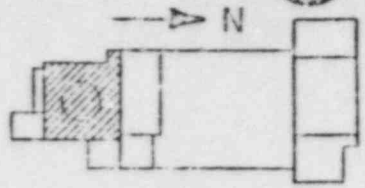
(J) FACE SYSTEM HANDSET STATION

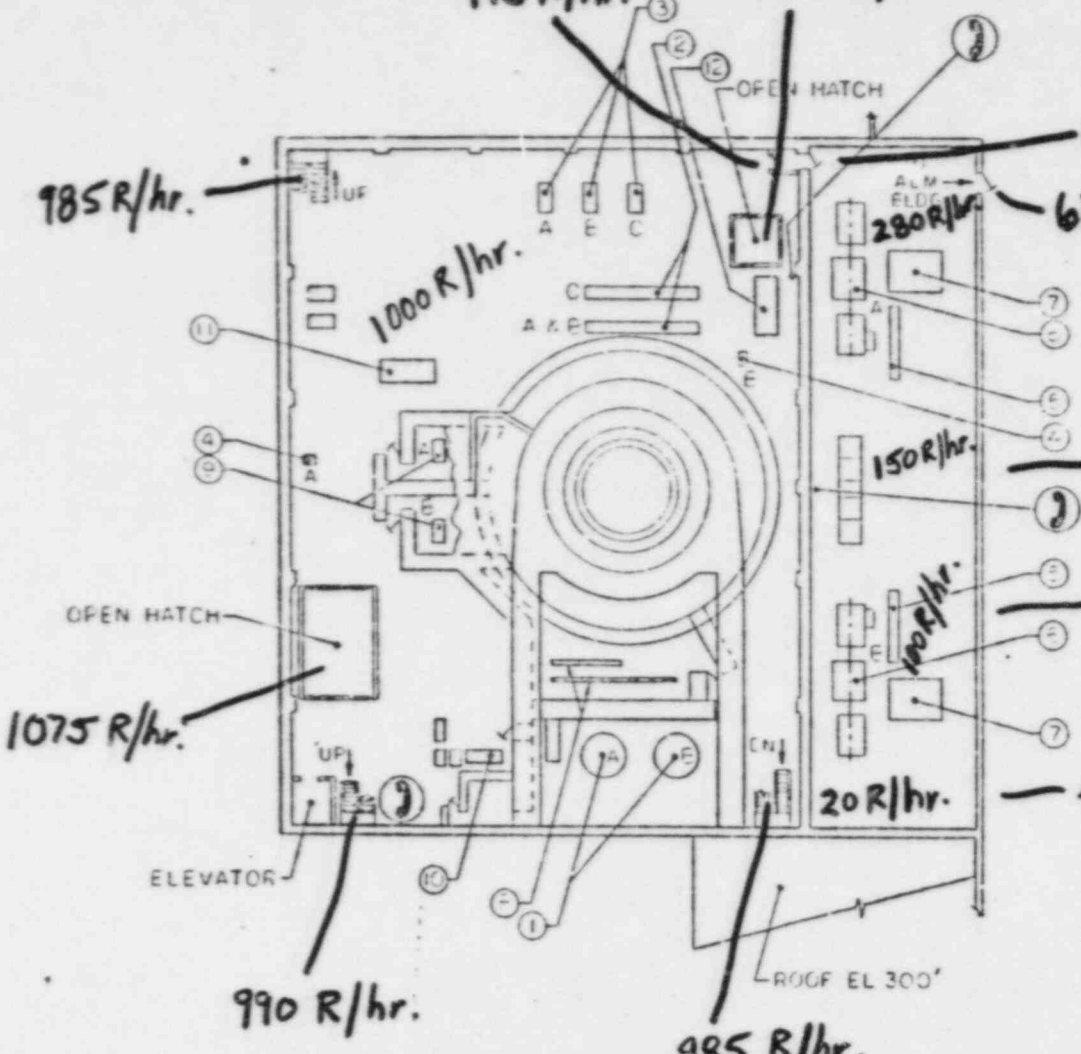
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 272'

Time: 1246-1314





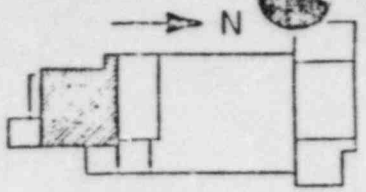
	EQUIPMENT	ZONE
1	CLEANUP PHASE SEP. TANK (2)	C4
2	CLCW HEAT EXCHANGER (3)	C2
3	CLCW PUMP (3)	C2
4	DRYWELL INERTING SAMPLE PUMP (2)	B3,D3
5	MG FLUID COOLER (2)	D2,D3
6	MG FLUID DRIVE (2)	D2,D3,D4
7	MG FLUID DRIVE LUBE OIL PUMP ASSY (2)	D2,D4
8	RWCU NON-REGENERATIVE HEAT EXCHANGER (2)	C4
9	RWCU PUMP (2)	C3
10	SAMPLE STATION NO. 1	C4
11	SWGR, 600V, 71-L15	B3
12	SWGR, 600V, 71-L16	D2

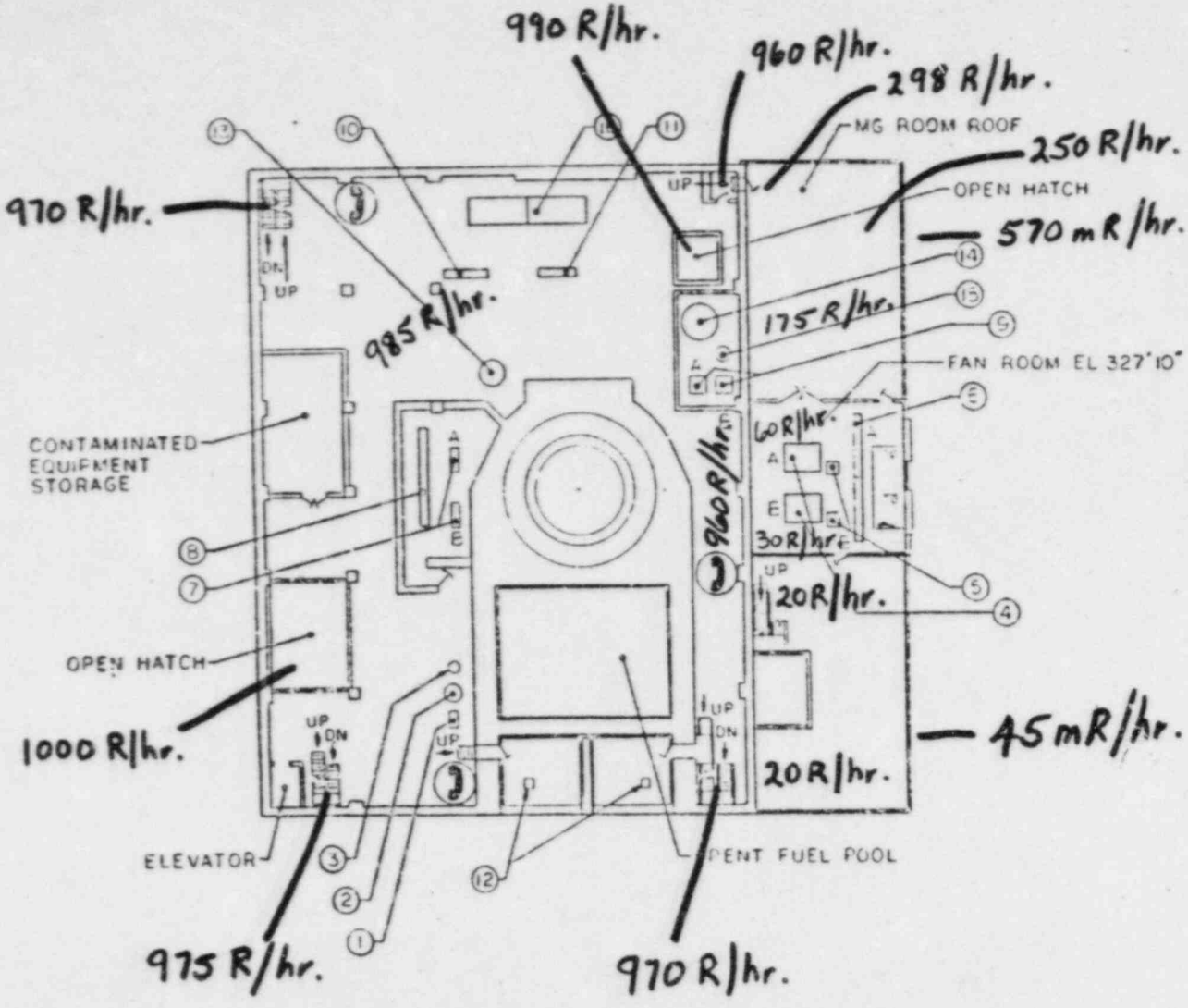
(2) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 300'

TIME : 1246-1314





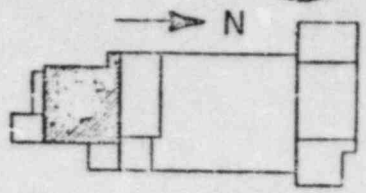
	EQUIPMENT	ZONE
1	CLEAN-UP PRECOAT PUMP	B4
2	CLEAN-UP PRECOAT TANK	B4
3	CLEAN-UP RESIN-FEED TANK	B4
4	FAN(2)	D3
5	FAN MOTOR(2)	D3
6	FILTER(2)	D3
7	FUEL POOL CLEAN UP RECIRC PUMP(2)	B3
8	FUEL POOL HEAT EXCH(2)	B3
9	LIQUID POISON PUMP(2)	C3,D3
10	PANEL, MCC 71-C131	C2
11	PANEL, MCC 71-C141	C2
12	RWCU HOLDING PUMP(2)	C4
13	REACTOR BLDG COOLING WATER MAKEUP TANK	C3
14	STANDBY LIQUID CONTROL TK	C2
15	STANDBY LIQUID CONTROL TEST TANK	D3
16	SWGR, 600v 71 L13/14	C2

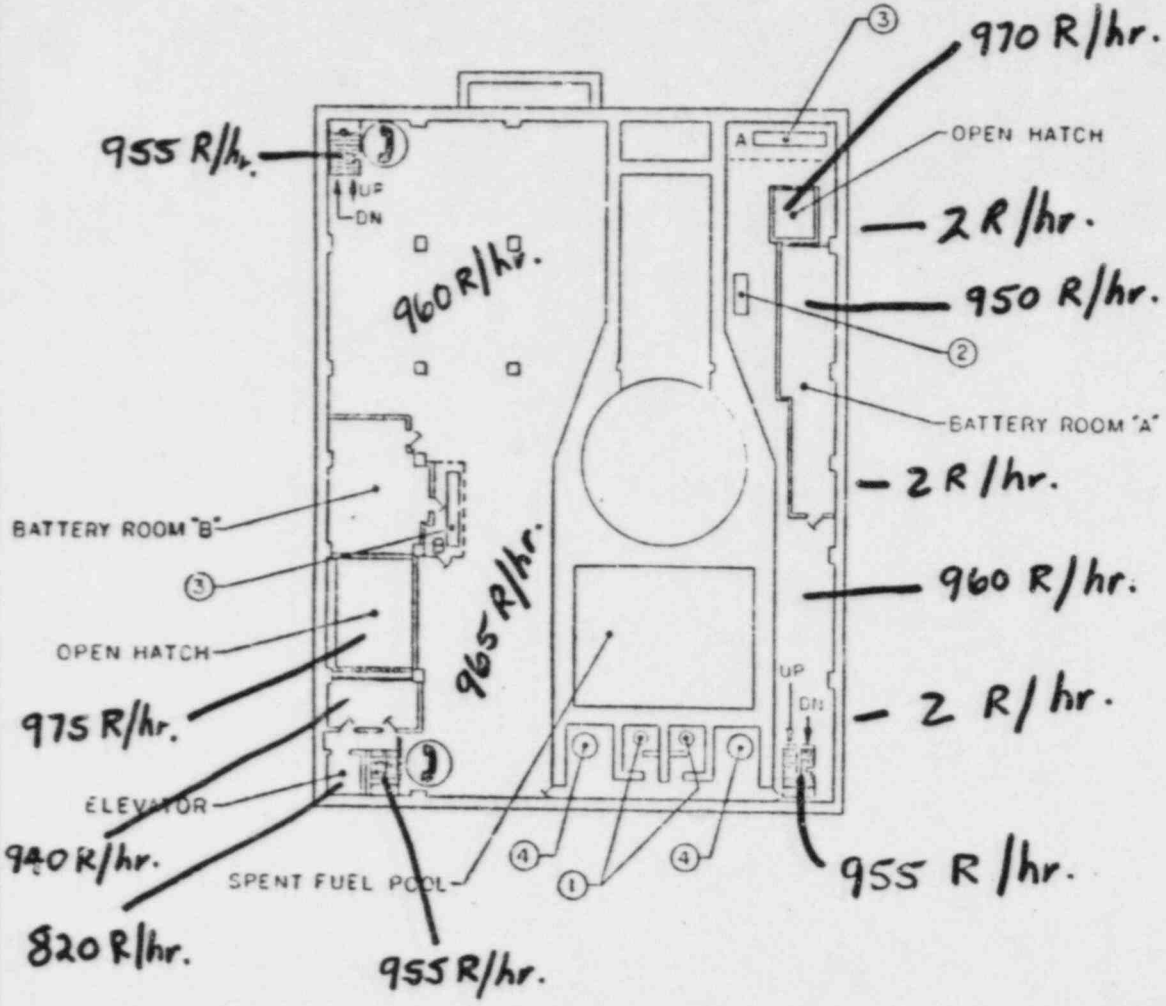
(3) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 326'

TIME: 1246 - 1314





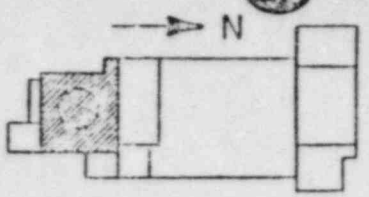
	EQUIPMENT	ZONE
1	CLEAN UP FILTER DEMIN(2)	C4
2	FILTER UNIT	C2
3	INVERTER(2)	B3,C2
4	SKIMMER SURGE TANK(2)	C4

(9) PAGE SYSTEM HANDSET STATION

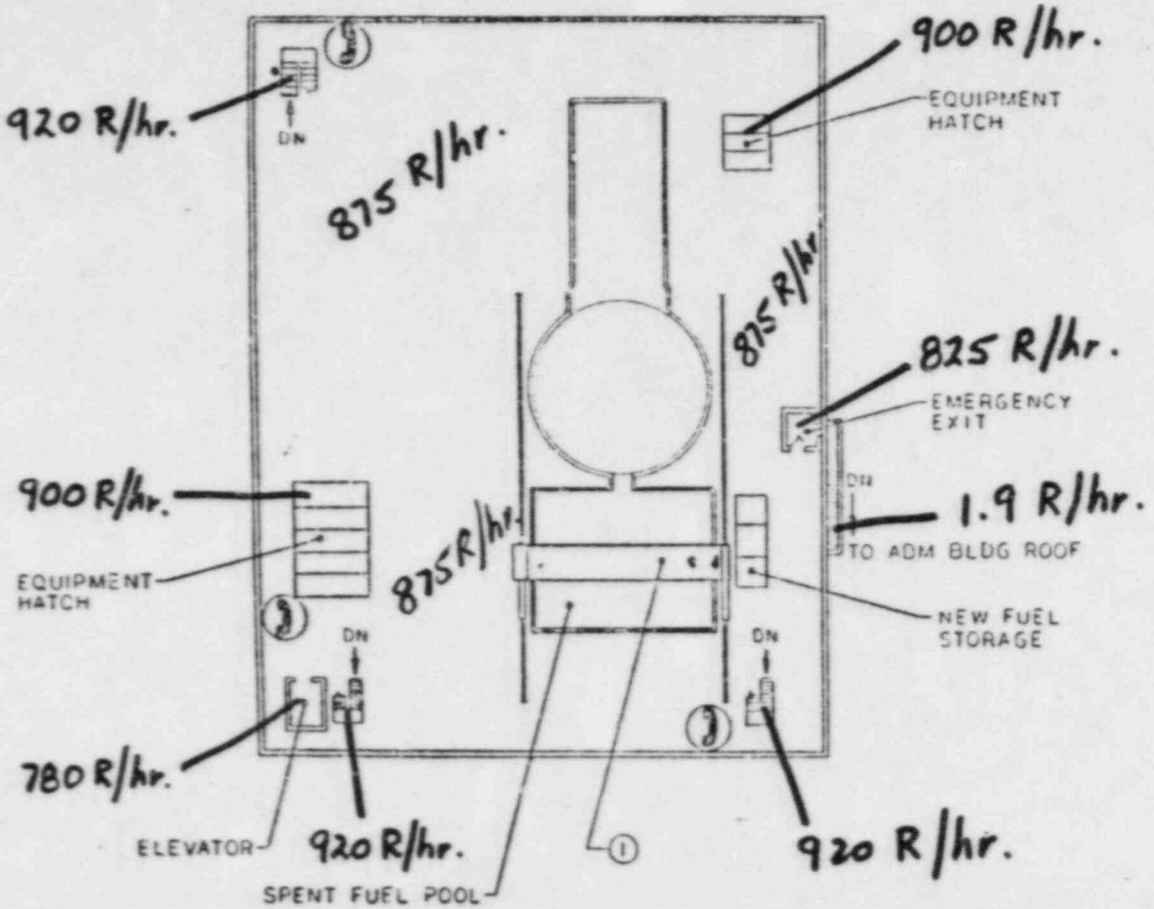
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 344'

TIME: 1246-1314



	EQUIPMENT	ZONE
1	REFUELING PLATFORM	C4

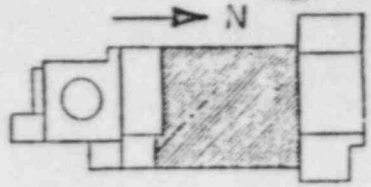


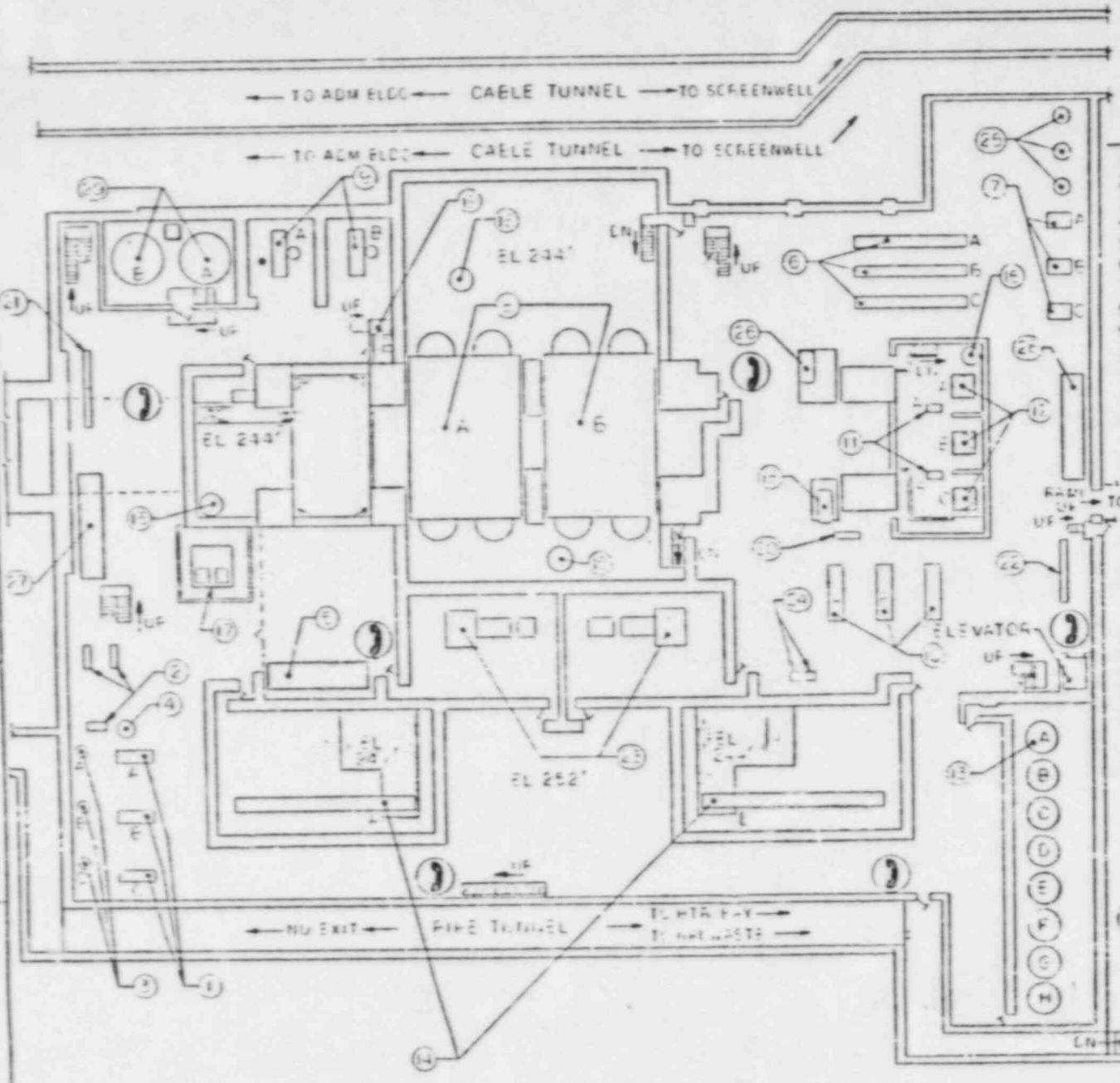
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 369'

TIME: 1246 - 1314





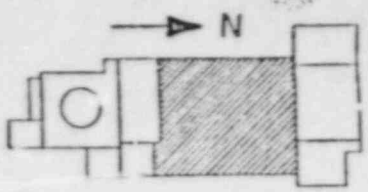
	EQUIPMENT	ZONE
1	AIR COMPRESSORS(3)	A4
2	AIR DRYERS(2)	A3,A4
3	AIR RECEIVERS(2)	A4
4	EMERGENCY AIR RECEIVER TANK	A4
5	CARBOX UNIT, H2 GEN	B4
6	CLOW HEAT EXCHANGERS(3)	D2,E2
7	CLOW PUMPS(3)	E2
8	CONDENSERS(2)	C2,C3
9	COND AIR REMOVAL PUMPS(2)	B2
10	COND BOOSTER PUMPS(3)	D2,D3
11	COND SAMPLE PUMPS(2)	E2,E3
12	CONDENSATE PUMPS(3)	E2,E3
13	DEMINERALIZERS(6)	E4,E5
14	DRAIN COOLERS(2)	E4,D4
15	EQUIP DRAIN SUMP	C3
16	FLOOR DRAIN SUMPS(3)	A3,C2,E3
17	HYD FLUID PWR UNIT	A3
18	HYDROGEN SEAL OIL UNIT	D3
19	OFF GAS SAMPLE EQUIP	B2
20	PANEL, H_2 & STATOR H_2O	D3
21	PANEL, MCC 71-C231 & 71-C241	A2
22	PANEL, MCC 71-C431 & 71-C441	E3
23	R_x FEED PUMPS(2)	C3
24	R_x FEED PUMP SEAL WATER COOLER	D4
25	SERVICE WATER PUMP STR	E1,E2
26	STATOR WINDING LIQUID COOLING UNIT	D2
27	SWGR, 600V, 71-L23/24	A3
28	SWGR, 600V, 71-L43/44	E2
29	TURBINE LUBE OIL TANKS(2)	A2

(1) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN TURB BLDG & HTR BAY EL 244' & 252'

TIME : 1246 - 1314



	EQUIPMENT	ZONE
1	AIR EJECTOR	C2
2	CO_2 UNIT	E1
3	CONDENSER (2)	C3
4	CONTROL PANEL - 71UPP	B2
5	EXCITER SWITCHBOARD	E3
6	FEEDWATER HEATER (6)	B4,D4
7	FLOOR DRAIN SAMPLE TANK (2)	E4
8	FOAM UNIT	D1
9	GEN. NEUT. TRANSF. AND RES.	D3
10	GLAND STEAM EXHAUSTER	C2
11	MOISTURE SEPARATOR DRAIN TK. (2)	B2,3
12	PANEL MCC C251	C1
13	PANEL MCC C252	C1
14	PANEL MCC C261	C2
15	PANEL MCC C262	C2
16	PANEL MCC C331	C1
17	PANEL MCC C341	C2
18	PANEL MCC C434	D3
19	PANEL MCC C444	D3
20	REBOILER	D4
21	RPS MG SET (2)	A1,2
22	RX FEED PUMP TURB EXHAUST (2)	C3
23	SWITCHGEAR, 600 V. (4)	C1,2
24	SWITCHGEAR, 4160 V. (5)	B1,2,C1
25	TURBINE BY-PASS STEAM CHEST	A2
26	TURBINE LUBE OIL TANK	A3
27	UNINTERRUPTABLE MG SET-71UPS-1	B2
28	VACUUM PRIMING PUMP (2)	D3
29	VACUUM TANK	D3
30	WASTE SAMPLE TANK	E5

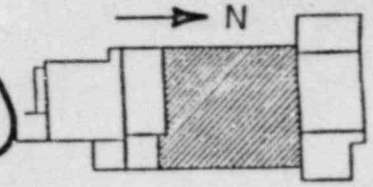
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB. BLDG., HTR. BAY, ELEC. BAY
EL 272'

TIME : 1246-1314
(All readings on this page in mR/hr.)



700 5 2

TO ELEC BAY ROOF

TO ELEC BAY ROOF

HOIST AREA

HOIST AREA

TO ADM ELEC ROOF

PLATF EL 323'-6"

15

UP

5

CN

TO ADM ELEC

UP

HOIST AREA

UP

CN

CN

TO HTR BAY ROOF

PLATF EL 314'-6"

HEATER BAY EL 292'

6A

5A

6B

5B

CN

ELEVATOR

CONTAMINATED INSTRUMENT REPAIR SHOP

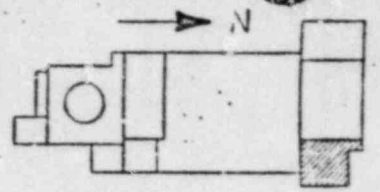
	EQUIPMENT	ZONE
1	ALTERNATOR	D3
2	CLOW MAKEUP & SURGE TANK	E3
3	FEEDWATER HEATER(4)	B4,D4
4	GENERATOR	D3
5	HIGH PRESSURE TURBINE	B3
6	HYDROGEN COOLER(2)	D3
7	LOW PRESSURE TURBINE(2)	B3,C3
8	MOISTURE SEPARATOR REHEATER(2)	B2,B3
9	PANEL, MCC 435 & 445	C5
10	REHEAT DRAIN TK 1ST STAGE(2)	B2,B3
11	REHEAT DRAIN TK 2ND STAGE(2)	B2,B3

PAGE SYSTEM HANDSET STATION

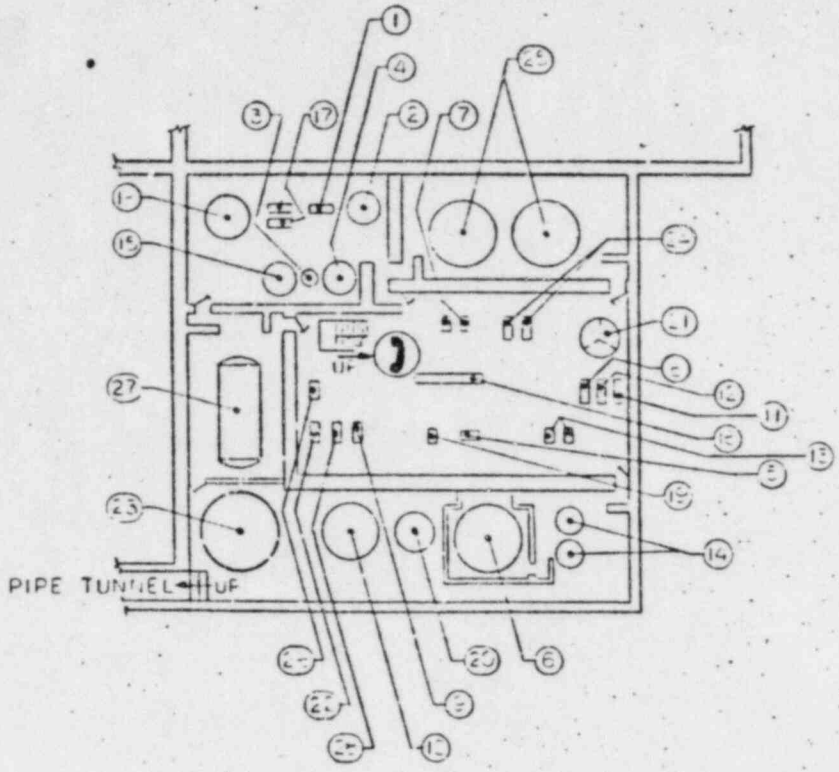
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN HTR BAY & TURB BLDG EL 292' & 300'

TIME: 1246 - 1314



	EQUIPMENT	ZONE
1	ACID RECOVERY PUMP	C2
2	ACID RECOVERY TANK	C2
3	ANION TANK	B3
4	CATION & RESIN SEP TANK	C3
5	CONCENTRATED WASTE PUMP	C3
6	CONCENTRATED WASTE TANK	C4
7	CONCENTRATOR FEED PUMP(2)	C3
8	EQUIPMENT DRAIN PUMP	D3
9	FLOOR DRAIN COLL PUMP	C3
10	FLOOR DRAIN COLL TANK	C4
11	FLOOR DRAIN PUMP	D3
12	HIGH COND DRAIN PUMP	D3
13	LAUNDRY DRAIN PUMP(2)	C3
14	LAUNDRY DRAIN TANK(2)	C4
15	MIX & STORAGE TANK	B3
16	PANEL MCC 432 & 442	C3
17	RINSE & SLUICE RCVY PUMP(2)	B2
19	RINSE & SLUICE RCVY TANK	B2
19	SPENT RESIN PUMP	C3
20	SPENT RESIN TANK	C4
21	SUMP TANK	D3
22	WASTE COLLECTOR PUMP	C3
23	WASTE COLLECTOR TANK	B4
24	WASTE NEUTRALIZER PUMP(2)	C3
25	WASTE NEUTRALIZER TANK(2)	C2
26	WASTE SLUDGE PUMP	C3
27	WASTE SLUDGE TANK	B3
28	WASTE SURGE PUMP	C3



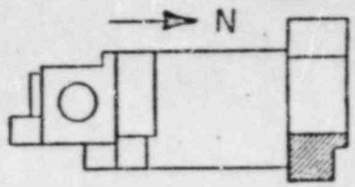
PAGE SYSTEM HANDSET STATION

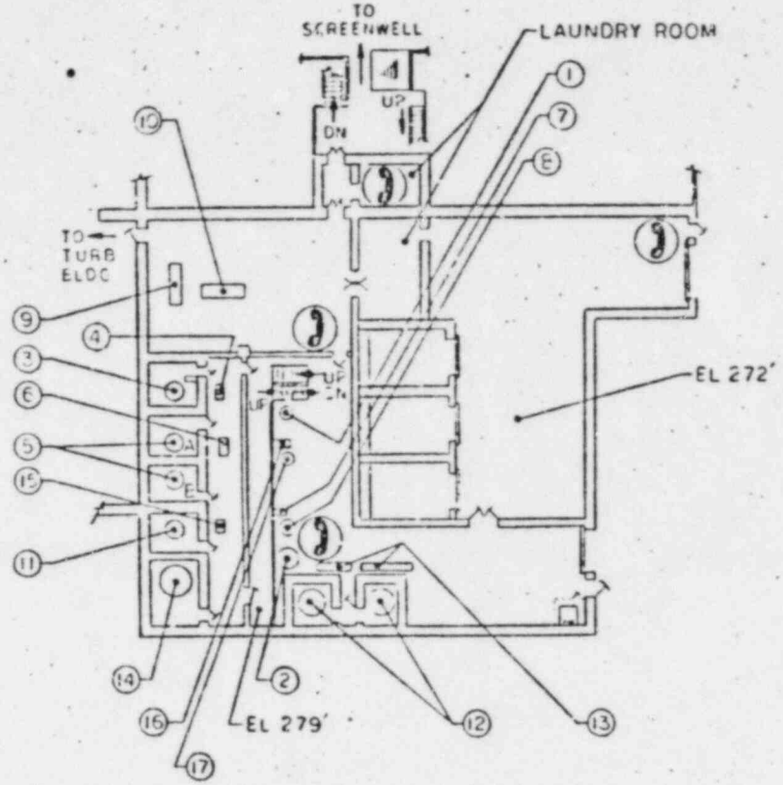
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 250'

TIME: 1246 - 1314





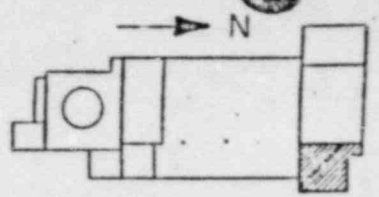
	EQUIPMENT	ZONE
1	CATION FLOCCULANT MIXING TK	C3
2	FILTER AID TANK	C4
3	FLOOR DRAIN FILTER	B3
4	FL DRAIN FLT HOLDING PUMP	B3
5	FUEL POOL FILTER DEMIN(2)	B3
6	FUEL POOL FILTER DEMIN HOLDING PUMP	B3
7	FUEL POOL PRECOAT PUMP	C3
P	FUEL POOL PRECOAT TANK	C3
9	SAMPLE PANEL	B3
10	SAMPLE SINK	B3
11	WASTE COLLECTOR FILTER	B3
12	WASTE CONCENTRATOR(2)	C4
13	WASTE CONC CONDENSER(2)	C4
14	WASTE DEMIN	B4
15	WASTE FIL & HOLDING PUMP	B3
16	WASTE PRECOAT PUMP	C3
17	WASTE PRECOAT TANK	C3

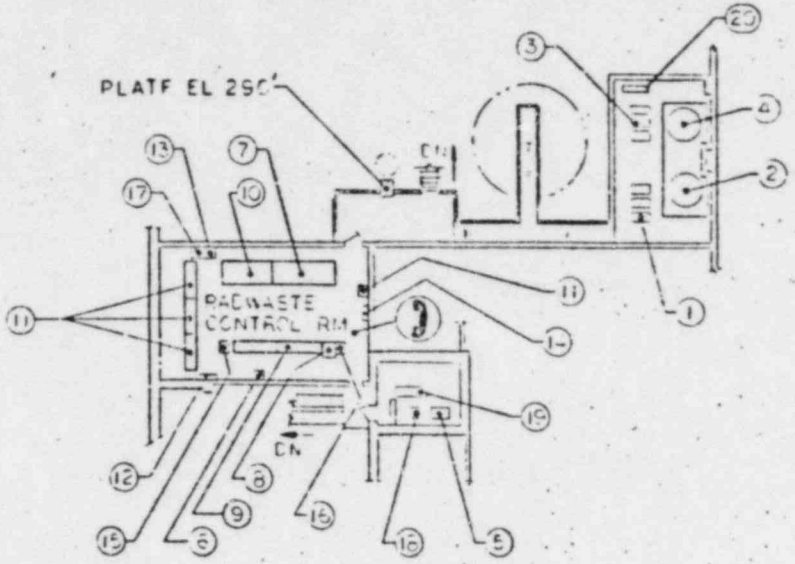
(J) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN RADWASTE EL 272' & 279'

TIME: 1246 - 1314





	EQUIPMENT	ZONE
1	ACID REGEN PUMP(3)	D3
2	ACID STORAGE TANK	D3
3	CAUSTIC REGEN PUMP(3)	D2
4	CAUSTIC STORAGE TANK	D2
5	MICRO CELL HOPPER DISCHARGE CHUTE	C3
6	PANEL,AR-RW	B3
7	PANEL,COND DEMIN	C3
8	PANEL,FUEL POOL	C3
9	PANEL,MCC 433 & 434	B3,C3
10	PANEL,PRE TREAT & MAKEUP	B3
11	PANEL,RADWASTE(4)	B3,C3
12	PANEL,RADWASTE FILTRN	B3
13	PANEL,TFE	B3
14	PANEL,ULTRASONIC LEVEL MEASUREMENT	C3
15	PANEL,ULTRASONIC RESIN CLEANER	B3
16	PANEL,UPFLOW SAND FILTER	C3
17	PANEL,WASTE CONCENTRATOR	B3
18	PORTLAND CEMENT HOPPER DISCHARGE CHUTE	C3
19	THIN FILM EVAPORATOR	C3
20	WATER HEATER	D2

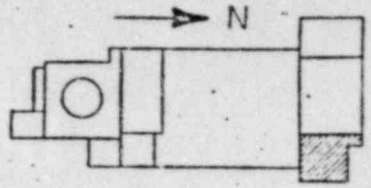
PAGE SYSTEM HANDSET STATION

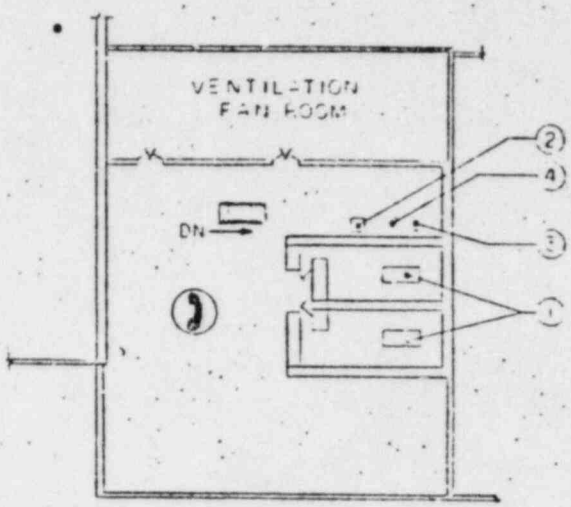
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN RADWASTE & SCRNWELL EL 284'

Time: 1246-1314





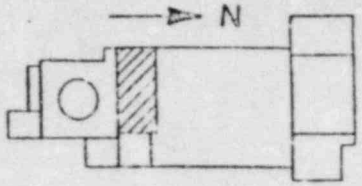
	EQUIPMENT	ZONE
1	CENTIFUGE(2)	C3
2	DUST COLLECTOR	C3
3	MICRO-CELL HOPPER	C3
4	PORTLAND CEMENT HOPPER	C3

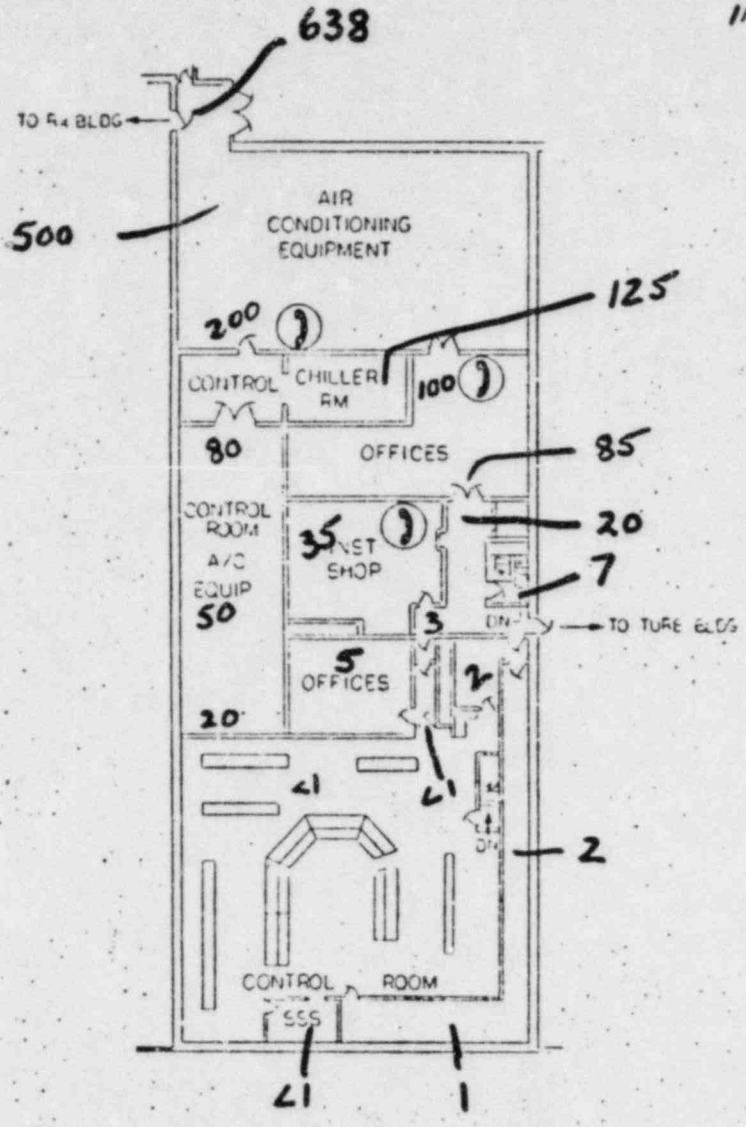
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 298'

TIME: 1246 - 1314
(All readings on this page in mR/hr.)





EQUIPMENT	ZONE

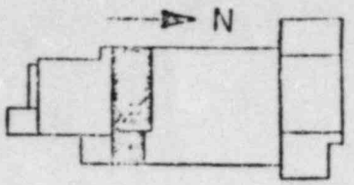
(1) PAGE SYSTEM HANDSET STATION

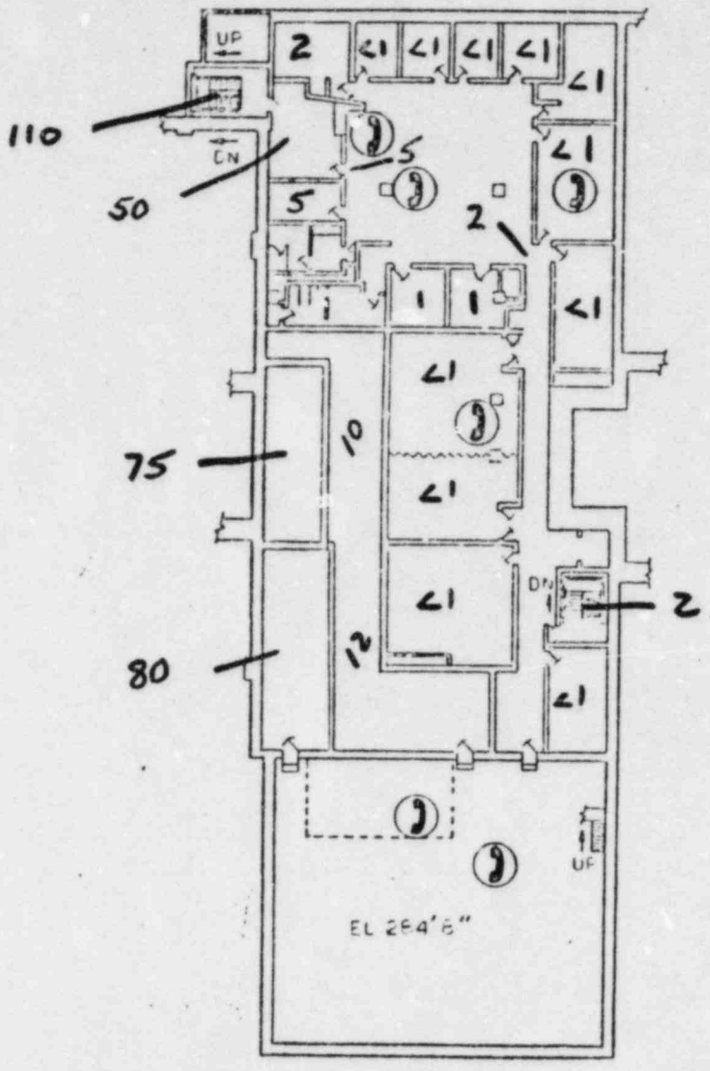
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG.
EL 300'

TIME: 1246 - 1314

(All readings on this page in mR/hr.)





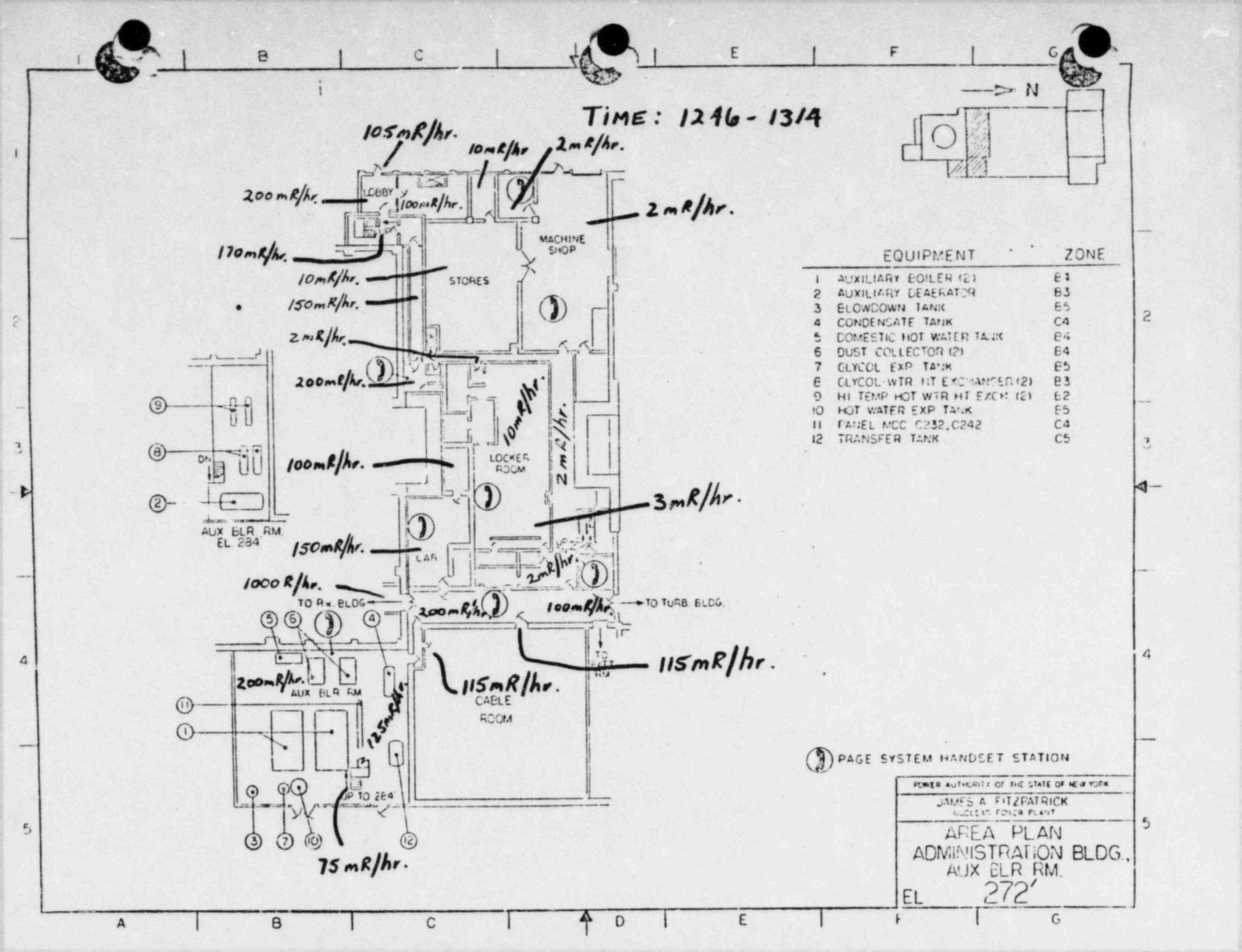
EQUIPMENT ZONE

(3) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 284' & 286'



	EQUIPMENT	ZONE
1	AUXILIARY BOILER (2)	B3
2	AUXILIARY DEAERATOR	B3
3	BLOWDOWN TANK	B5
4	CONDENSATE TANK	C4
5	DOMESTIC HOT WATER TANK	B4
6	DUST COLLECTOR (2)	B4
7	GLYCOL EXP TANK	B5
8	GLYCOL-WTR HT EXCHANGER (2)	B3
9	HI TEMP HOT WTR HT EXCH (2)	B2
10	HOT WATER EXP TANK	B5
11	PANEL MCC C232, C242	C4
12	TRANSFER TANK	C5

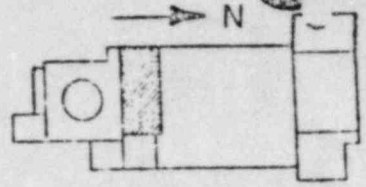
POWER AUTHORITY OF THE STATE OF NEW YORK

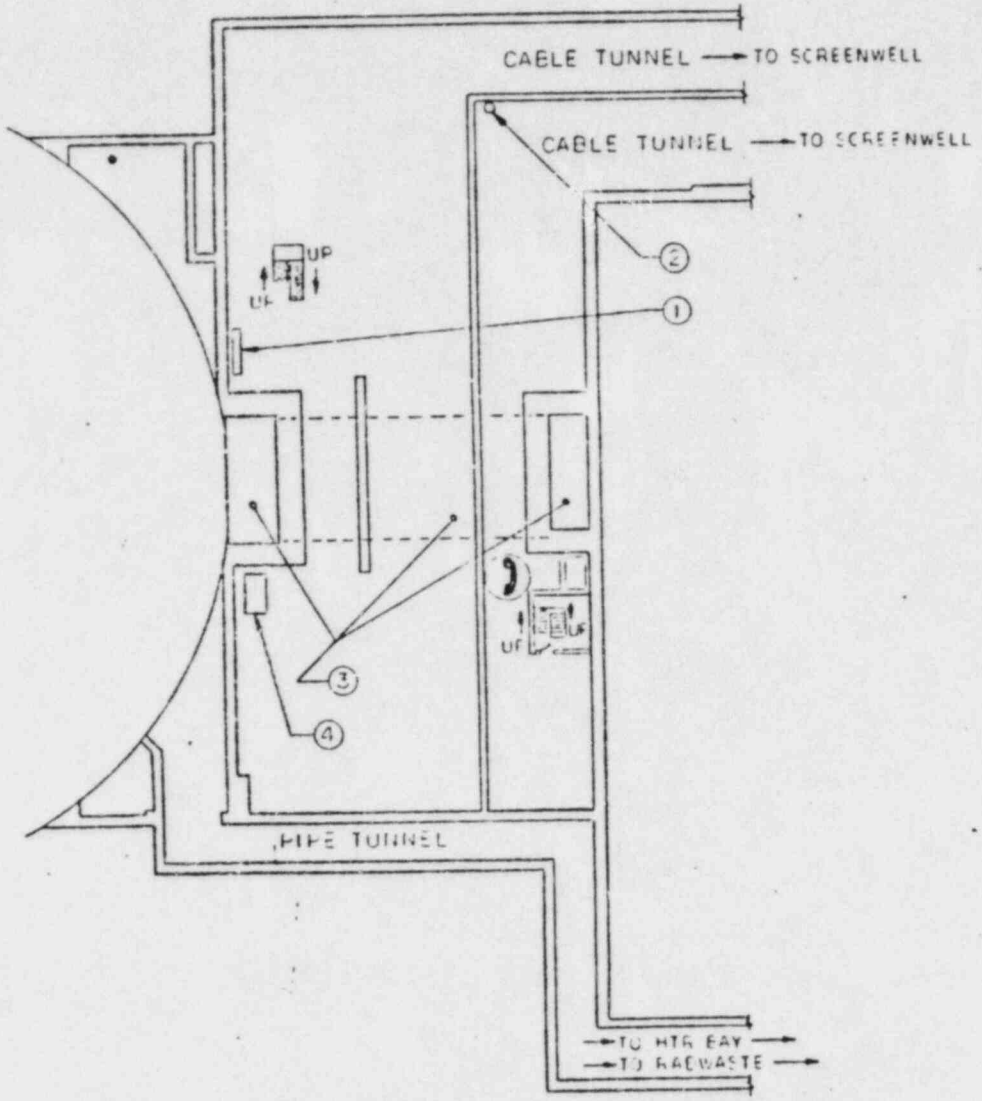
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN ADMINISTRATION BLDG., AUX BLR RM.

EL 272'

Time : 1246 - 1314





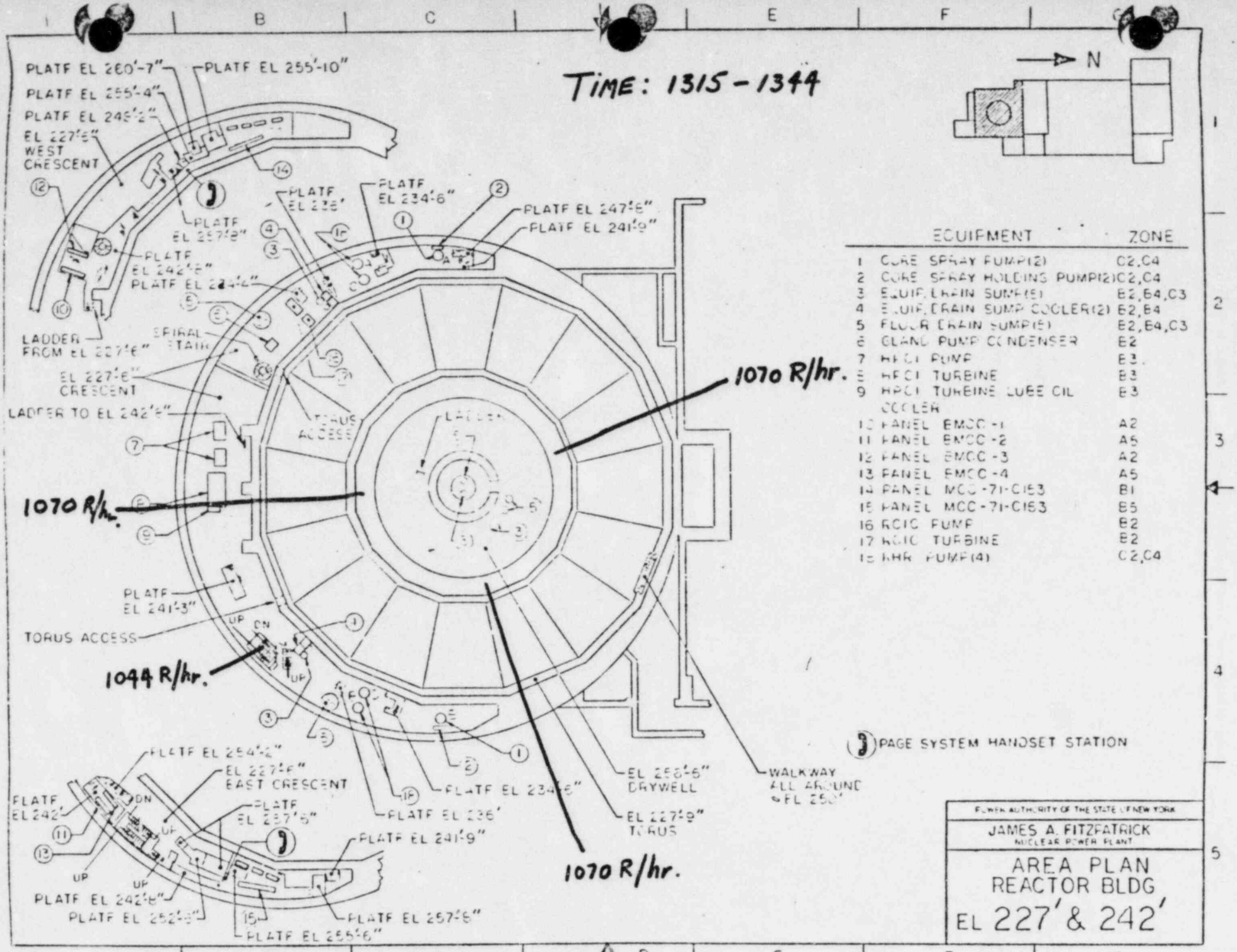
	EQUIPMENT	ZONE
1	DELUGE STATION	B2
2	FLOOR DRAIN SUMP	C2
3	MAIN STEAM TUNNEL	C4
4	SHOWER WASTE TANK	B3

(?) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 260'



	EQUIPMENT	ZONE
1	CORE SPRAY PUMP(2)	C2,C4
2	CORE SPRAY HOLDING PUMP(2)	C2,C4
3	EQUIP. DRAIN SUMP(S)	B2,B4,C3
4	EQUIP. DRAIN SUMP COOLER(2)	B2,B4
5	FLOOR DRAIN SUMP(S)	B2,B4,C3
6	GLAND PUMP CONDENSER	B2
7	HPCI PUMP	B3
8	HPCI TURBINE	B3
9	HPCI TURBINE LUBE OIL COOLER	B3
10	PANEL EMCC-1	A2
11	PANEL EMCC-2	A5
12	PANEL EMCC-3	A2
13	PANEL EMCC-4	A5
14	PANEL MCC-71-C183	B1
15	PANEL MCC-71-C183	B5
16	RCIC PUMP	B2
17	RCIC TURBINE	B2
18	RHR PUMP(4)	C2,C4

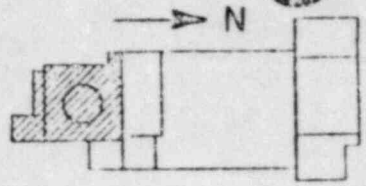
(J) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 227' & 242'

Time : 1315 - 1349



966 R/hr.

905 R/hr.

822 R/hr.

1025 R/hr.

950 R/hr.

710 R/hr.

1000 R/hr.

1052 R/hr.

1065 R/hr.

1052 R/hr.

822 R/hr.

	EQUIPMENT	ZONE
1	ACCESS HATCH TO TORUS (6)	C2, 1 D2, 4 E2
2	CONDENSATE TRANSFER PUMP (2)	E2
3	COOLING COILS & BLOWERS (2)	D3
4	CRD HYD CONTROL UNITS	D2,4
5	CRD WATER PUMP (2)	E2
6	EQUIPMENT HATCH TO TORUS	C2
7	LADDER TO EL. 256'6"	D3
8	LADDER TO EL 292'0"	D3
9	LIQUID NITROGEN TANK (2)	B2,3
10	PANEL EMCC-6	E4
11	PANEL MCC C132, C151	C3
12	PANEL MCC C133	E3
13	PANEL MCC C142, C161	C3
14	PANEL MCC C143, C162	E4
15	PANEL MCC C152	E2
16	PANEL MCC C164	E4
17	RECIRC. PUMP (2)	D3
18	RHR HEAT EXCHANGER (2)	C2,4
19	STANDBY GAS TREATMENT FILTER TRAIN (2)	B4

CRD REPAIR AREA

EL 285'0"

SPIRAL STAIR

EL 256'6"

RR TRACKS

EQUIPMENT ACCESS LOCK

ELEVATOR

STAND BY GAS TREATMENT ROOM

EL 209'9"

NEUTRON TIP WINTERING ROOM

EL 284'0"

TO ADMIN. BLDG.

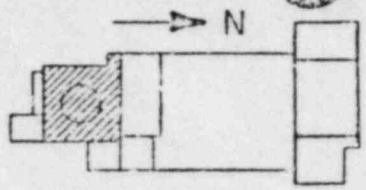
FACE SYSTEM HANDSET STATION

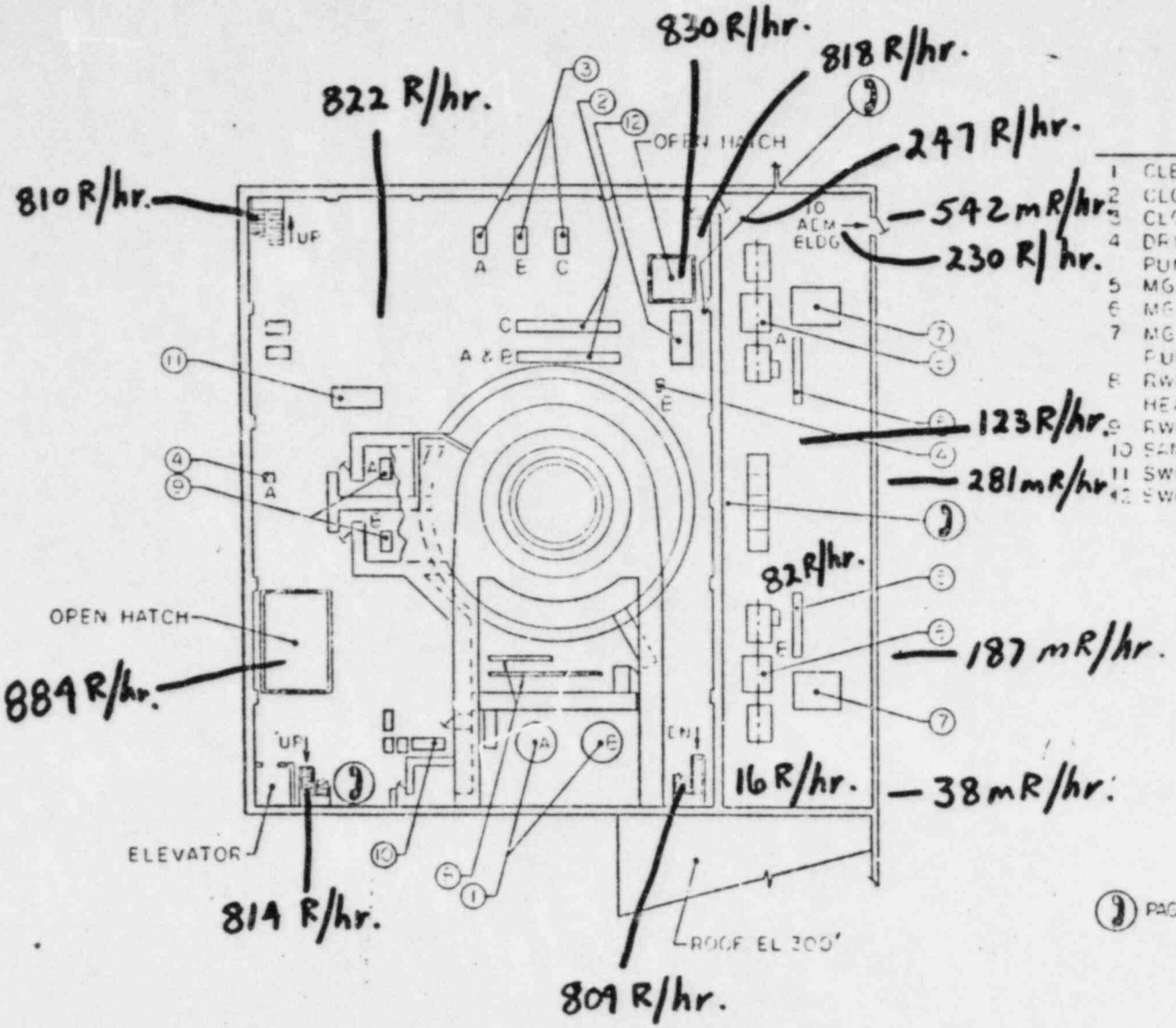
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG.
EL 272'

TIME: 1315 - 1344





	EQUIPMENT	ZONE
1	CLEANUP PHASE SEP TANK(2)	C4
2	CLCW HEAT EXCHANGER(3)	C2
3	CLCW PUMP(3)	C2
4	DRYWELL INERTING SAMPLE PUMP(2)	B3,D3
5	MG FLUID COOLER(2)	D2,D3
6	MG FLUID DRIVE(2)	D2,D3,D4
7	MG FLUID DRIVE LUBE OIL PUMP ASSY(2)	D2,D4
8	RWCU NON-REGENERATIVE HEAT EXCHANGER(2)	C4
9	RWCU PUMP(2)	C3
10	SAMPLE STATION NO.1	C4
11	SWGR.600V.71-L15	B3
12	SWGR.600V.71-L16	D2

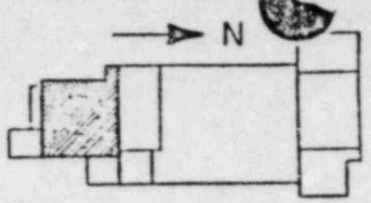
(9) PAGE SYSTEM HANDSET STATION

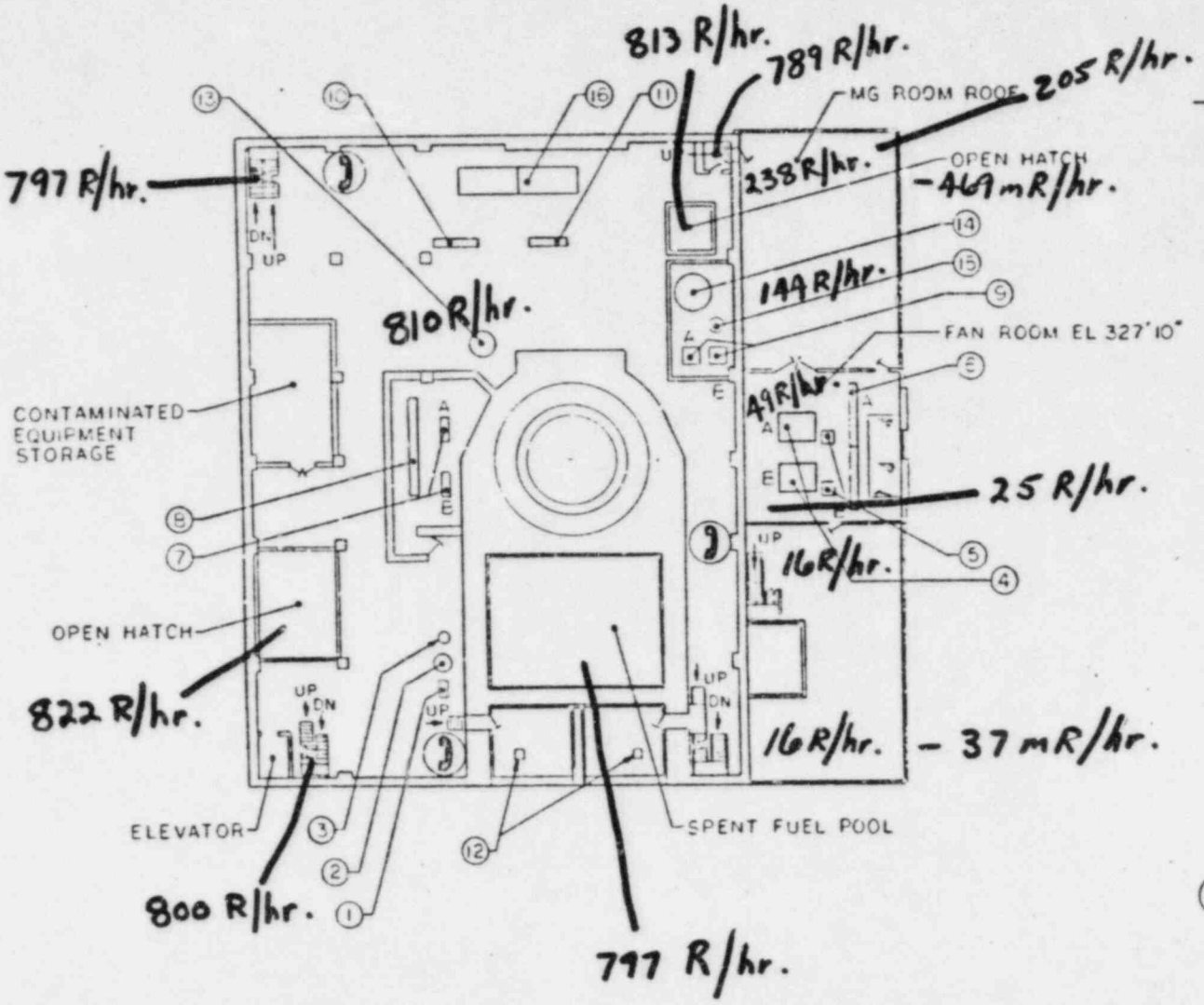
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 300'

TIME: 1315 - 1344





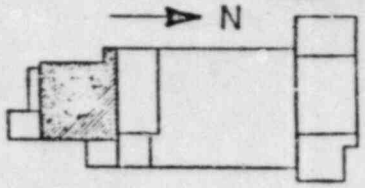
	EQUIPMENT	ZONE
1	CLEAN-UP PRECOAT PUMP	B4
2	CLEAN-UP PRECOAT TANK	B4
3	CLEAN-UP RESIN-FEED TANK	B4
4	FAN(2)	D3
5	FAN MOTOR(2)	D3
6	FILTER(2)	D3
7	FUEL POOL CLEAN UP RECIRC PUMP(2)	B3
8	FUEL POOL HEAT EXCH(2)	B3
9	LIQUID POISON PUMP(2)	C3,D3
10	PANEL, MCC 71-C131	C2
11	PANEL, MCC 71-C141	C2
12	RWCU HOLDING PUMP(2)	C4
13	REACTOR BLDG COOLING WATER MAKEUP TANK	C3
14	STANDBY LIQUID CONTROL TK	C2
15	STANDBY LIQUID CONTROL TEST TANK	D3
16	SWGR, 600V 71 L13/14	C2

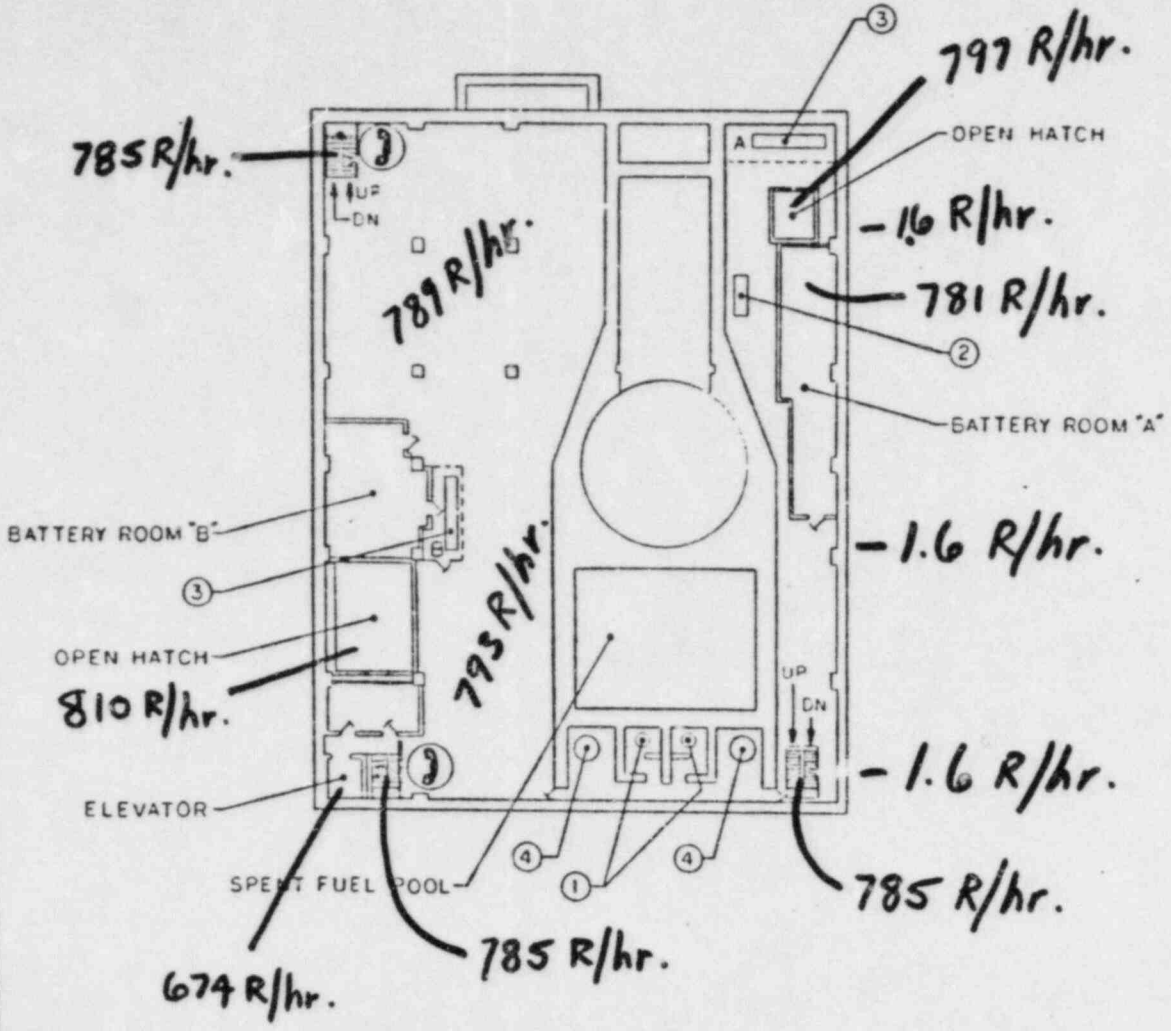
(3) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 326'

Time : 1315 - 1344





	EQUIPMENT	ZONE
1	CLEAN UP FILTER DEMIN(2)	C4
2	FILTER UNIT	C2
3	INVERTER(2)	B3,C2
4	SKIMMER SURGE TANK(2)	C4

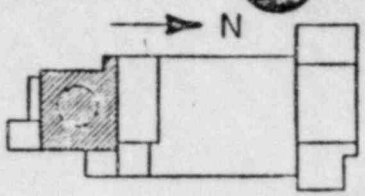
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

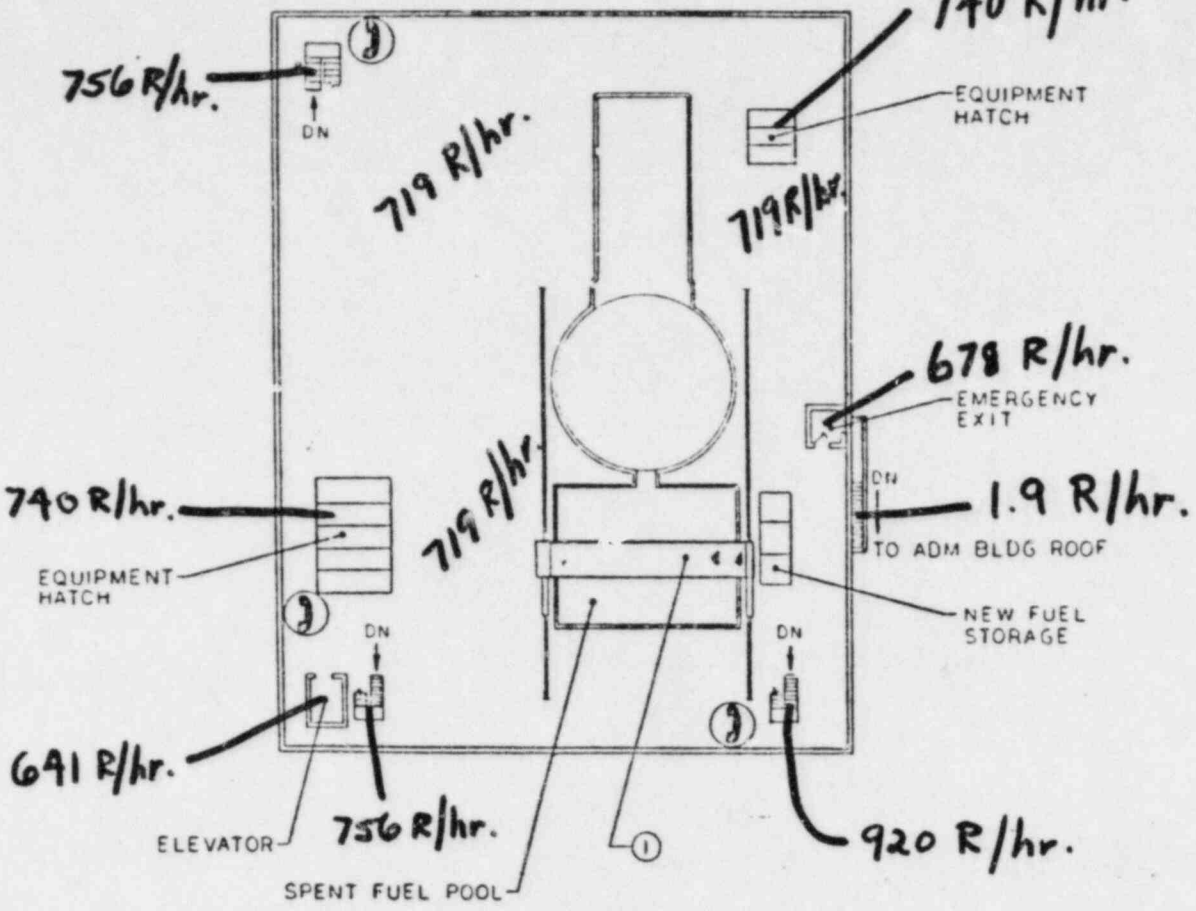
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 344'

TIME: 1315-1344



	EQUIPMENT	ZONE
1	REFUELING PLATFORM	C4



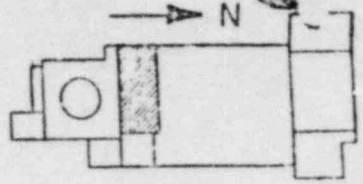
PAGE SYSTEM HANDSET STATION

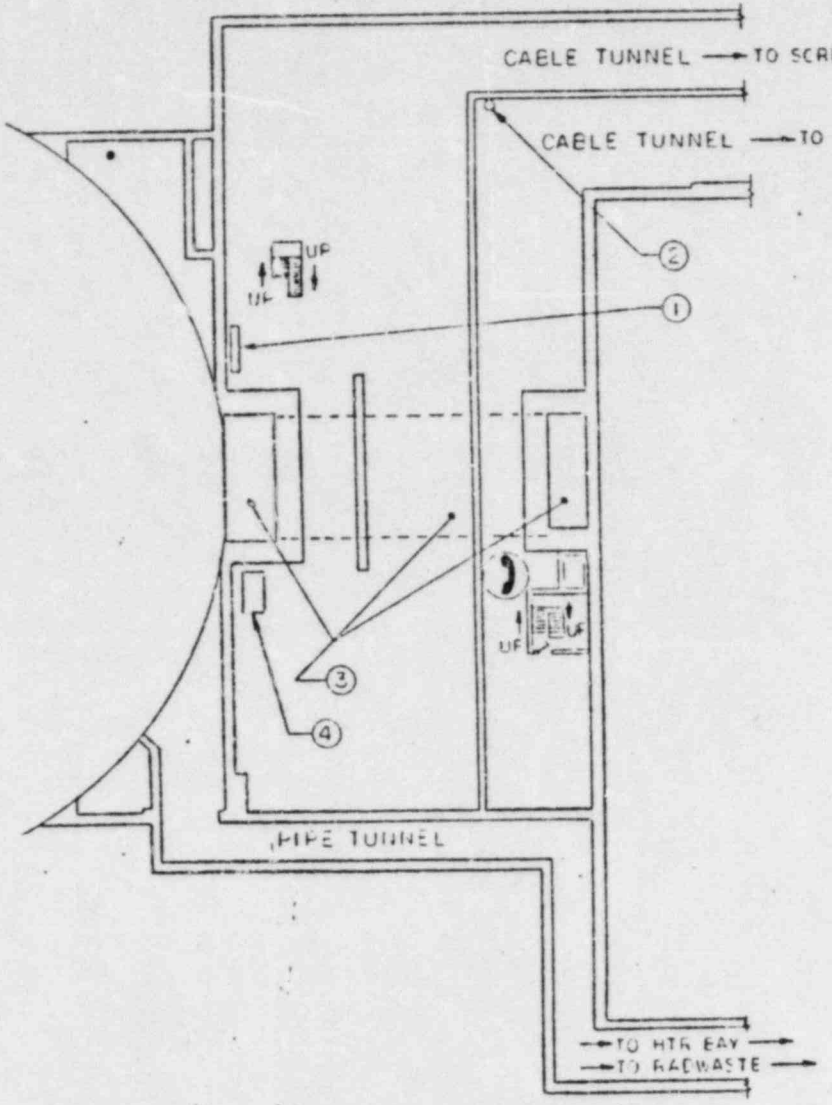
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 369'

Time: 1315 - 1344





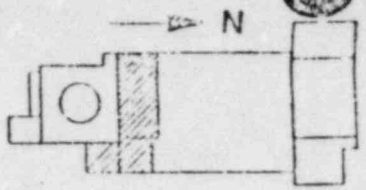
EQUIPMENT		ZONE
1	DELUGE STATION	B2
2	FLOOR DRAIN SUMP	C2
3	MAIN STEAM TUNNEL	C4
4	SHOWER WASTE TANK	E3

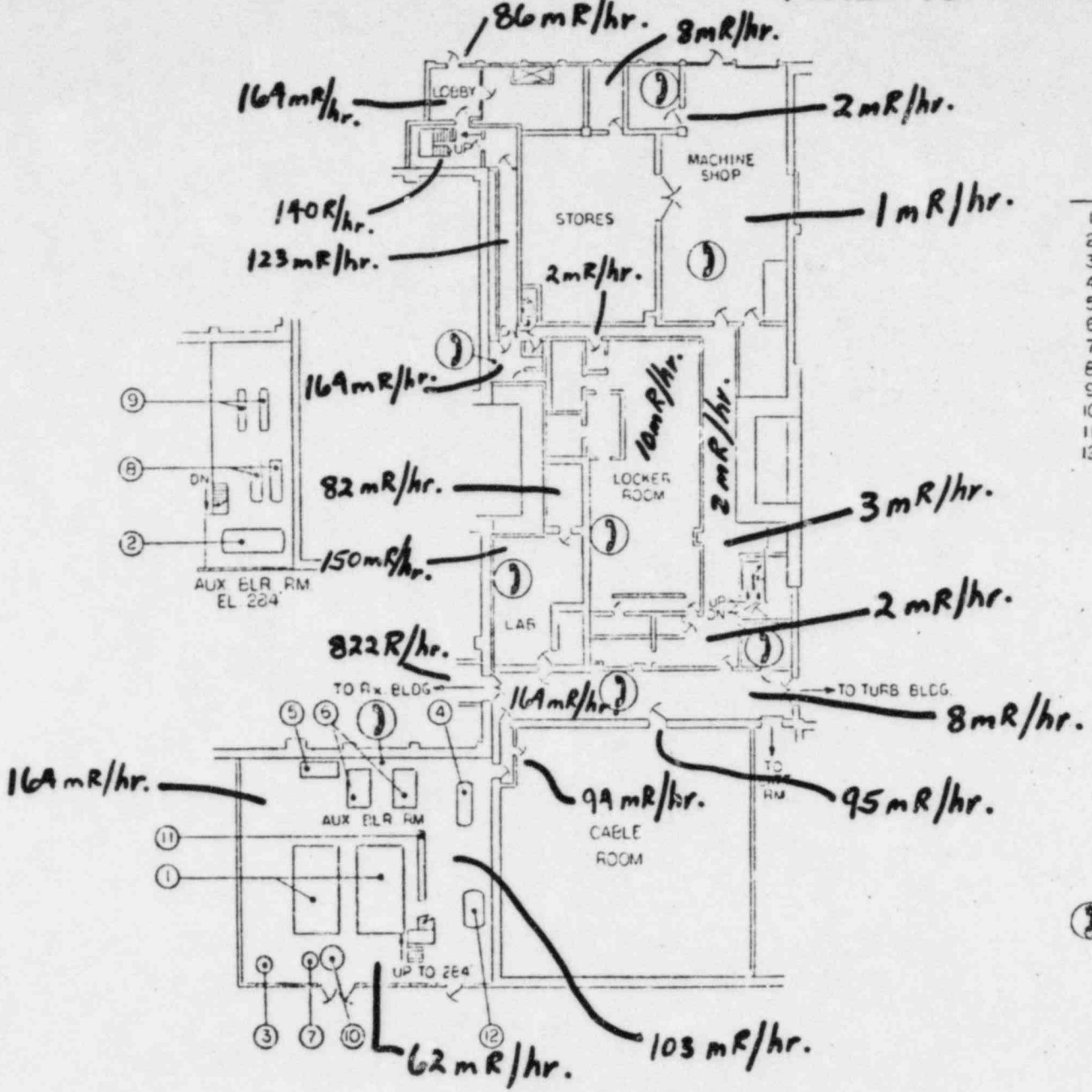
(☎) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 260'

TIME: 1315 - 1344





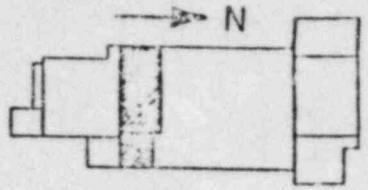
	EQUIPMENT	ZONE
1	AUXILIARY BOILER (2)	B1
2	AUXILIARY DEAERATOR	B3
3	BLOWDOWN TANK	B5
4	CONDENSATE TANK	C4
5	DOMESTIC HOT WATER TANK	B4
6	DUST COLLECTOR (2)	B4
7	GLYCOL EXP TANK	B5
8	GLYCOL-WTR HT EXCHANGER (2)	B3
9	HI TEMP HOT WTR HT EXCH (2)	B2
10	HOT WATER EXP TANK	B5
11	PANEL MCC C232, C242	C4
12	TRANSFER TANK	C5

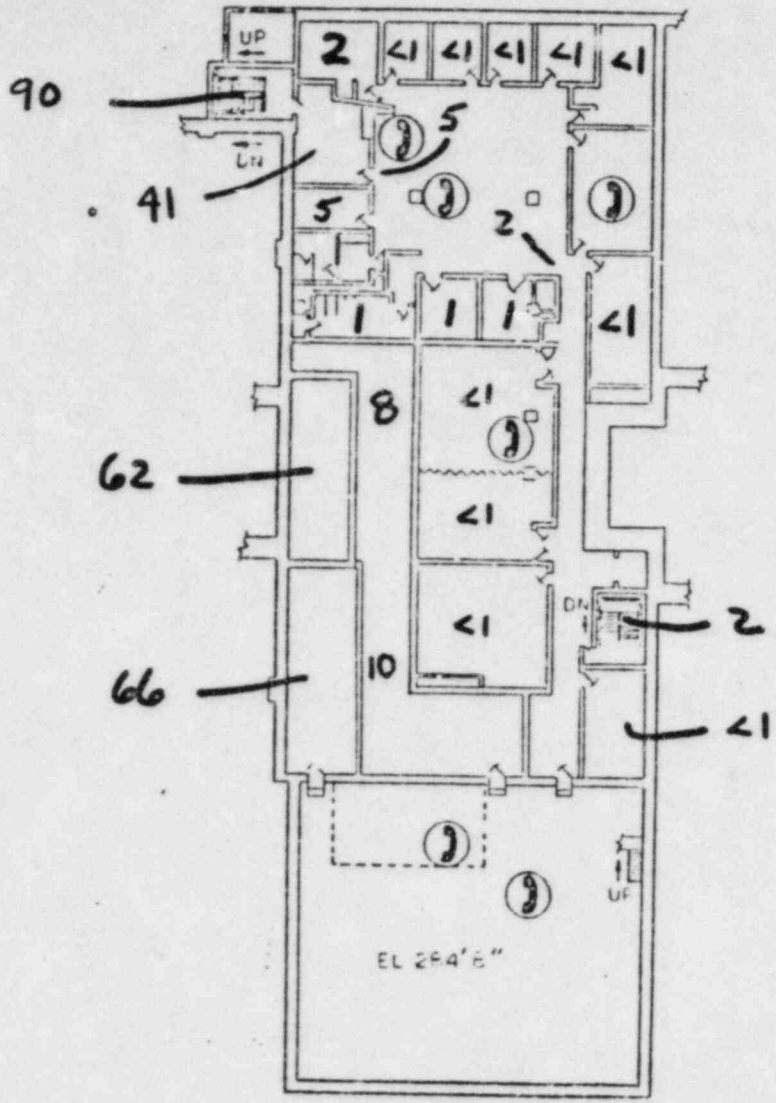
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG.,
AUX BLR RM.
EL 272'

TIME: 1315 - 1344
(All readings on this page are in mR/hr.)





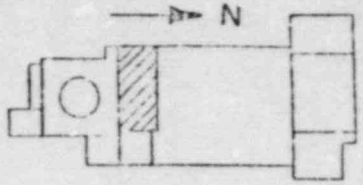
EQUIPMENT ZONE

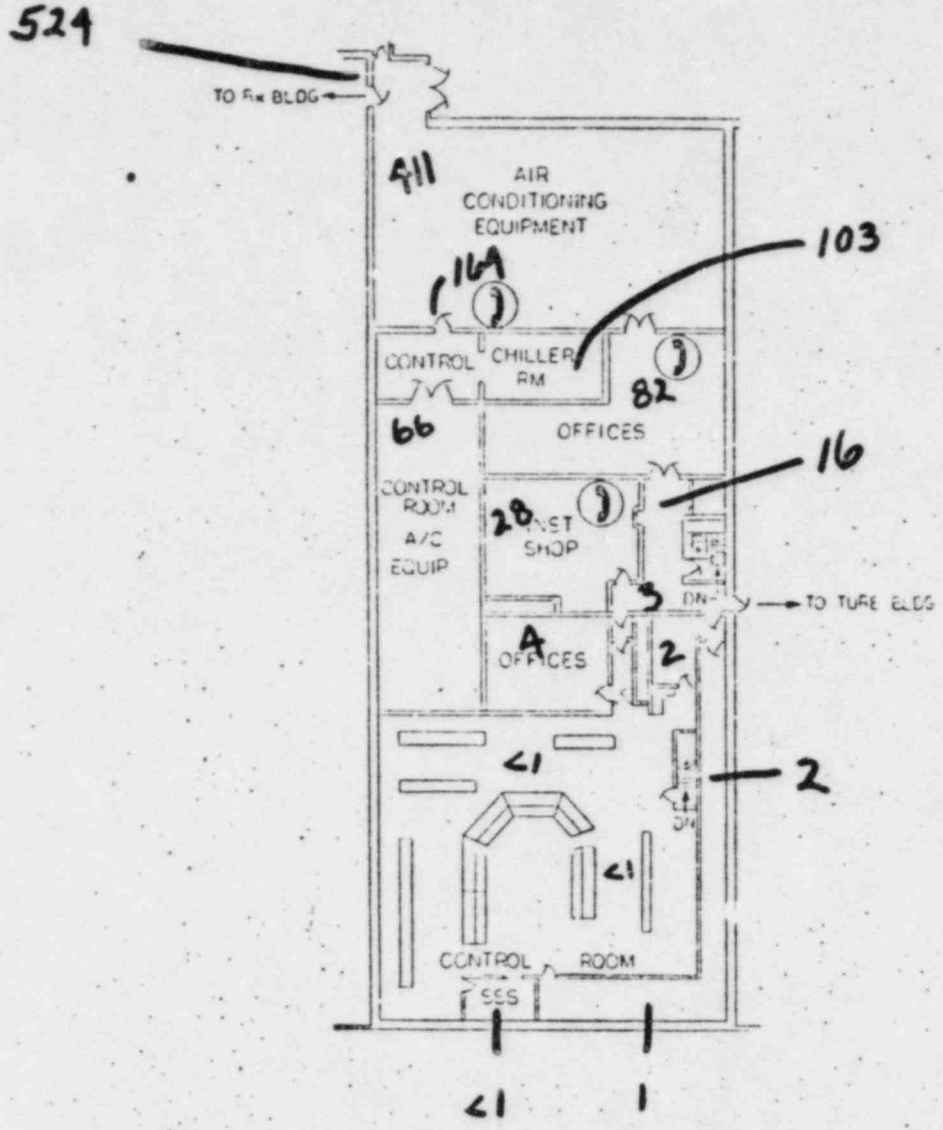
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 284' & 286'

TIME: 1315 - 1344
(All readings on this page are in mR/hr.)





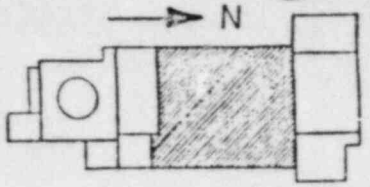
EQUIPMENT	ZONE

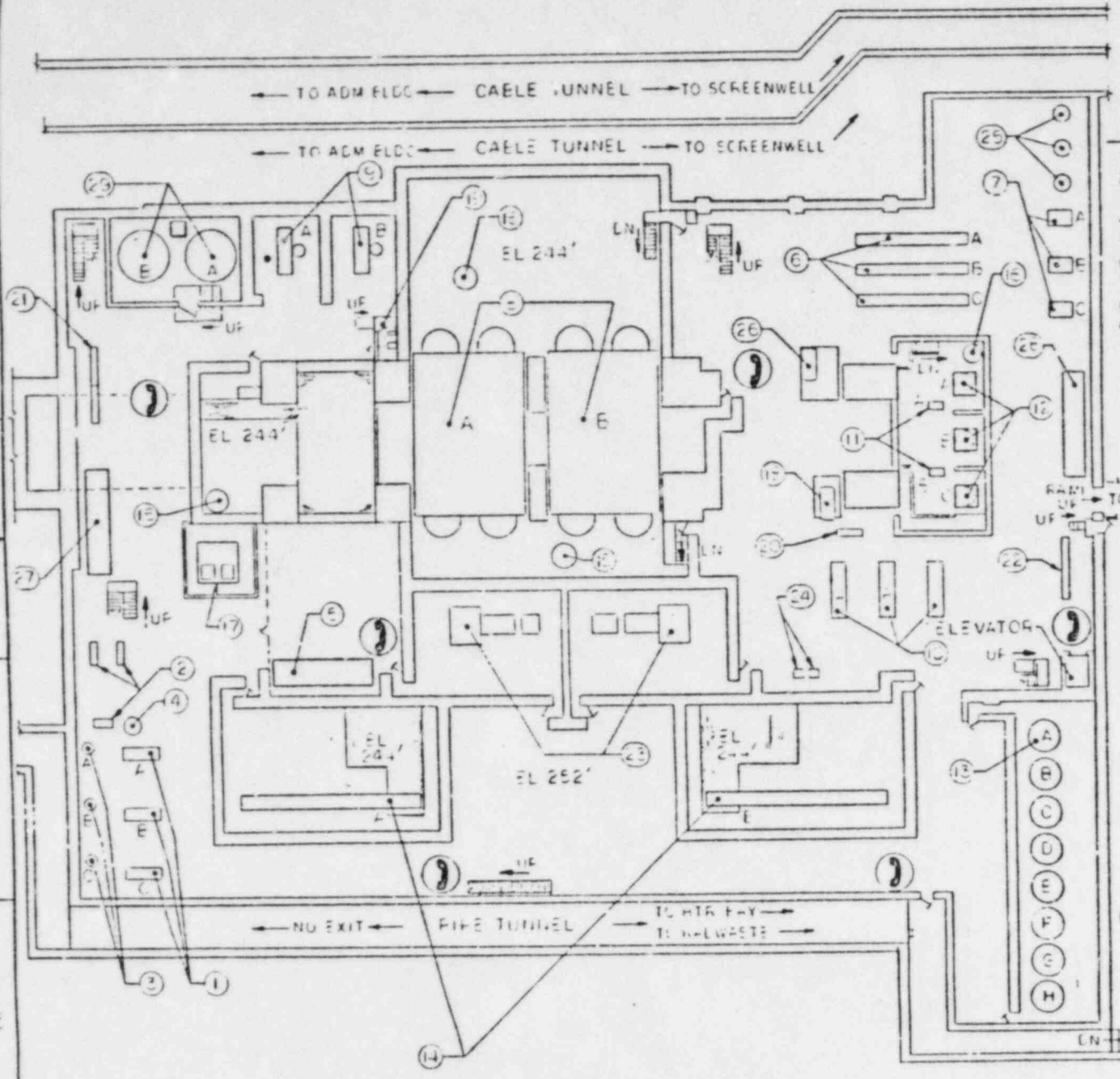
(8) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG.
EL 300'

TIME: 1315 - 1344





	EQUIPMENT	ZONE
1	AIR COMPRESSORS(3)	A4
2	AIR DRYERS(3)	A3,A4
3	AIR RECEIVERS(3)	A4
4	BREATHING AIR MFG TANK	A4
5	CARBOX UNIT, 10 TON	E4
6	CLCW HEAT EXCHANGERS(3)	D2,E2
7	CLCW PUMPS(3)	E2
8	CONDENSERS(2)	C2,C3
9	COND AIR REMOVAL PUMPS(2)	B2
10	COND BOOSTER PUMPS(3)	D2,D3
11	COND SAMPLE PUMPS(2)	E2,E3
12	CONDENSATE PUMPS(3)	E2,E3
13	DEMINERALIZERS(6)	E4,E5
14	DRAIN COOLERS(2)	E4,D4
15	EQUIP DRAIN SUMP	C3
16	FLOOR DRAIN SUMPS(3)	A3,C2,E3
17	HYD FLUID PWR UNIT	A3
18	HYDROGEN SEAL OIL UNIT	D3
19	OFF GAS SAMPLE EQUIP	B2
20	PANEL, H_2 & STATOR H_2O	D3
21	PANEL, MCC 71-C231 & 71-C241	A2
22	PANEL, MCC 71-C431 & 71-C441	E3
23	R_x FEED PUMPS(2)	C3
24	R_x FEED PUMP SEAL WATER COOLER	D4
25	SERVICE WATER PUMP STR	E1,E2
26	STATOR WINDING LIQUID COOLING UNIT	D2
27	SWGR, EDGV, 71-L23/24	A3
28	SWGR, EDGV, 71-L43/44	E2
29	TURBINE LUBE OIL TANKS(2)	A2

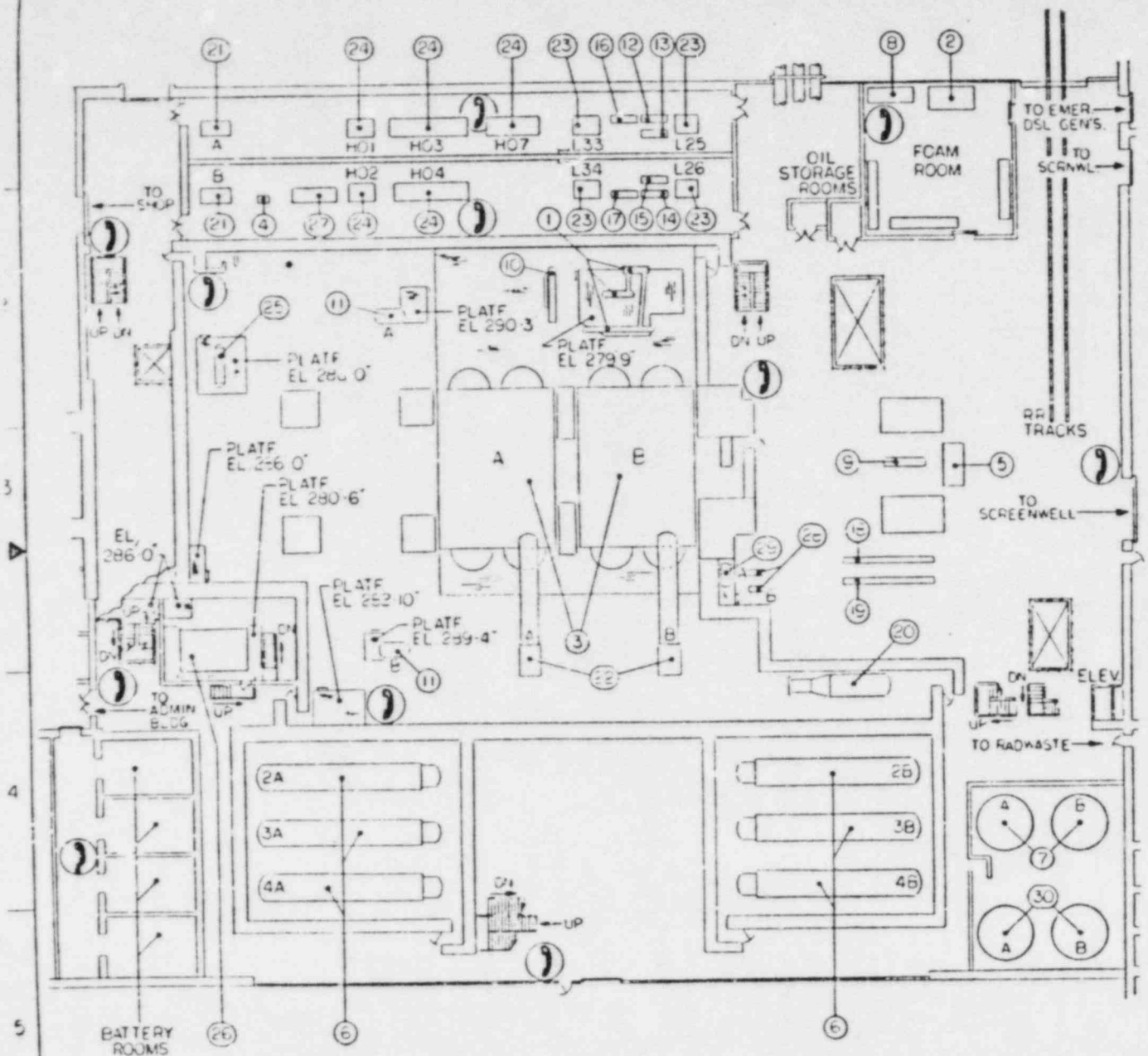
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN TURB BLDG & HTR BAY EL 244' & 252'

TIME: 1315 - 1349



	EQUIPMENT	ZONE
1	AIR EJECTOR	C2
2	CO_2 UNIT	E1
3	CONDENSER (2)	C3
4	CONTROL PANEL - 71UPP	B2
5	EXCITER SWITCHBOARD	E3
6	FEEDWATER HEATER (6)	B4,D4
7	FLOOR DRAIN SAMPLE TANK (2)	E4
8	FOAM UNIT	D1
9	GEN. NEUT. TRANSF. AND RES.	D3
10	GLAND STEAM EXHAUSTER	C2
11	MOISTURE SEPARATOR DRAIN TK. (2)	B2,3
12	PANEL MCC C251	C1
13	PANEL MCC C252	C1
14	PANEL MCC C261	C2
15	PANEL MCC C262	C2
16	PANEL MCC C331	C1
17	PANEL MCC C341	C2
18	PANEL MCC C434	D3
19	PANEL MCC C444	D3
20	REBOILER	D4
21	RPS MG SET (2)	A1,2
22	R_x FEED PUMP TURB. EXHAUST (2)	C3
23	SWITCHGEAR, 600 V. (4)	C1,2
24	SWITCHGEAR, 4160 V. (5)	B1,2,C1
25	TURBINE BY-PASS STEAM CHEST	A2
26	TURBINE LUBE OIL TANK	A3
27	UNINTERRUPTABLE MG SET-71UPS-1	B2
28	VACUUM PRIMING PUMP (2)	D3
29	VACUUM TANK	D3
30	WASTE SAMPLE TANK	E5

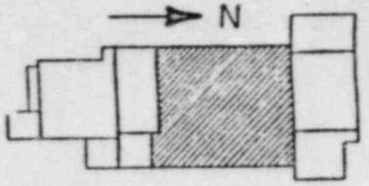
PAGE SYSTEM HANDSET STATION

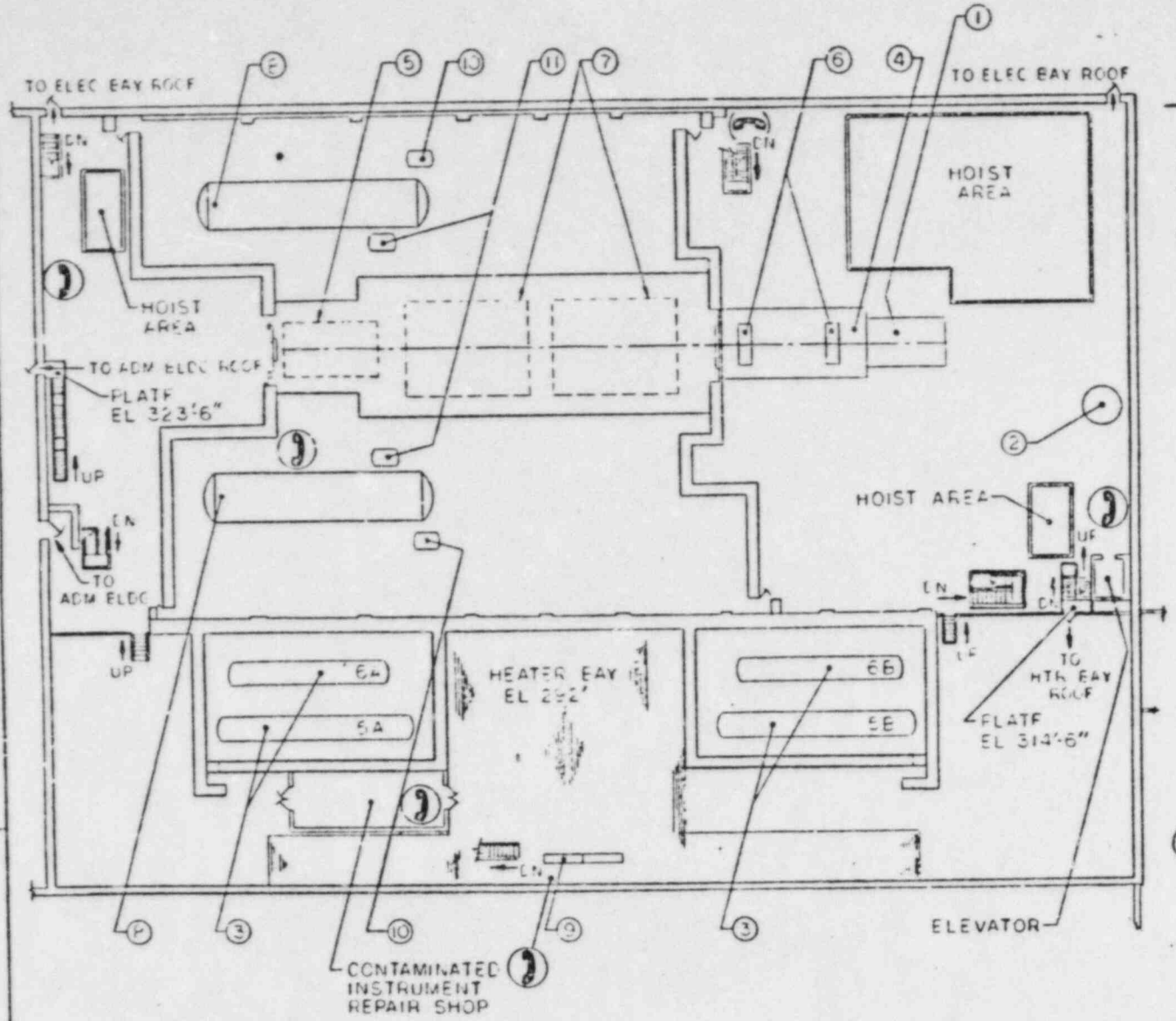
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN TURB BLDG., HTR. BAY, ELEC BAY EL 272'

Time : 1315 - 1344





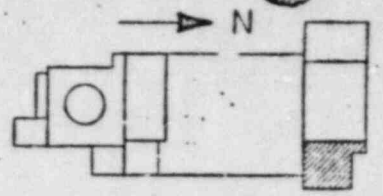
EQUIPMENT		ZONE
1	ALTERNATOR	D3
2	CLOW MAKEUP & SURGE TANK	E3
3	FEEDWATER HEATER(4)	B4,D4
4	GENERATOR	D3
5	HIGH PRESSURE TURBINE	B3
6	HYDROGEN COOLER(2)	D3
7	LOW PRESSURE TURBINE(2)	B3,C3
8	MOISTURE SEPARATOR REHEATER(2)	B2,B3
9	PANEL, MCC 435 & 445	C5
10	REHEAT DRAIN TK 1ST STAGE(2)	B2,B3
11	REHEAT DRAIN TK 2ND STAGE(2)	B2,B3

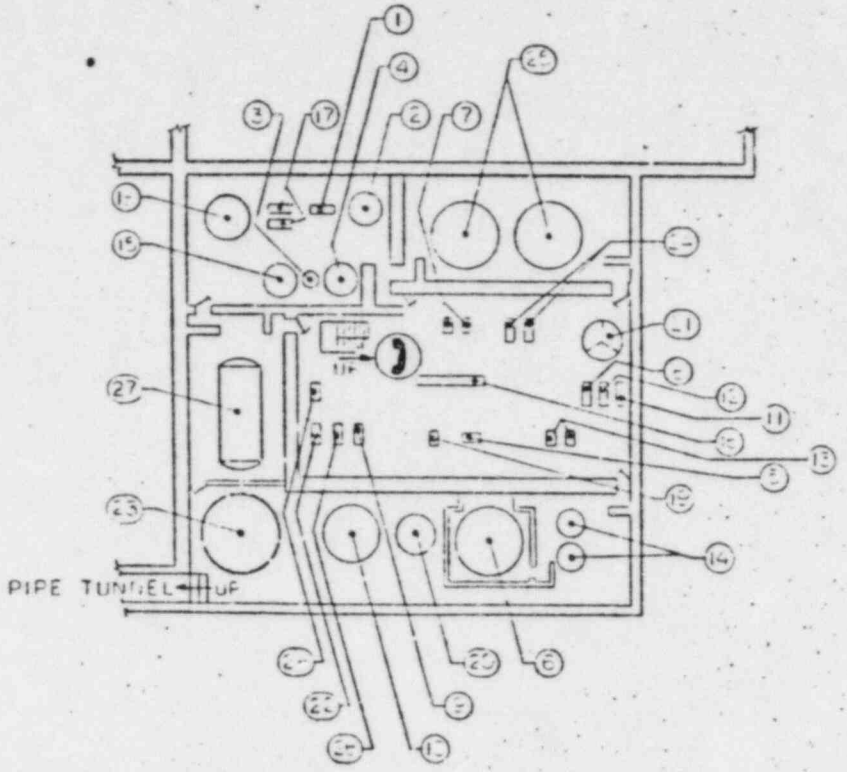
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN HTR BAY & TURB BLDG EL 292' & 300'

TIME: 1315-1344





	EQUIPMENT	ZONE
1	ACID RECOVERY PUMP	C2
2	ACID RECOVERY TANK	C2
3	ANION TANK	B3
4	CATION & RESIN SEP TANK	C3
5	CONCENTRATED WASTE PUMP	C3
6	CONCENTRATED WASTE TANK	C4
7	CONCENTRATOR FEED PUMP(2)	C3
8	EQUIPMENT DRAIN PUMP	D3
9	FLOOR DRAIN COLL PUMP	C3
10	FLOOR DRAIN COLL TANK	C4
11	FLOOR DRAIN PUMP	D3
12	HIGH COND DRAIN PUMP	D3
13	LAUNDRY DRAIN PUMP(2)	C3
14	LAUNDRY DRAIN TANK(2)	C4
15	MIX & STORAGE TANK	B3
16	PANEL MCC 432 & 442	C3
17	RINSE & SLUICE RCVY PUMP(2)	B2
18	RINSE & SLUICE RCVY TANK	B2
19	SPENT RESIN PUMP	C3
20	SPENT RESIN TANK	C4
21	SUMP TANK	D3
22	WASTE COLLECTOR PUMP	C3
23	WASTE COLLECTOR TANK	B4
24	WASTE NEUTRALIZER PUMP(2)	C3
25	WASTE NEUTRALIZER TANK(2)	C2
26	WASTE SLUDGE PUMP	C3
27	WASTE SLUDGE TANK	B3
28	WASTE SURGE PUMP	C3

(J) PAGE SYSTEM HANDSET STATION

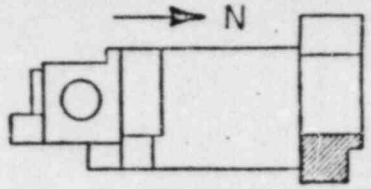
PROPERTY OF THE POWER AUTHORITY OF THE STATE OF NEW YORK

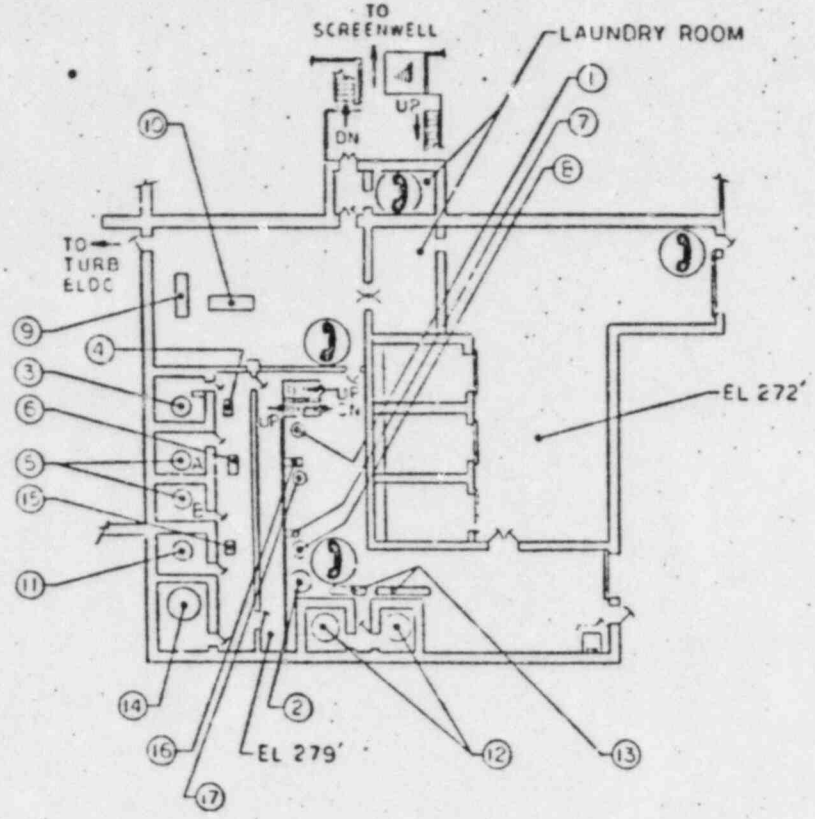
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN RADWASTE

EL 250'

TIME: 1315 - 1344





	EQUIPMENT	ZONE
1	CATION FLOCCULANT MIXING TK	C3
2	FILTER AID TANK	C4
3	FLOOR DRAIN FILTER	B3
4	FL DRAIN FLT HOLDING PUMP	B3
5	FUEL POOL FILTER DEMIN(2)	B3
6	FUEL POOL FILTER DEMIN HOLDING PUMP	B3
7	FUEL POOL PRECOAT PUMP	C3
8	FUEL POOL PRECOAT TANK	C3
9	SAMPLE PANEL	B3
10	SAMPLE SINK	B3
11	WASTE COLLECTOR FILTER	B3
12	WASTE CONCENTRATOR(2)	C4
13	WASTE CONC CONDENSER(2)	C4
14	WASTE DEMIN	B4
15	WASTE FILTER HOLDING PUMP	B3
16	WASTE PRECOAT PUMP	C3
17	WASTE PRECOAT TANK	C3

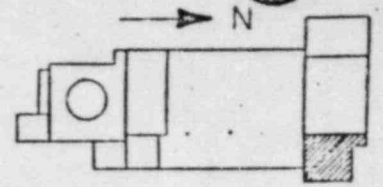
PAGE SYSTEM HANDSET STATION

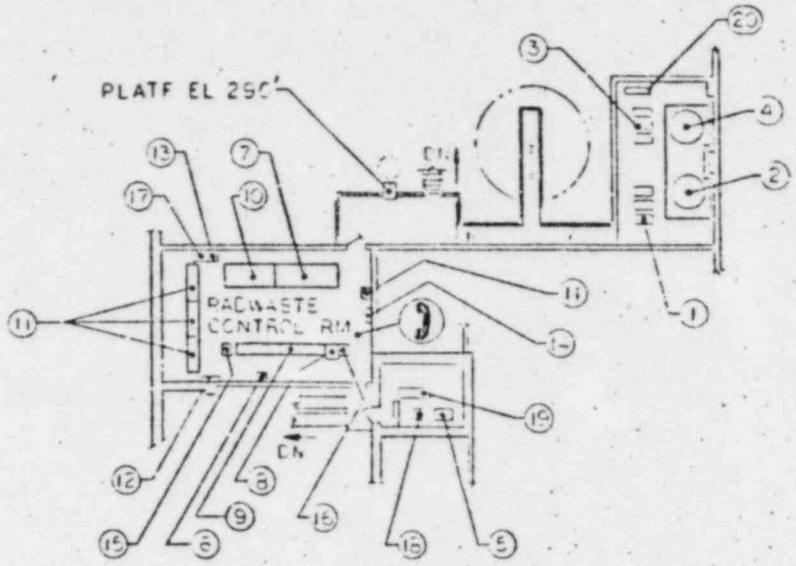
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN RADWASTE EL 272' & 279'

TIME: 1315 - 1344





	EQUIPMENT	ZONE
1	ACID REGEN PUMP(3)	D3
2	ACID STORAGE TANK	D3
3	CAUSTIC REGEN PUMP(3)	D2
4	CAUSTIC STORAGE TANK	D2
5	MICRO CELL HOPPER DISCHARGE CHUTE	C3
6	PANEL, AR-RW	B3
7	PANEL, COND DEMIN	C3
8	PANEL, FUEL POOL	C3
9	PANEL, MCC 433 & 434	B3, C3
10	PANEL, PRE TREAT & MAKEUP	B3
11	PANEL, RADWASTE(4)	B3, C3
12	PANEL, RADWASTE FILTRN	B3
13	PANEL, TFE	B3
14	PANEL, ULTRASONIC LEVEL MEASUREMENT	C3
15	PANEL, ULTRASONIC RESIN CLEANER	B3
16	PANEL, UPFLOW SAND FILTER	C3
17	PANEL, WASTE CONCENTRATOR	B3
18	PORTLAND CEMENT HOPPER DISCHARGE CHUTE	C3
19	THIN FILM EVAPORATOR	C3
20	WATER HEATER	D2

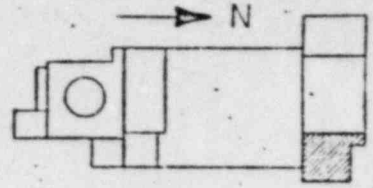
(J) PAGE SYSTEM HANDSET STATION

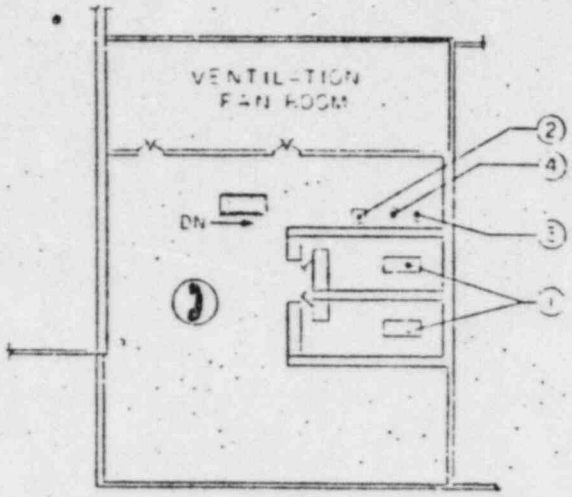
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE & SCRNWELL
EL 284'

TIME: 1315-1344



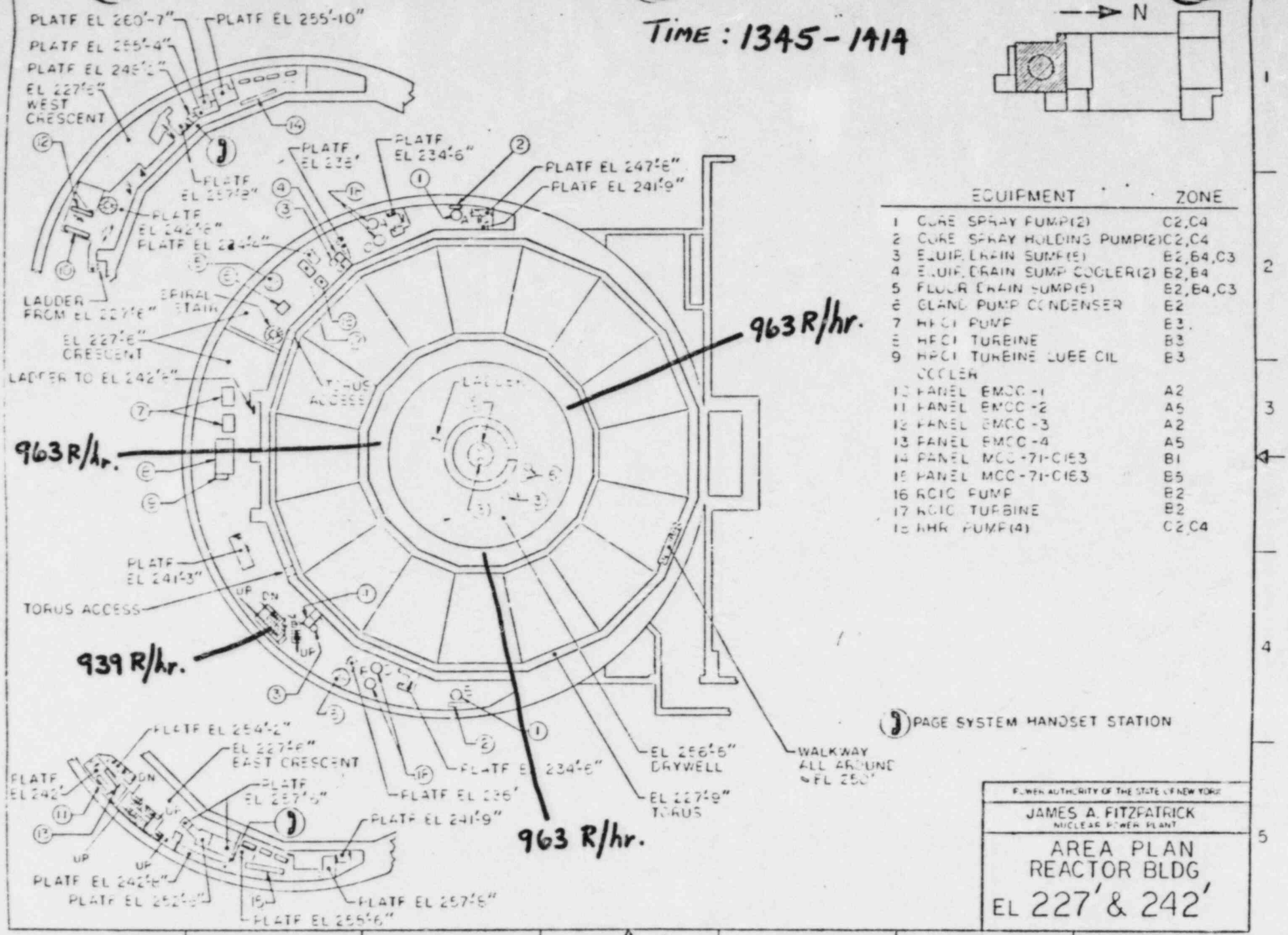


	EQUIPMENT	ZONE
1	CENTIFUGE (2)	C3
2	DUST COLLECTOR	C3
3	MICRO-CELL HOPPER	C3
4	PORTLAND CEMENT HOPPER	C3

PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 298'



TIME : 1345 - 1414

	EQUIPMENT	ZONE
1	CORE SPRAY PUMP(2)	C2,C4
2	CORE SPRAY HOLDING PUMP(2)	C2,C4
3	EQUIP. DRAIN SUMP(S)	B2,B4,C3
4	EQUIP. DRAIN SUMP COOLER(2)	B2,B4
5	FLOOR DRAIN SUMP(S)	B2,B4,C3
6	GLAND PUMP CONDENSER	B2
7	HPCI PUMP	B3
8	HPCI TURBINE	B3
9	HPCI TURBINE LUBE OIL COOLER	B3
10	PANEL EMCC-1	A2
11	PANEL EMCC-2	A5
12	PANEL EMCC-3	A2
13	PANEL EMCC-4	A5
14	PANEL MCC-71-C163	B1
15	PANEL MCC-71-C163	B5
16	RCIC PUMP	B2
17	RCIC TURBINE	B2
18	RHR PUMP(4)	C2,C4

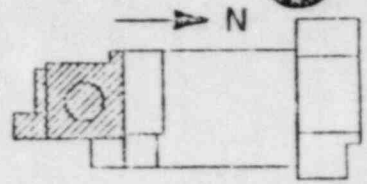
(J) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 227' & 242'

TIME: 1345 - 1414



869 R/hr.

815 R/hr.

740 R/hr.

947 R/hr.

855 R/hr.

492 R/hr.

690 R/hr.

947 R/hr.

959 R/hr.

947 R/hr.

740 R/hr.

CRD REPAIR AREA

EL 269'0"

SPIRAL STAIR

EL 260'6"

RR TRACKS

EQUIPMENT ACCESS LOCK

ELEVATOR

STAND BY GAS TREATMENT ROOM

EL 269'9"

EL 254'0"

NEUTRON MONITORING ROOM

TO ADMIN. BLDG.

	EQUIPMENT	ZONE
1	ACCESS HATCH TO TORUS (6)	C2,4,D2,4,E2
2	CONDENSATE TRANSFER PUMP (2)	E2
3	COOLING COILS & BLOWERS (2)	D3
4	CRD HYD CONTROL UNITS	D2,4
5	CRD WATER PUMP (2)	E2
6	EQUIPMENT HATCH TO TORUS	C2
7	LADDER TO EL 256'6"	D3
8	LADDER TO EL 252'0"	D3
9	LIQUID NITROGEN TANK (2)	B2,3
10	PANEL EMCC-6	E4
11	PANEL MCC C102, C101	C3
12	PANEL MCC C133	E3
13	PANEL MCC C142, C161	C3
14	PANEL MCC C143, C162	E4
15	PANEL MCC C152	E2
16	PANEL MCC C164	E4
17	RECIRC. PUMP (2)	D3
18	RHR HEAT EXCHANGER (2)	C2,4
19	STANDBY GAS TREATMENT FILTER TRAIN (2)	B4

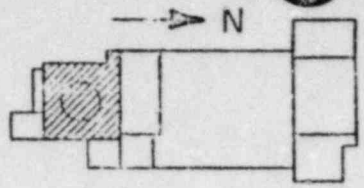
(9) PACE SYSTEM HANDSET STATION

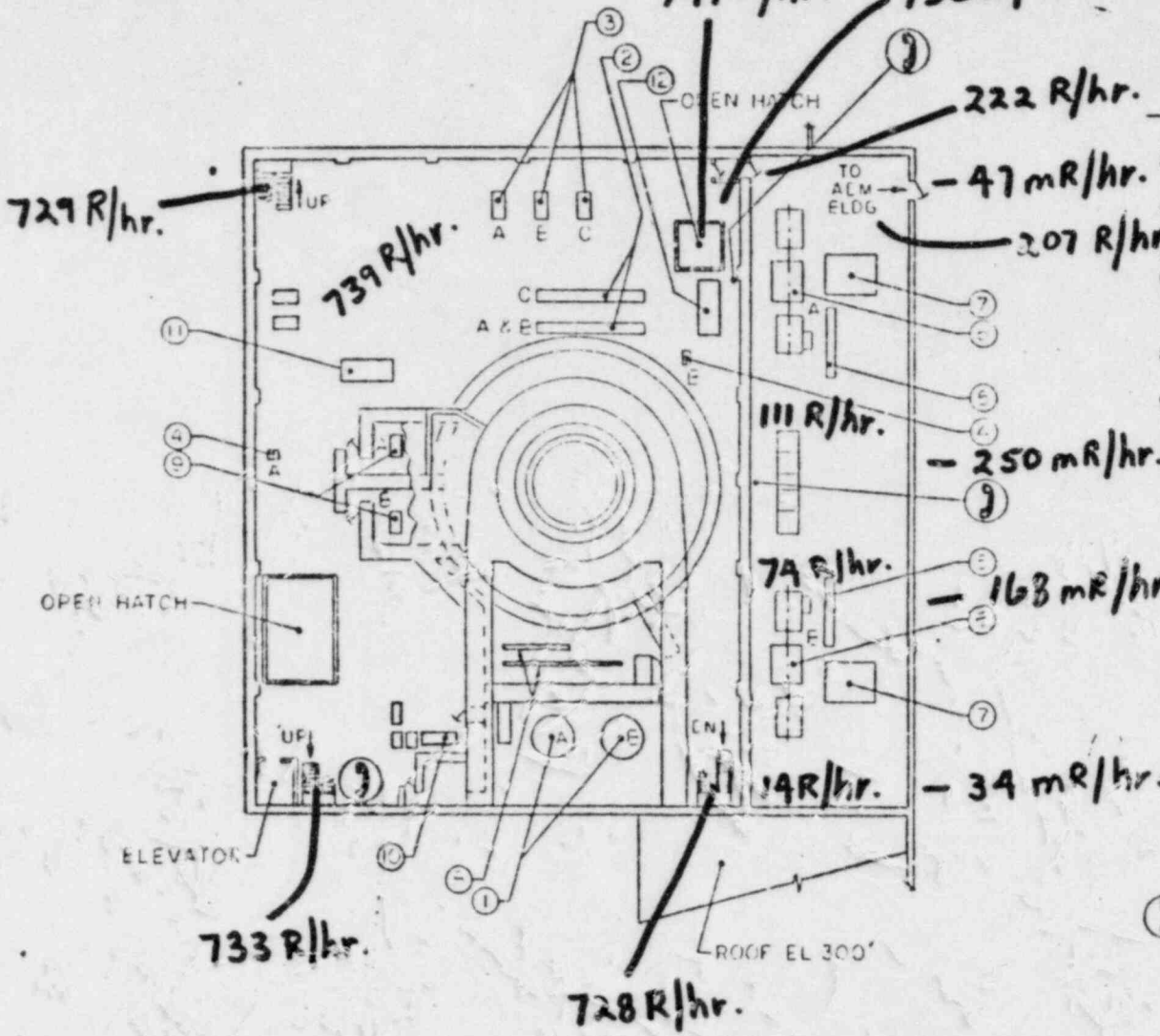
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG.
EL 272'

TIME: 1345 - 1414





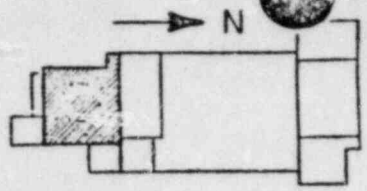
	EQUIPMENT	ZONE
1	CLEANUP PHASE SEP TANK(2)	C4
2	CLCW HEAT EXCHANGER(3)	C2
3	CLCW PUMP(3)	C2
4	DRYWELL INERTING SAMPLE PUMP(2)	B3,D3
5	MG FLUID COOLER(2)	D2,D3
6	MG FLUID DRIVE(2)	D2,D3,D4
7	MG FLUID DRIVE LUBE OIL PUMP ASSY(2)	D2,D4
8	RWCU NON-REGENERATIVE HEAT EXCHANGER(2)	C4
9	RWCU PUMP(2)	C3
10	SAMPLE STATION NO.	C4
11	SWGR, 600V, 71-L15	B3
12	SWGR, 600V, 71-L16	D2

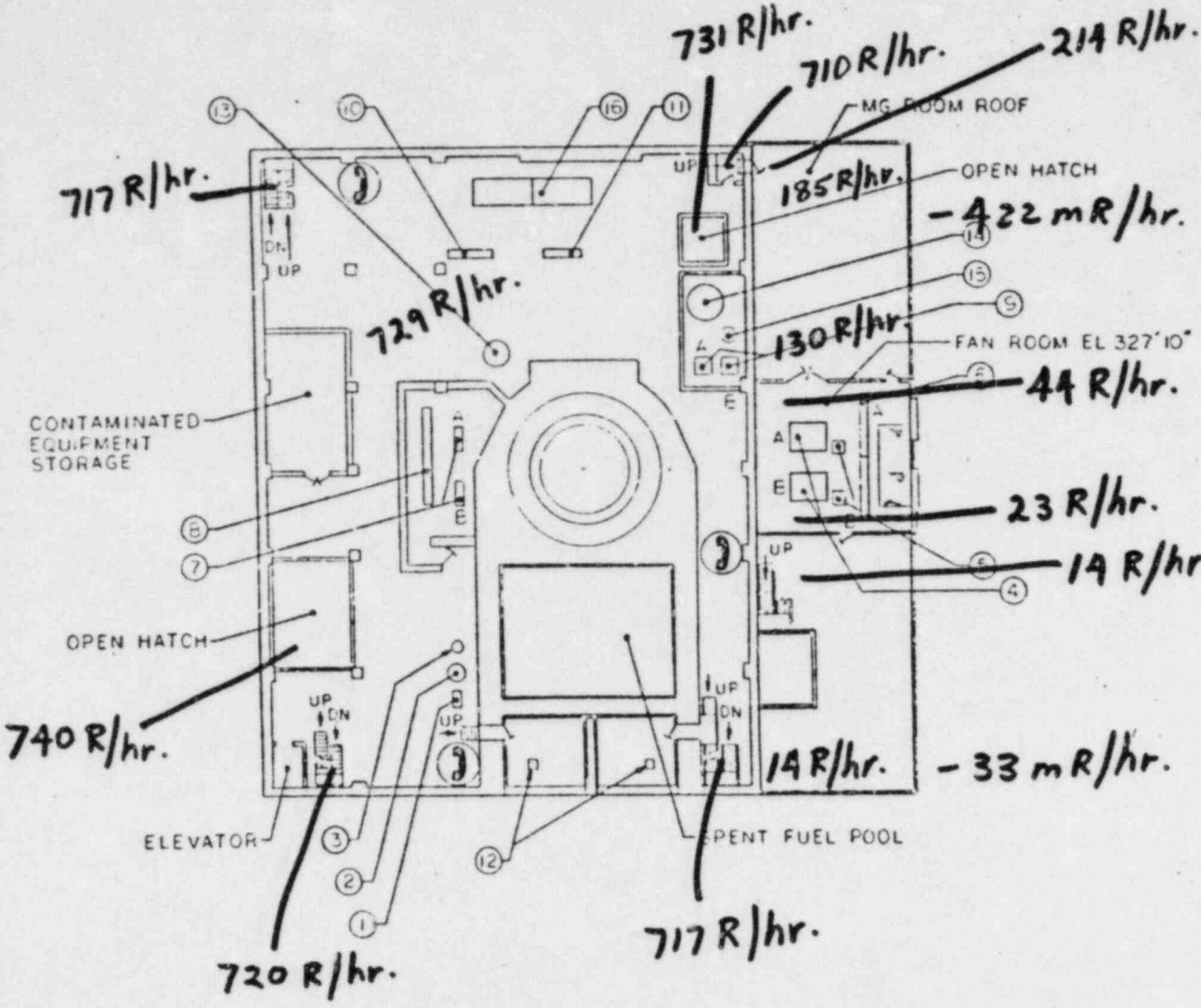
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 300'

TIME: 1345 - 1414





	EQUIPMENT	ZONE
1	CLEAN-UP PRECOAT PUMP	B4
2	CLEAN-UP PRECOAT TANK	B4
3	CLEAN-UP RESIN-FEED TANK	B4
4	FAN(2)	D3
5	FAN MOTOR(2)	D3
6	FILTER(2)	D3
7	FUEL POOL CLEAN UP RECIRC PUMP(2)	B3
8	FUEL POOL HEAT EXCH(2)	B3
9	LIQUID POISON PUMP(2)	C3,D3
10	PANEL, MCC 71-C131	C2
11	PANEL, MCC 71-C141	C2
12	RWCU HOLDING PUMP(2)	C4
13	REACTOR BLDG COOLING WATER MAKEUP TANK	C3
14	STANDBY LIQUID CONTROL TK	C2
15	STANDBY LIQUID CONTROL TEST TANK	D3
16	SWGR, 600V 71 L13/14	C2

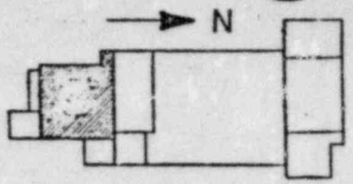
PAGE SYSTEM HANDSET STATION

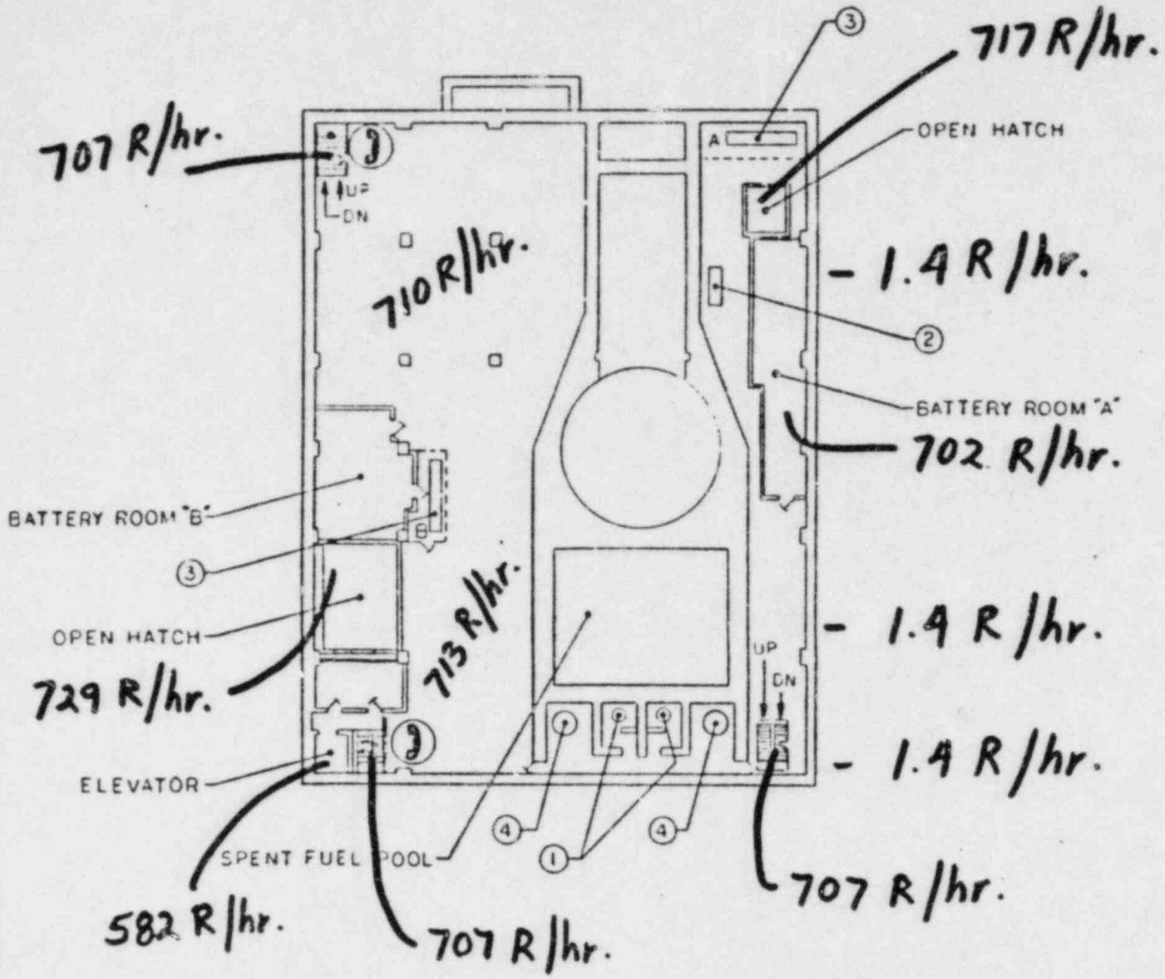
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 326'

Time: 1345 - 1414





	EQUIPMENT	ZONE
1	CLEAN UP FILTER DEMIN(2)	C4
2	FILTER UNIT	C2
3	INVERTER(2)	B3,C2
4	SKIMMER SURGE TANK(2)	C4

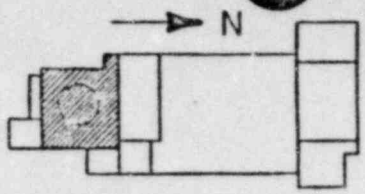
(J) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

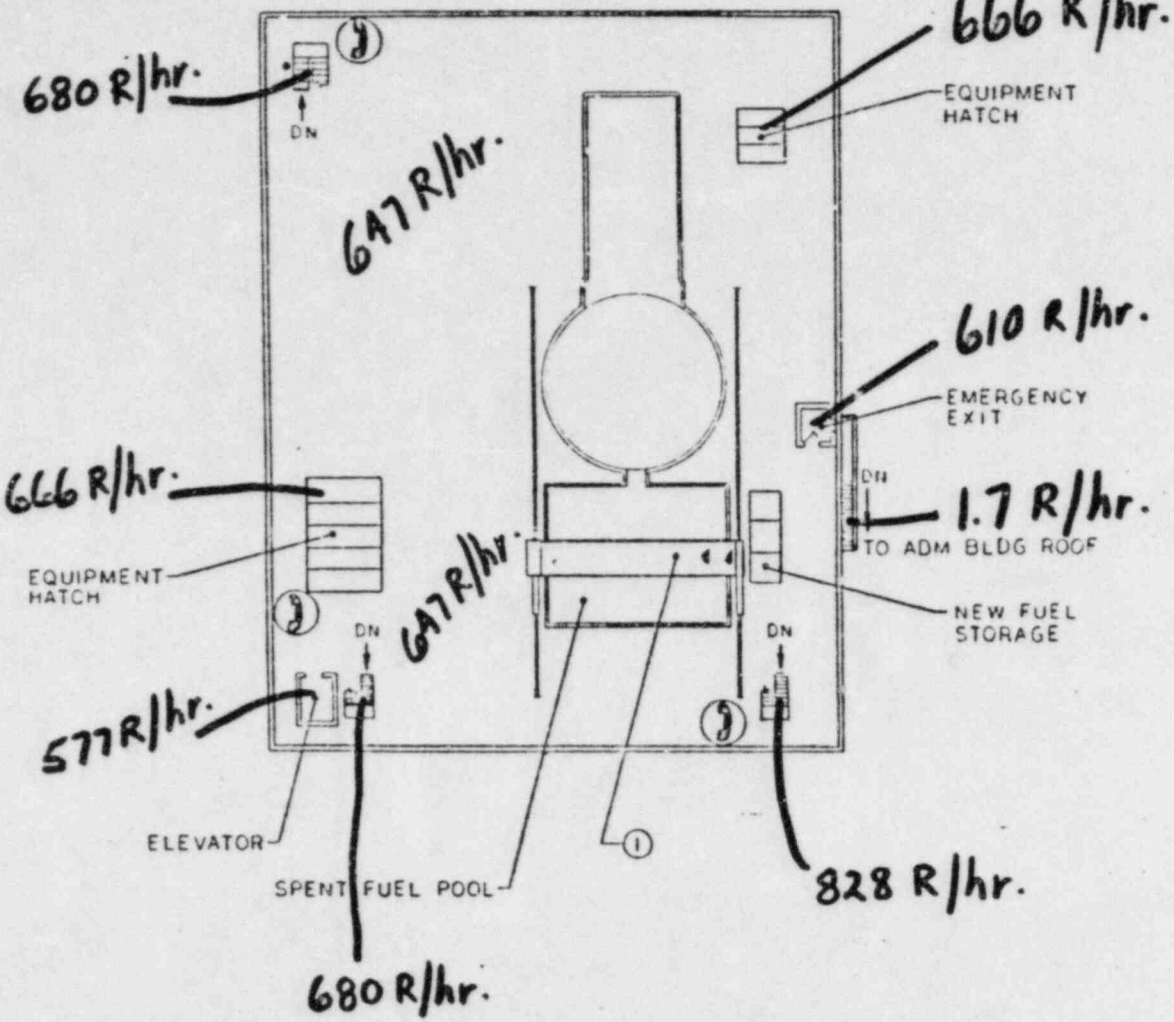
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 344'

TIME: 1345 - 1414



	EQUIPMENT	ZONE
1	REFUELING PLATFORM	C4

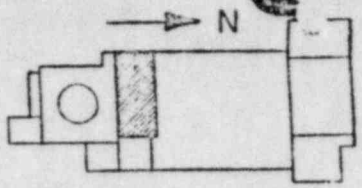


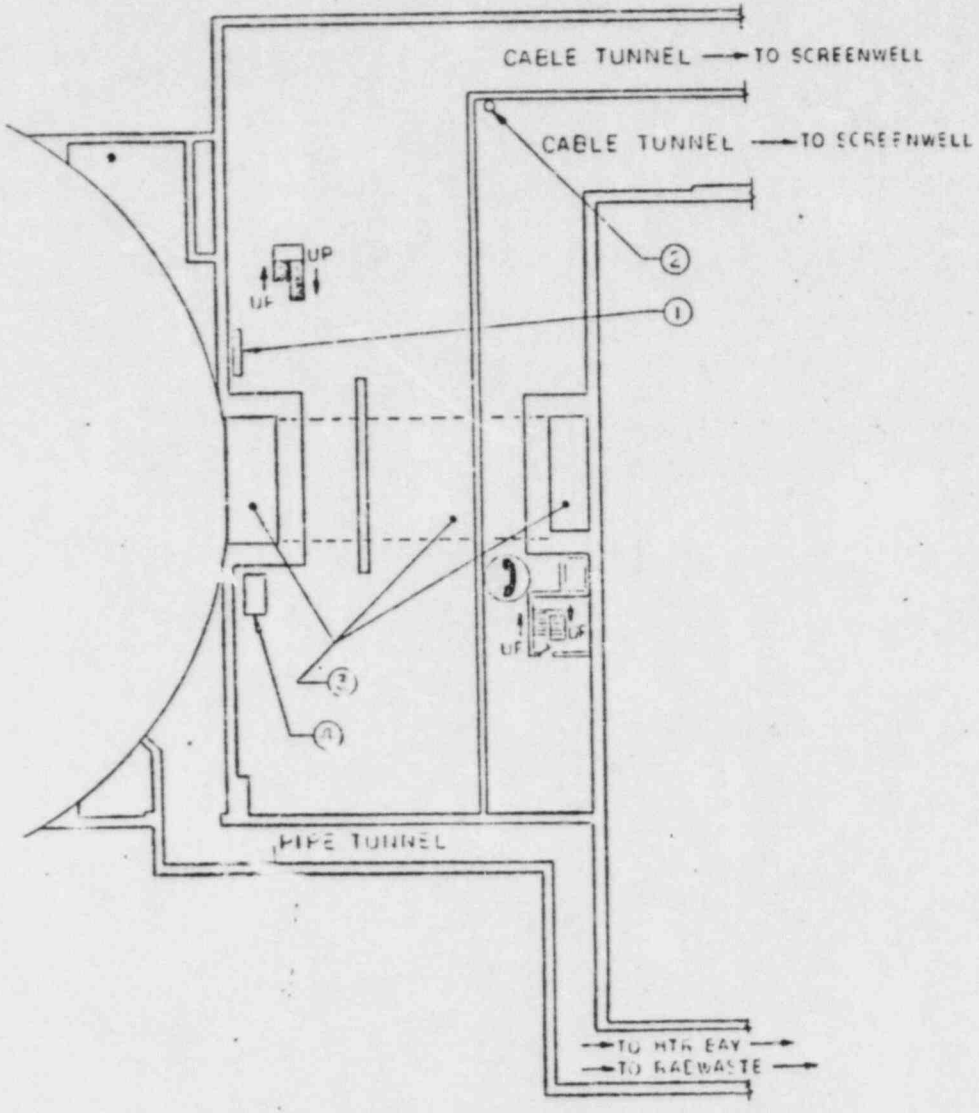
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 369'

Time: 1345 - 1419





	EQUIPMENT	ZONE
1	DELUGE STATION	B2
2	FLOOR DRAIN SUMP	C2
3	MAIN STEAM TUNNEL	C4
4	SHOWER WASTE TANK	B3

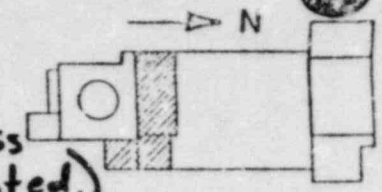
(3) PAGE SYSTEM HANDSET STATION

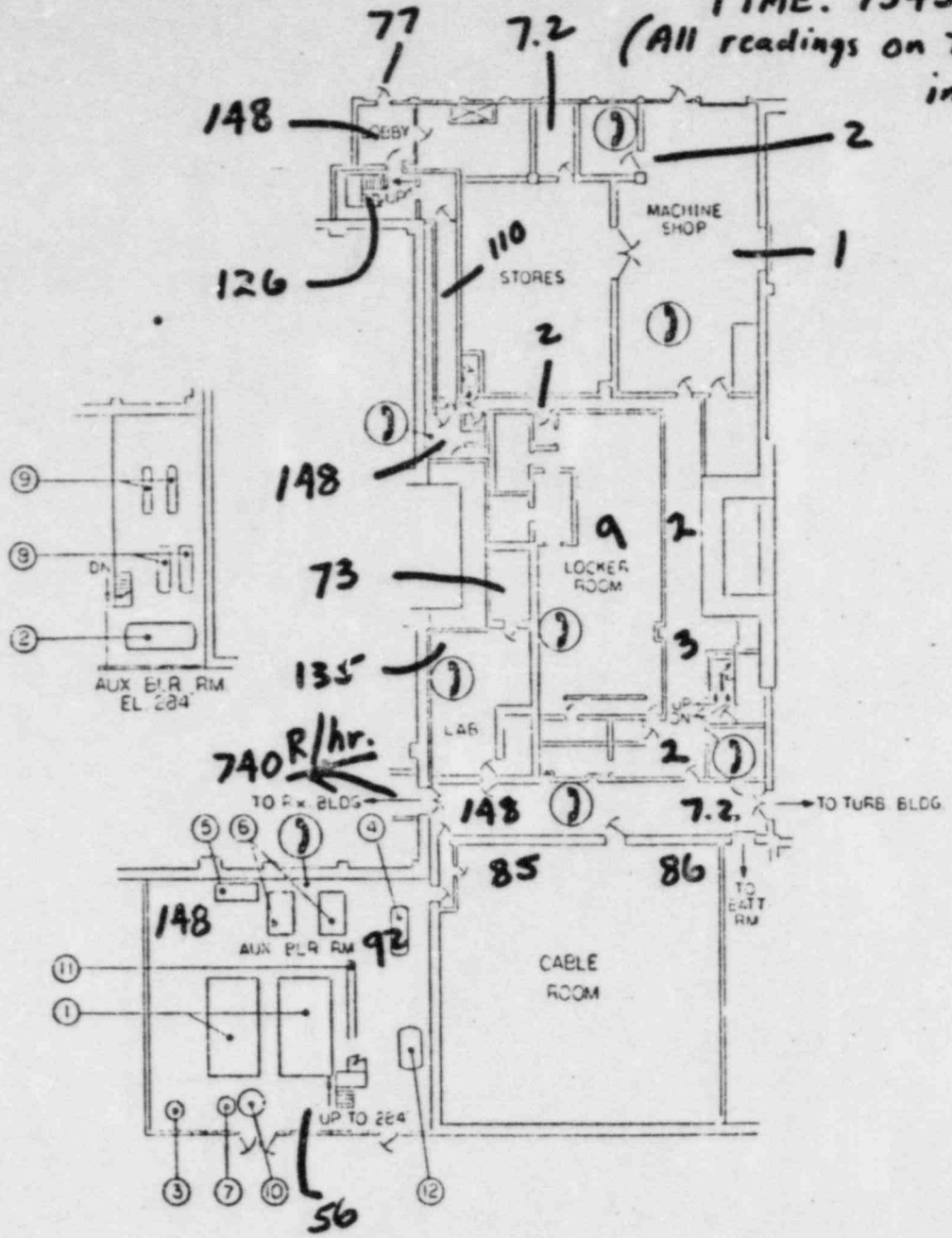
PLANT WITH UNIT OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 260'

TIME: 1345-1414
(All readings on this page are in mR/hr. unless otherwise noted.)





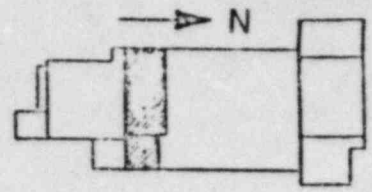
	EQUIPMENT	ZONE
1	AUXILIARY BOILER (2)	B3
2	AUXILIARY DEAERATOR	B3
3	BLOWDOWN TANK	B5
4	CONDENSATE TANK	C4
5	DOMESTIC HOT WATER TANK	B4
6	DUST COLLECTOR (2)	B4
7	GLYCOL EXP TANK	B5
8	GLYCOL-WTR HT EXCHANGER (2)	B3
9	HI TEMP HOT WTR HT EXCH. (2)	B2
10	HOT WATER EXP TANK	B5
11	PANEL MCC C232, C242	C4
12	TRANSFER TANK	C5

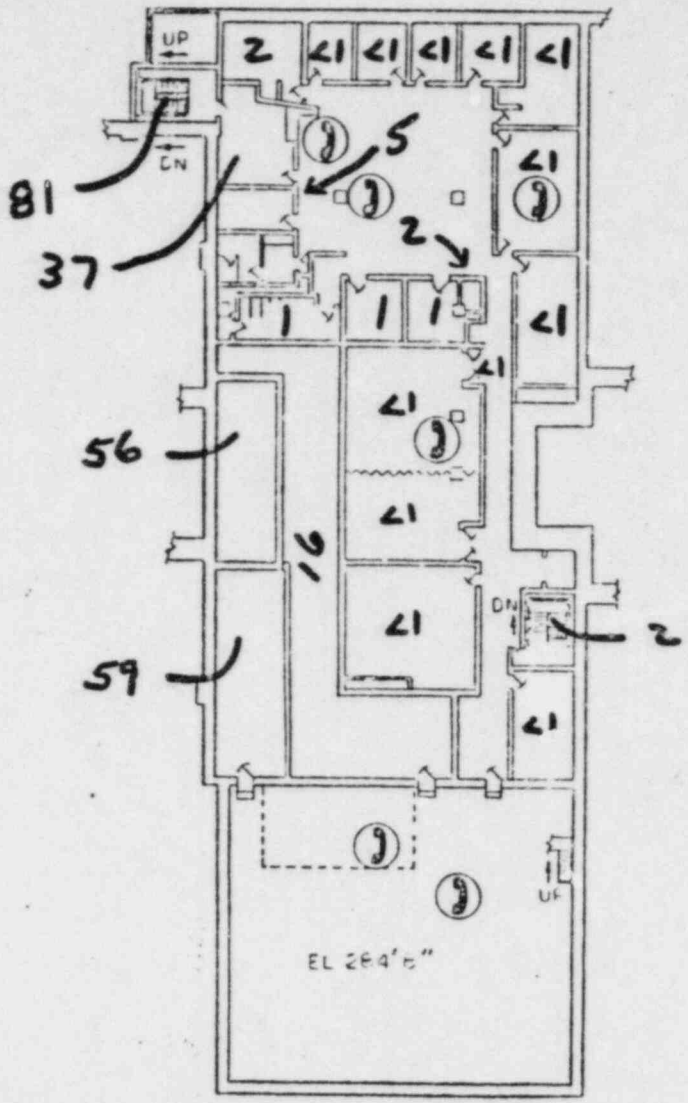
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG.
AUX ELR RM.
EL 272'

TIME: 1345 - 1414
(All readings on this page are in mR/hr.)





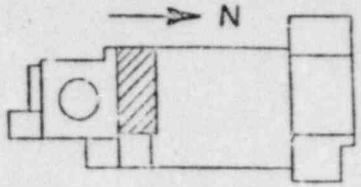
EQUIPMENT ZONE

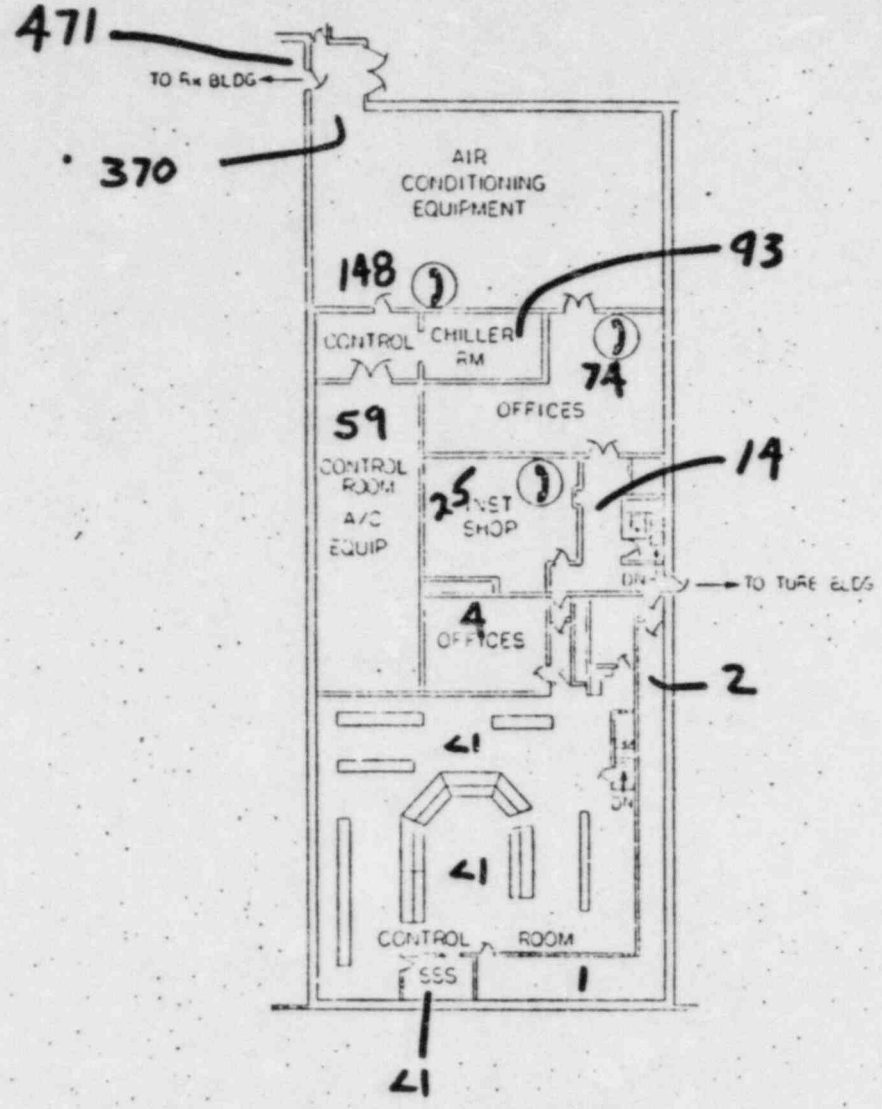
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 284' & 286'

Time: 1345-1414
(All readings on this page are in mR/hr.)





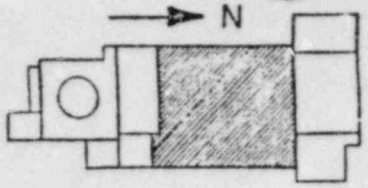
EQUIPMENT	ZONE

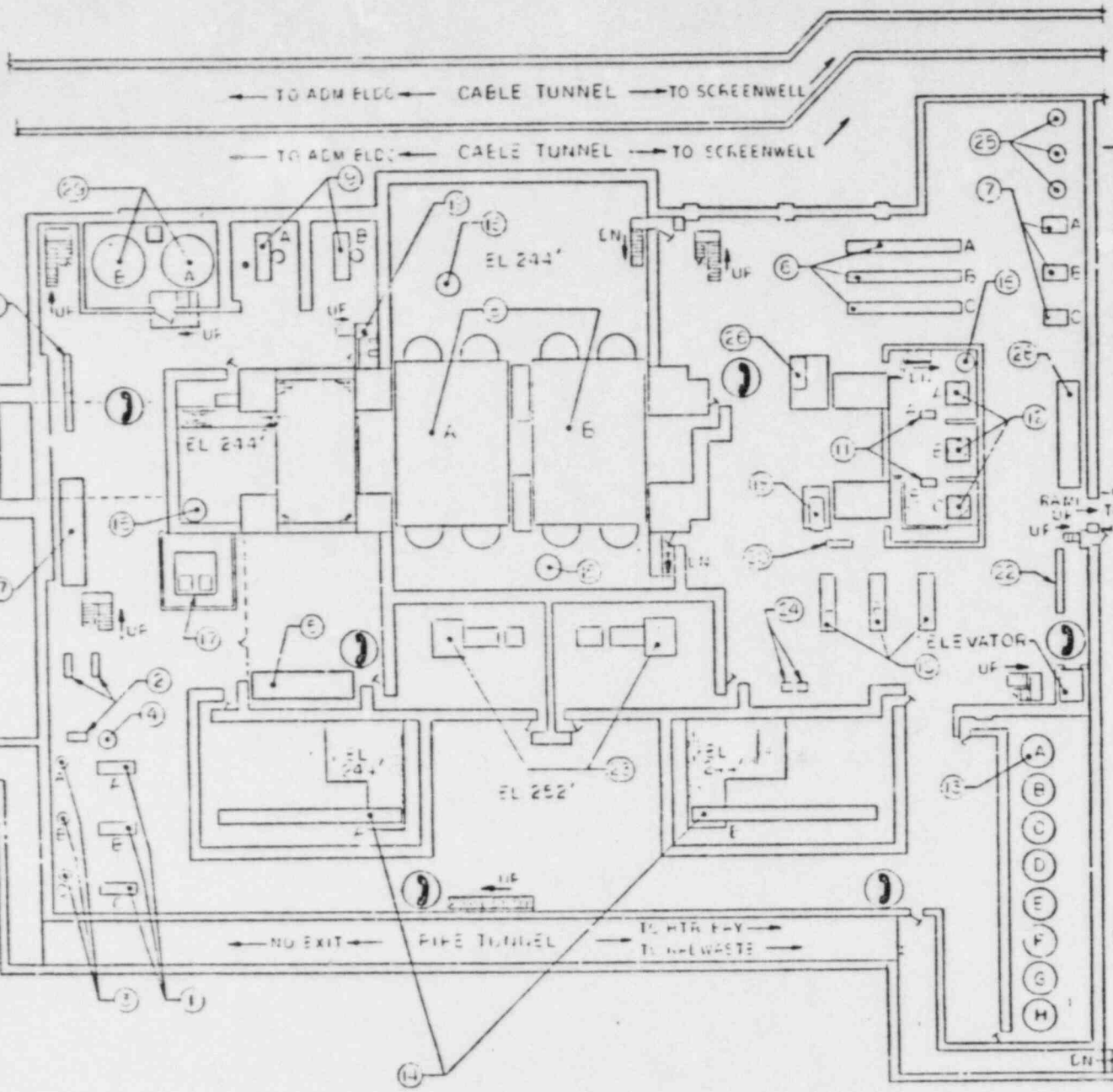
(5) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG.
EL 300'

TIME: 1345-1414





	EQUIPMENT	ZONE
1	AIR COMPRESSORS(3)	A4
2	AIR DRYERS(3)	A3,A4
3	AIR RECEIVERS(3)	A4
4	BREATHING AIR ECC TANK	A4
5	CARBOX UNIT, 10 TON	B4
6	CLCW HEAT EXCHANGERS(3)	D2,E2
7	CLCW PUMPS(3)	E2
8	CONDENSERS(2)	C2,C3
9	COND AIR REMOVAL PUMPS(2)	B2
10	COND BOOSTER PUMPS(3)	D2,D3
11	COND SAMPLE PUMPS(2)	E2,E3
12	CONDENSATE PUMPS(3)	E2,E3
13	DEMINERALIZERS(6)	E4,E5
14	DRAIN COOLERS(2)	E4,D4
15	EQUIP. DRAIN SUMP	C3
16	FLOOR DRAIN SUMPS(3)	A3,C2,E3
17	HYD FLUID PWR UNIT	A3
18	HYDROGEN SEAL OIL UNIT	D3
19	OFF GAS SAMPLE EQUIP.	B2
20	PANEL, H_2 & STATOR H_2O	D3
21	PANEL, MCC 71-C231 & 71-C241	A2
22	PANEL, MCC 71-C431 & 71-C441	E3
23	R_x FEED PUMPS(2)	C3
24	R_x FEED PUMP SEAL WATER COOLER	D4
25	SERVICE WATER PUMP STR	E1,E2
26	STATOR WINDING LIQUID COOLING UNIT	D2
27	SWGR, 600V, 71-L23/24	A3
28	SWGR, 600V, 71-L43/44	E2
29	TURBINE LUBE OIL TANKS(2)	A2

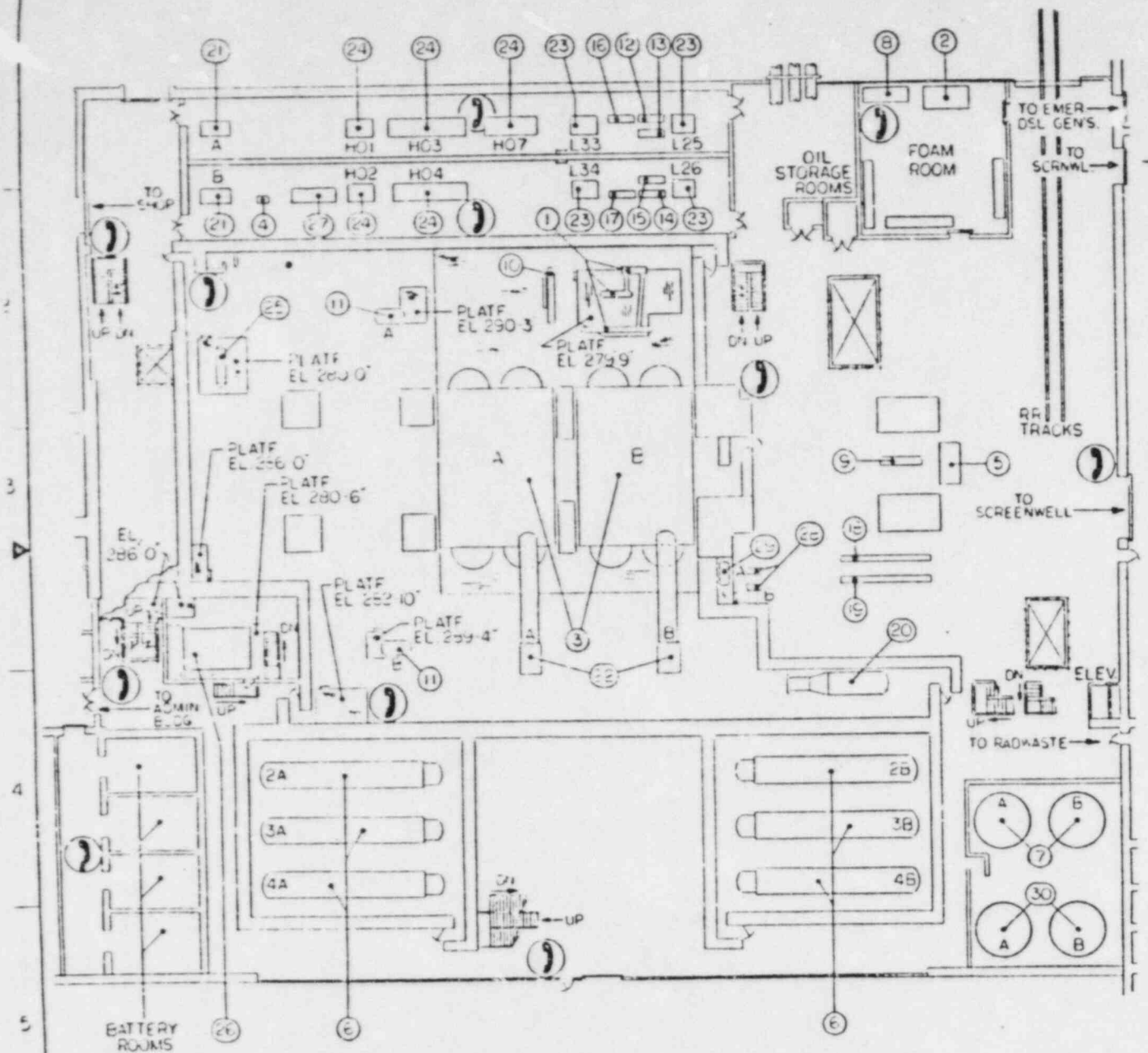
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB BLDG & HTR BAY
EL 244' & 252'

TIME: 1345-1419



	EQUIPMENT	ZONE
1	AIR EJECTOR	C2
2	CO_2 UNIT	E1
3	CONDENSER (2)	C3
4	CONTROL PANEL - 71UPP	B2
5	EXCITER SWITCHBOARD	E3
6	FEEDWATER HEATER (6)	B4,D4
7	FLOOR DRAIN SAMPLE TANK (2)	E4
8	FOAM UNIT	D1
9	GEN. NEUT. TRANSF. AND RES.	D3
10	GLAND STEAM EXHAUSTER	C2
11	MOISTURE SEPARATOR DRAIN TK. (2)	B2,3
12	PANEL MCC C251	C1
13	PANEL MCC C252	C1
14	PANEL MCC C261	C2
15	PANEL MCC C262	C2
16	PANEL MCC C331	C1
17	PANEL MCC C341	C2
18	PANEL MCC C434	D3
19	PANEL MCC C444	D3
20	REBOILER	D4
21	RPS MG SET (2)	A1,2
22	R_x FEED PUMP TURB. EXHAUST (2)	C3
23	SWITCHGEAR, 600 V. (4)	C1,2
24	SWITCHGEAR, 4160 V. (5)	B1,2,C1
25	TURBINE BY-PASS STEAM CHEST	A2
26	TURBINE LUBE OIL TANK	A3
27	UNINTERRUPTABLE MG SET-71UPS-1	B2
28	VACUUM PRIMING PUMP (2)	D3
29	VACUUM TANK	D3
30	WASTE SAMPLE TANK	E5

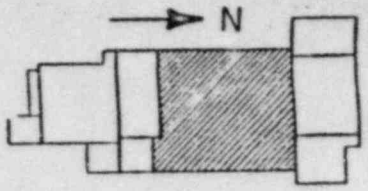
(21) PAGE SYSTEM HANDSET STATION

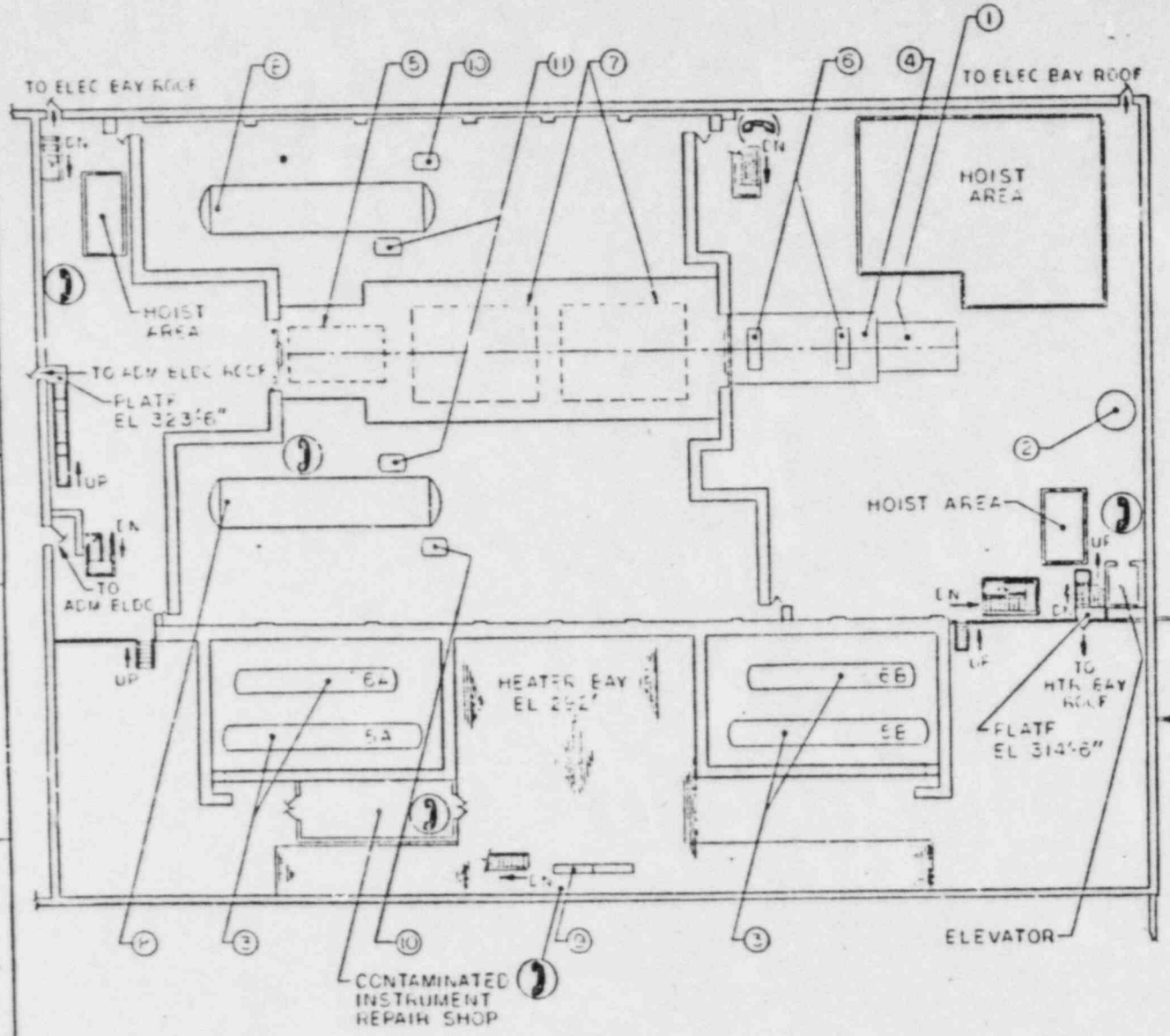
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB BLDG., HTR. BAY, ELEC BAY
EL 272'

Time: 1345 - 1414





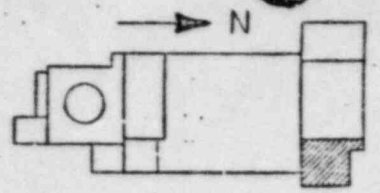
	EQUIPMENT	ZONE
1	ALTERNATOR	D3
2	CLOW MAKEUP & SURGE TANK	E3
3	FEEDWATER HEATER(4)	B4,D4
4	GENERATOR	D3
5	HIGH PRESSURE TURBINE	B3
6	HYDROGEN COOLER(2)	D3
7	LOW PRESSURE TURBINE(2)	B3,C3
8	MOISTURE SEPARATOR REHEATER(2)	B2,B3
9	PANEL, MCC 43E & 44E	C5
10	REHEAT DRAIN TK 1ST STAGE(2)	B2,B3
11	REHEAT DRAIN TK 2ND STAGE(2)	B2,B3

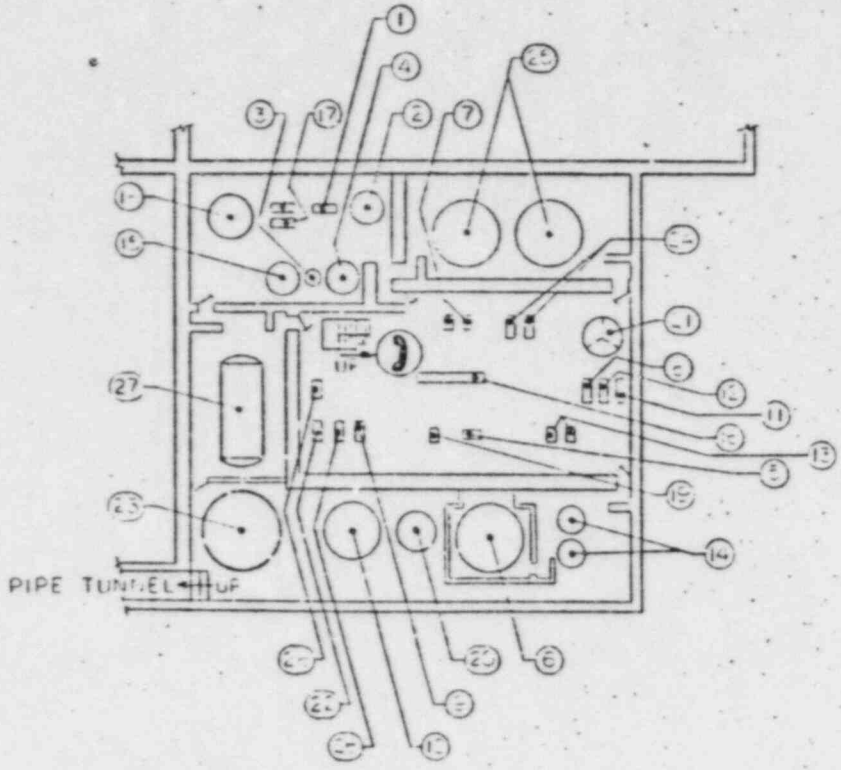
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN HTR BAY & TURB BLDG EL 292' & 300'

TIME: 1345 – 1414





	EQUIPMENT	ZONE
1	ACID RECOVERY PUMP	C2
2	ACID RECOVERY TANK	C2
3	ANION TANK	B3
4	CATION & RESIN SEP TANK	C3
5	CONCENTRATED WASTE PUMP	C3
6	CONCENTRATED WASTE TANK	C4
7	CONCENTRATOR FEED PUMP (2)	C3
8	EQUIPMENT DRAIN PUMP	D3
9	FLOOR DRAIN COLL PUMP	C3
10	FLOOR DRAIN COLL TANK	C4
11	FLOOR DRAIN PUMP	D3
12	HIGH COND DRAIN PUMP	D3
13	LAUNDRY DRAIN PUMP (2)	C3
14	LAUNDRY DRAIN TANK (2)	C4
15	MIX & STORAGE TANK	B3
16	PANEL MCC 432 & 442	C3
17	RINSE & SLUICE RCVY PUMP (2)	B2
18	RINSE & SLUICE RCVY TANK	B2
19	SPENT RESIN PUMP	C3
20	SPENT RESIN TANK	C4
21	SUMP TANK	D3
22	WASTE COLLECTOR PUMP	C3
23	WASTE COLLECTOR TANK	B4
24	WASTE NEUTRALIZER PUMP (2)	C3
25	WASTE NEUTRALIZER TANK (2)	C2
26	WASTE SLUDGE PUMP	C3
27	WASTE SLUDGE TANK	B3
28	WASTE SURGE PUMP	C3

PAGE SYSTEM HANDSET STATION

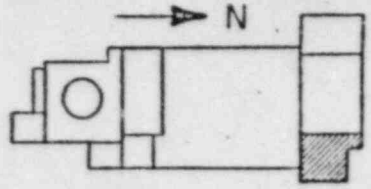
POWER AUTHORITY OF THE STATE OF NEW YORK

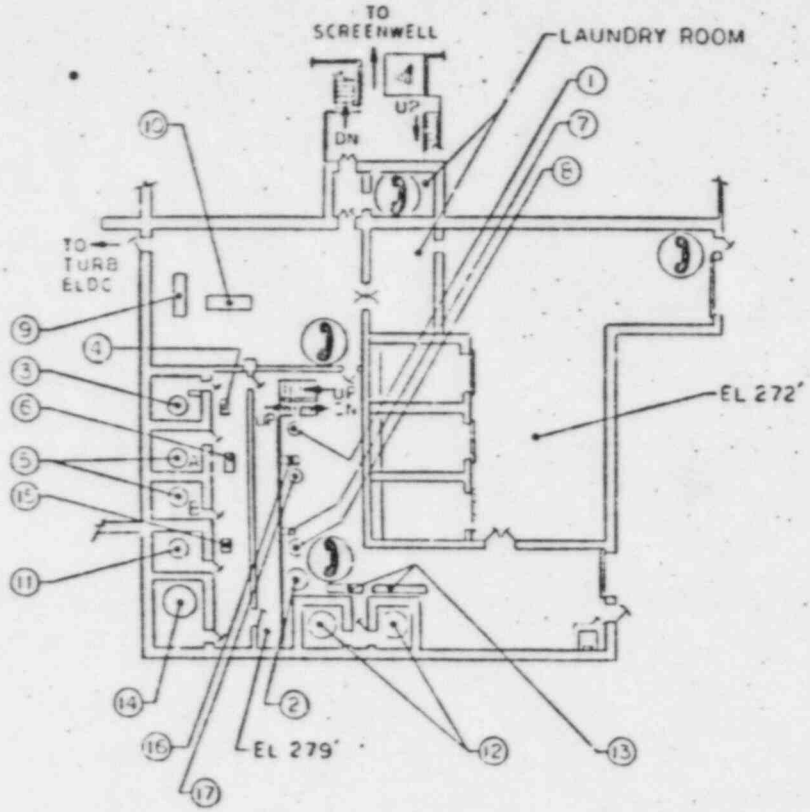
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN RADWASTE

EL 250'

TIME: 1345 - 1414





	EQUIPMENT	ZONE
1	CATION FLOCCULANT MIXING TK	C3
2	FILTER AID TANK	C4
3	FLOOR DRAIN FILTER	B3
4	FL DRAIN FLT HOLDING PUMP	B3
5	FUEL POOL FILTER DEMIN (2)	B3
6	FUEL POOL FILTER DEMIN HOLDING PUMP	B3
7	FUEL POOL PRECOAT PUMP	C3
8	FUEL POOL PRECOAT TANK	C3
9	SAMPLE PANEL	B3
10	SAMPLE SINK	B3
11	WASTE COLLECTOR FILTER	B3
12	WASTE CONCENTRATOR (2)	C4
13	WASTE CONC CONDENSER (2)	C4
14	WASTE DEMIN	B4
15	WASTE FILTER HOLDING PUMP	B3
16	WASTE PRECOAT PUMP	C3
17	WASTE PRECOAT TANK	C3

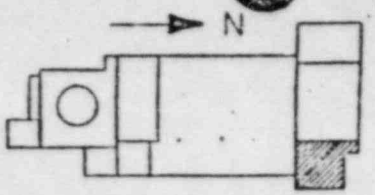
(9) PAGE SYSTEM HANDSET STATION

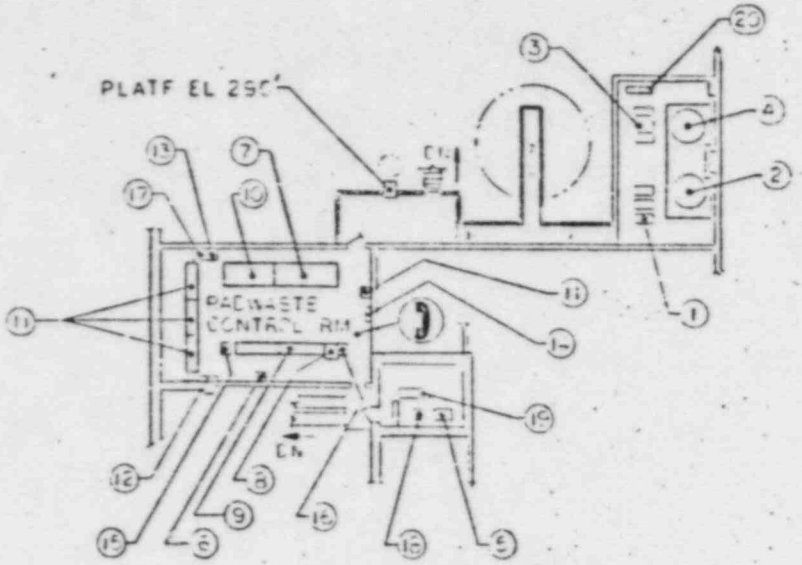
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN RADWASTE EL 272' & 279'

TIME: 1345 - 1419





	EQUIPMENT	ZONE
1	ACID REGEN PUMP(3)	D3
2	ACID STORAGE TANK	D3
3	CAUSTIC REGEN PUMP(3)	D2
4	CAUSTIC STORAGE TANK	D2
5	MICRO CELL HOPPER DISCHARGE CHUTE	C3
6	PANEL, AR-RW	B3
7	PANEL, COND DEMIN	C3
8	PANEL, FUEL POOL	C3
9	PANEL, MCC 433 & 434	B3, C3
10	PANEL, PRE TREAT & MAKEUP	B3
11	PANEL, RADWASTE(4)	B3, C3
12	PANEL, RADWASTE FILTRN	B3
13	PANEL, TFE	B3
14	PANEL, ULTRASONIC LEVEL MEASUREMENT	C3
15	PANEL, ULTRASONIC RESIN CLEANER	S3
16	PANEL, UPFLOW SAND FILTER	C3
17	PANEL, WASTE CONCENTRATOR	B3
18	PORTLAND CEMENT HOPPER DISCHARGE CHUTE	C3
19	THIN FILM EVAPORATOR	C3
20	WATER HEATER	D2

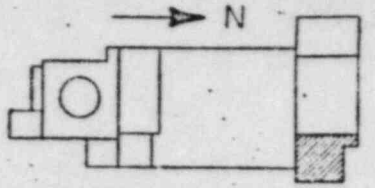
(J) PAGE SYSTEM HANDSET STATION

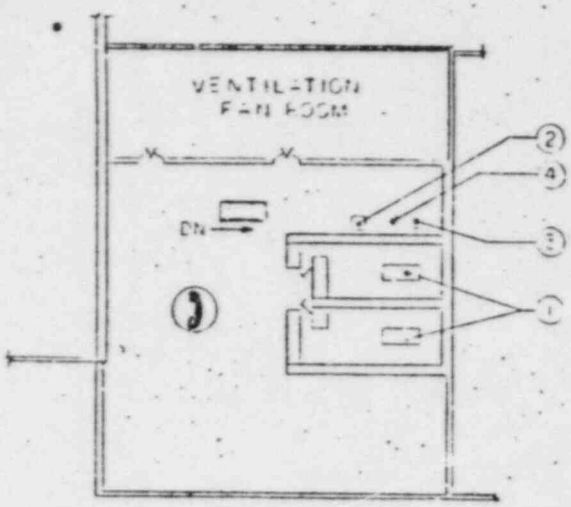
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN RADWASTE & SCRNWELL EL 284'

TIME: 1345 - 1414





	EQUIPMENT	ZONE
1	CENTIFUGE(2)	C3
2	DUST COLLECTOR	C3
3	MICRO-CELL HOPPER	C3
4	PORTLAND CEMENT HOPPER	C3

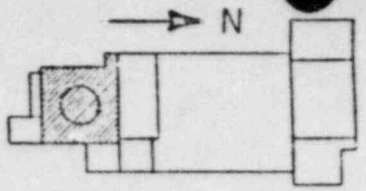
(J) PACE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 298'

TIME: 1415 - 1452



	EQUIPMENT	ZONE
1	CORE SPRAY PUMP(2)	C2,C4
2	CORE SPRAY HOLDING PUMP(2)	C2,C4
3	EQUIP. DRAIN SUMP(5)	B2,B4,C3
4	EQUIP. DRAIN SUMP COOLER(2)	B2,B4
5	FLOOR DRAIN SUMP(5)	B2,B4,C3
6	GLAND PUMP CONDENSER	B2
7	HPCI PUMP	B3
8	HPCI TURBINE	B3
9	HPCI TURBINE LUBE OIL COOLER	B3
10	PANEL EMCC-1	A2
11	PANEL EMCC-2	A5
12	PANEL EMCC-3	A2
13	PANEL EMCC-4	A5
14	PANEL MCC-71-C153	B1
15	PANEL MCC-71-C163	B5
16	RCIC PUMP	B2
17	RCIC TURBINE	B2
18	RHR PUMP(4)	C2,C4

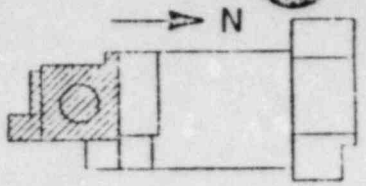
(J) PAGE SYSTEM HANDSET STATION

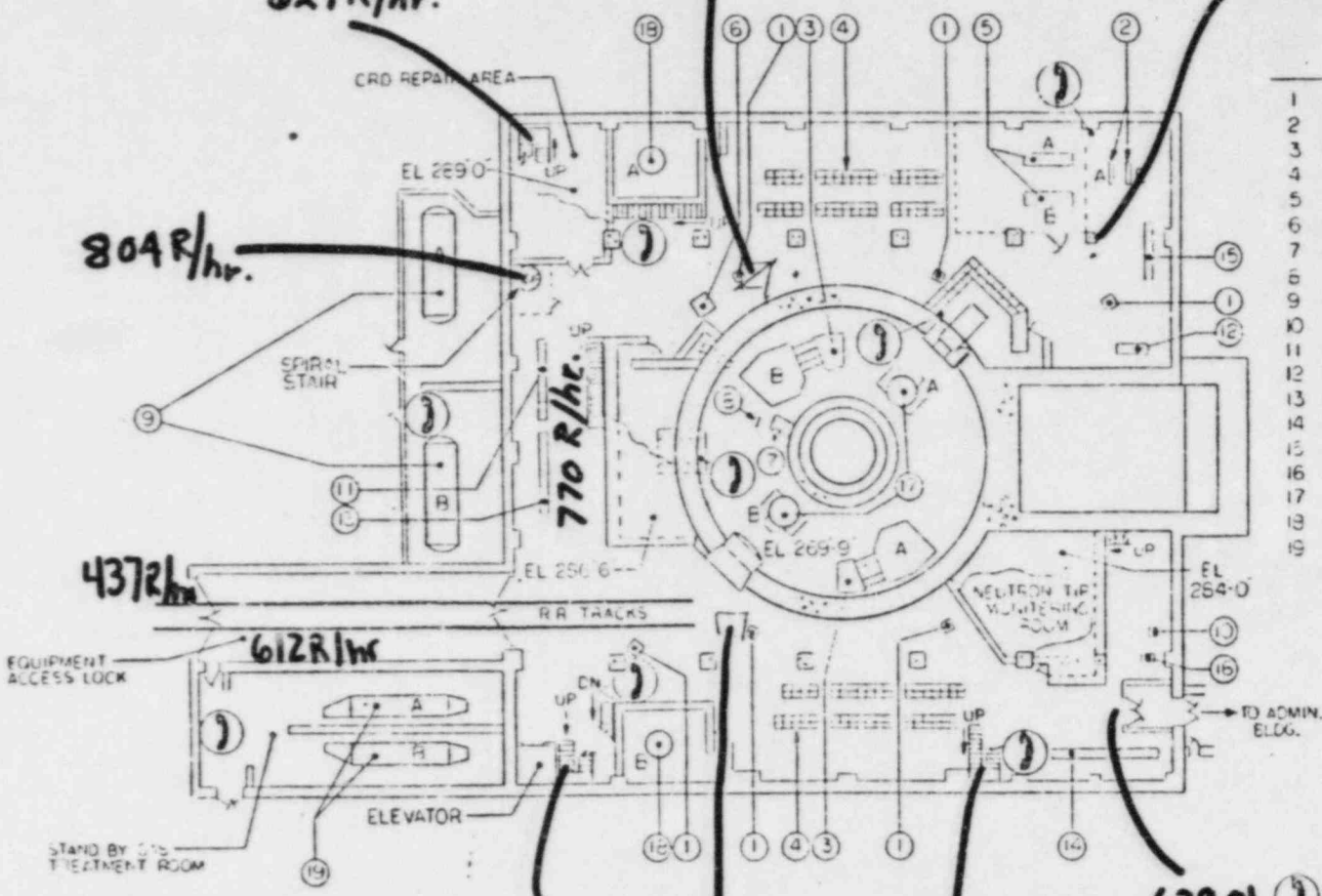
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 227' & 242'

TIME: 1415 - 1452





	EQUIPMENT	ZONE
1	ACCESS HATCH TO TORUS (6)	C2,3,D2,4,E2
2	CONDENSATE TRANSFER PUMP (2)	E2
3	COOLING COILS & BLOWERS (2)	D3
4	CRD HYD CONTROL UNITS	D2,4
5	CRD WATER PUMP (2)	E2
6	EQUIPMENT HATCH TO TORUS	C2
7	LADDER TO EL 256'6"	D3
8	LADDER TO EL 292'0"	D3
9	LIQUID NITROGEN TANK (2)	B2,3
10	PANEL EMCC-6	E4
11	PANEL MCC C132, C151	C3
12	PANEL MCC C133	E3
13	PANEL MCC C142, C161	C3
14	PANEL MCC C143, C162	E4
15	PANEL MCC C152	E2
16	PANEL MCC C164	E4
17	RECIRC. PUMP (2)	D3
18	RHR HEAT EXCHANGER (2)	C2,4
19	STANDBY GAS TREATMENT FILTER TRAIN (2)	B4

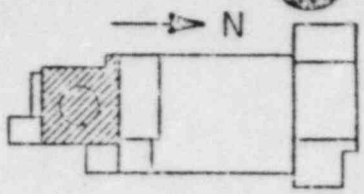
(1) PACE SYSTEM HANDSET STATION

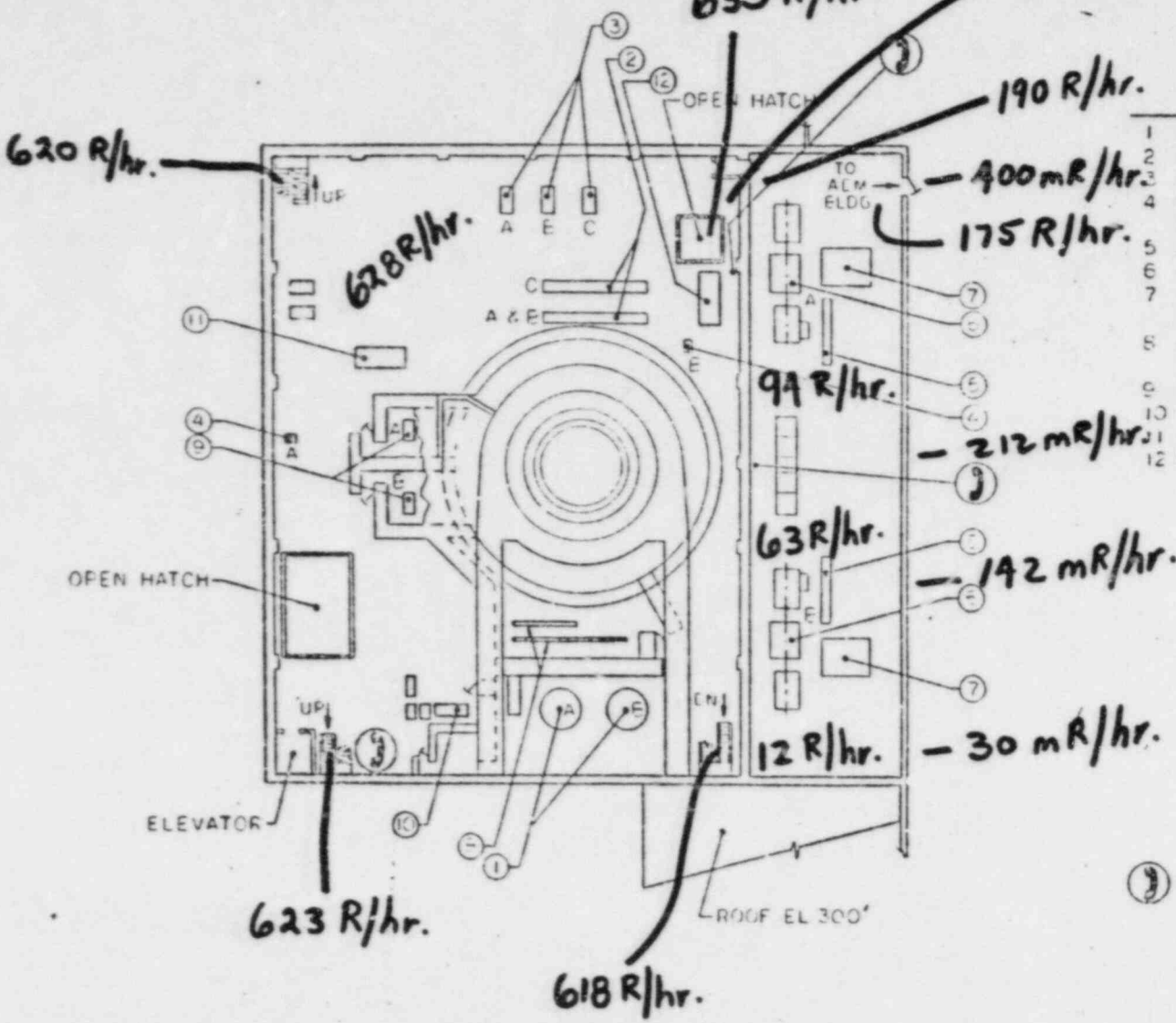
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG.
EL 272'

TIME: 1415-1452





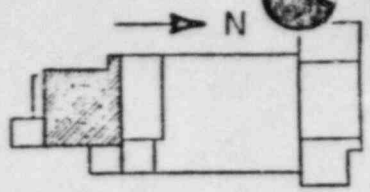
	EQUIPMENT	ZONE
1	CLEANUP PHASE SEP TANK(2)	C4
2	CLCW HEAT EXCHANGER(3)	C2
3	CLCW PUMP(3)	C2
4	DRYWELL INERTING SAMPLE PUMP(2)	B3,D3
5	MG FLUID COOLER(2)	D2,D3
6	MG FLUID DRIVE(2)	D2,D3,D4
7	MG FLUID DRIVE LUBE OIL PUMP ASSY(2)	D2,D4
8	RWCU NON-REGENERATIVE HEAT EXCHANGER(2)	C4
9	RWCU PUMP(2)	C3
10	SAMPLE STATION NO.1	C4
11	SWGR,600V,71-L15	B3
12	SWGR,600V,71-L16	D2

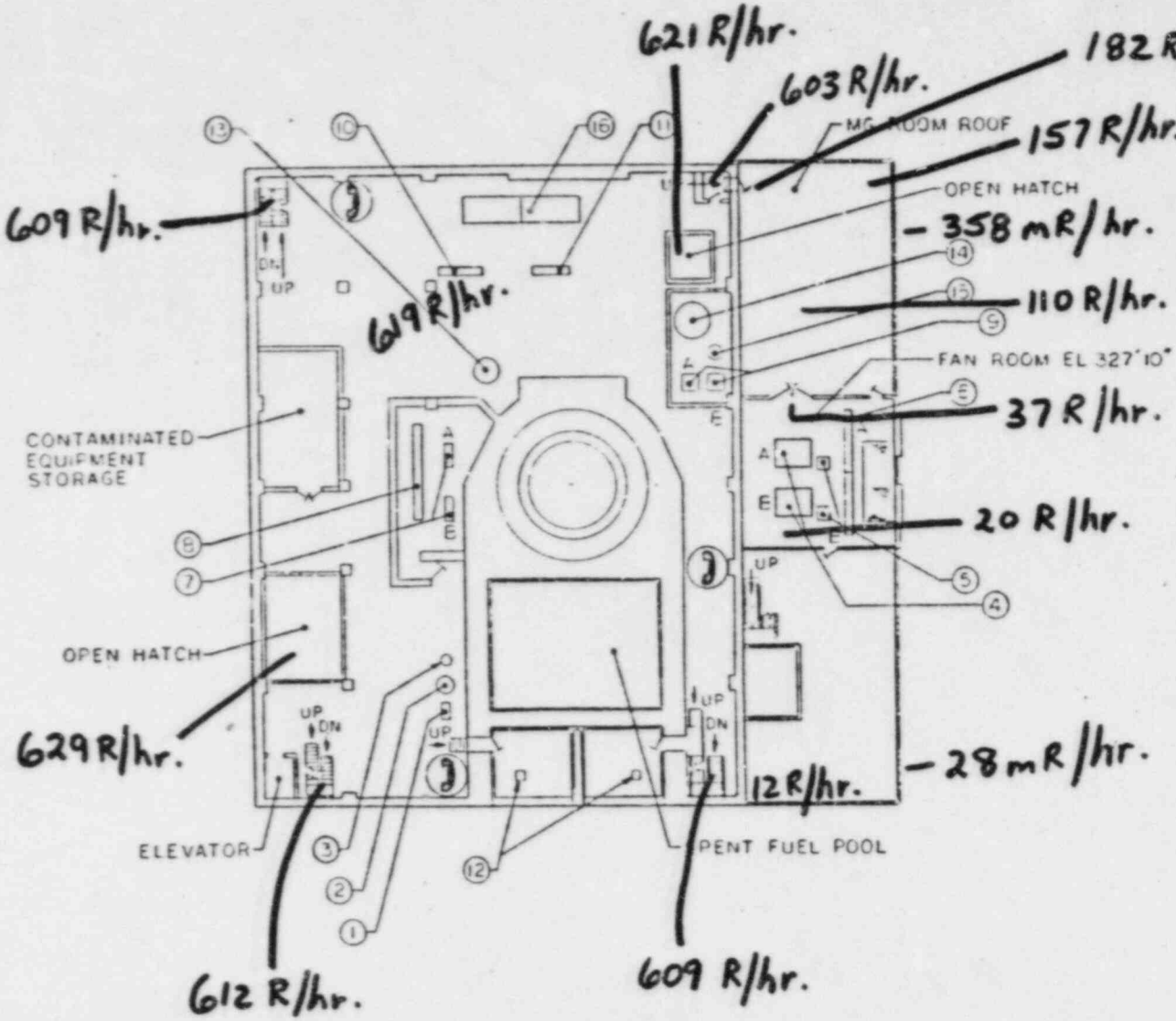
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 300'

Time: 1415 - 1452





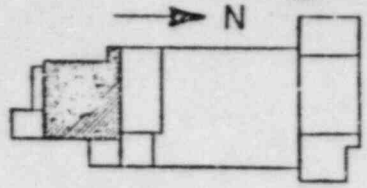
	EQUIPMENT	ZONE
1	CLEAN-UP PRECOAT PUMP	B4
2	CLEAN-UP PRECOAT TANK	B4
3	CLEAN-UP RESIN-FEED TANK	B4
4	FAN(2)	D3
5	FAN MOTOR(2)	D3
6	FILTER(2)	D3
7	FUEL POOL CLEAN UP RECIRC PUMP(2)	B3
8	FUEL POOL HEAT EXCH(2)	B3
9	LIQUID POISON PUMP(2)	C3,D3
10	PANEL, MCC 71-C131	C2
11	PANEL, MCC 71-C141	C2
12	RW&U HOLDING PUMP(2)	C4
13	REACTOR BLDG COOLING WATER MAKEUP TANK	C3
14	STANDBY LIQUID CONTROL TK	C2
15	STANDBY LIQUID CONTROL TEST TANK	D3
16	SWGR, 600V 71 L13/14	C2

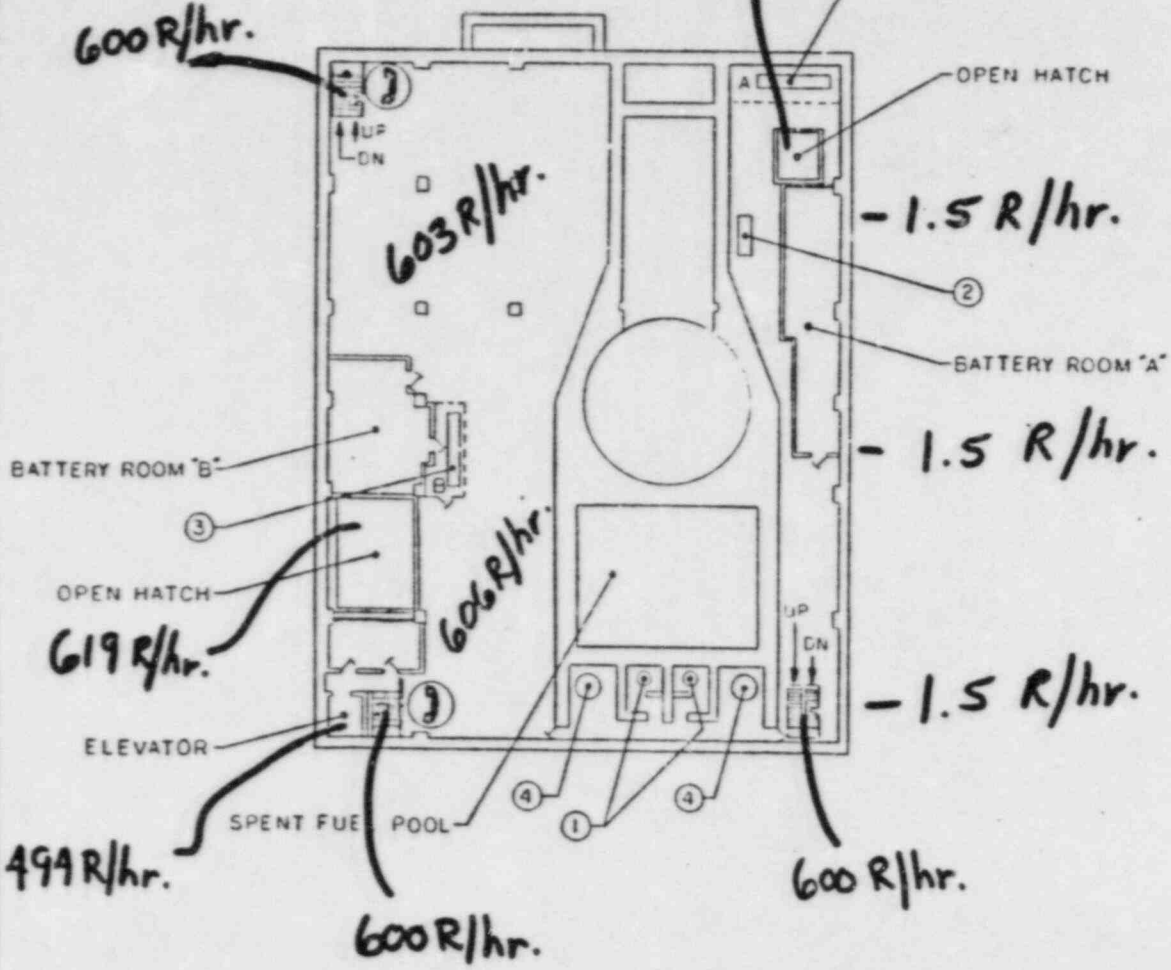
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 326'

TIME: 1415 - 1452





	EQUIPMENT	ZONE
1	CLEAN UP FILTER DEMIN(2)	C4
2	FILTER UNIT	C2
3	INVERTER(2)	B3,C2
4	SKIMMER SURGE TANK(2)	C4

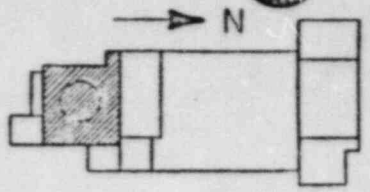
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

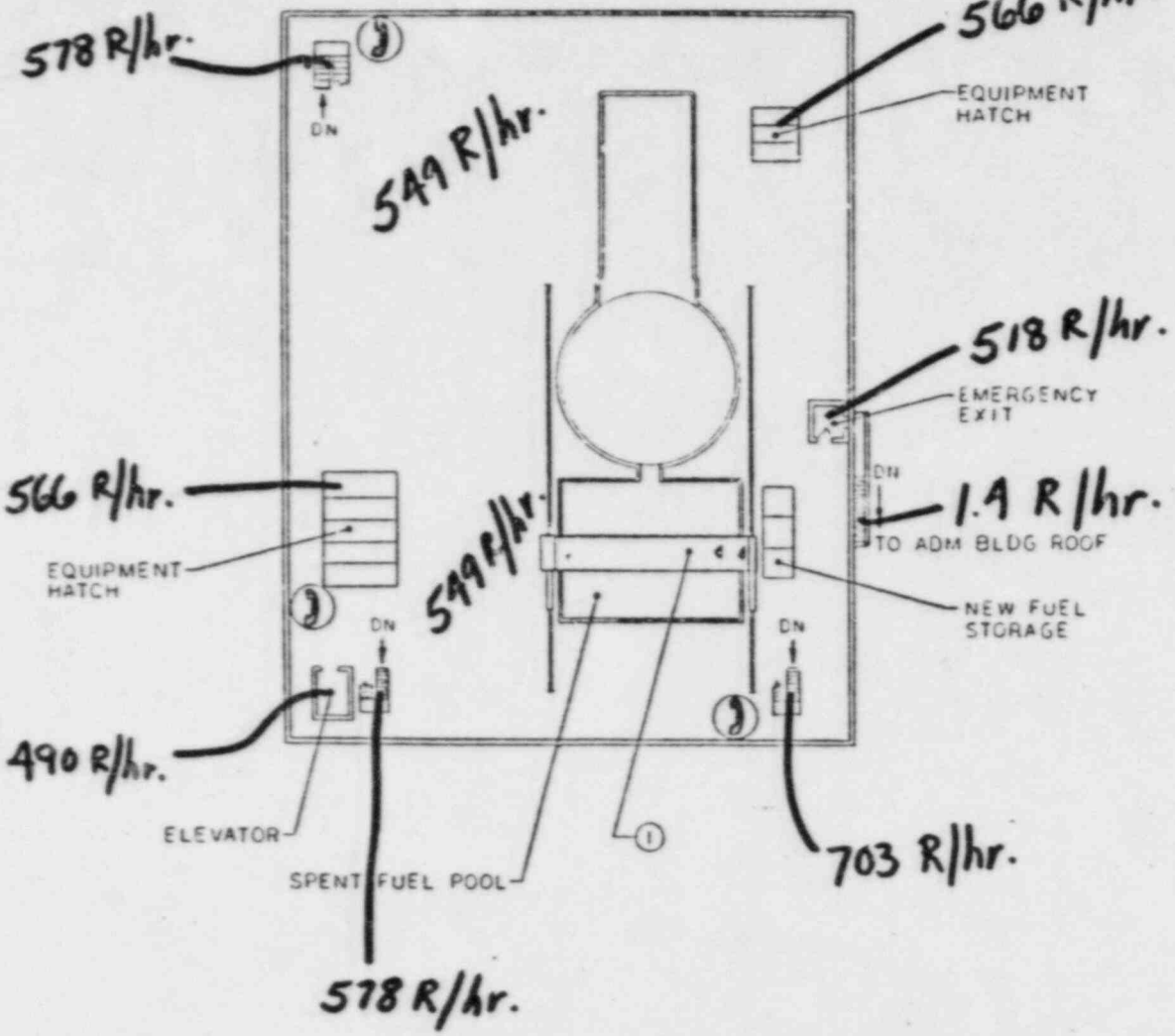
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 344'

TIME: 1915 - 1452



	EQUIPMENT	ZONE
1	REFUELING PLATFORM	C4



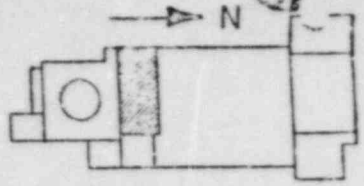
PAGE SYSTEM HANDSET STATION

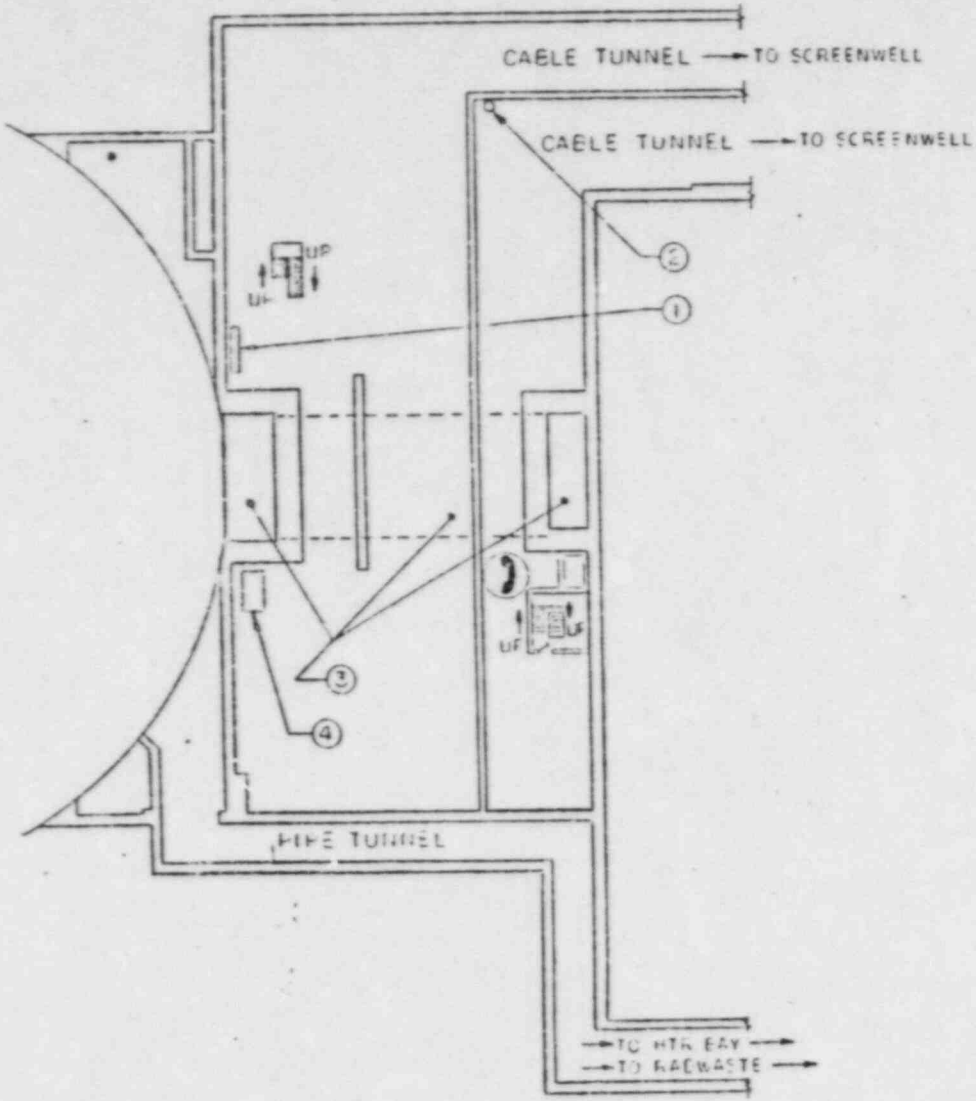
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 369'

Time: 1415-1452





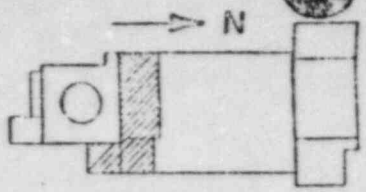
EQUIPMENT		ZONE
1	DELUGE STATION	B2
2	FLOOR DRAIN SUMP	C2
3	MAIN STEAM TUNNEL	C4
4	SHOWER WASTE TANK	B3

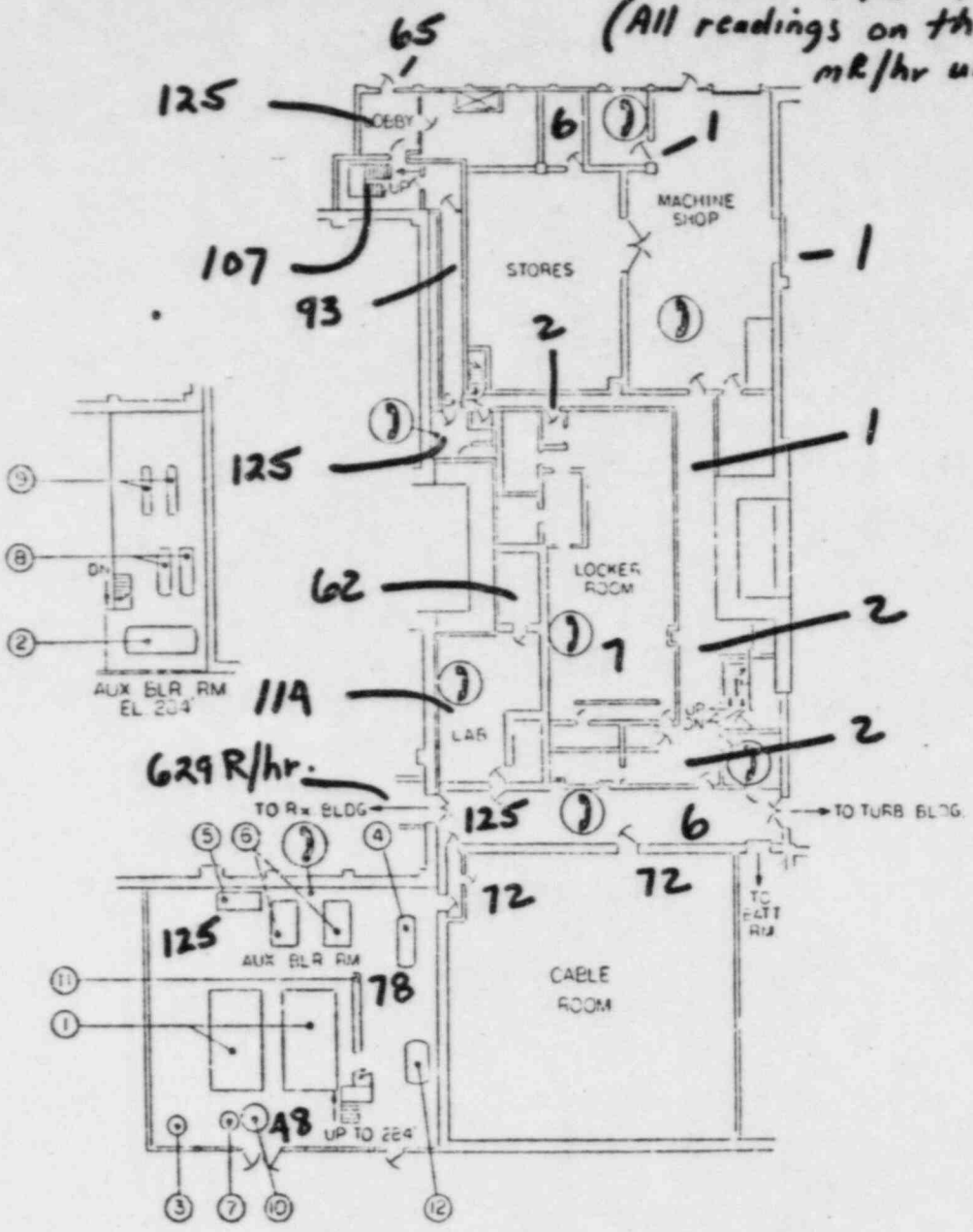
(3) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 260'

TIME: 1415-1452
(All readings on this page are in mR/hr unless otherwise noted.)





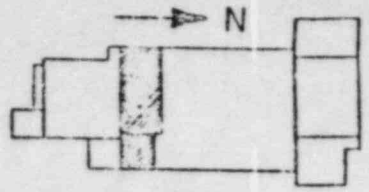
	EQUIPMENT	ZONE
1	AUXILIARY BOILER (2)	E1
2	AUXILIARY DEAERATOR	B3
3	BLOWDOWN TANK	E5
4	CONDENSATE TANK	C4
5	DOMESTIC HOT WATER TANK	B4
6	DUST COLLECTOR (2)	B4
7	GLYCOL EXP TANK	B5
8	GLYCOL-WTR HT EXCHANGER (2)	B3
9	HI TEMP HOT WTR HT EXCH (2)	B2
10	HOT WATER EXP TANK	E5
11	PANEL MCC C232, C242	C4
12	TRANSFER TANK	C5

PAGE SYSTEM HANDSET STATION

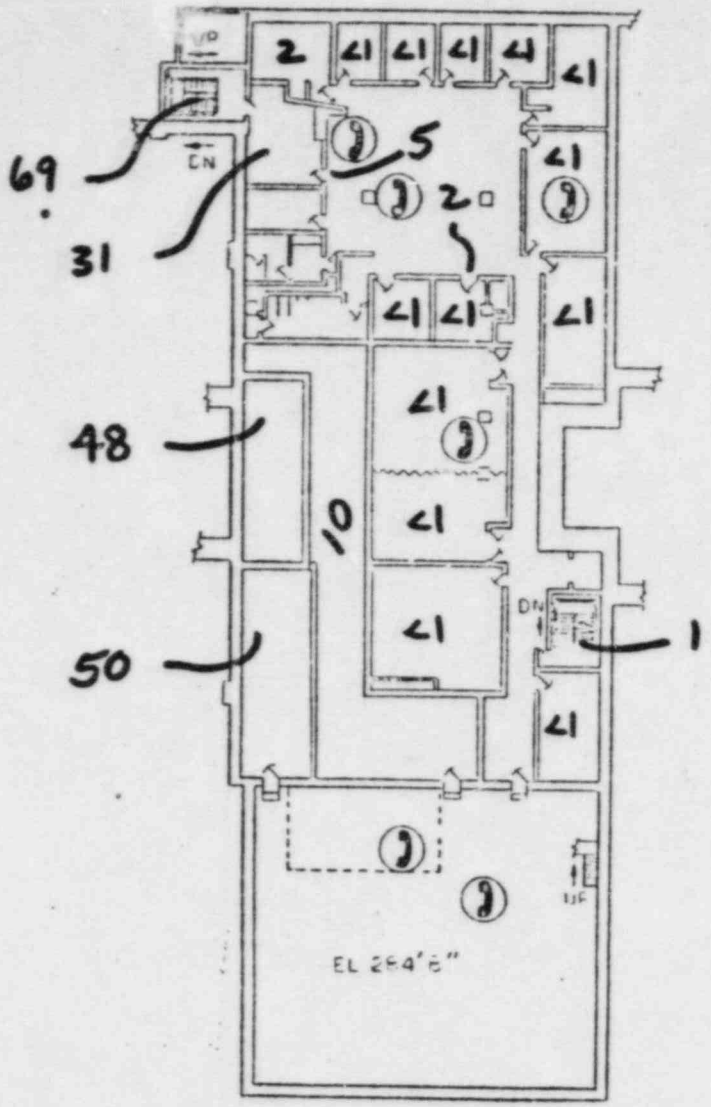
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG.,
AUX ELR RM.
EL 272'

TIME : 1415 - 1452
(All readings on this page are in mR/hr.)



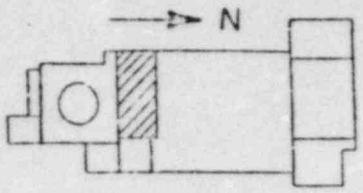
EQUIPMENT ZONE

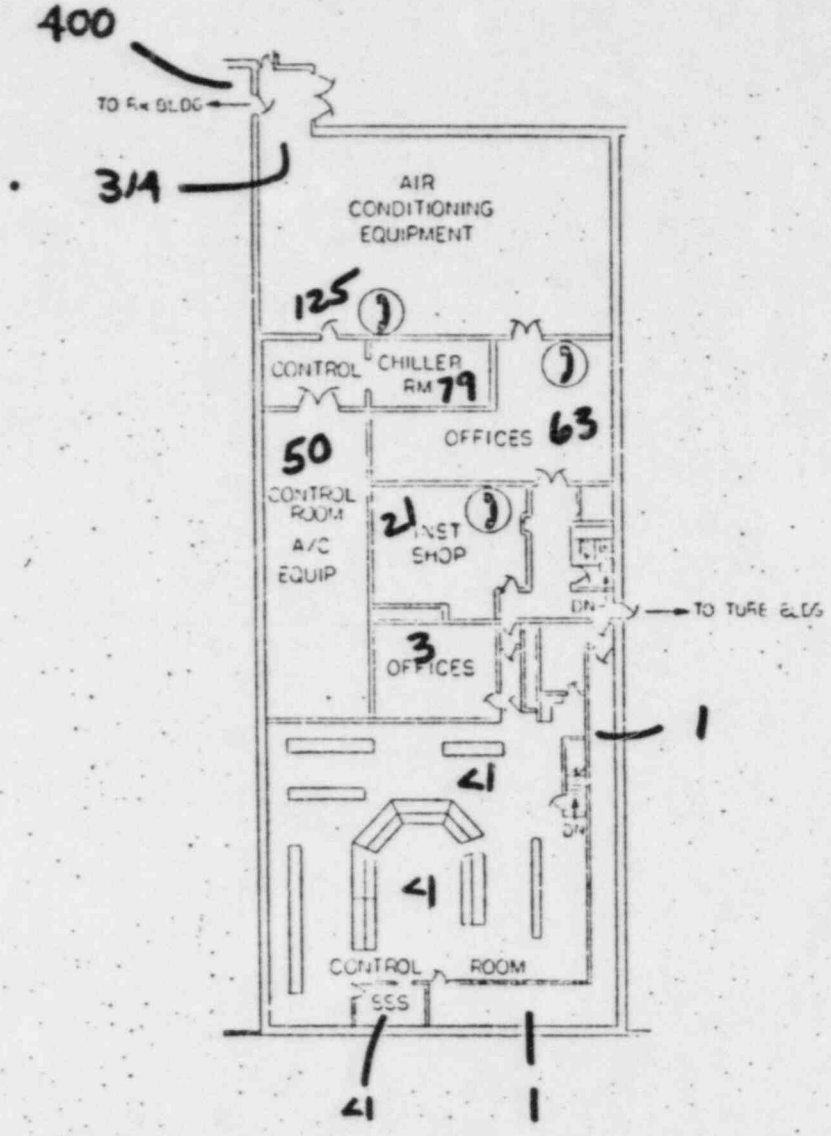


(5) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
AREA PLAN
ADMINISTRATION BLDG
EL 284' & 286'

TIME: 1415 - 1452
(All readings on this page are in mR/hr.)



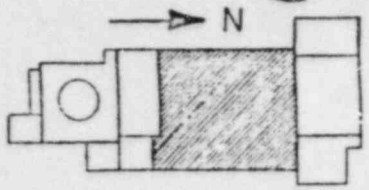


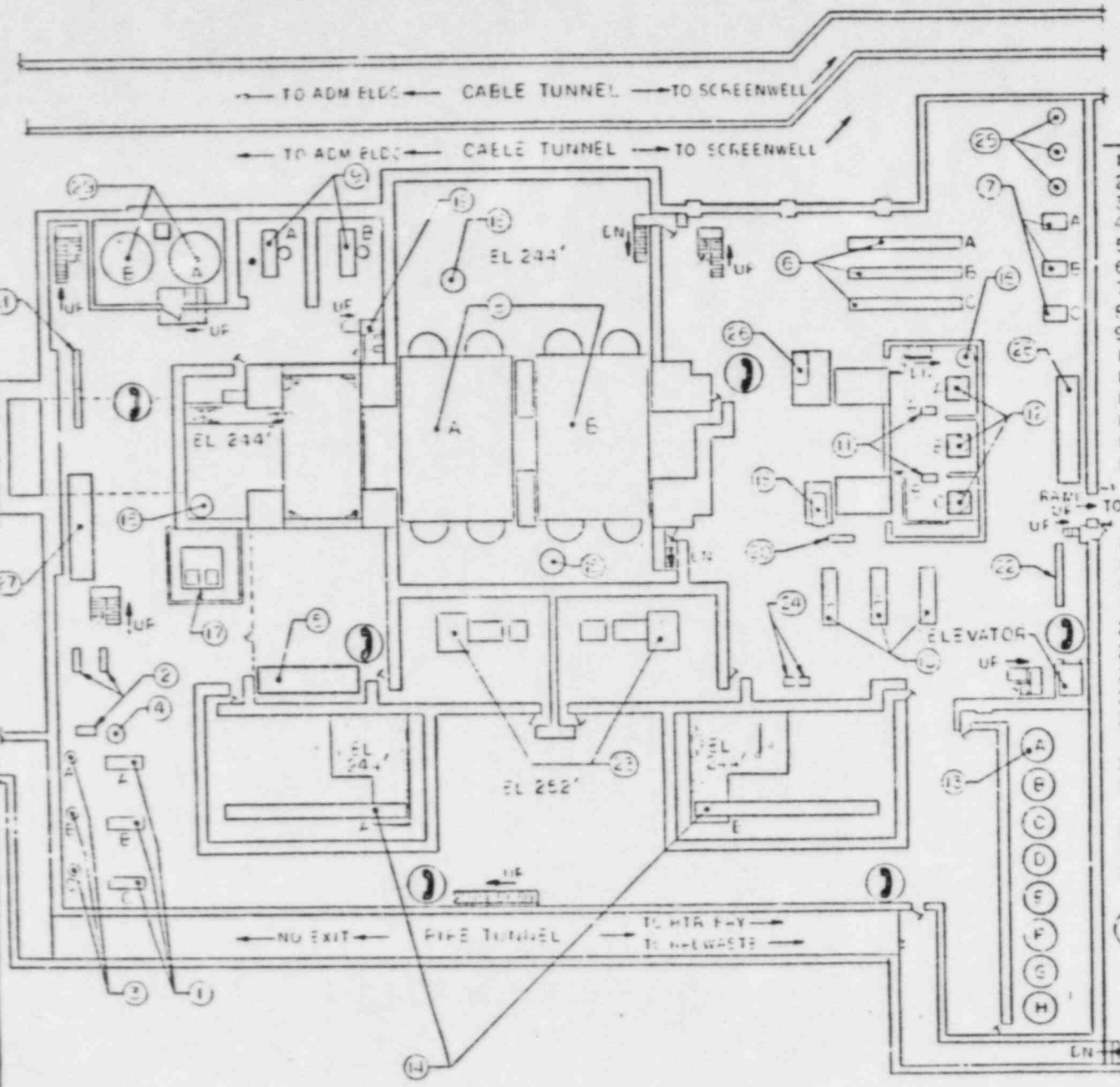
EQUIPMENT	ZONE

(1) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
AREA PLAN
ADMINISTRATION BLDG.
EL 300'

TIME: 1915-1452





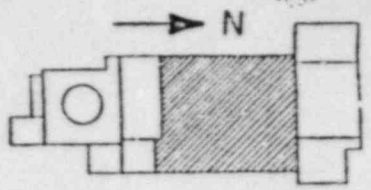
	EQUIPMENT	ZONE
1	AIR COMPRESSORS(3)	A4
2	AIR DRYERS(3)	A3,A4
3	AIR RECEIVERS(3)	A4
4	BREATHING AIR & OIL TANK	A4
5	CARBOX UNIT, 10 TON	B4
6	CLCW HEAT EXCHANGERS(3)	D2,E2
7	CLCW PUMPS(3)	E2
8	CONDENSERS(2)	C2,C3
9	COND AIR REMOVAL PUMPS(2)	B2
10	COND BOOSTER PUMPS(3)	D2,C3
11	COND SAMPLE PUMPS(2)	E2,E3
12	CONDENSATE PUMPS(3)	E2,E3
13	DEMINERALIZERS(2)	E4,E5
14	DRAIN COOLERS(2)	E4,D4
15	EQUIP DRAIN SUMP	C3
16	FLOOR DRAIN SUMPS(3)	A3,C2,E3
17	HYD FLUID PWR UNIT	A3
18	HYDROGEN SEAL OIL UNIT	D3
19	OFF GAS SAMPLE EQUIP	B2
20	PANEL, H_2 & STATOR H_2O	D3
21	PANEL, MCC 71-C231 & 71-C241	A2
22	PANEL, MCC 71-C431 & 71-C441	E3
23	R_x FEED PUMPS(2)	C3
24	R_x FEED PUMP SEAL WATER COOLER	D4
25	SERVICE WATER PUMP STR	E1,E2
26	STATOR WINDING LIQUID COOLING UNIT	D2
27	SWGR, EGCV, 71-L23/24	A3
28	SWGR, EGCV, 71-L43/44	E2
29	TURBINE LUBE OIL TANKS(2)	A2

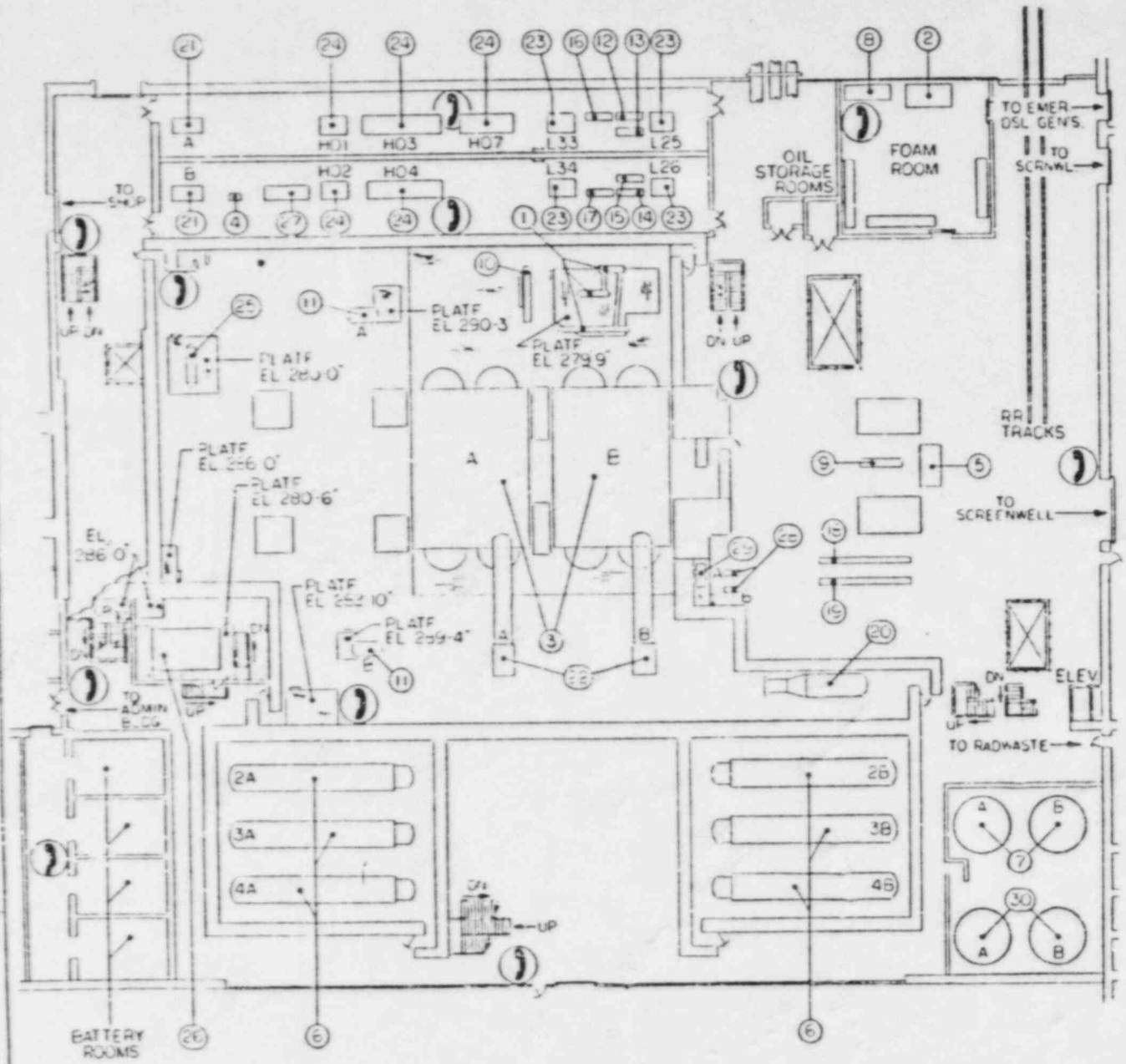
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB BLDG & HTR BAY
EL 244' & 252'

TIME: 1415 - 1452





	EQUIPMENT	ZONE
1	AIR EJECTOR	C2
2	CO_2 UNIT	E1
3	CONDENSER (2)	C3
4	CONTROL PANEL - 71UPP	B2
5	EXCITER SWITCHBOARD	E3
6	FEEDWATER HEATER (6)	B4,D4
7	FLOOR DRAIN SAMPLE TANK (2)	E4
8	FOAM UNIT	D1
9	GEN. NEUT. TRANSF. AND RES.	D3
10	GLAND STEAM EXHAUSTER	C2
11	MOISTURE SEPARATOR DRAIN TK. (2)	B2,3
12	PANEL MCC C251	C1
13	PANEL MCC C252	C1
14	PANEL MCC C261	C2
15	PANEL MCC C262	C2
16	PANEL MCC C331	C1
17	PANEL MCC C341	C2
18	PANEL MCC C434	D3
19	PANEL MCC C444	D3
20	REBOILER	D4
21	RPS MG SET (2)	A1,2
22	R_x FEED PUMP TURB. EXHAUST (2)	C3
23	SWITCHGEAR, 600 V. (4)	C1,2
24	SWITCHGEAR, 4160 V. (5)	B1,2,C1
25	TURBINE BY-PASS STEAM CHEST	A2
26	TURBINE LUBE OIL TANK	A3
27	UNINTERRUPTABLE MG SET-71UPS-1	B2
28	VACUUM PRIMING PUMP (2)	D3
29	VACUUM TANK	D3
30	WASTE SAMPLE TANK	E5

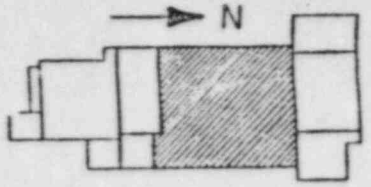
PAGE SYSTEM HANDSET STATION

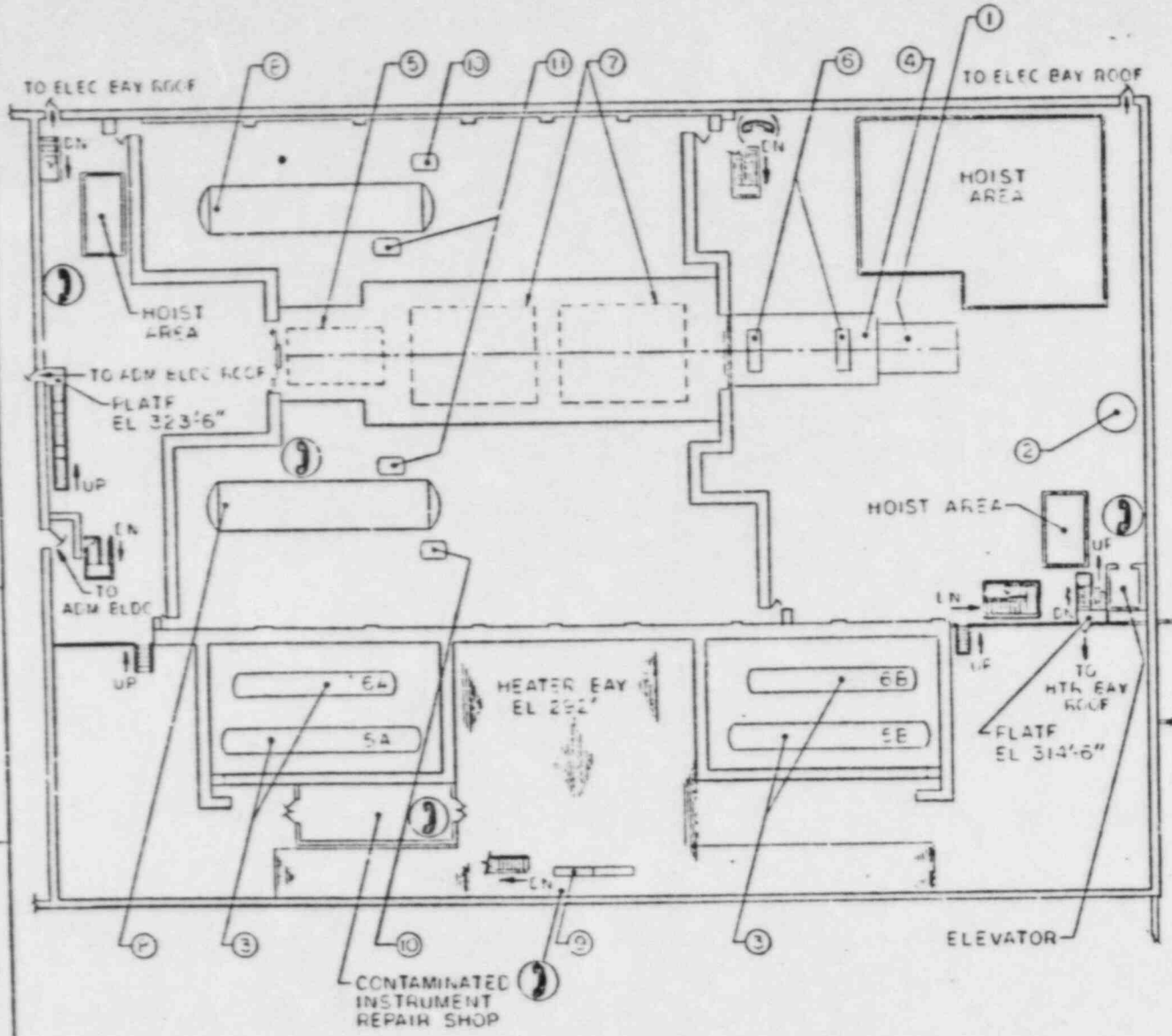
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB BLDG., HTR. BAY, ELEC BAY
EL 272'

TIME: 1415-1452





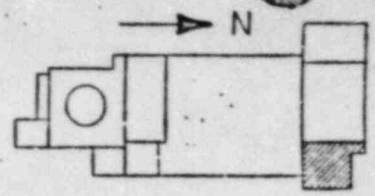
	EQUIPMENT	ZONE
1	ALTERNATOR	D3
2	CLOW MAKEUP & SURGE TANK	E3
3	FEEDWATER HEATER (4)	B4,D4
4	GENERATOR	D3
5	HIGH PRESSURE TURBINE	E3
6	HYDROGEN COOLER (2)	D3
7	LOW PRESSURE TURBINE (2)	B3,C3
8	MOISTURE SEPARATOR REHEATER (2)	B2,B3
9	PANEL, MCC 439 & 445	C5
10	REHEAT DRAIN TK 1ST STAGE (2)	B2,B3
11	REHEAT DRAIN TK 2ND STAGE (2)	B2,B3

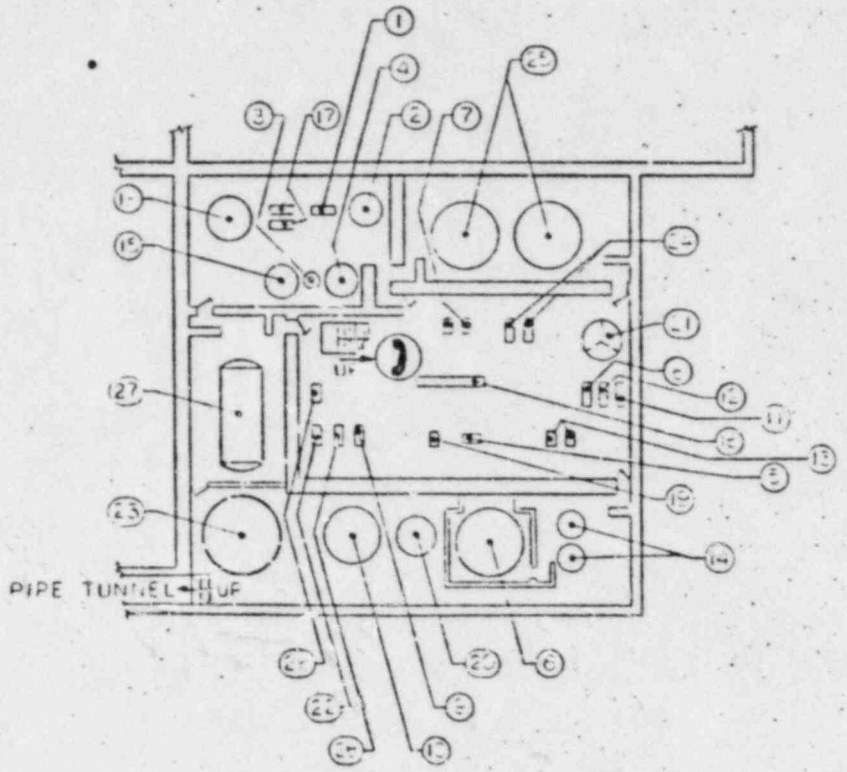
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN HTR BAY & TURB BLDG EL 292' & 300'

TIME: 1415-1452





	EQUIPMENT	ZONE
1	ACID RECOVERY PUMP	C2
2	ACID RECOVERY TANK	C2
3	ANION TANK	B3
4	CATION & RESIN SEP TANK	C3
5	CONCENTRATED WASTE PUMP	C3
6	CONCENTRATED WASTE TANK	C4
7	CONCENTRATOR FEED PUMP(2)	C3
8	EQUIPMENT DRAIN PUMP	D3
9	FLOOR DRAIN COLL PUMP	C3
10	FLOOR DRAIN COLL TANK	C4
11	FLOOR DRAIN PUMP	D3
12	HIGH COND DRAIN PUMP	D3
13	LAUNDRY DRAIN PUMP(2)	C3
14	LAUNDRY DRAIN TANK(2)	C4
15	MIX & STORAGE TANK	B3
16	PANEL MCC 432 & 442	C3
17	RINSE & SLUICE RCVY PUMP(2)	B2
18	RINSE & SLUICE RCVY TANK	B2
19	SPENT RESIN PUMP	C3
20	SPENT RESIN TANK	C4
21	SUMP TANK	D3
22	WASTE COLLECTOR PUMP	C3
23	WASTE COLLECTOR TANK	B4
24	WASTE NEUTRALIZER PUMP(2)	C3
25	WASTE NEUTRALIZER TANK(2)	C2
26	WASTE SLUDGE PUMP	C3
27	WASTE SLUDGE TANK	B3
28	WASTE PURGE PUMP	C3

PAGE SYSTEM HANDSET STATION

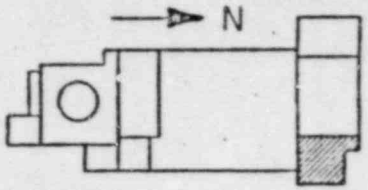
POWER AUTHORITY OF THE STATE OF NEW YORK

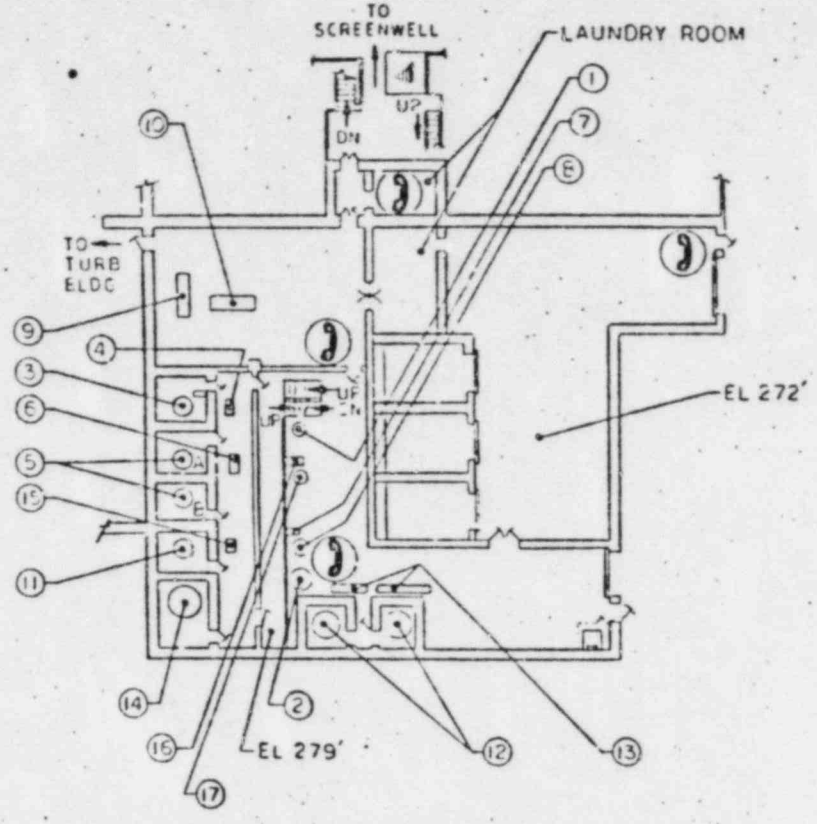
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN RADWASTE

EL 250'

TIME: 1415-1452





	EQUIPMENT	ZONE
1	CATION FLOCCULANT MIXING TK	C3
2	FILTER AID TANK	C4
3	FLOOR DRAIN FILTER	B3
4	FL DRAIN FLT HOLDING PUMP	B3
5	FUEL POOL FILTER DEMIN(2)	B3
6	FUEL POOL FILTER DEMIN HOLDING PUMP	B3
7	FUEL POOL PRECOAT PUMP	C3
8	FUEL POOL PRECOAT TANK	C3
9	SAMPLE PANEL	B3
10	SAMPLE SINK	B3
11	WASTE COLLECTOR FILTER	B3
12	WASTE CONCENTRATOR(2)	C4
13	WASTE CONC CONDENSER(2)	C4
14	WASTE DEMIN	B4
15	WASTE FILTER HOLDING PUMP	B3
16	WASTE PRECOAT PUMP	C3
17	WASTE PRECOAT TANK	C3

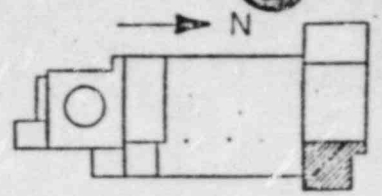
PAGE SYSTEM HANDSET STATION

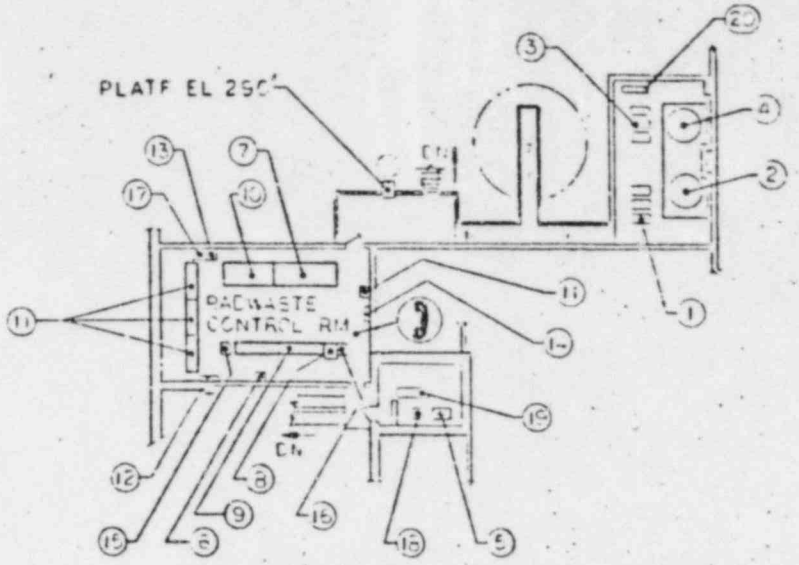
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN RADWASTE EL 272' & 279'

TIME: 1415 - 1452





	EQUIPMENT	ZONE
1	ACID REGEN PUMP(3)	D3
2	ACID STORAGE TANK	D3
3	CAUSTIC REGEN PUMP(3)	D2
4	CAUSTIC STORAGE TANK	D2
5	MICRO CELL HOPPER DISCHARGE CHUTE	C3
6	PANEL,AR-RW	B3
7	PANEL,COND DEMIN	C3
8	PANEL,FUEL POOL	C3
9	PANEL,MCC 433 & 434	B3,C3
10	PANEL,PRE TREAT & MAKEUP	B3
11	PANEL,RADWASTE(4)	B3,C3
12	PANEL,RADWASTE FILTRN	B3
13	PANEL,TFE	B3
14	PANEL,ULTRASONIC LEVEL MEASUREMENT	C3
15	PANEL,ULTRASONIC RESIN CLEANER	S3
16	PANEL,UPFLOW SAND FILTER	C3
17	PANEL,WASTE CONCENTRATOR	B3
18	PORTLAND CEMENT HOPPER DISCHARGE CHUTE	C3
19	THIN FILM EVAPORATOR	C3
20	WATER HEATER	D2

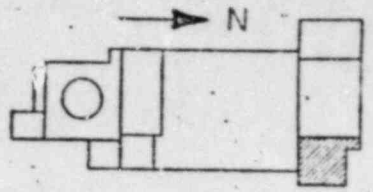
(J) PAGE SYSTEM HANDSET STATION

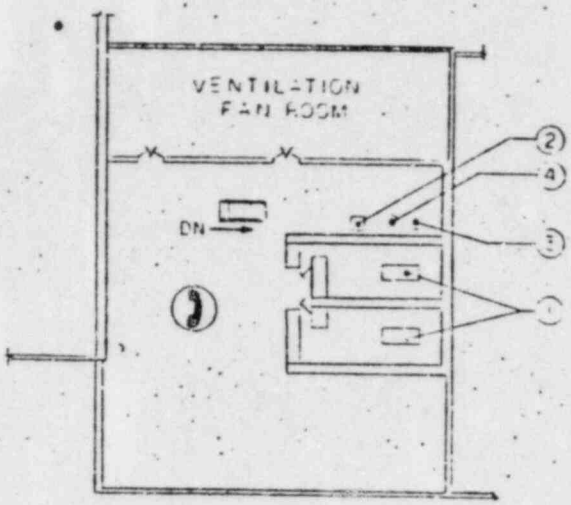
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE & SCRNWELL
EL 284'

TIME: 1415-1452





	EQUIPMENT	ZONE
1	CENTIFUGE(2)	C3
2	DUST COLLECTOR	C3
3	MICRO-CELL HOPPER	C3
4	PORTLAND CEMENT HOPPER	C3

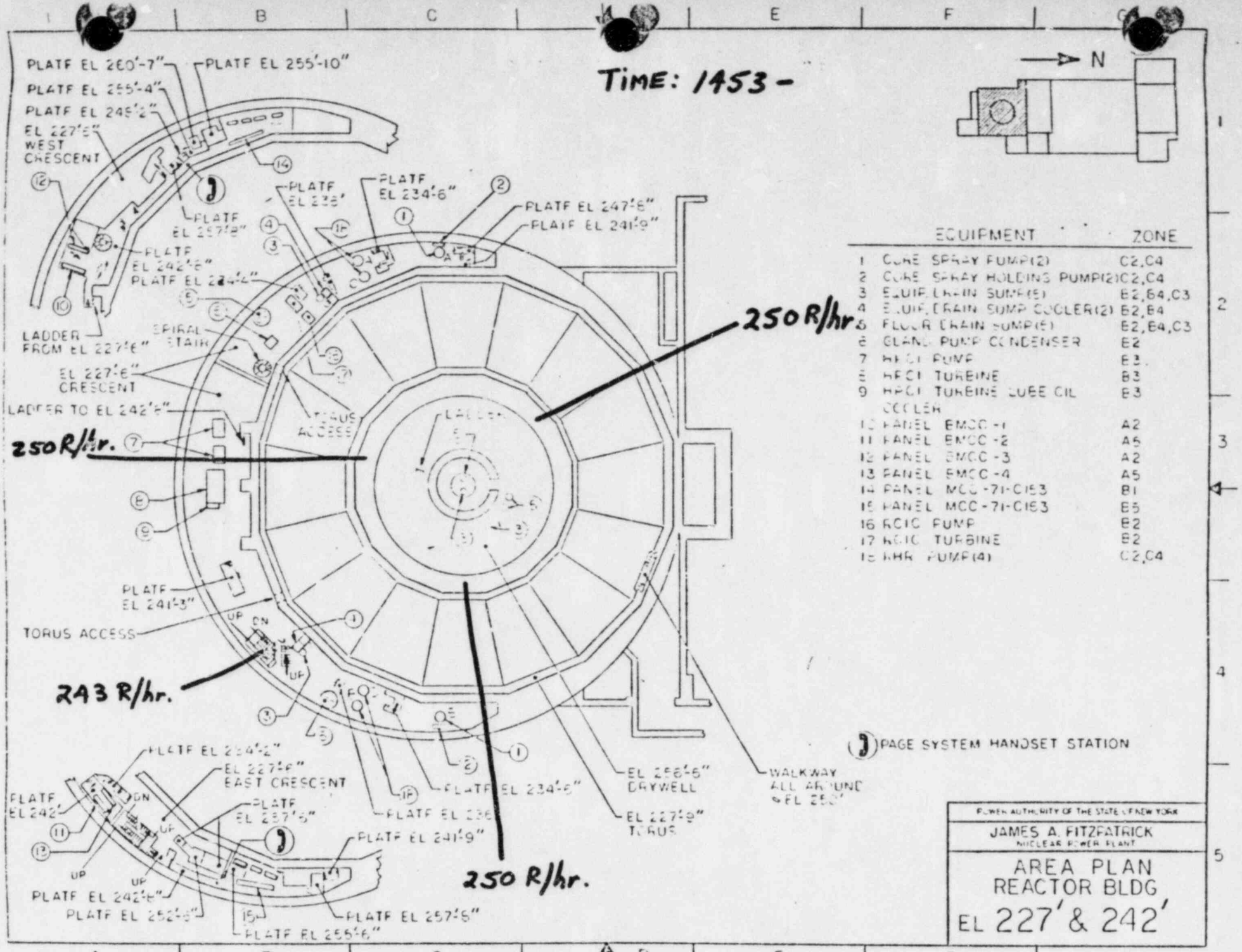
(P) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE

EL 298'



TIME: 1453 -

	EQUIPMENT	ZONE
1	CORE SPRAY PUMP(2)	C2,C4
2	CORE SPRAY HOLDING PUMP(2)	C2,C4
3	EQUIP. DRAIN SUMP(5)	B2,B4,C3
4	EQUIP. DRAIN SUMP COOLER(2)	B2,B4
5	FLOOR DRAIN SUMP(5)	B2,B4,C3
6	GLAND PUMP CONDENSER	B2
7	RHCI PUMP	B3
8	RHCI TURBINE	B3
9	RHCI TURBINE LUBE OIL COOLER	B3
10	PANEL EMCC-1	A2
11	PANEL EMCC-2	A5
12	PANEL EMCC-3	A2
13	PANEL EMCC-4	A5
14	PANEL MCC-71-C183	B1
15	PANEL MCC-71-C183	B5
16	RCIC PUMP	B2
17	RCIC TURBINE	B2
18	RHR PUMP(4)	C2,C4

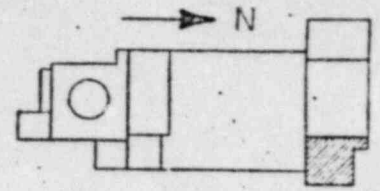
(J) PAGE SYSTEM HANDSET STATION

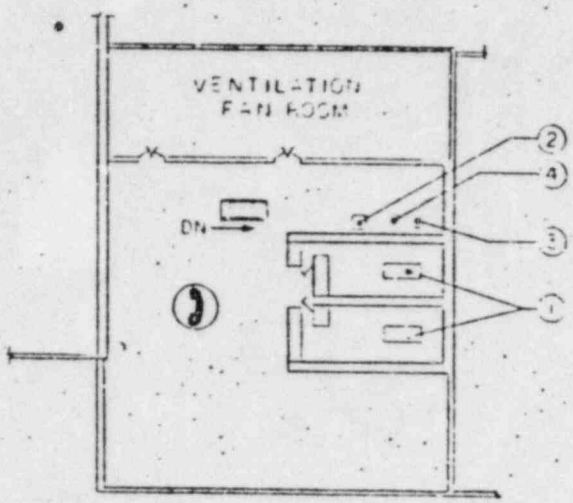
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN REACTOR BLDG EL 227' & 242'

TIME: 1453 –





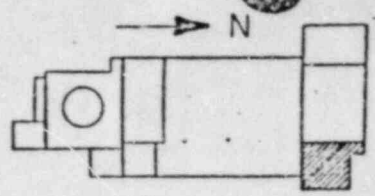
	EQUIPMENT	ZONE
1	CENTIFUGE(2)	C3
2	DUST COLLECTOR	C3
3	MICRO-CELL HOPPER	C3
4	PORTLAND CEMENT HOPPER	C3

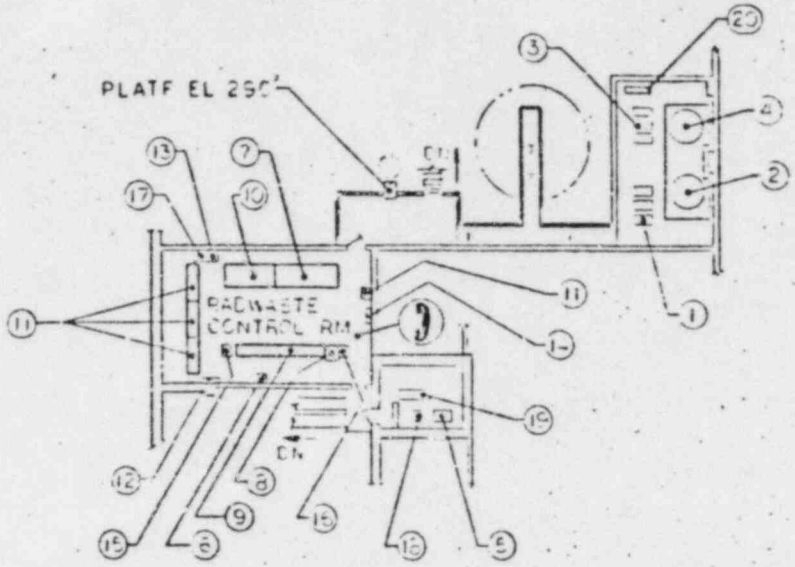
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 298'

Time: 1453 –





	EQUIPMENT	ZONE
1	ACID REGEN PUMP(3)	D3
2	ACID STORAGE TANK	D3
3	CAUSTIC REGEN PUMP(3)	D2
4	CAUSTIC STORAGE TANK	D2
5	MICRO CELL HOPPER DISCHARGE CHUTE	C3
6	PANEL,AR-RW	B3
7	PANEL,COND DEMIN	C3
8	PANEL,FUEL POOL	C3
9	PANEL,MCC 433 & 434	B3,C3
10	PANEL,PRE TREAT & MAKEUP	B3
11	PANEL,RADWASTE(4)	B3,C3
12	PANEL,RADWASTE FILTRN	B3
13	PANEL,TFE	B3
14	PANEL,ULTRASONIC LEVEL MEASUREMENT	C3
15	PANEL,ULTRASONIC RESIN CLEANER	B3
16	PANEL,UPFLOW SAND FILTER	C3
17	PANEL,WASTE CONCENTRATOR	B3
18	PORTLAND CEMENT HOPPER DISCHARGE CHUTE	C3
19	THIN FILM EVAPORATOR	C3
20	WATER HEATER	D2

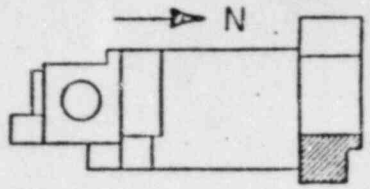
(9) PAGE SYSTEM HANDSET STATION

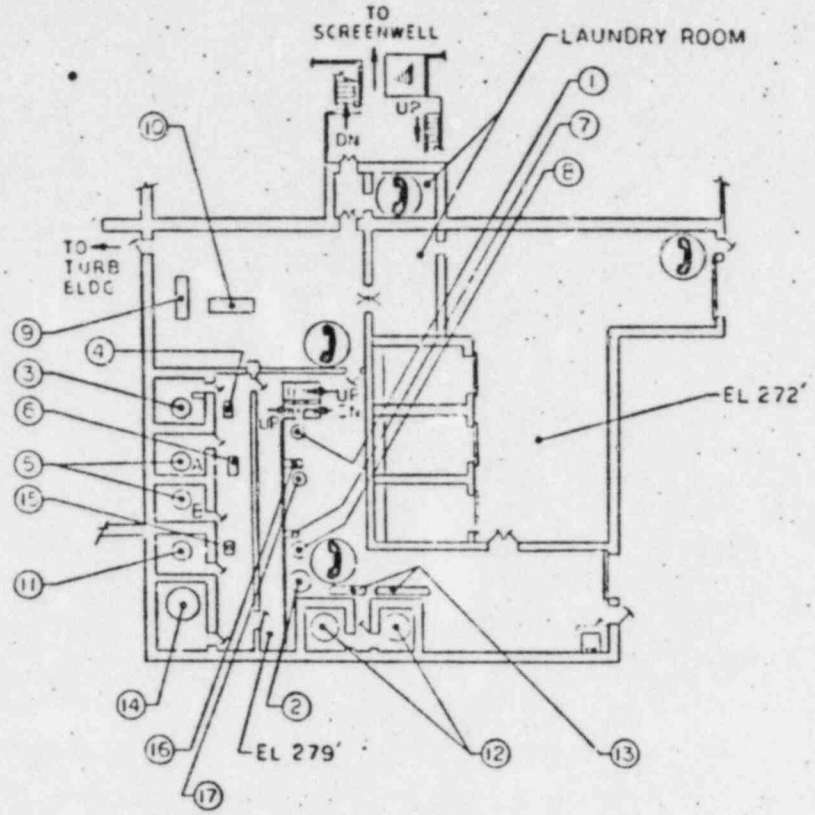
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE & SCRNWELL
EL 284'

TIME: 1453 —





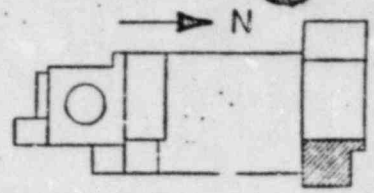
	EQUIPMENT	ZONE
1	CATION FLOCCULANT MIXING TK	C3
2	FILTER AID TANK	C4
3	FLOOR DRAIN FILTER	B3
4	FL DRAIN FLT HOLDING PUMP	B3
5	FUEL POOL FILTER DEMIN(2)	B3
6	FUEL POOL FILTER DEMIN HOLDING PUMP	B3
7	FUEL POOL PRECOAT PUMP	C3
8	FUEL POOL PRECOAT TANK	C3
9	SAMPLE PANEL	B3
10	SAMPLE SINK	B3
11	WASTE COLLECTOR FILTER	B3
12	WASTE CONCENTRATOR(2)	C4
13	WASTE CONC CONDENSER(2)	C4
14	WASTE DEMIN	B4
15	WASTE FILTER HOLDING PUMP	B3
16	WASTE PRECOAT PUMP	C3
17	WASTE PRECOAT TANK	C3

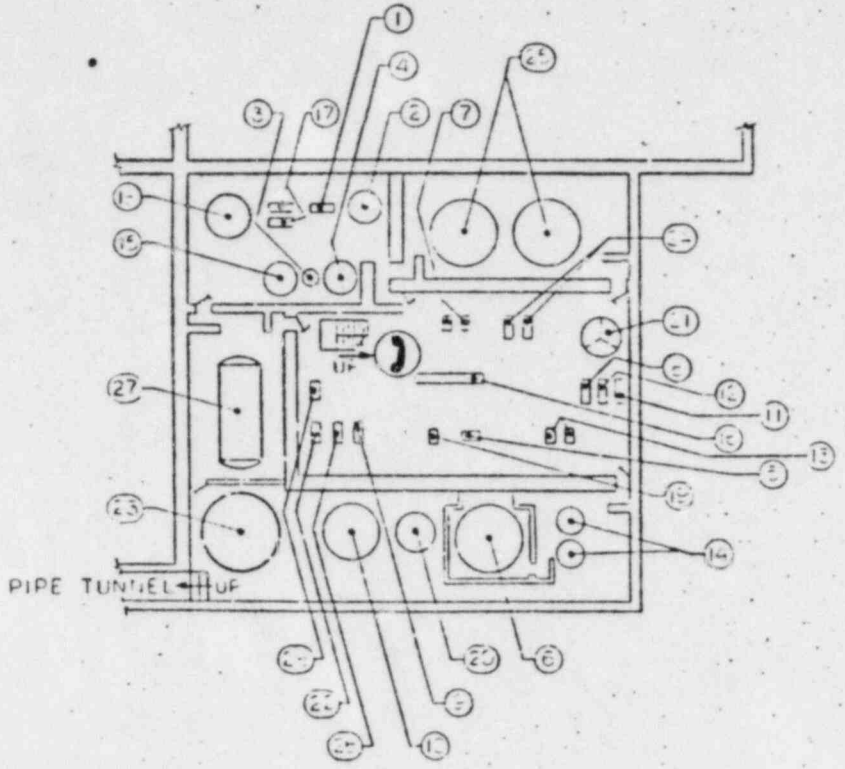
(J) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN RADWASTE EL 272' & 279'

TIME: 1453 -





	EQUIPMENT	ZONE
1	ACID RECOVERY PUMP	C2
2	ACID RECOVERY TANK	C2
3	ANION TANK	B3
4	CATION & RESIN SEP TANK	C3
5	CONCENTRATED WASTE PUMP	C3
6	CONCENTRATED WASTE TANK	C4
7	CONCENTRATOR FEED PUMP(2)	C3
8	EQUIPMENT DRAIN PUMP	D3
9	FLOOR DRAIN COLL PUMP	C3
10	FLOOR DRAIN COLL TANK	C4
11	FLOOR DRAIN PUMP	D3
12	HIGH COND DRAIN PUMP	D3
13	LAUNDRY DRAIN PUMP(2)	C3
14	LAUNDRY DRAIN TANK(2)	C4
15	MIX & STORAGE TANK	B3
16	PANEL MCC 432 & 442	C3
17	RINSE & SLUICE RCVY PUMP(2)	B2
18	RINSE & SLUICE RCVY TANK	B2
19	SPENT RESIN PUMP	C3
20	SPENT RESIN TANK	C4
21	SUMP TANK	D3
22	WASTE COLLECTOR PUMP	C3
23	WASTE COLLECTOR TANK	B4
24	WASTE NEUTRALIZER PUMP(2)	C3
25	WASTE NEUTRALIZER TANK(2)	C2
26	WASTE SLUDGE PUMP	C3
27	WASTE SLUDGE TANK	B3
28	WASTE SURGE PUMP	C3

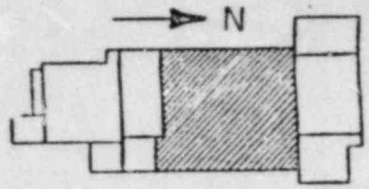
(9) PAGE SYSTEM HANDSET STATION

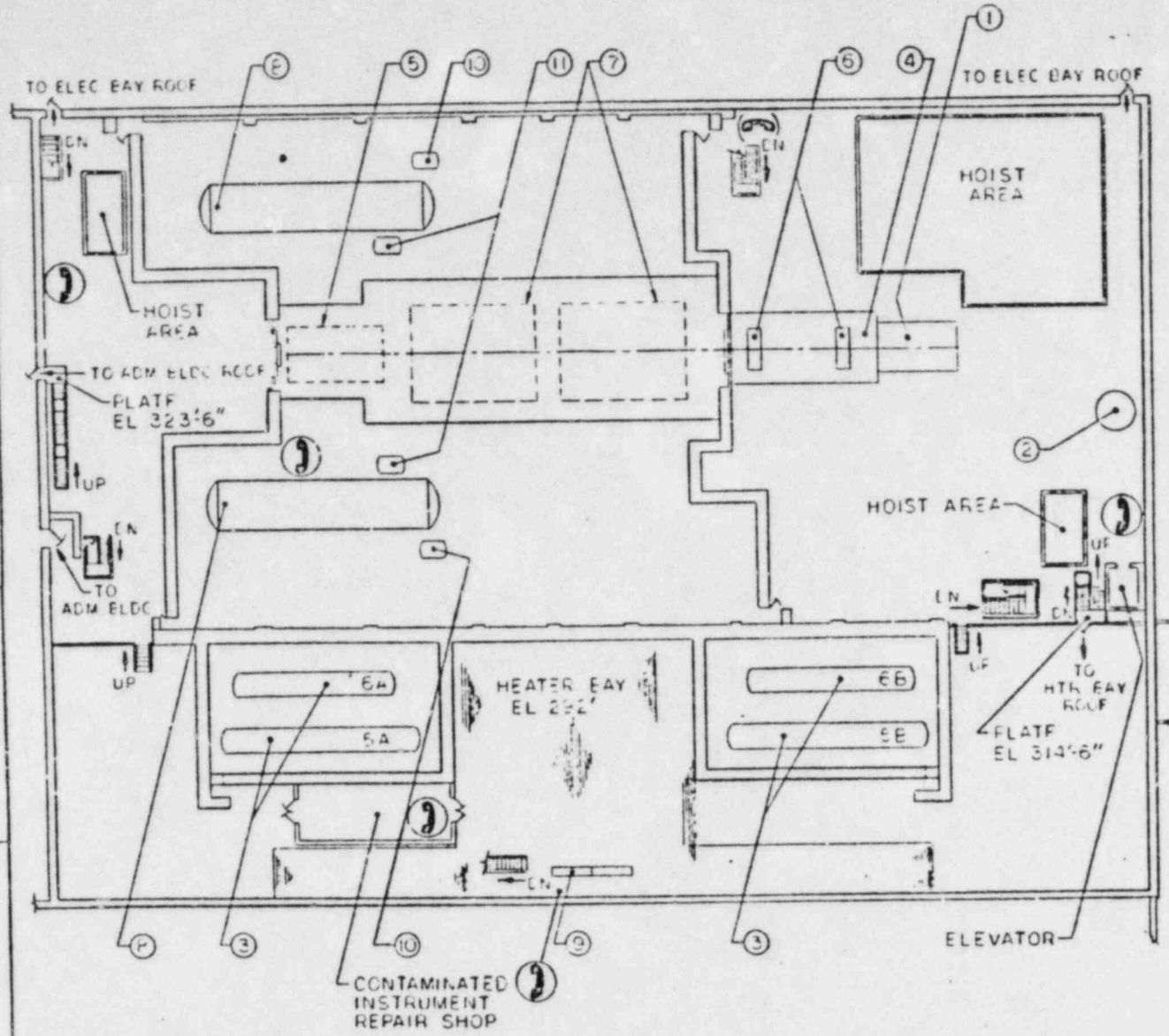
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
RADWASTE
EL 250'

TIME: 1453 —





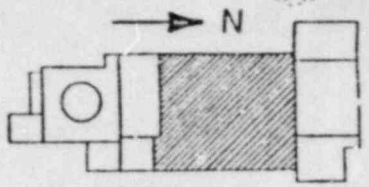
	EQUIPMENT	ZONE
1	ALTERNATOR	D3
2	CLOW MAKEUP & SURGE TANK	E3
3	FEEDWATER HEATER(4)	B4,D4
4	GENERATOR	D3
5	HIGH PRESSURE TURBINE	B3
6	HYDROGEN COOLER(2)	D3
7	LOW PRESSUR TURBINE(2)	B3,C3
E	MOISTURE SEPARATOR REHEATER(2)	B2,B3
9	PANEL, MCC 435 & 445	C5
10	REHEAT DRAIN TK 1ST STAGE(2)	B2,B3
11	REHEAT DRAIN TK 2ND STAGE(2)	B2,B3

PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
HTR BAY & TURB BLDG
EL 292' & 300'

TIME: 1453 -



	EQUIPMENT	ZONE
1	AIR EJECTOR	C2
2	CO_2 UNIT	E1
3	CONDENSER (2)	C3
4	CONTROL PANEL - 71UPP	B2
5	EXCITER SWITCHBOARD	E3
6	FEEDWATER HEATER (6)	B4,D4
7	FLOOR DRAIN SAMPLE TANK (2)	E4
8	FOAM UNIT	D1
9	GEN. NEUT. TRANSF. AND RES.	D3
10	GLAND STEAM EXHAUSTER	C2
11	MOISTURE SEPARATOR DRAIN TK. (2)	B2,3
12	PANEL MCC C251	C1
13	PANEL MCC C252	C1
14	PANEL MCC C261	C2
15	PANEL MCC C262	C2
16	PANEL MCC C331	C1
17	PANEL MCC C341	C2
18	PANEL MCC C434	D3
19	PANEL MCC C444	D3
20	REBOILER	D4
21	RPS MG SET (2)	A1,2
22	Rx FEED PUMP TURB. EXHAUST (2)	C3
23	SWITCHGEAR, 600 V. (4)	C1,2
24	SWITCHGEAR, 4160 V (5)	B1,2,C1
25	TURBINE BY-PASS STEAM CHEST	A2
26	TURBINE LUBE OIL TANK	A3
27	UNINTERRUPTABLE MG SET-71UPS-1	B2
28	VACUUM PRIMING PUMP (2)	D3
29	VACUUM TANK	D3
30	WASTE SAMPLE TANK	E5

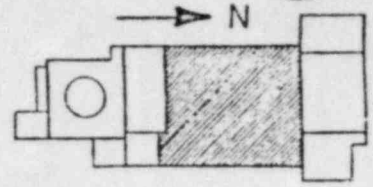
PAGE SYSTEM HANDSET STATION

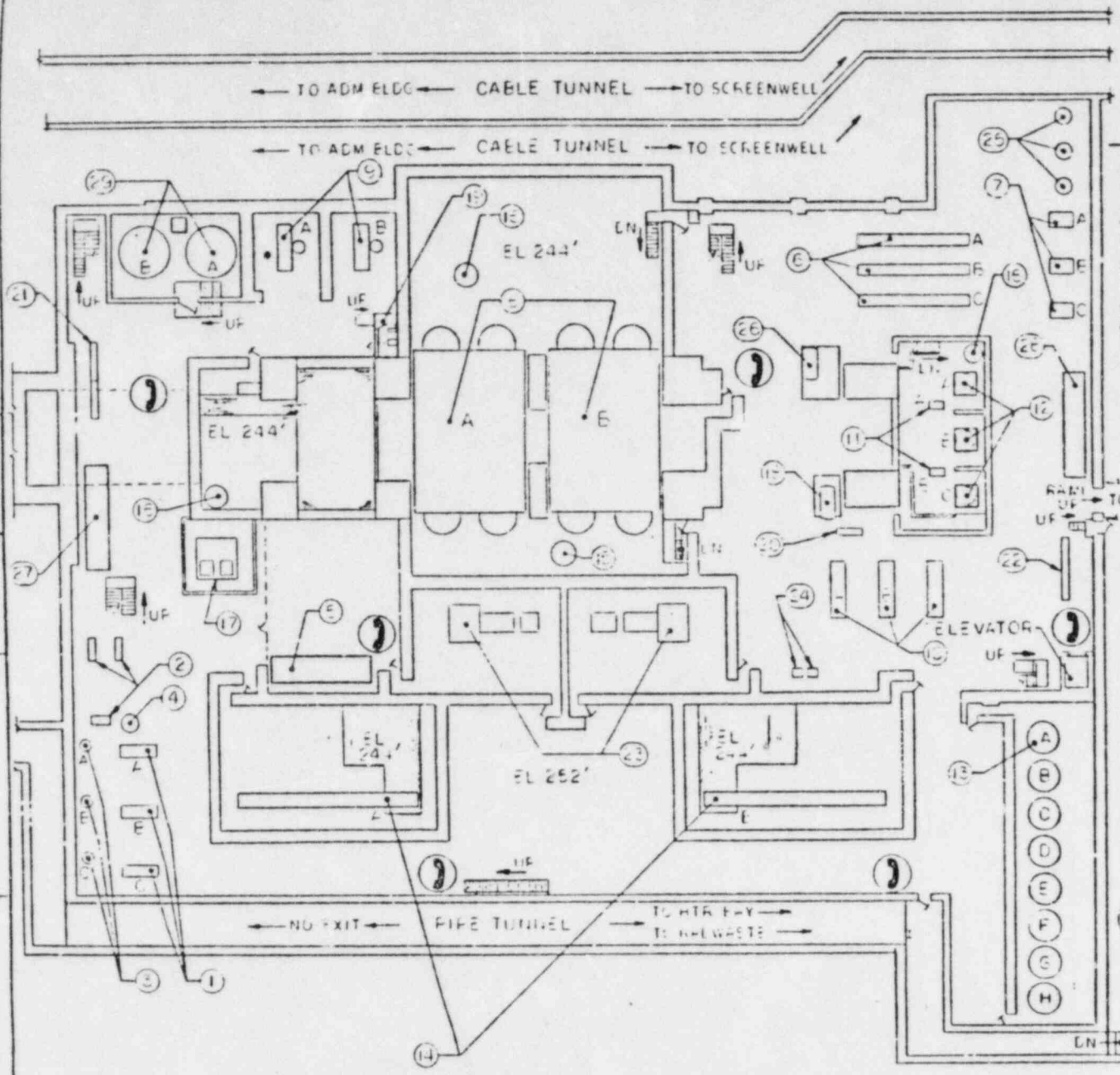
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
TURB BLDG., HTR. BAY, ELEC BAY
EL 272'

TIME: 1453 -





	EQUIPMENT	ZONE
1	AIR COMPRESSORS(3)	A4
2	AIR DRYERS(3)	A3,A4
3	AIR RECEIVERS(3)	A4
4	BREATHING AIR REC TANK	A4
5	CARBOX UNIT, TCN	B4
6	CLCW HEAT EXCHANGERS(3)	D2,E2
7	CLCW PUMPS(3)	E2
8	CONDENSERS(2)	C2,C3
9	COND AIR REMOVAL PUMPS(2)	B2
10	COND BOOSTER PUMPS(3)	D2,D3
11	COND SAMPLE PUMPS(2)	E2,E3
12	CONDENSATE PUMPS(3)	E2,E3
13	DEMINERALIZERS(6)	E4,E5
14	DRAIN COOLERS(2)	E4,D4
15	EQUIP DRAIN SUMP	C3
16	FLOOR DRAIN SUMPS(3)	A3,C2,E3
17	HYD FLUID PWR UNIT	A3
18	HYDROGEN SEAL OIL UNIT	D3
19	OFF GAS SAMPLE EQUIP	B2
20	PANEL, H_2 & STATOR H_2O	D3
21	PANEL, MCC 71-C231 & 71-C241	A2
22	PANEL, MCC 71-C431 & 71-C441	E3
23	R_x FEED PUMPS(2)	C3
24	R_x FEED PUMP SEAL WATER COOLER	D4
25	SERVICE WATER PUMP STR	E1,E2
26	STATOR WINDING LIQUID COOLING UNIT	D2
27	SWGR, EGCV, 71-L23/24	A3
28	SWGR, EGCV, 71-L43/44	E2
29	TURBINE LUBE OIL TANKS(2)	A2

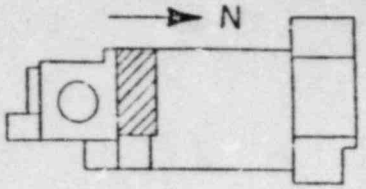
(9) PAGE SYSTEM HANDSET STATION

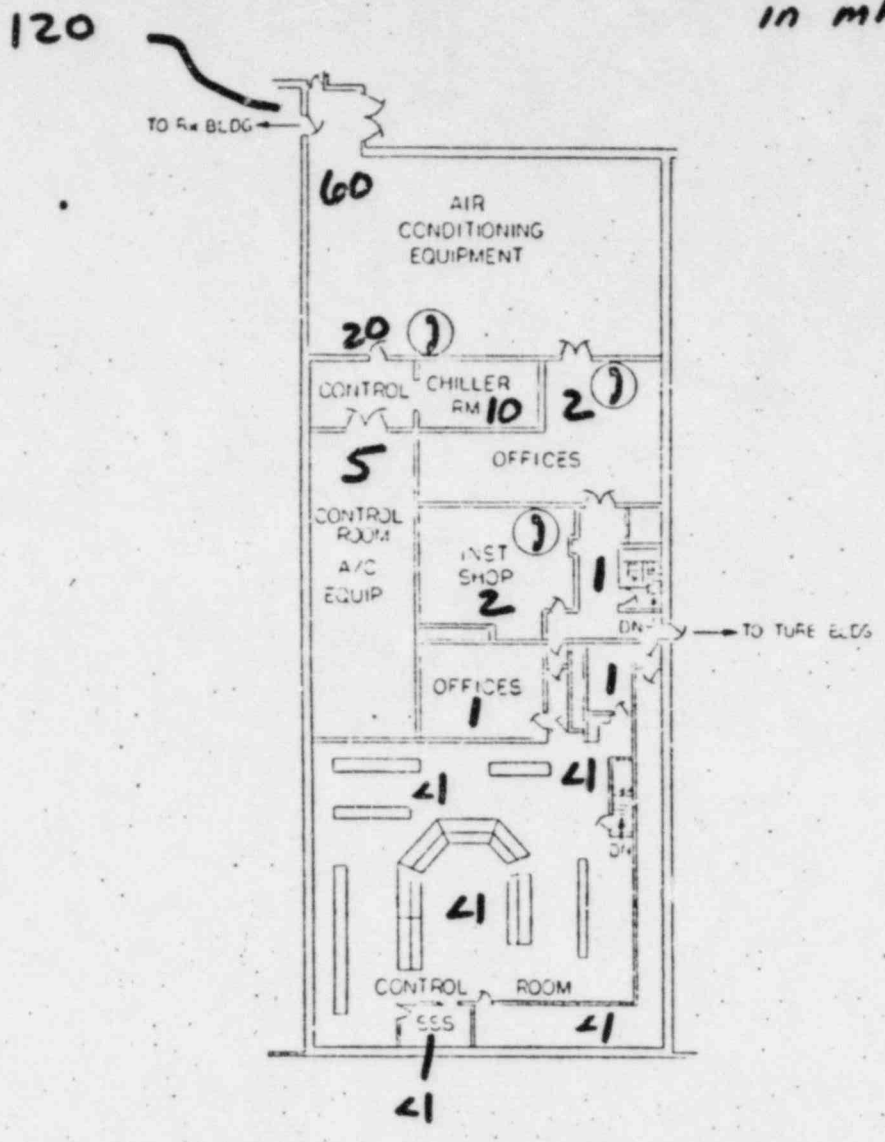
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN TURB BLDG & HTR BAY EL 244' & 252'

TIME: 1453 —
(All readings on this page are in mR/hr.)





EQUIPMENT ZONE

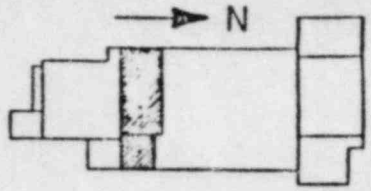
PAGE SYSTEM HANDSET STATION

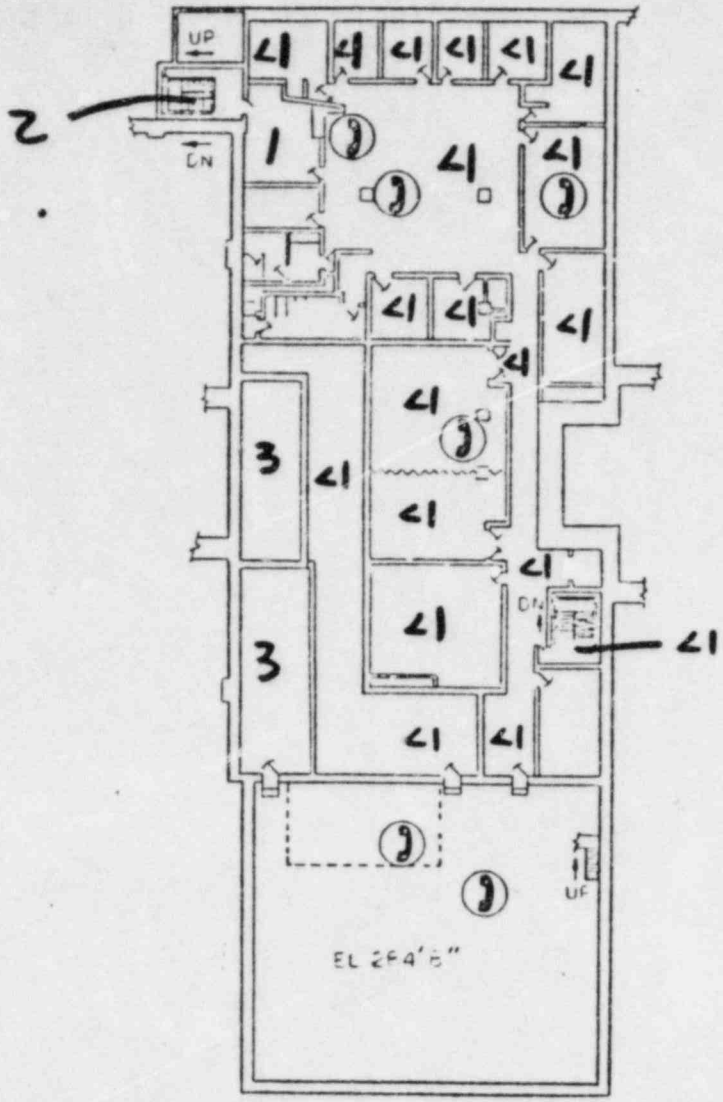
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN ADMINISTRATION BLDG.

EL 300'

TIME: 1953 –
(All readings on this page are in mR/hr.)





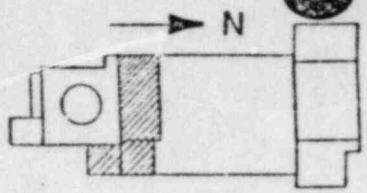
EQUIPMENT ZONE

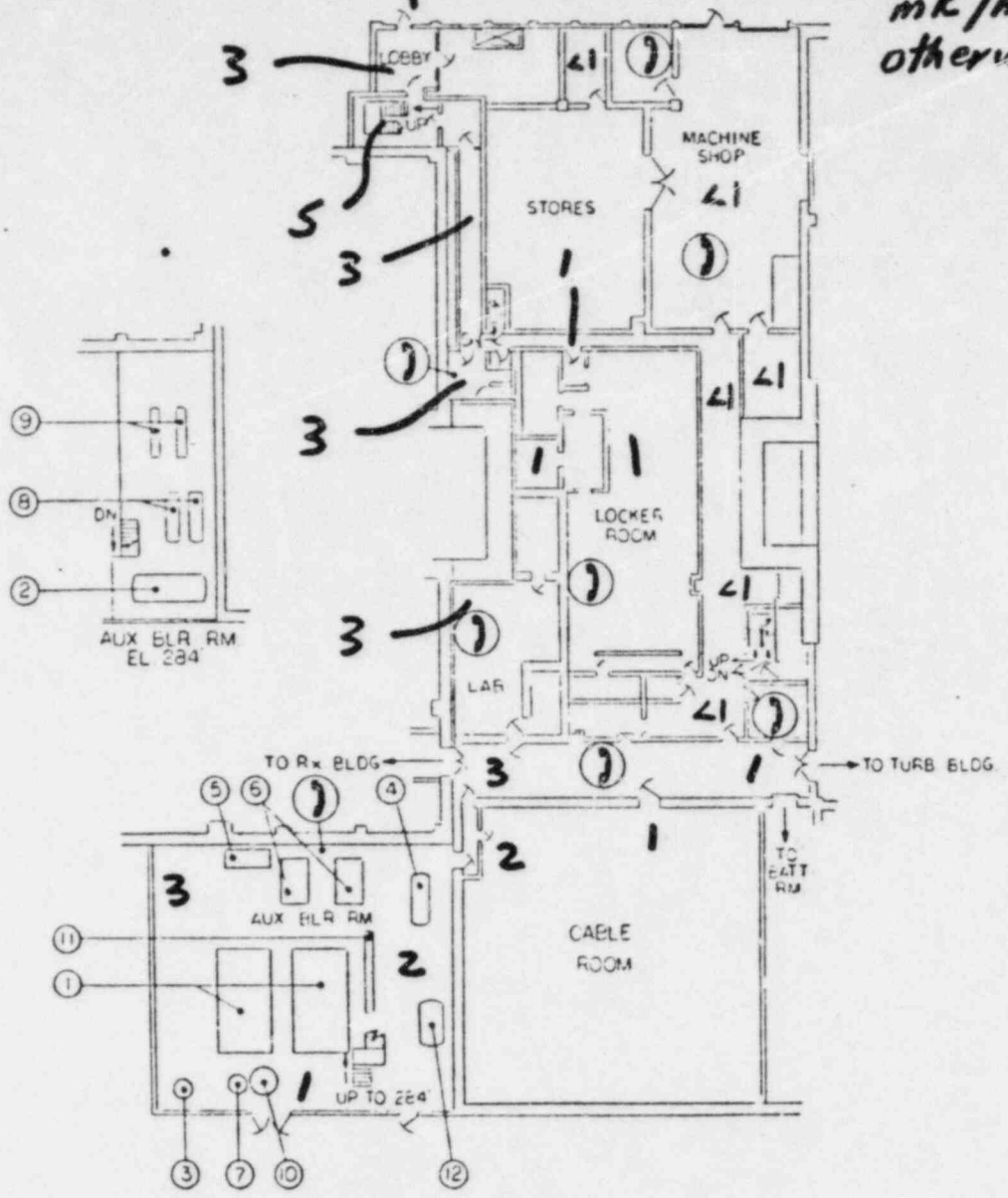
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL. 284' & 286'

TIME: 1453 –
(All readings on this page are in mR/hr. unless otherwise noted.)





	EQUIPMENT	ZONE
1	AUXILIARY BOILER (2)	E3
2	AUXILIARY DEAERATOR	B3
3	BLOWDOWN TANK	E5
4	CONDENSATE TANK	C4
5	DOMESTIC HOT WATER TANK	B4
6	DUST COLLECTOR (2)	B4
7	GLYCOL EXP TANK	B5
8	GLYCOL-WTR HT EXCHANGER (2)	B3
9	HI TEMP HOT WTR HT EXCH. (2)	B2
10	HOT WATER EXP TANK	E5
11	PANEL MCC C232, C242	C4
12	TRANSFER TANK	C5

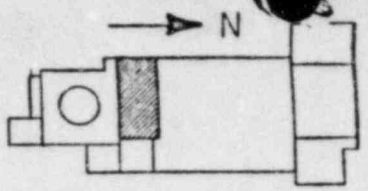
PAGE SYSTEM HANDSET STATION

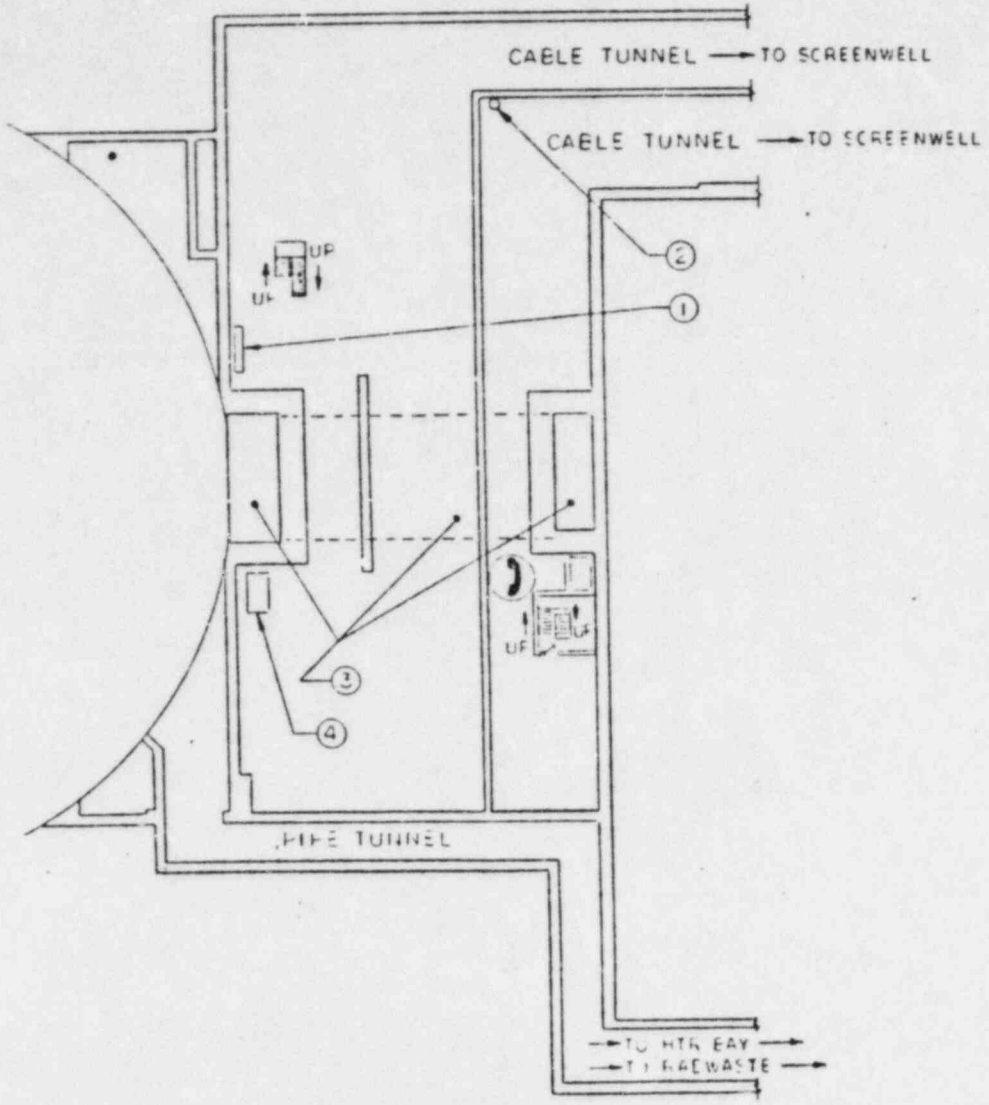
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN ADMINISTRATION BLDG., AUX BLR RM.

EL 272'

TIME: 1453 -





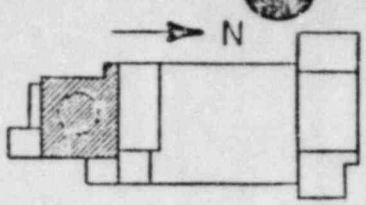
	EQUIPMENT	ZONE
1	DELUGE STATION	B2
2	FLOOR DRAIN SUMP	C2
3	MAIN STEAM TUNNEL	C4
4	SHOWER WASTE TANK	E3

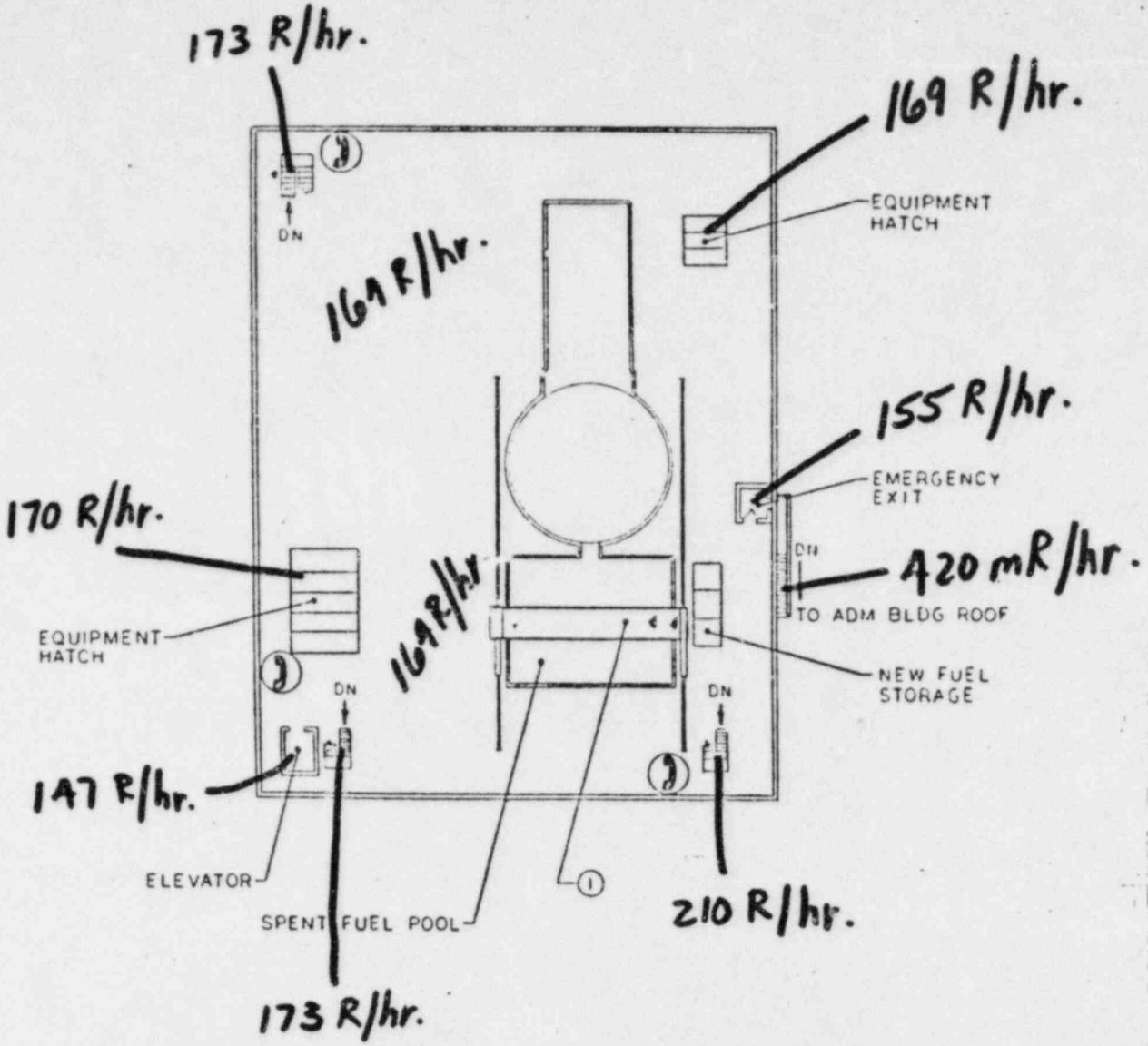
(☎) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
ADMINISTRATION BLDG
EL 260'

TIME: 1453 –





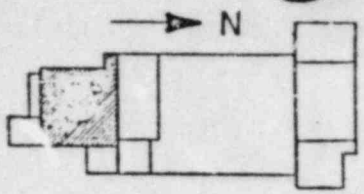
EQUIPMENT		ZONE
1	REFUELING PLATFORM	C4

PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 369'

TIME: 1453 -



182 R/hr.

180 R/hr.

180 R/hr.

181 R/hr.

450 mR/hr.

450 mR/hr.

450 mR/hr.

148 R/hr.

180 R/hr.

180 R/hr.

	EQUIPMENT	ZONE
1	CLEAN UP FILTER DEMIN(2)	C4
2	FILTER UNIT	C2
3	INVERTER(2)	B3, C2
4	SKIMMER SURGE TANK(2)	C4

OPEN HATCH

BATTERY ROOM "A"

BATTERY ROOM "B"

OPEN HATCH

ELEVATOR

SPENT FUEL POOL

UP DN

UP DN

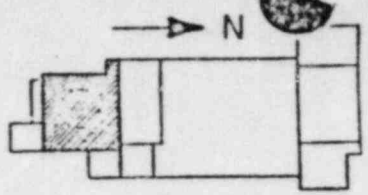
(9) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 344'

TIME : 1453 —



186 R/hr. 180 R/hr. 55 R/hr.

46 R/hr.

182 R/hr

107 mR/hr.

185 R/hr.

33 R/hr.

11 R/hr.

6 R/hr.

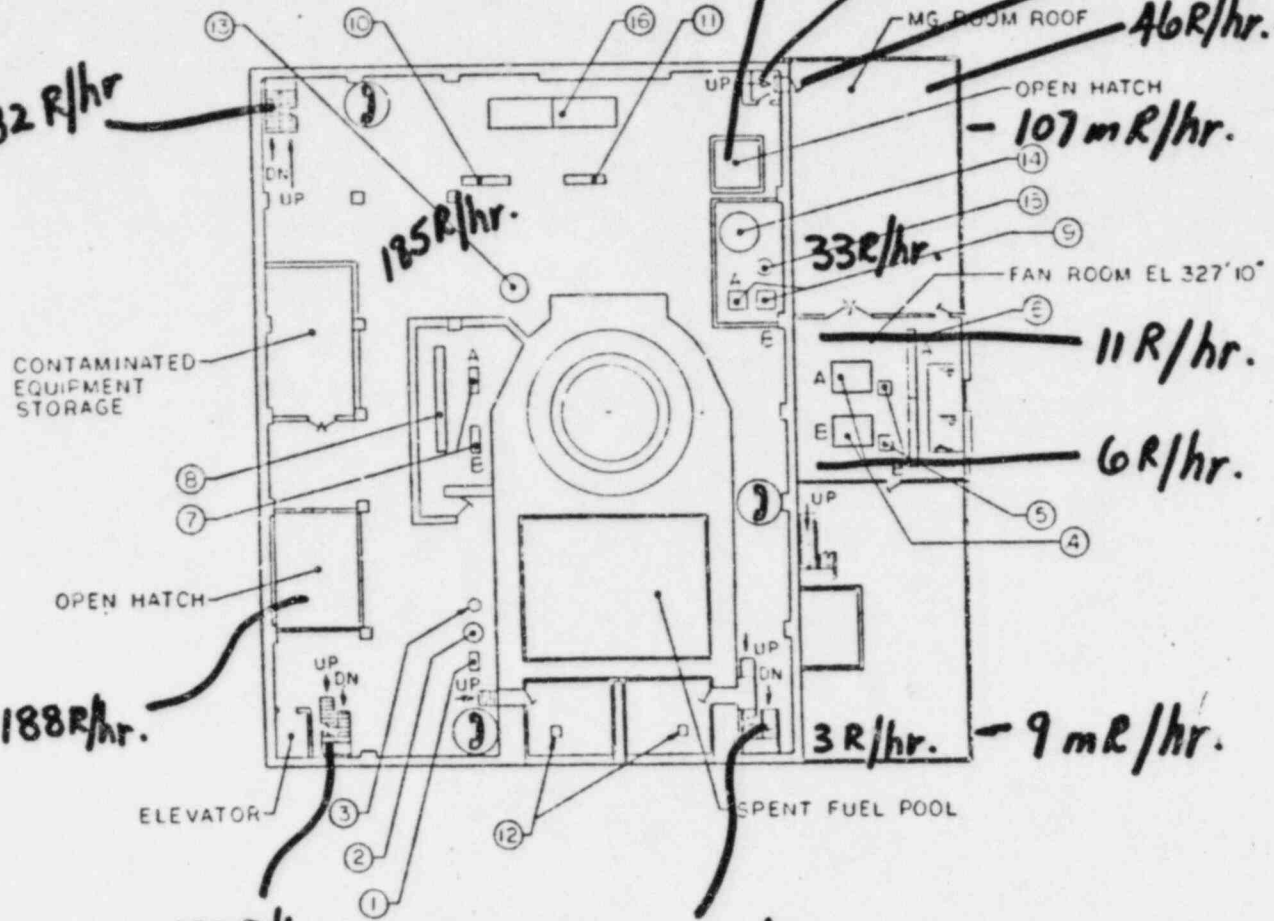
188 R/hr.

3 R/hr.

9 mR/hr.

183 R/hr.

182 R/hr.



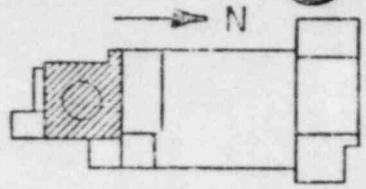
	EQUIPMENT	ZONE
1	CLEAN-UP PRECOAT PUMP	B4
2	CLEAN-UP PRECOAT TANK	B4
3	CLEAN-UP RESIN-FEED TANK	B4
4	FAN(2)	D3
5	FAN MOTOR(2)	D3
6	FILTER(2)	D3
7	FUEL POOL CLEAN UP RECIRC PUMP(2)	B3
8	FUEL POOL HEAT EXCH(2)	B3
9	LIQUID POISON PUMP(2)	C3,D3
10	PANEL, MCC 71-C131	C2
11	PANEL, MCC 71-C141	C2
12	RWCU HOLDING PUMP(2)	C4
13	REACTOR BLDG COOLING WATER MAKEUP TANK	C3
14	STANDBY LIQUID CONTROL TK	C2
15	STANDBY LIQUID CONTROL TEST TANK	D3
16	SWGR, 600V 71 L13/14	C2

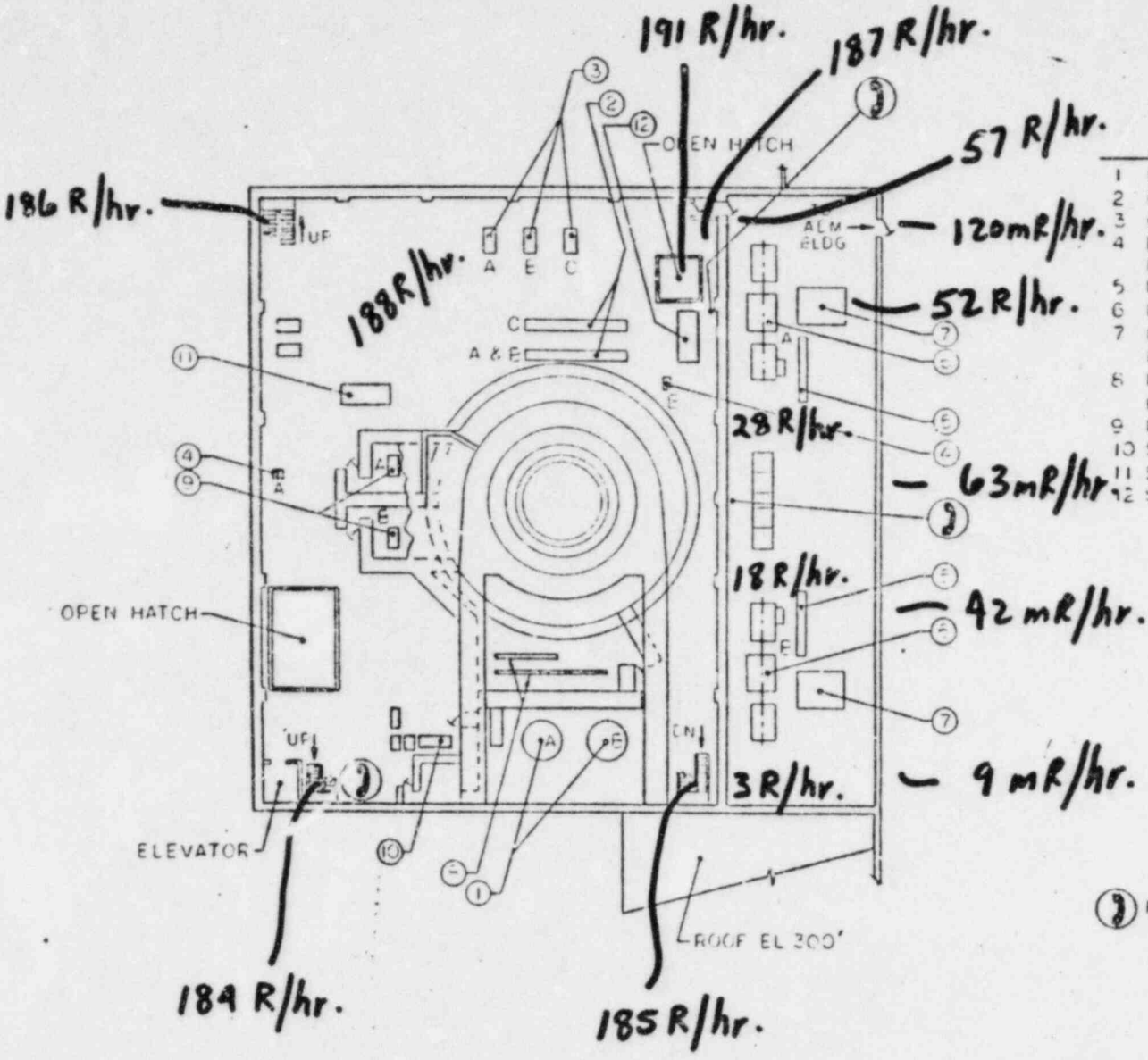
PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 326'

Time: 1953 -





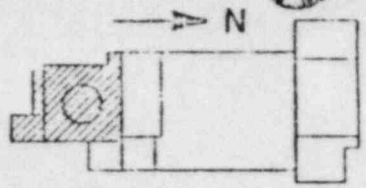
	EQUIPMENT	ZONE
1	CLEANUP PHASE SEP. TANK(2)	C4
2	CLCW HEAT EXCHANGER(3)	C2
3	CLCW PUMP(3)	C2
4	DRYWELL INERTING SAMPLE PUMP(2)	B3,D3
5	MG FLUID COOLER(2)	D2,D3
6	MG FLUID DRIVE(2)	D2,D3,D4
7	MG FLUID DRIVE LUBE OIL PUMP ASSY(2)	D2,D4
8	RWCU NON-REGENERATIVE HEAT EXCHANGER(2)	C4
9	RWCU PUMP(2)	C3
10	SAMPLE STATION NO.1	C4
11	SWGR,600V,71-L15	B3
12	SWGR,600V,71-L16	D2

(2) PAGE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG
EL 300'

Time: 1453 –



194 R/hr.

229 R/hr.

214 R/hr.

249 R/hr.

231 R/hr.

513 R/hr.

225 R/hr.

249 R/hr.

244 R/hr.

249 R/hr.

194 R/hr.

	EQUIPMENT	ZONE
1	ACCESS HATCH TO TORUS (5)	C2,3,D2,4,E2
2	CONDENSATE TRANSFER PUMP (2)	E2
3	COOLING COILS & BLOWERS (2)	D3
4	CRD HYD CONTROL UNITS	D2,4
5	CRD WATER PUMP (2)	E2
6	EQUIPMENT HATCH TO TORUS	C2
7	LADDER TO EL 255'6"	D3
8	LADDER TO EL 292'0"	D3
9	LIQUID NITROGEN TANK (2)	B2,3
10	PANEL EMCC-6	E4
11	PANEL MCC C132, C151	C3
12	PANEL MCC C133	E3
13	PANEL MCC C142, C161	C3
14	PANEL MCC C143, C162	E4
15	PANEL MCC C152	E2
16	PANEL MCC C164	E4
17	RECIRC. PUMP (2)	D3
18	RHR HEAT EXCHANGER (2)	C2,4
19	STANDBY GAS TREATMENT FILTER TRAIN (2)	B4

(3) PACE SYSTEM HANDSET STATION

POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AREA PLAN
REACTOR BLDG.
EL 272'

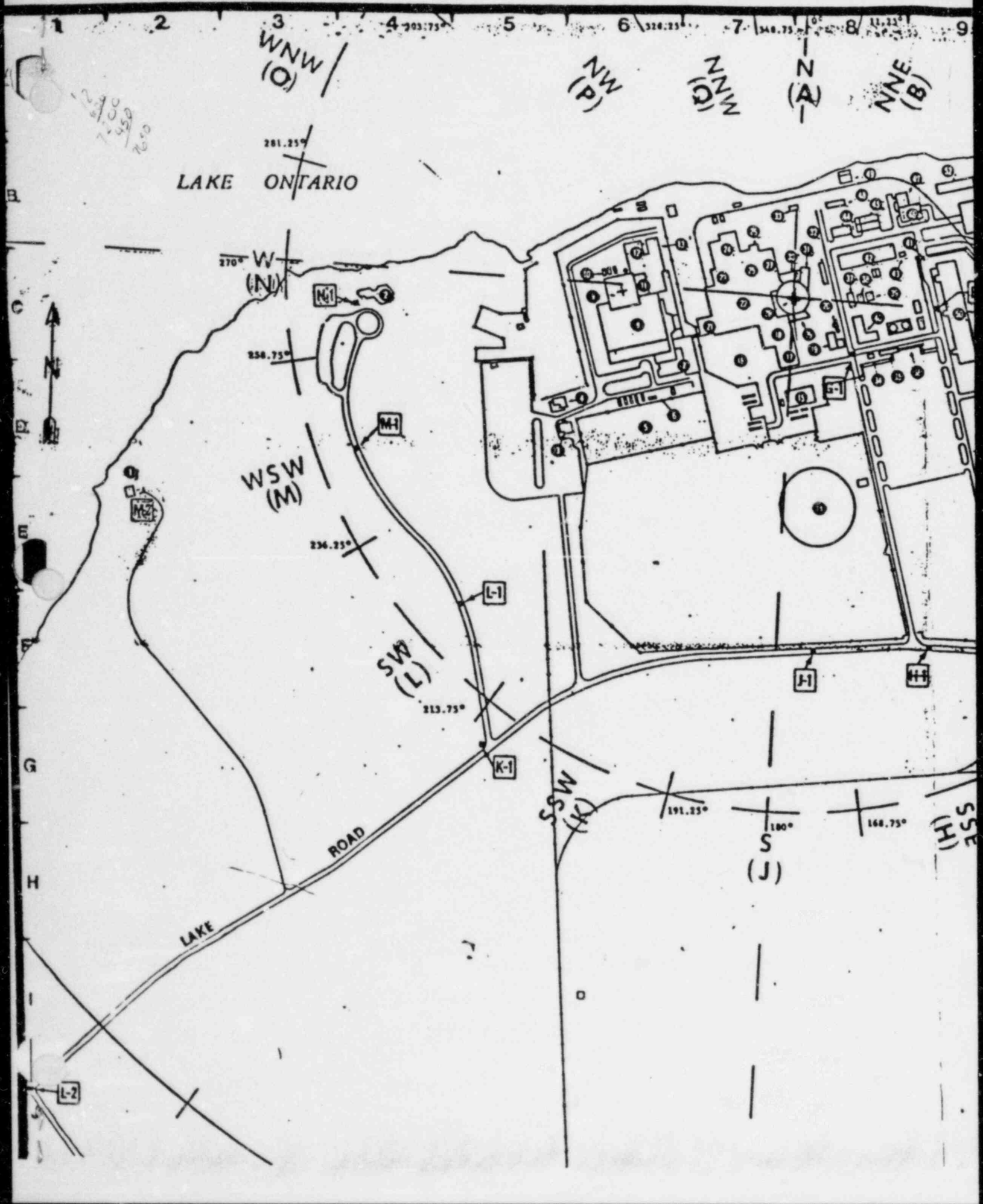
1984 NRC Observed Exercise
July 18, 1984

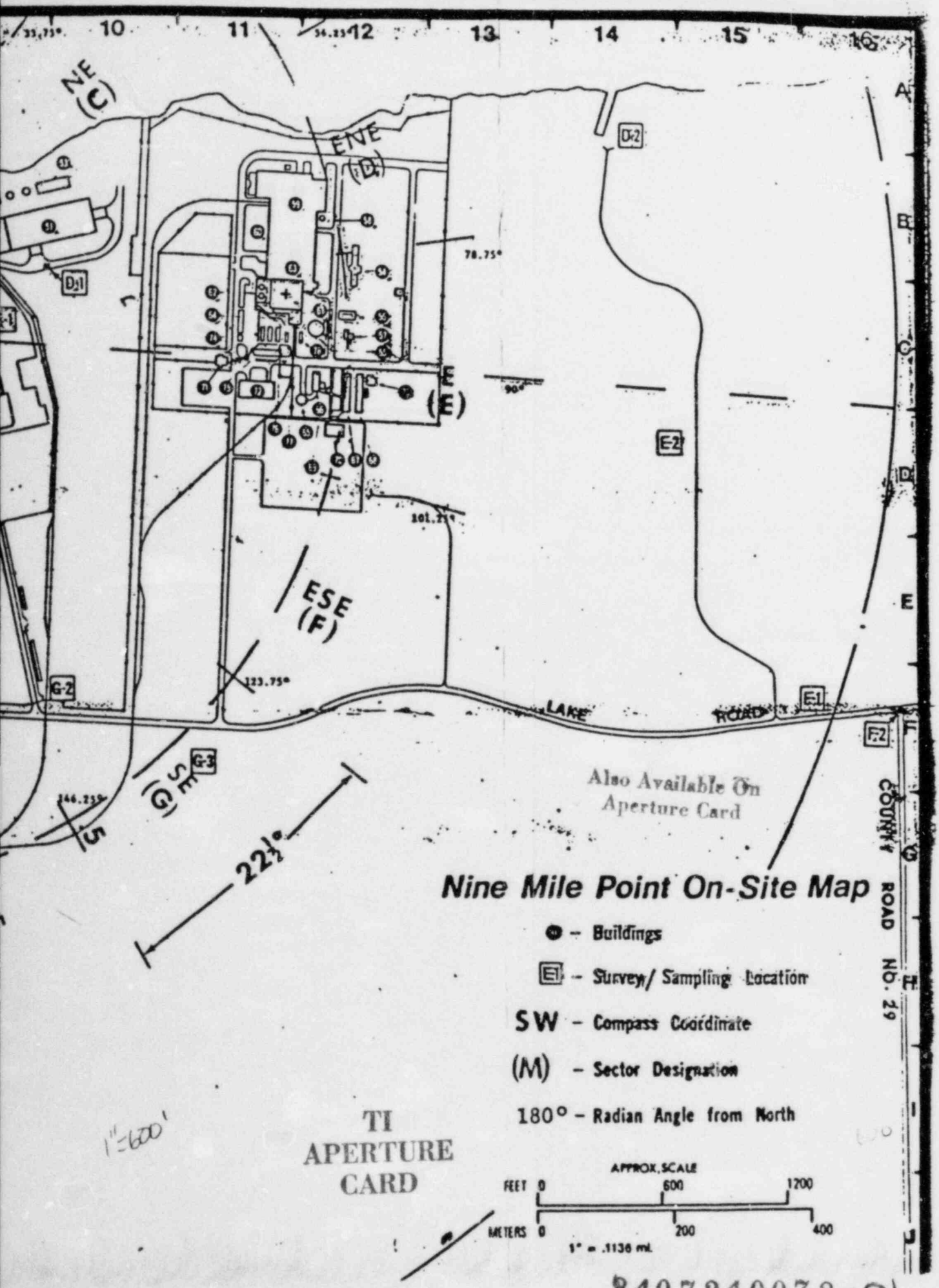
James A. FitzPatrick Nuclear Power Plant

ONSITE RADIOLOGICAL PLOTTING MAPS

1. Nine Mile Point Onsite Map; Key to Fixed Survey Points (With verbal description of numbered map points)

2. Site Map Sectored with Degrees and Miles


LAKE ONTARIO
WNW (O)
NW (P)
NNW (G)
N (A)
NNE (B)
W (N)
WSW (M)
SW (L)
SSW (K)
S (J)
SSE (H)
281.25°
270°
236.75°
236.25°
213.75°
191.25°
180°
168.75°
N-1
M-1
M-2
L-1
K-1
J-1
H-1
L-2
ROAD
LAKE



1"=600'

TI APERTURE CARD

8407240078-01

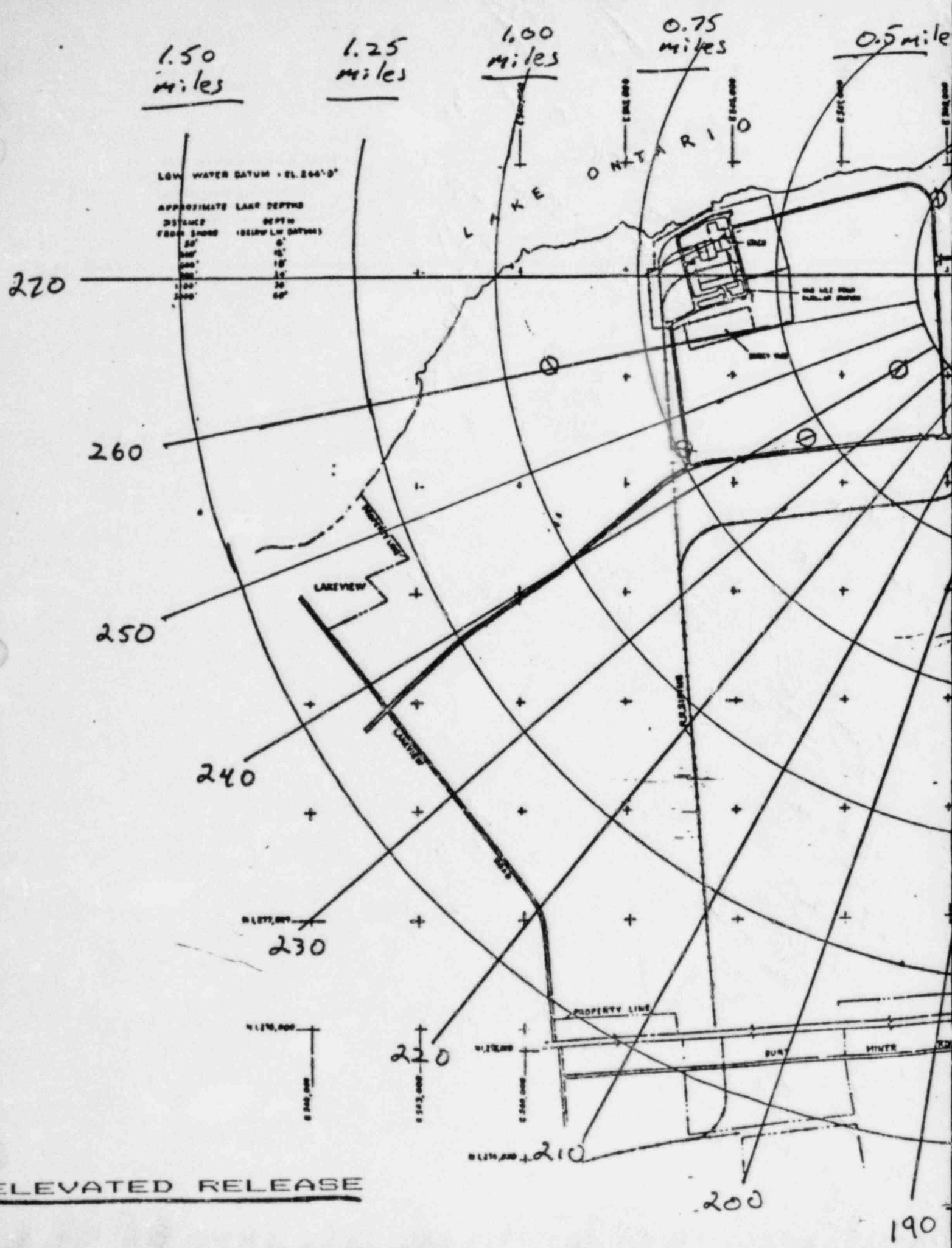
ONSITE MAP INDEX

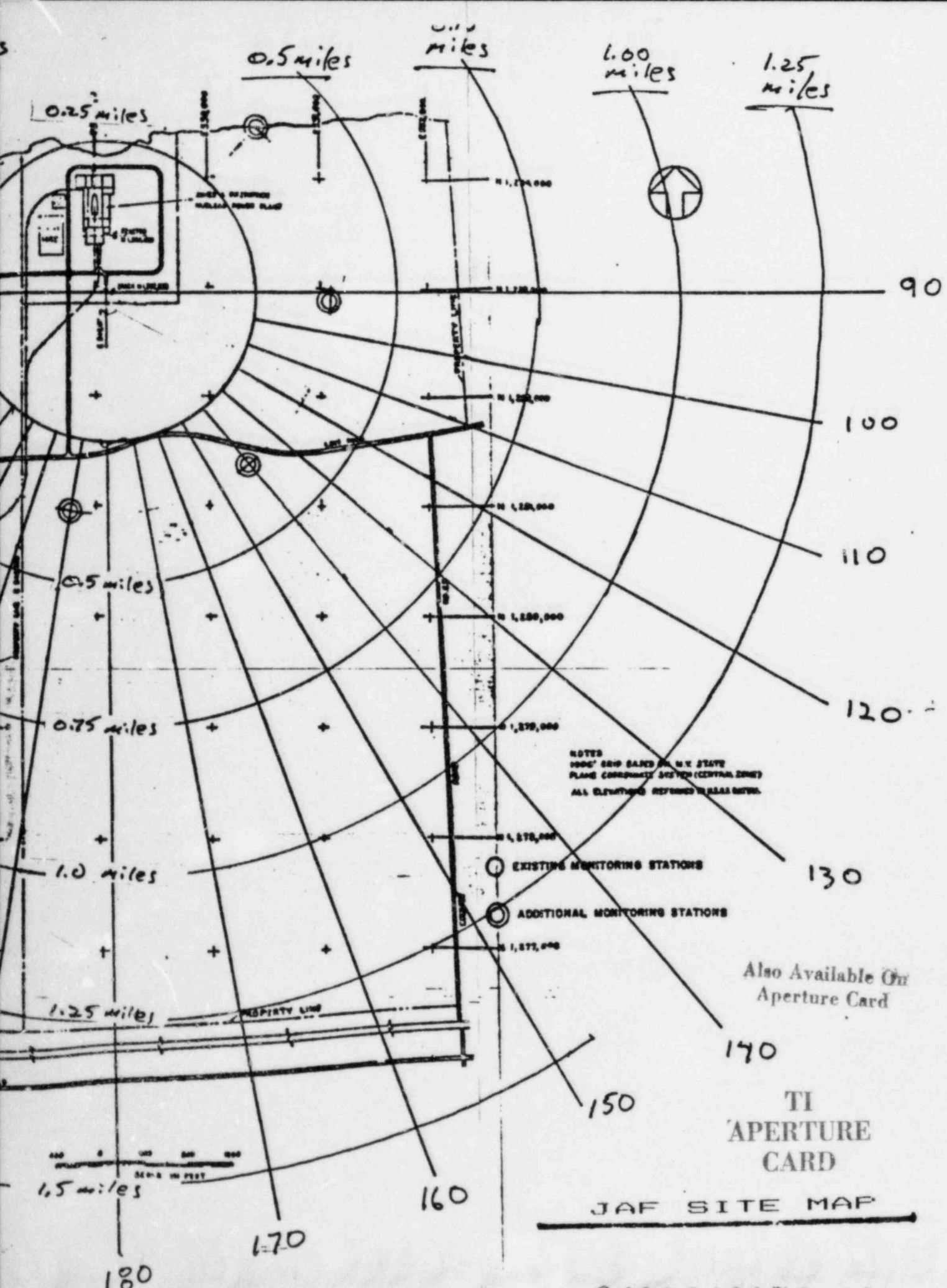
NUMERICAL LISTING

1. Meteorological Tower
2. Energy Information Center/EOF
3. Unit 1 - Old Security Building
4. Unit 1 - New Security Building
5. Unit 1 - Switch Yard
6. Unit 1 - South Trailers
7. Unit 1 - Administration Building
8. Unit 1 - Turbine Building
9. Unit 1 - Reactor Building
10. Unit 1 - North Trailers
11. Unit 1 - Condensate Storage
12. Unit 1 - Screen House
13. Unit 1 - Rad Waste Storage
14. Unit 2 - Cooling Tower
15. Unit 2 - Area 1 and 2 Offices
16. Unit 2 - Switch Yard
17. Unit 2 - Diesel Generating Building
18. Unit 2 - Control Building
19. Unit 2 - Fitter's Fab Shop
20. Unit 2 - Cadweld Trailers
21. Unit 2 - Service Building
22. Unit 2 - Turbine Building
23. Unit 2 - Offgas Building
24. Unit 2 - Screenwell
25. Unit 2 - Radwaste Building
26. Unit 2 - Auxiliary Boiler Building
27. Unit 2 - Condensate Storage Building
28. Unit 2 - Reactor Building
29. Unit 2 - South Auxiliary Bay
30. Unit 2 - North Auxiliary Bay
31. Unit 2 - Track Bay
32. Unit 2 - Tool Shed
33. Unit 2 - Compressor Building
34. Unit 2 - Training Center
35. Unit 2 - Time Office & Security Bldg.
36. Unit 2 - Time Alley
37. Unit 2 - Sanitary Structure
38. Unit 2 - Carpenter's Saw House
39. Unit 2 - Riggers Loft
40. Unit 2 - SMS Fab Shop/Field Offices and Shops
41. Unit 2 - Guard House
42. Unit 2 - Construction Change House
43. Unit 2 - Ice House
44. Unit 2 - Electrical Shop
45. Unit 2 - Maintenance Shop and Fuel Station
46. Unit 2 - Pipe Fab Shop
47. Unit 2 - NDT Lab
48. Unit 2 - Electrical Bulk Storage
49. Unit 2 - Rebar Fab Shop
50. Unit 2 - Combined Construction Offices
51. Unit 2 - Warehouse
52. Unit 2 - Pipe Bending and Hanger Storage
53. Unit 2 - Paint Shop
54. JAFNPP Maintenance Shop
55. JAFNPP Oil Storage Tank
56. JAFNPP Project Services Building NYO Staff
57. JAFNPP Accounting/Personnel Building
58. JAFNPP Radioactive Waste Area
59. JAFNPP Turbine Building
60. JAFNPP Transformer Yard
61. JAFNPP Reactor Building
62. JAFNPP Condensate Storage Tanks
63. JAFNPP Administration Building
64. JAFNPP Track Bay/Nitrogen Storage Building
65. JAFNPP Vent Stack
66. JAFNPP Valve Shed/Toilet Facility
67. JAFNPP Document Control Center Building
68. JAFNPP Training Building
69. JAFNPP Environmental Lab/Dosimetry Building
70. JAFNPP Secondary Access Control Point
71. JAFNPP Primary Access Control Point
72. JAFNPP Warehouse
73. JAFNPP Fabrication Shop Building
74. JAFNPP Trailer
75. JAFNPP Technical Services Trailer
76. JAFNPP Technical Services Trailer
77. JAFNPP NRC Trailer
78. JAFNPP Instrument and Control

ONSITE RADIOLOGICAL PLOTTING MAPS

2. Site Map Sectored with Degrees and Miles


1.50 miles
1.25 miles
1.00 miles
0.75 miles
0.5 mile
LAKE ONTARIO
LOW WATER DATUM = EL. 246'-0"
APPROXIMATE LAKE DEPTHS
DISTANCE FROM SHORE
DEPTH (BELOW LW DATUM)
220
260
250
240
230
220
210
200
190
LAKEVIEW
PROPERTY LINE
ELEVATED RELEASE



Also Available On
Aperture Card

TI
APERTURE
CARD

JAF SITE MAP

8407240078-02

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

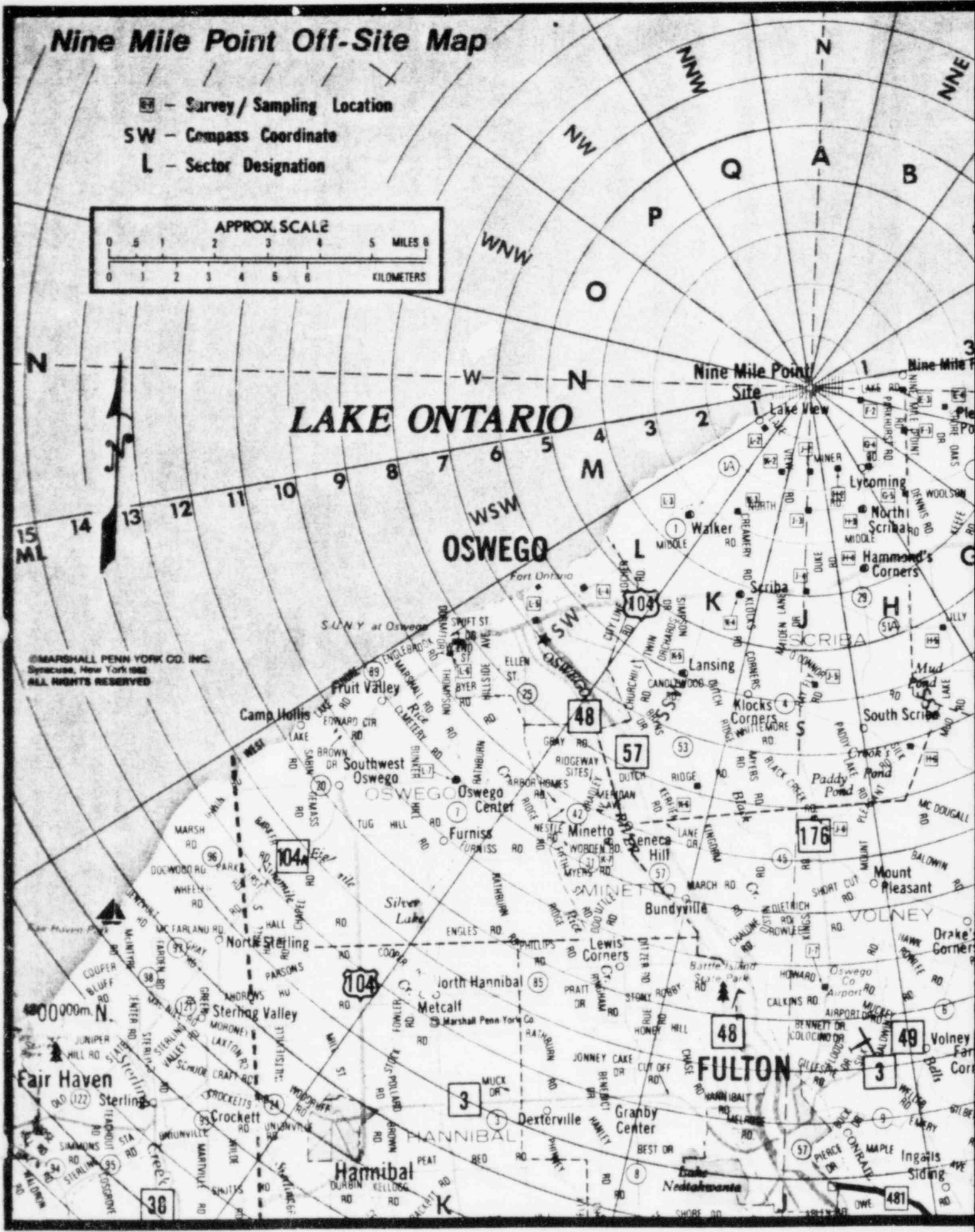
OFFSITE RADIOLOGICAL PLOTTING MAPS

1. Nine Mile Point Offsite Map; Key to Fixed Survey Points (1 Part)

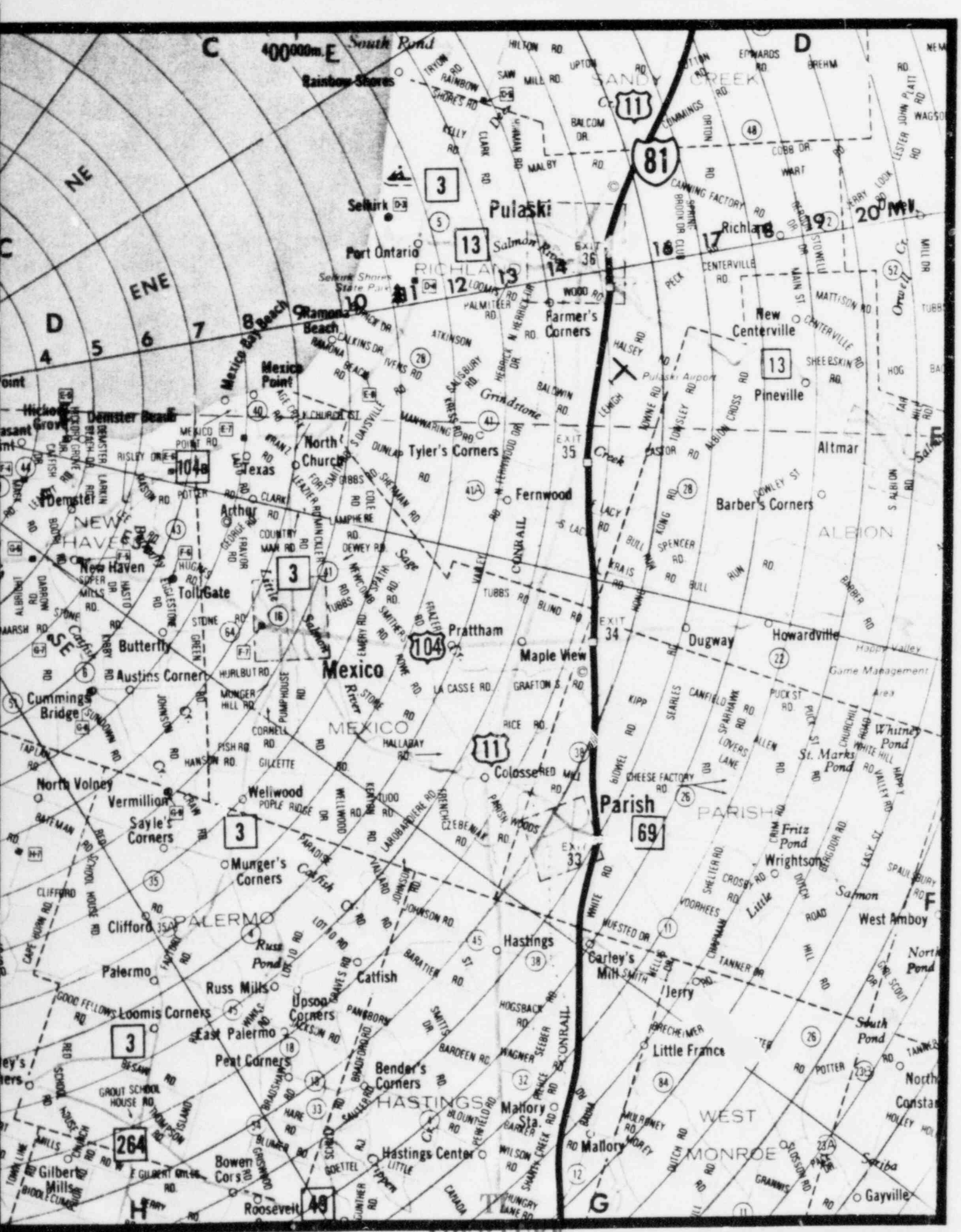
2. Oswego County Map Sectored; Degrees and Miles (5 Parts)

OFFSITE RADIOLOGICAL PLOTTING MAPS

1. Nine Mile Point Offsite Map; Key to Fixed Survey Points (1 Part)

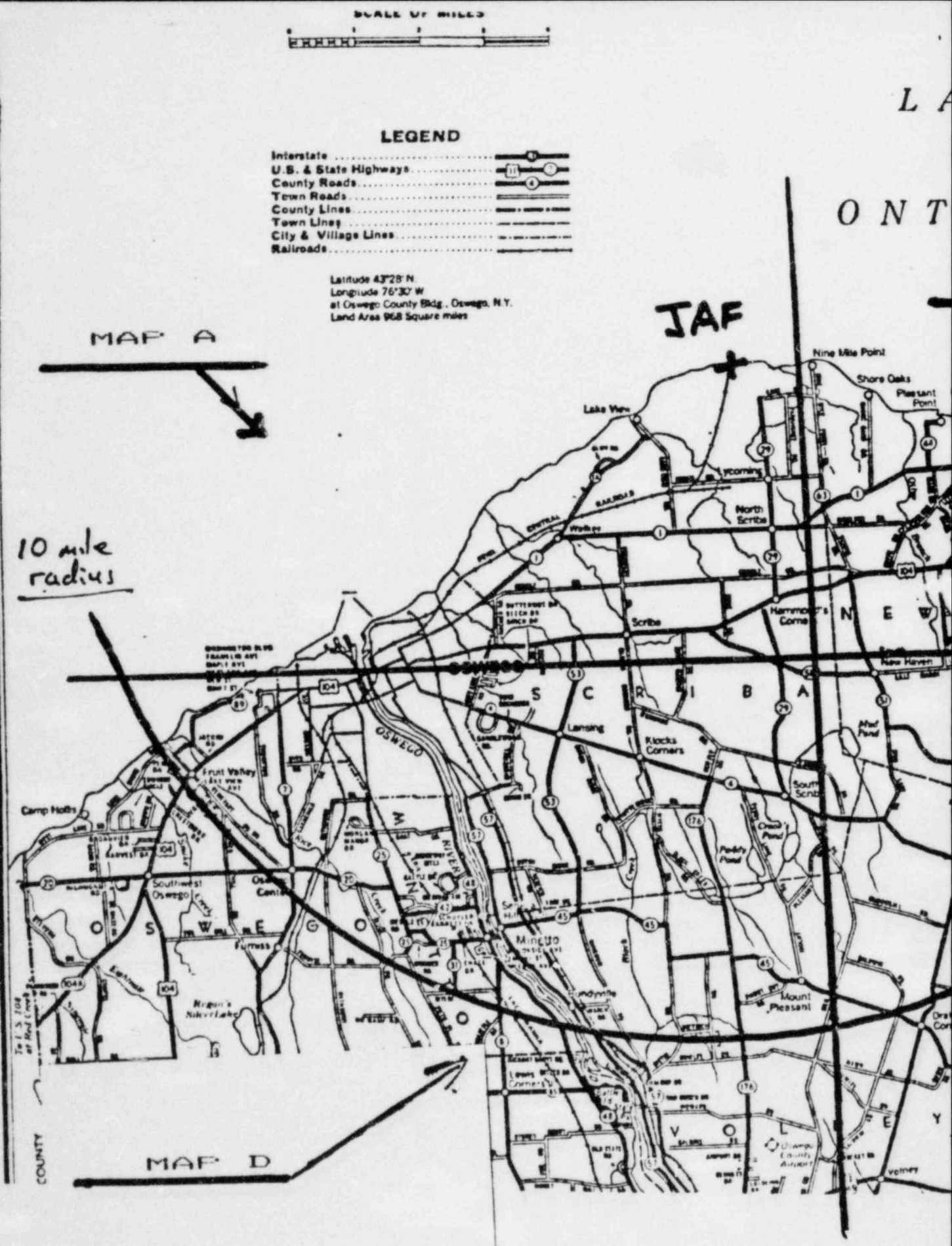


Also Available On



OFFSITE RADIOLOGICAL PLOTTING MAPS

2. Oswego County Map Sectored; Degrees and Miles (5 Parts)


SCALE OF MILES
LEGEND
Interstate
U.S. & State Highways
County Roads
Town Roads
County Lines
Town Lines
City & Village Lines
Railroads
Latitude 43°28' N
Longitude 76°30' W
at Oswego County Bldg., Oswego, N.Y.
Land Area 968 Square miles
JAF
MAP A
10 mile radius
MAP D
COUNTY
OSWEGO
SCRIBA
Nine Mile Point
Shore Oaks
Pleasant Point
Lake View
Lycoming
North Scriba
Scriba
Hannes Corners
New Haven
Lansing
Klocks Corners
Fruit Valley
Camp Hollis
Southwest Oswego
Minetto
Mount Pleasant
Volney

MAP KEY

ONSITE: USE SITE MAP

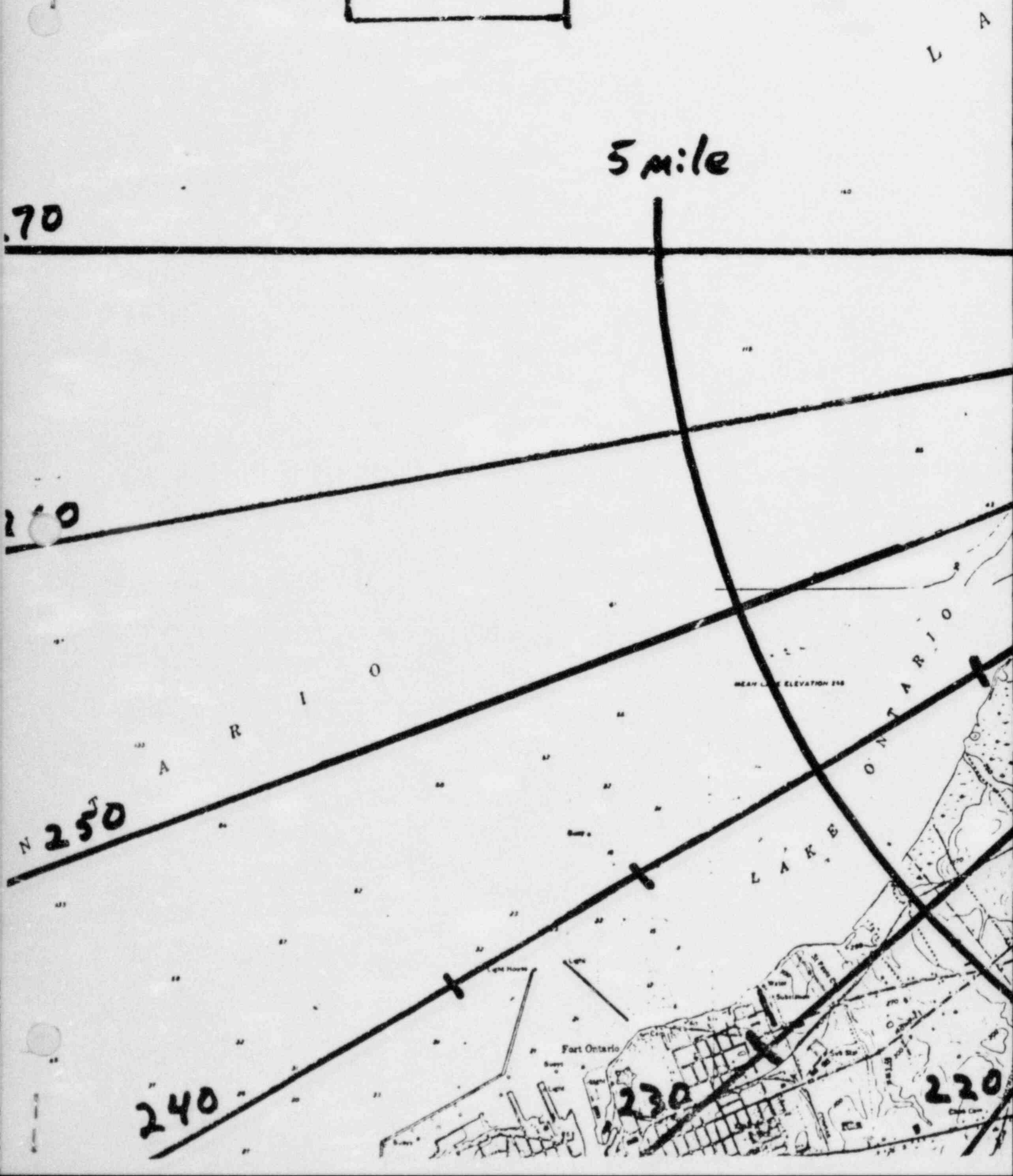
OFFSITE: USE MAPS A-

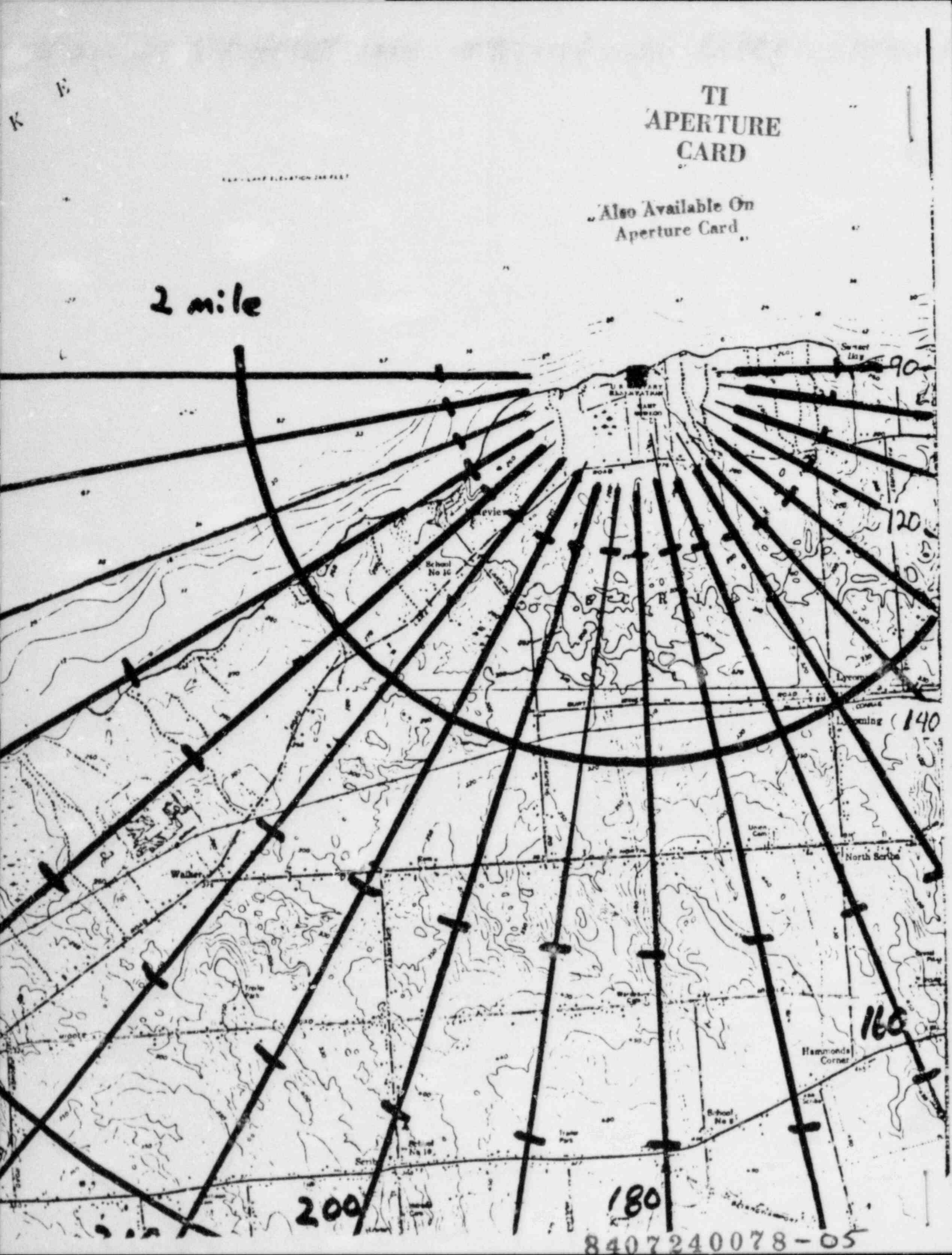
Also Available On
Aperture Card

TI
APERTURE
CARD

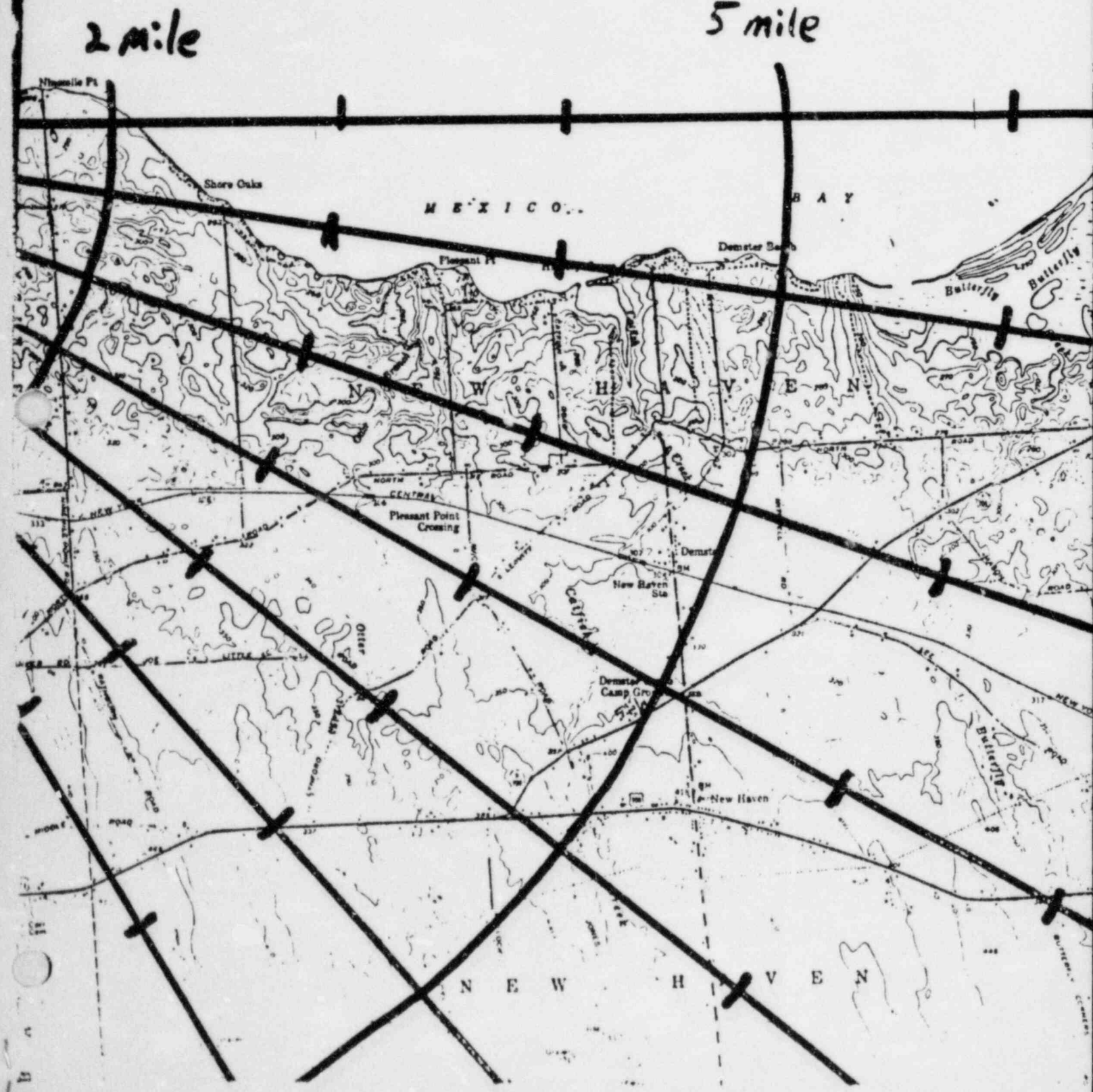
8407240078-07

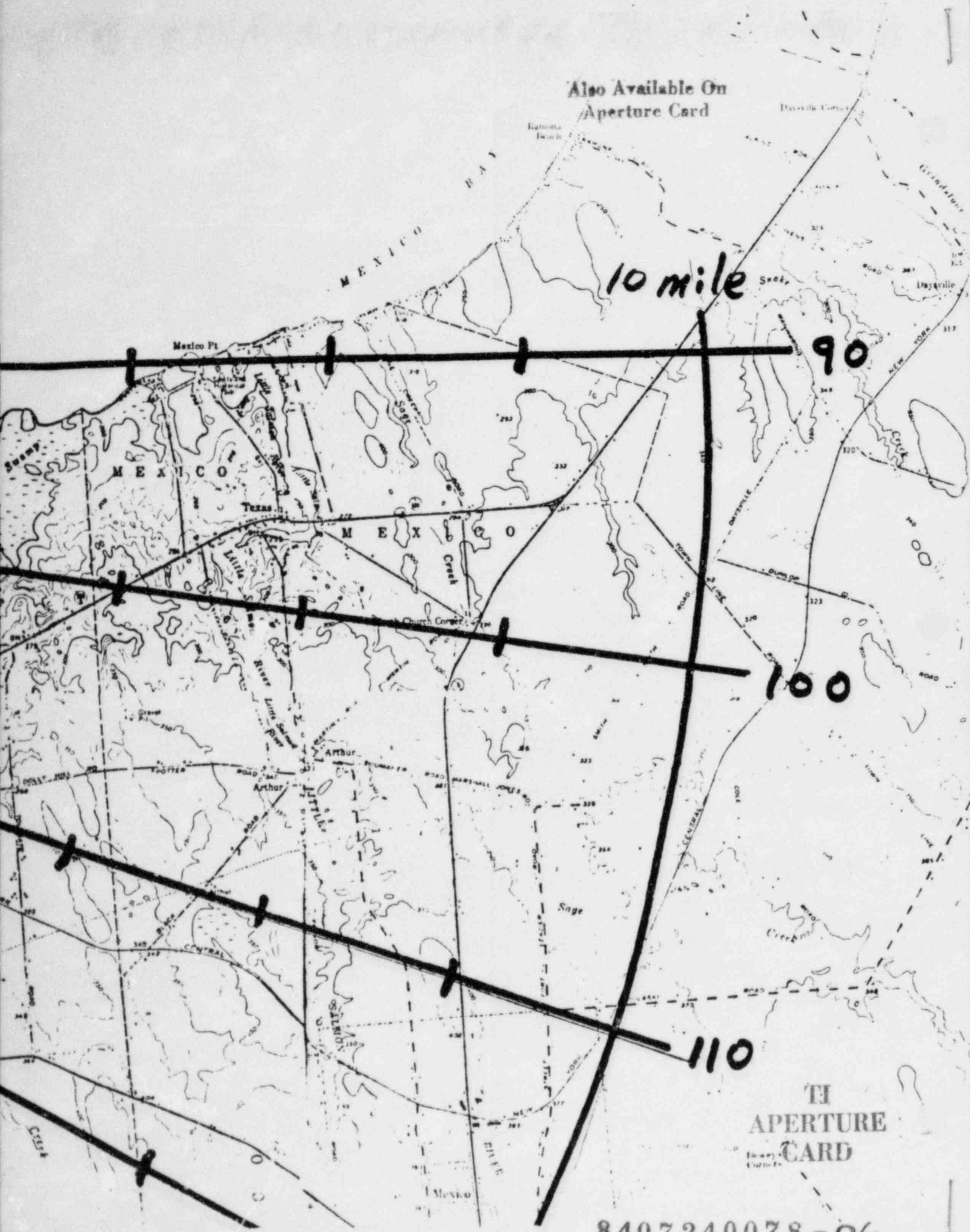
MAP A



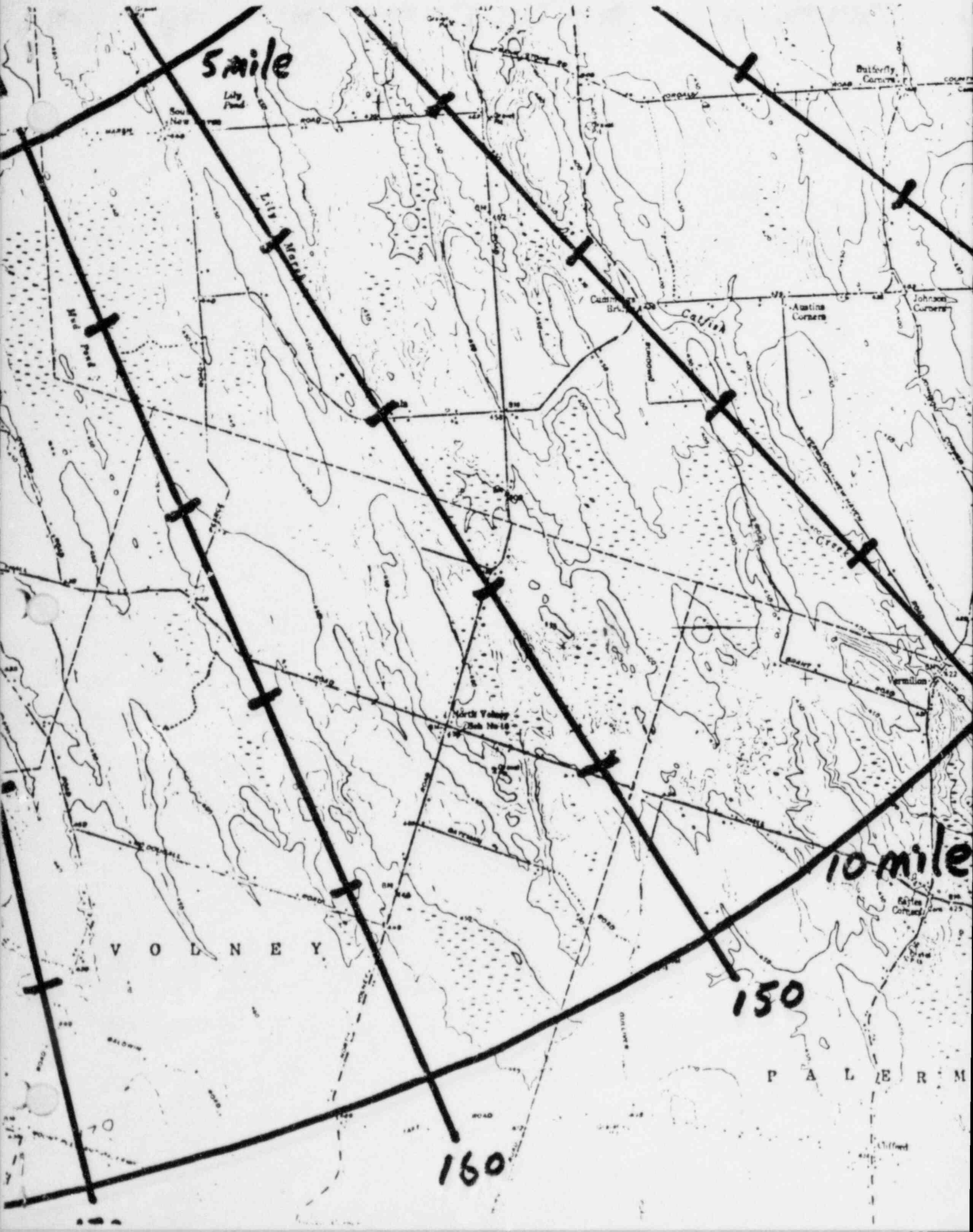


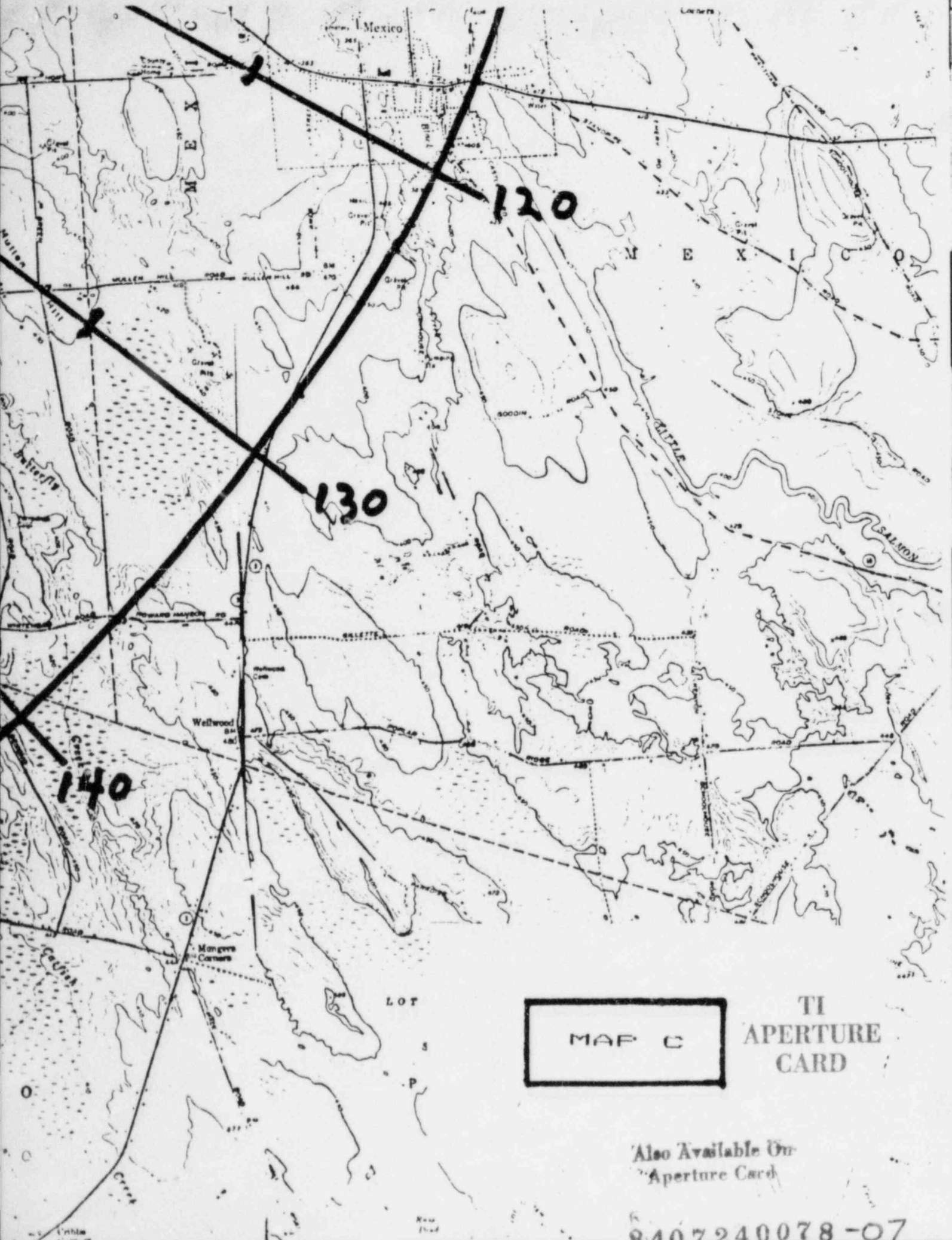
MAP B

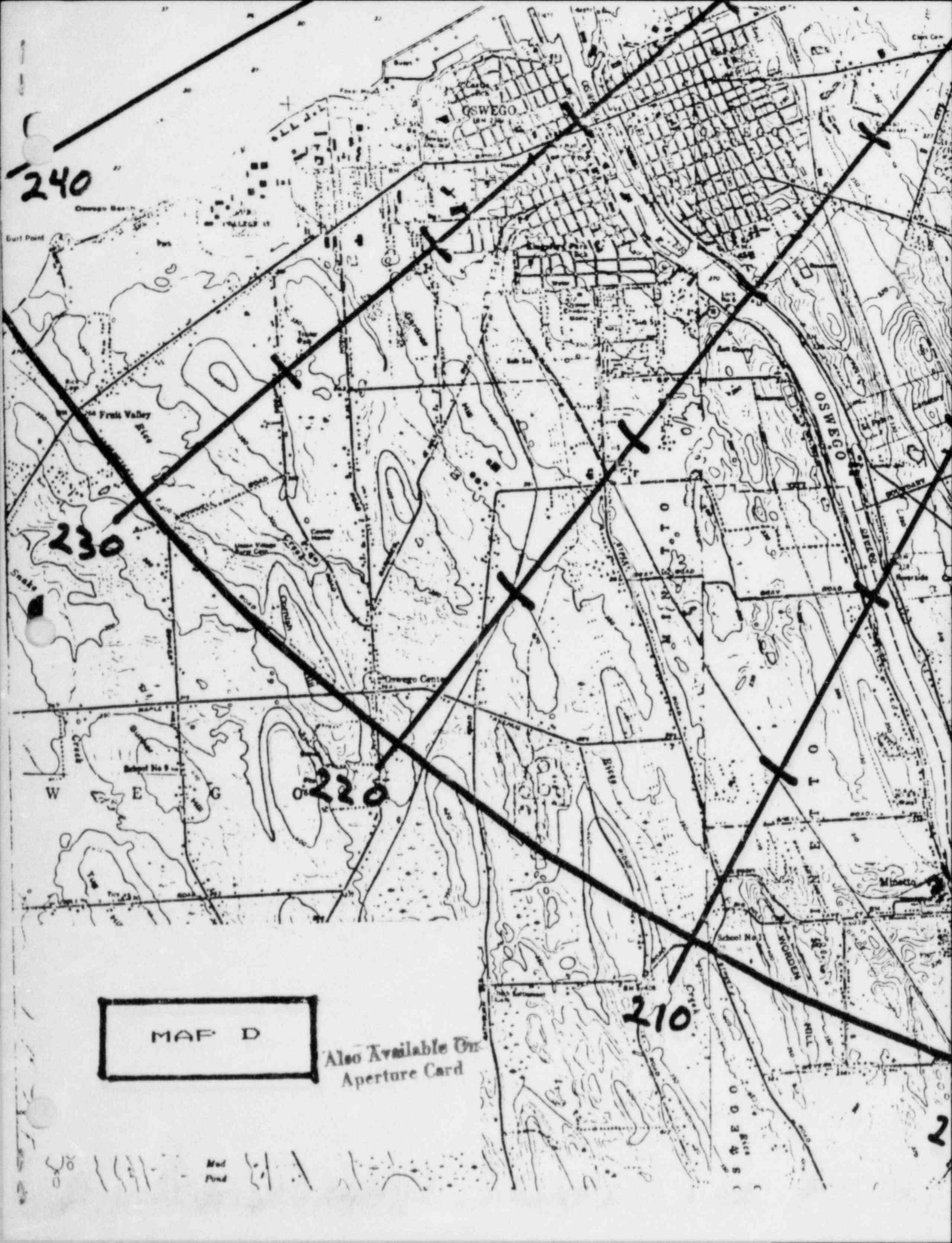

2 mile
5 mile
Shore Oaks
MEXICO
BAY
Pleasant Pt
Butterfly
Butterfly
NEW HAVEN
Pleasant Point Crossing
New Haven Sta
Otter
Butterfly
New Haven
NEW HAVEN



8407240078-06


5 mile
10 mile
150
160
VOLNEY
PALERM
Lily Marsh
Mud Pond
Catfish
Creek
Austins Corners
Johnson Corners
Butterfly Corners
Vermilion
North Volney





MAP D

Also Available On
Aperture Card

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

ENVIRONMENTAL SAMPLE INFORMATION

Post Release Environmental TLD Readings

POST RELEASE ENVIRONMENTAL TLD READINGS

ONSITE

TLD ID #	Location Description	Direction from Site	Distance from Site	Reading (mREM)$_\gamma$	mREM $\beta\gamma$
19	East boundary JAFNPP Site Pole #9	E	6900'	Bkg.	Bkg.
25	Along Lake Road (1600') .3 miles east of JAFNPP access road by J onsite Environmental Stations	E, S.E.	4700'	Bkg.	Bkg.
50	Lake Road 400' west of J onsite Environmental Station (1200') .23 miles east of JAFNPP access rd.	E. S.E.	4675'	Bkg.	Bkg.
26	250' south of Lake Road, near JAFNPP access road by K onsite Environmental Station	E. S.E.	3525'	Bkg.	Bkg.
4	Along NMP-2 access road 50' from Lake Road by D_2 onsite Environmental Sta.	S.E.	2800'	Bkg.	Bkg.
5	Along south side of Lake Road 800' west of materials access road by E onsite Environmental Sta.	S.E.	2300'	Bkg.	Bkd.
6	Along south side of Lake Road 500' east of NMP-1 access road by F onsite Environmental Station.	S	2000'	Bkg.	Bkg.
7	.5 mile north of Lake Road in the woods past entrance to Energy Information Center driveway.	S, S.E.	2100'	Bkg.	Bkg.
15	Pole 66, northeast section of Bible Camp	S.W.	1.0 mile	Bkg.	Bkg.
18	Energy Information Center picnic area northshore	W.	1600'	Bkg.	Bkg.
31	North fence NMP #1	N, N.W.	300'	Bkg.	Bkg.

POST RELEASE ENVIRONMENTAL TLD READINGS

OFFSITE

TLD ID #	Location Description	Direction from Site	Distance from Site	Reading (mREM)$_{\gamma}$	mREM $_{\beta\gamma}$
39	East Fence, by NMP-1 Rad Wast Bldg.	N, N.E.	300'	Bkg.	Bkg.
3	30' south of NMP-2 Stone & Webster Warehouse by Environmental Station D_1	E, N.E.	2500'	Bkg.	Bkg.
30	Northwest corner of fence inside JAFNPP	E, N.E.	2800'	Bkg.	Bkg.
27	North fence inside JAFNPP by lake shore	E, N.E.	1100'	Bkg.	Bkg.
29	North fence inside JAFNPP opposite screen house	E, N.E.	3400'	Bkg.	Bkg.
28	Light pole inside JAFNPP across from road intersec.	E, N.E.	3600'	Bkg.	Bkg.
47	North east shoreline inside JAFNPP on fence	E, N.E.	4100'	Bkg.	Bkg.
23	Dirt access road along the lake on JAFNPP site by Environmental Station H (onsite)	E, N.E.	5000'	Bkg.	Bkg.
61	On a pole 700' north of Environmental TLD #48 on access road of JAFNPP site	E	4800'	Bkg.	Bkg.
48	On a pole .36 mile north on access road west of road between H & I onsite Environmental Stations	E	4800'	0.3	0.3
24	Along dirt access road .5 mile south of H onsite Environmental Station	E	4500'	0.4	0.4

POST RELEASE ENVIRONMENTAL TLD READINGS

OFFSITE

TLD ID #	Location Description	Direction from Site	Distance from Site	Reading (mREM)$_\gamma$	mREM $\beta\gamma$
8	13 miles north on Montario Point Road by C Offsite Environmental Station	N.E.	16.2 miles	Bkg.	Bkg.
44	Corner Route 3 and Kelly Drive southwest of intersection on pole	E, N.E. 67°	13 miles	Bkg.	Bkg.
55	Hinnman Road & Co. Rt. 5, Pulaski High School on pole	E, N.E. 75°	14 miles	Bkg.	Bkg.
9	.65 miles north of the entrance to Selkirk Shores State Park on Route 3 by D_1 offsite Environmental Sta.	E 77°	11.7 miles	Bkg.	Bkg.
43	On a pole .9 mile north on Route 3 from intersection of Route 104B and Route 3 in a field north of road	E 87°	10 miles	Bkg.	Bkg.
56	Route 104 New Haven School S.E. corner on pole	E, S.E. 122°	5.3 miles	27.5	32.5
10	.75 mile west on Co. Rt. 64 in Village of Mexico by D_2 offsite Environmental Station	E, S.E. 117°	9.1 miles	Bkg.	Bkg.
54	Liberty Street & Co. Rt. 16 Mexico High School on pole	E, S.E. 114°	9.8 miles	Bkg.	Bkg.
57	Southeast corner of Rt. 29 and Miner Rd. intersection, Lycoming, New York	S.E. 145°	2.0 miles	4.3	5.2
45	Corner Route 64 and 35 on pole	S.E.	8.0 miles	Bkg.	Bkg.
11	250' east of O'Connor Rd. on Co. Rt. 4 by E offsite Environmental Station	S, S.E.	7.3 miles	Bkg.	Bkg.
49	Phoenix, New York - control	S, S.E.	19.6 miles	Bkg.	Bkg.

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

DRILL REPORT

JAMES A. FITZPATRICK NUCLEAR POWER PLANT
EMEREGNCY PLAN

DRILL REPORT

Drill/Exercise Title: 1984 JAFNPP NRC Observed Exercise

Drill/Exercise Date: July 18, 1984

Reviewed By: Nicholas Dumontas 5/26/84
Emergency Planning Coordinator/ Fire Protection Supervisor — Date

Reviewed By: [signature] 5/29/84
PORC Representative — Date

Copies to:

1. JAFNPP EMERGENCY PLANNING COORDINATOR
2. JAFNPP TRAINING SUPERINTENDENT
3. JAFNPP FIRE PROTECTION SUPERVISOR (FIRE DRILLS ONLY)

DRILL REPORT

1. Time Frame

a. Drill/Exercise date July 18, 1984

b. Date of last similar drill/exercise October 12, 1983

c. Real time span of drill 8 hours, 1 days

d. Drill/Exercise time frame 8 hours, 1 days

e. Season (circle one)

Winter Spring (Summer) Fall

f. Period of the week (circle one)

(Weekday) Weekend Holiday

g. What shift shall the drill begin on?

(7 a.m. - 3 p.m.) 3 p.m. - 11 p.m. 11 p.m. - 7 a.m.

2. Maximum level of emergency classification during the drill/exercise (check one).

____ Notification of Unusual Event

____ Alert

____ Site Area Emergency

X General Emergency

____ Does not apply

3. Organization Involvement (Circle applicable)

a. NYPA

Control Room Staff (Yes) / No

Technical Support Center (TSC) (Yes) / No

Emergency Operations Facility (EOF) (Yes) / No

DRILL REPORT

3. Organization Involvement (Circle applicable) (Continued)

Site Security	(Yes) / No
Fire Brigade	Yes / (No)
White Plains Office (WPO)	(Yes) / No
Joint News Center (JNC)	(Yes) / No
Operational Support Center (OSC)	(Yes) / No
Alternate Operating Support Center (AOSC)	Yes / (No)
Alternate Emergency Operating Facility (AEOF)	Yes / (No)
First Aid Team	Yes / (No)

b. Non NYPA

NY State Radiological Emergency Preparedness Group (REPG)	(Yes) / No
NY State Department of Health	(Yes) / No
NY State Office of Disaster Preparedness	(Yes) / No
NY State Bureau of Radiological Health	(Yes) / No
US Nuclear Regulatory Commission	(Yes) / No
US Department of Energy	Yes / (No)
US Coast Guard	Yes / (No)
Nine Mile Point Unit #1	(Yes) / No
Oswego County Office of Emergency Preparedness	(Yes) / No
Oswego County Sheriff	(Yes) / No

DRILL REPORT

3. Organization Involvement (Circle applicable) (Continued)

Oswego Hospital	Yes / (No)
Upstate Medical Center	Yes / (No)
Oswego Fire Department Ambulance	Yes / (No)
General Electric	Yes / (No)

Other (Specify) _____

4. Communications

a. Shall the JAFNPP Radio System be used for communications?
(Yes) / No

b. Should a news release be prepared?
(Yes) / No

c. Activation of Joint News Center?
(Yes) / No

d. Activation of Public Notification System/EBS?
(Yes) / No

5. Drill/Exercise Elements

a. Will key emergency response positions be filled by alternate?
Yes / (No)

b. Is a contaminated medical injury to be involved?
Yes / (No)

If yes, (1) Onsite response by First Aid Team Yes / No
(2) Offsite response Yes / No

(Circle Agencies Involved)

Oswego Hospital
Upstate Medical Center
Oswego Fire Department Ambulance

DRILL REPORT

5. Drill/Exercise Elements (Continued)

c. Will the exercise involve a simulated fire?
Yes / (No)

(1) Onsite response — Yes / No
(2) Offsite response — Yes / No

(Circle Agencies Involved)

Oswego Fire Department
Scriba Volunteer Fire Department
Volney Volunteer Fire Corporation
Alcan Fire Department
Minetto Volunteer Fire Department

d. Will the Security Force response be tested?
(Yes) / No

(1) Sabotage/Bomb — Yes / (No)
(2) Intruder — Yes / (No)
(3) Accountability — (Yes) / No

6. Radiological Release — Yes / No

a. Meteorological capabilities.

(1) Will real-time meteorology be used? — Yes / (No)
(2) Will fixed meteorology be used? — (Yes) / No

b. Dose Assessment.

(1) Will dose projection be made using computerized model? — (Yes) / No

(2) Will dose projection be made using manual calculator overlay wheel? — (Yes) / No

(3) Will field monitoring teams be dispatched? — (Yes) / No

(4) Will dose projections warrant protective action recommendations? — (Yes) / No

c. Post Accident Sampling.

(1) Are simulated samples of stack iodine/particulate sample required? — (Yes) / No

(2) Should a simulated reactor coolant sample be taken? — (Yes) / No

DRILL REPORT

6. Radiological Release (Continued)

d. Enviornmental.

(1) Should environmental media be collected? (Yes) / No

(2) Should sampling devices be collected from environmental stations? Yes / (No)

7. Attached is a copy of the scenario used for this drill.

8. Drill Controllers/References

	Name	Location
1. Lead Controller	Thomas Pelton	Control Room
Controller	Donald Simpson	EOF
Controller	Arthur Zaremba	PASS Sampling
Controller	Shawn Allen	TSC
Controller	James McGuire	Survey Team
Controller	David Bell	Survey Team
Controller	Matty Mozzor	Survey Team
Controller		
Controller		
Controller		

DRILL REPORT

9. Observers

Name	Organization	Area of Responsibility	Reference Procedures
J. Lyons	JAFNPP	Control Room	See attached
W. Heady	IP-3	Security	"
S. Rokerya	WPO	Control Point	"
C. Faison	WPO	EOF	"
B. Sullivan	WPO	Dose Assessment	"
G. Vargo	WPO	Dose Assessment	"
A. Zaremba	JAFNPP	PASS	"
J. McGuire	WPO	Survey Team	"
D. Bell	WPO	Survey Team	"
M. Mozzor	IP-3	Survey Team	"
R. Chau	WPO	Damage Control/OSC	"
J. Schoenbaum	WPO	Damage Control/OSC	"
C. Krok	JAFNPP	Damage Control/OSC	"
T. Landers	WPO	Damage Control/OSC	"
V. Kapur	WPO	Damage Control/OSC	"
S. Shoenholz	WPO	Joint News Center	"
J. Rea	WPO	TSC	"

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

CONTROLLER AND OBSERVER ASSIGNMENTS AND PROCEDURES

NEEDED TO BE REVIEWED

JULY 18, 1984

1. CONTROL ROOM

IAP-1
IAP-2
EAP-1.1
EAP-2
EAP-4
EAP-10
EAP-11
EAP-13
EAP-16
EAP-17
EAP-18
EAP-19
EAP-22
SAP-1
SAP-6

Observer

1. J. Lyons

Lead Controller

1. T. Pelton

2. CONTROL POINT/ASSEMBLY POINTS/RESTRICTED AREA EVACUATION/SECURITY

EAP-2
EAP-6
EAP-8
EAP-9
EAP-10
EAP-11
EAP-13
EAP-14.5
EAP-14.6
EAP-15
EAP-19
EAP-22
EAP-23
SAP-1
SAP-6
RPOP-1
RPOP-2
RPOP-5
RPOP-9
RPOP-11

Observer

1. W. Heady
2. S. Rokerya

3. EMERGENCY OPERATIONS FACILITY (EOF)

IAP-1
IAP-2
EAP-1.1
EAP-4
EAP-5.1
EAP-5.2
EAP-7.1
EAP-7.2
EAP-11
EAP-12
EAP-14.2
EAP-14.6
EAP-16
EAP-17
EAP-18
EAP-19
EAP-21
SAP-1
SAP-6
RPOP-2
RPOP-11

Observer

1. C. Faison

EOF Controller

1. D. Simpson

4. DOSE ASSESSMENT, TECHNICAL SUPPORT CENTER (TSC) AND EMERGENCY OPERATIONS FACILITY (EOF)

IAP-1
EAP-4
EAP-5.1
EAP-5.2
EAP-7.1
EAP-7.2
EAP-12
EAP-15
EAP-18
EAP-21
SAP-1
SAP-6
ESP-5

Observer

1. B. Sullivan
2. G. Vargo

5 POST ACCIDENT SAMPLING SYSTEM (PASS)

EAP-6
EAP-13
EAP-14.5
EAP-15
EAP-19
EAP-20
SAP-1
SAP-2
PSP-17
RPOP-5
RPOP-9

Observer/Controller

1. A. Zaremba

6. OFFSITE MONITORING TEAM

EAP-4
EAP-5.1
EAP-5.2
EAP-7.1
EAP-7.2
EAP-12
EAP-15
EAP-18
EAP-19
SAP-1
SAP-6
ESP-1
ESP-4
ESP-5
ESP-7

Observer/Controllers

1. J. McGuire
2. D. Bell
3. M. Mozzor

7. ONSITE MONITORING/DAMAGE CONTROL/OPERATIONS SUPPORT CENTER/ RADIATION PROTECTION

EAP-6
EAP-9
EAP-13
EAP-14.5
EAP-14.6
EAP-15
EAP-19
SAP-1
SAP-6
RPOP-2
RPOP-6
RPOP-9
RPOP-11

Observer

1. R. Chau
2. J. Schoenbaum
3. C. Krok
4. T. Landers
5. V. K. Kapur

8. JOINT NEWS CENTER (JNC)

IAP-1
IAP-2
EAP-1.1
EAP-16

Observer

1. S. Shoenholz

9. TECHNICAL SUPPORT CENTER (TSC)

IAP-1
IAP-2
EAP-1.1
EAP-2
EAP-4
EAP-5.1
EAP-5.2
EAP-6
EAP-7.1
EAP-7.2
EAP-8
EAP-9
EAP-10
EAP-11
EAP-12
EAP-13
EAP-14.6
EAP-15
EAP-16
EAP-17
EAP-18
EAP-19
EAP-21
SAP-1
SAP-6

Observer

1. J. Rea

TSC Controller

1. S. Allen

1984 NRC Observed Exercise
July 18, 1984

James A. FitzPatrick Nuclear Power Plant

OBSERVER AND CONTROLLER ASSIGNMENTS

James A. FitzPatrick
Nuclear Power Plant
P.O. Box 41
Lycoming, New York 13093
315 342.3840

New York Power Authority

Memorandum

May 25, 1984
JRES-84-129

TO: JAFNPP OBSERVERS

FROM: N. AVRAKOTOS

SUBJECT: JAFNPP FULL SCALE EXERCISE OBSERVER SCHEDULE

The James A. FitzPatrick Nuclear Power Plant is scheduled to hold an annual exercise on July 18, 1984. Observers slated for the exercise are required on the following dates:

I. May 22 and 23, 1984 (WPO Observers Only)

Beginning at 10:00 a.m. on May 22, 1984 until 3:30 p.m. on May 23, 1984, all WPO observers must be qualified via a training course. This qualification is a requirement of the JAFNPP Emergency Plan. The training shall take place at the WPO Emergency Response Center or training classroom.

II. June 1, 1984 (JAF Observers and WPO Makeup)

Beginning at 8:30 a.m. until 3:30 p.m. on June 1, 1984, all JAFNPP observers and remaining WPO observers must be qualified via a training course. This qualification is a requirement of the JAFNPP Emergency Plan. The training shall take place in Classroom E at the JAFNPP Training Center.

III. June 11 and 12, 1984

On June 11, 1984 from 6:00 p.m. to 7:00 p.m. for a briefing at the Energy Information Center (EIC).

On June 12, 1984 from 8:00 a.m. to 3:00 p.m. for the First Practice Drill and Critique.

IV. June 25 and 26, 1984

On June 25, 1984 from 6:00 p.m. to 7:00 p.m. for a briefing at the EIC.

On June 26, 1984 from 8:00 a.m. to 3:00 p.m. for the Second Practice Drill (and Observer Critique only).

V. July 17, 18 and 19, 1984

On July 17, 1984 from 1:30 p.m. to 4:00 p.m. for an Observer Briefing at the EIC.

On July 18, 1984 from 6:00 a.m. to 6:00 p.m. for the Full Scale Exercise.

On July 19, 1984 at 10:00 a.m. for the Critique at the EIC.

(PLEASE NOTE: A third practice drill date has been reserved if this drill is deemed necessary. The date scheduled is July 10, 1984; an observer briefing on July 9, 1984 at 6:00 p.m. would precede this drill. If this drill is required, you will be notified.)

Attached is the observer/controller assignment sheets which includes the list of procedures which will be reviewed during the scheduled training session, and for which the assigned observers are responsible.

If you have any questions concerning this schedule or cannot make a scheduled date, please contact me at JAF ext. 412 as soon as possible.

NICHOLAS AVRAKOTOS
NA/mam
Attachment

CC: A. Zaremba
M. Curling
C. Faison (WPO)
File
Document Control Center

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

CONTROLLER AND OBSERVER ASSIGNMENTS AND PROCEDURES

NEEDED TO BE REVIEWED

JULY 18, 1984

1. CONTROL ROOM

IAP-1
IAP-2
EAP-1.1
EAP-2
EAP-4
EAP-10
EAP-11
EAP-13
EAP-16
EAP-17
EAP-18
EAP-19
EAP-22
SAP-1
SAP-6

Observer

1. J. Lyons

Lead Controller

1. T. Pelton

2. CONTROL POINT/ASSEMBLY POINTS/RESTRICTED AREA EVACUATION/SECURITY

EAP-2
EAP-6
EAP-8
EAP-9
EAP-10
EAP-11
EAP-13
EAP-14.5
EAP-14.6
EAP-15
EAP-19
EAP-22
EAP-23
SAP-1
SAP-6
RPOP-1
RPOP-2
RPOP-5
RPOP-9
RPOP-11

Observer

1. W. Heady
2. S. Rokerya

3. EMERGENCY OPERATIONS FACILITY (EOF)

IAP-1
IAP-2
EAP-1.1
EAP-4
EAP-5.1
EAP-5.2
EAP-7.1
EAP-7.2
EAP-11
EAP-12
EAP-14.2
EAP-14.6
EAP-16
EAP-17
EAP-18
EAP-19
EAP-21
SAP-1
SAP-6
RPOP-2
RPOP-11

Observer

1. C. Faison

EOF Controller

1. D. Simpson

4. DOSE ASSESSMENT, TECHNICAL SUPPORT CENTER (TSC) AND EMERGENCY OPERATIONS FACILITY (EOF)

IAP-1
EAP-4
EAP-5.1
EAP-5.2
EAP-7.1
EAP-7.2
EAP-12
EAP-15
EAP-18
EAP-21
SAP-1
SAP-6
ESP-5

Observer

1. B. Sullivan
2. G. Vargo

5. POST ACCIDENT SAMPLING SYSTEM (PASS)

EAP-6
EAP-13
EAP-14.5
EAP-15
EAP-19
EAP-20
SAP-1
SAP-2
PSP-17
RPOP-5
RPOP-9

Observer/Controller

1. A. Zaremba

6. OFFSITE MONITORING TEAM

EAP-4
EAP-5.1
EAP-5.2
EAP-7.1
EAP-7.2
EAP-12
EAP-15
EAP-18
EAP-19
SAP-1
SAP-6
ESP-1
ESP-4
ESP-5
ESP-7

Observer/Controllers

1. J. McGuire
2. D. Bell
3. M. Mozzor

7. ONSITE MONITORING/DAMAGE CONTROL/OPERATIONS SUPPORT CENTER/ RADIATION PROTECTION

EAP-6
EAP-9
EAP-13
EAP-14.5
EAP-14.6
EAP-15
EAP-19
SAP-1
SAP-6
RPOP-2
RPOP-6
RPOP-9
RPOP-11

Observer

1. R. Chau
2. J. Schoenbaum
3. C. Krok
4. T. Landers
5. V. K. Kapur

8. JOINT NEWS CENTER (JNC)

IAP-1
IAP-2
EAP-1.1
EAP-16

Observer

1. S. Shoenholz

9. TECHNICAL SUPPORT CENTER (TSC)

IAP-1
IAP-2
EAP-1.1
EAP-2
EAP-4
EAP-5.1
EAP-5.2
EAP-6
EAP-7.1
EAP-7.2
EAP-8
EAP-9
EAP-10
EAP-11
EAP-12
EAP-13
EAP-14.6
EAP-15
EAP-16
EAP-17
EAP-18
EAP-19
EAP-21
SAP-1
SAP-6

Observer

1. J. Rea

TSC Controller

1. S. Allen