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THE ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

EMERGENCY PREPAREDNESS EXERCISE MANUAL

1997 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

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Rochester Gas and Electric Corporation

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ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

1997 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

FOREWORD

This Exercise package has been developed to provide the basis for the conduct of a simulated radiological accident at the Ginna Station located in Ontario, New York. Through this Exercise, the capabilities and effectiveness of the Emergency Response Plans for the Rochester Gas and Electric Corporation, the State of New York, and Monroe and Wayne Counties will be evaluated. This package is to be utilized by the Exercise Controllers and observers to initiate, control and evaluate the activities of the participants in the Exercise.

The Rochester Gas and Electric Corporation and the State of New York approve this document as the standard for conduct in performance of the June 11, 1997, Emergency Preparedness Exercise.



# THE ROCHESTER GAS AND ELECTRIC CORPORATION, GINNA STATION

## 1997 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

### INTRODUCTION

The Nuclear Emergency Response Plan (NERP) describes the emergency response capabilities for a nuclear emergency at the Ginna Station, including support from Federal, State, and local government agencies and private organizations. The Nuclear Emergency Response Plan provides for continuous emergency preparedness, including an annual Exercise.

The purpose of the Plume Exposure Emergency Preparedness Exercise is to activate and evaluate major portions of the emergency response capabilities and other aspects of the Emergency Plan and associated Emergency Plan Implementing Procedures, in accordance with Nuclear Regulatory Commission (NRC) Regulation 10CFR50.47(b) and Appendix E. This Exercise will be with the participation of the State of New York, and the Counties of Wayne and Monroe in order to assess State and Local Government Agency Emergency Response. The conduct and evaluation of the Exercise provide additional training for the Plume Exposure Pathway emergency response organization personnel and a means to further enhance Rochester Gas and Electric Corporation's emergency response capability.

This Exercise Manual has been developed to provide the basis for the conduct of a simulated radiological accident at the Ginna Station facility located in Ontario, New York. This manual is to be utilized by the Exercise Controllers to initiate, control, and evaluate the activities of the participants in the Exercise. Exercise "players" will not have prior knowledge of the nature of the simulated incident or any parts thereof such as radiological plume release information, including times, content, size and weather pattern used.

This Exercise Manual is the control mechanism for the conduct of the Exercise and consists of two parts. Part I provides a general description and overview of the emergency Exercise. Part II contains the scenario and time schedule of simulated plant conditions. The Exercise Manual is subject to a limited, controlled distribution.



1997 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

SCENARIO DEVELOPMENT COMMITTEE

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# GINNA STATION

## 1997 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

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## SECTION 1.0

### SCOPE AND OBJECTIVES



## **1.0      SCOPE AND ONSITE OBJECTIVES - PLUME EXPOSURE PATHWAY**

### **1.1      Scope**

The 1997 Emergency Preparedness Plume Exposure Pathway Exercise will simulate accident events culminating in a radiological accident resulting in the activation of on-site and offsite facilities. The Exercise will involve events that test the effectiveness of the Ginna Station Emergency Preparedness Program and the integrated capabilities of certain elements of the State of New York, Wayne County and Monroe County emergency organizations. The Exercise will include the limited mobilization of state and local resources adequate to verify their capability to respond to an accident at the Ginna Nuclear Power Plant.

### **1.2      Onsite Objectives for the 1997 Ginna Evaluated Plume Exposure Pathway Exercise**

The major objective of the Exercise is to demonstrate the response capabilities of the Rochester Gas and Electric Corporation Emergency Organization. Within this overall objective, numerous individual objectives are specified as follows:

- 1.2.1      Demonstrate the ability to mobilize, staff and activate Emergency Response Facilities promptly.**
- 1.2.2      Demonstrate the ability to fully staff facilities and to maintain staffing on an around-the-clock basis through the use of relief shift rosters (limited shift changes may occur to allow for operational restrictions).**
- 1.2.3      Demonstrate the ability to make decisions and to coordinate emergency activities.**
- 1.2.4      Demonstrate the adequacy of facilities and displays and the utilization of procedures to support emergency operations.**
- 1.2.5      Demonstrate the ability to communicate with all appropriate locations, organizations, and field personnel.**
- 1.2.6      Demonstrate the ability to mobilize and deploy Radiation Survey Teams.**
- 1.2.7      Demonstrate the appropriate equipment and procedures for determining ambient radiation levels.**

- 1.2.8 Demonstrate the availability of appropriate equipment and procedures for measurement of airborne radioiodine concentrations as low as  $1.0 \text{ E-7}$   $\mu\text{Ci/cc}$  in the presence of noble gases.
- 1.2.9 Demonstrate the availability of appropriate equipment and procedures for the collection of environmental samples.
- 1.2.10★ Demonstrate the ability to project dosage to the public via plume exposure, based on Plant and field data, and to determine appropriate protective measures, based on items such as: plant conditions, Protective Action Guidelines, available shelter, evacuation time estimates, expected release duration.
- 1.2.11★ Demonstrate the ability to notify offsite officials and agencies within 15 minutes of declaration of an emergency.
- 1.2.12 Demonstrate the ability to periodically update offsite officials and agencies of the status of the emergency based on data available at Ginna Station.
- 1.2.13 Demonstrate the ability to notify emergency support pools as appropriate (i.e., INPO, ANI, etc.).
- 1.2.14⊙ Demonstrate the ability to notify onsite personnel using Plant alarms and public address systems.
- 1.2.15⊙ Demonstrate the ability to effectively assess incident conditions and to properly classify the incident.
- 1.2.16 Demonstrate the organizational ability and resources necessary to manage an accountability of personnel within the restricted area.
- 1.2.17 Demonstrate the organizational ability and resources necessary to manage an orderly evacuation of restricted area personnel.
- 1.2.18 Demonstrate the organizational ability and resources necessary to control access to the site.
- 1.2.19⊙ Demonstrate the ability to continuously monitor and control emergency workers' exposure.
- 1.2.20 Demonstrate the adequacy of facilities and displays to support the Joint Emergency News Center operations.



- 1.2.21 Demonstrate the ability to brief the media in a clear, accurate, and timely manner.
- 1.2.22 Demonstrate the ability to provide advanced coordination of information released to the public.
- 1.2.23 Demonstrate the ability to establish and operate rumor control in a coordinated fashion.
- 1.2.24 Demonstrate the adequacy of in-plant post-accident sampling techniques and analyses.
- 1.2.25 Demonstrate the ability to develop proposed short term and long term actions to support Plant recovery.
- 1.2.26 Demonstrate the ability to isotopically analyze survey team field samples.
- 1.2.27 Demonstrate the adequacy of measures taken to correct principal findings and observations identified during the previous exercise.
- 1.2.28 Demonstrate the ability to conduct a post-exercise critique which adequately characterizes licensee performance based upon controller and observer assessments.

**Note:** ★ = Items identified by RG&E at 10/96 exercise critique.  
⊙ = Observed during remedial exercise and subsequent drills.

### 1.3 Summary of Proposed Activities

Table 1.1 provides a list of proposed RG&E activities.

TABLE 1.1

**1994 GINNA STATION EMERGENCY PREPAREDNESS EXERCISE**  
**(PLUME EXPOSURE)**

**PROPOSED ONSITE ACTIVITIES**

	<u>RG&amp;E</u>
Notification of Agencies	Actual
Call Up of Personnel	Actual
Activate Organization	Actual
Maintain Security	Actual
Conduct Dose Assessment	Actual
Protective Action Recommendations	Actual
Operate Joint News Center	Actual
EPZ Siren Activation	N/A
Route Alerting	N/A
EAS Message Broadcast	Simulated
Dispatch Field Survey Teams	Actual-5*
Exchange of Field Data	Actual*
Reception Center Setup	N/A
Congregate Care Center	N/A
School Bus Run	N/A
General Population	N/A
Traffic Control Points	N/A
Road Impediments	N/A
Coast Guard (notify only)	N/A
Mobility Impaired	N/A

**\*Note:** Field teams will be deployed and will demonstrate communications with respective emergency response facilities.

## SIMULATIONS

- o Respiratory protection and protective clothing will be simulated by survey teams outside the protected area. Personnel inside the protected area will don respiratory protection and protective clothing prescribed by Radiation Protection and Chemistry personnel according to postulated scenario plant conditions.
- o Controllers should demonstrate the appropriate actions expected by players (e.g. frisking, no eating & drinking during habitability checks).
- o In general, Exercise participants should follow applicable plant procedures as closely as possible, and will be stopped by Controllers before actual equipment is manipulated (except PASS). Simulated repairs and other corrective actions should be described to Controller/Evaluators as fully as possible.

### 1.4 OFFSITE OBJECTIVES AND EXTENT OF PLAY

Offsite objectives and extent of play are described in the attached document. The offsite objectives and extent of play have been agreed upon by Rochester Gas and Electric Corporation, The Federal Emergency Management Agency, The New York State Emergency Management Office, The Wayne County Office of Disaster Preparedness and The Monroe County Office of Emergency Preparedness.

**ROBERT E. GINNA NUCLEAR POWER PLANT  
1997 FULL SCALE EXERCISE**

**SECTION 1**

**OFFSITE OBJECTIVES AND EXTENT OF PLAY  
ROBERT E. GINNA NUCLEAR POWER PLANT  
1997 FULL SCALE EXERCISE  
OFFSITE OBJECTIVES AND EXTENT OF PLAY**

**OBJECTIVE 1: MOBILIZATION OF EMERGENCY PERSONNEL.** Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

**Locations:** SEOC, EOF, JENC, MCEOC, WCEOC, MCFA, WCFA

**Extent of Play:**

Emergency personnel will be mobilized and emergency facilities activated as they would be in an actual emergency with the exception of the State staff in the JENC, EOF and EOC who will arrive no sooner than 30 minutes after the Alert declaration is received over the RECS line. See Section 3, Response by Facility/Team, for staffing limitations for Field Monitoring Teams, Reception Center, Congregate Care Center, Personnel Monitoring Center, bus routes, and Traffic Control Points.

**ARCAs:** None

**OBJECTIVE 2: FACILITIES - EQUIPMENT, DISPLAYS, AND WORK ENVIRONMENT.** Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

**Locations:** SEOC, EOF, JENC, MCEOC, WCEOC, MCFA, WCFA

**Extent of Play:**

Facilities, equipment and displays will be set-up and used as they would in an actual emergency. See Section 3, Response by Facility/Team, for set-up limitations for the Reception Center, Congregate Care Center and Personnel Monitoring Center.

**ARCAs:** None

**OBJECTIVE 3: DIRECTION AND CONTROL.** Demonstrate the capability to direct and control emergency operations.

**Locations:** SEOC, EOF, JENC, MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

Direction and control will be demonstrated as they would in an actual emergency.

**ARCAs:** JENC-27-95-03-A-01

**OBJECTIVE 4: COMMUNICATIONS.** Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

**Locations:** SEOC, EOF, JENC, MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

Communications systems will be demonstrated as they would in an actual emergency.

**ARCAs:** None

**OBJECTIVE 5: EMERGENCY WORKER EXPOSURE CONTROL.** Demonstrate the capability to continuously monitor and control radiation exposure to emergency workers.

**Locations:** SEOC, EOF, JENC, MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

A controller inject will cause the County Radiological Officer and each County Field Monitoring Team to discuss actions for exposure rate in excess of the turn-back value. The term *exposure limit* is used by all other emergency workers.

**ARCAs:** WC (RC/CC) 27-95-05-A-03



**OBJECTIVE 6: FIELD RADIOLOGICAL MONITORING.** Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.

**Locations:** MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

Each County will dispatch one Field Monitoring Team. Each team will take radiation measurements, some of which may be the same locations, but at different times in the scenario. The teams will not suit up in anti-contamination clothing, however, one member will suit up at FEMA'S request at the dispatch point or PMC. RGE field monitoring will be in accordance with the plans and the protocol established in support of Wayne and Monroe Counties. Monroe may use radio controlled survey meters for exercise purposes.

**ARCA's:** WCFA, 27-95-06-A-02

**OBJECTIVE 7: PLUME DOSE PROJECTION.** Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

**Locations:** SEOC (Only if the governor declares a State of Emergency.), MCEOC, WCEOC

**Extent of Play:**

Dose projections and protective action recommendations will be demonstrated as they would in an actual emergency.

**ARCA's:** None

**OBJECTIVE 8: FIELD RADIOLOGICAL MONITORING - AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING.** Demonstrate the appropriate use of equipment and procedures for the measurement of airborne radioiodine concentrations as low as  $10^{-7}$  (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

**Locations:** MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

Silver zeolite cartridges will be used. The teams will not suit up in anti-contamination clothing, however, one member may suit up at FEMA's request. County EOC staff and the Field Monitoring Teams can be questioned regarding procedures and resources to transport samples to a central point for transfer to the State laboratory (Albany). There will be no transport of samples to either the transfer point or the State laboratory (Albany). RGE monitoring team will provide air sampling data in accordance with the plans and established protocol established

**ARCAs:** None

**OBJECTIVE 9: PLUME PROTECTION ACTION DECISION MAKING.** Demonstrate the capability to make timely and appropriate protective action decisions (PAD).

**Locations:** SEOC (Only if the governor declares a State of Emergency.), MCEOC, WCEOC

**Extent of Play:**

Protective action decision making will be demonstrated as it would in an actual emergency.

**ARCAs:** None

**OBJECTIVE 10: ALERT AND NOTIFICATION.** Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

**Locations:** SEOC (Only if the governor declares a State of Emergency.), JENC, MCEOC, WCEOC, WHAM

**Extent of Play:**

EAS messages will be developed and sent to WHAM. There will be no broadcast of EAS messages. In addition, siren and tone alert activations will be simulated. Back-up route alerting of one route (selected by the FEMA evaluator) will be discussed at the County EOC.

**ARCAs:** None

**OBJECTIVE 11: PUBLIC INSTRUCTIONS AND EMERGENCY INFORMATION.** Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

**Locations:** SEOC (Only if the governor declares a State of Emergency.), JENC, MCEOC, WCEOC

**Extent of Play:**

EAS messages will be formulated and simulated to be disseminated as they would in an actual emergency. There will be only one (1) simulation of airing of the EAS message. This will be the first EAS message. The last time to be recorded (clock stopped) is the time at which the EAS message begins to be broadcast (first 3 words read of the talk-up after "this is a drill").

**ARCAs:** None



**OBJECTIVE 12: EMERGENCY INFORMATION - MEDIA.** Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.

Locations: JENC

Extent of Play:

Information will be developed and disseminated to the media as it would in an actual emergency.

ARCA's: None

**OBJECTIVE 13: EMERGENCY INFORMATION - RUMOR CONTROL.** Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

Locations: JENC

Extent of Play:

Rumor control will be demonstrated as it would in an actual emergency. Rumor control staff will be limited to six individuals.

ARCA's: None

**OBJECTIVE 14: IMPLEMENTATION OF PROTECTIVE ACTIONS - USE OF KI FOR EMERGENCY WORKERS, INSTITUTIONALIZED INDIVIDUALS, AND THE GENERAL PUBLIC.** Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.

**Locations:** SEOC, MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

In accordance with the State and County plans, KI is not provided to the general public. The State and County dose assessment groups discuss the need to authorize the administration of KI. Emergency workers in the EPZ at risk of exposure to radioactive iodine will be issued KI along with their dosimetry prior to dispatch to the field.

**ARCAs:** None

**OBJECTIVE 15: IMPLEMENTATION OF PROTECTIVE ACTIONS - SPECIAL POPULATIONS.** Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

**Locations:** MCEOC, WCEOC

**Extent of Play:**

Call lists will be available at the County EOC for special facilities and for the non-institutionalized hearing impaired and mobility impaired individuals. All calls will be simulated. One special population bus route will be demonstrated. The bus driver will assemble at the normal dispatch location for briefing, assignment and dispatch. The bus, or similarly equipped vehicle, will complete the assigned routes but will not make any stops. The route will be completed after the last pickup point and a discussion of the route to be taken to the Reception Center at which time the bus and driver will be returned to service following contact with the County EOC. (See section 3 for time and dates)An interview of a second driver will occur at the point of dispatch.

**ARCAs:** None



**OBJECTIVE 16: IMPLEMENTATION OF PROTECTIVE ACTIONS - SCHOOLS.** Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway emergency planning zone (EPZ).

**Locations:** MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

Bus route(s) will be demonstrated in each county. Monroe- 1 route, Wayne-4 routes. The bus driver will assemble at the normal dispatch location for briefing, assignment and dispatch. The bus, or similarly equipped vehicle, will complete the assigned routes but will not make any stops. The routes will be completed after arrival at the school and a discussion of the route to be taken to the Student Center/School Receiving District at which time the bus and driver will be released following contact with the County EOC. School interviews will be performed prior to the exercise in coordination with Monroe and Wayne Counties. (See section 3 for time and dates)

**ARCAs:** None

**OBJECTIVE 17: TRAFFIC AND ACCESS CONTROL.** Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

**Locations:** MCEOC, MCFA, WCEOC, WCFA

**Extent of Play:**

At the EOC Traffic Control Points are to be free played in sequence with the exercise scenario. Free play messages are to be inserted at the County EOC to the State Controller. Information will be passed on to the County Emergency Management Director or her designee for action and dispatching of police officers. The interviews of law enforcement will be conducted in the field in sequence with the exercise scenario.

**ARCAs:** None

**OBJECTIVE 18: RECEPTION CENTER - MONITORING, DECONTAMINATION, AND REGISTRATION.** Demonstrate the adequacy of procedures, facilities, equipment, and personnel for the radiological monitoring, decontamination, and registration of evacuees.





Locations: Monroe County: Greece Olympia  
Wayne County: Newark High School

Extent of Play:

NOTE:SEMO, Wayne County, Monroe County and FEMA have agreed that the reception centers will be demonstrated under the following schedule:

Wayne County - 4/30 1830-completion

Monroe County - 7/30 1000-1300

It will be the responsibility of FEMA to have evaluators available at the times agreed upon. FEMA evaluators should advise the participants when their evaluation is complete so that participants can resume their normal duties. Vehicle monitoring and decontamination will be observed first by FEMA evaluators.

The Reception Center at Greece Olympia High School in Monroe County and the Reception Center at the Newark High School in Wayne County will be demonstrated out of sequence with the scenario. The facility is staffed with enough equipment and personnel to monitor 20% of the EPZ population (as defined in the plan) in 12 hours. Reception centers will not be setup in advance. Please note that Federal evaluators may not use a hidden source (such as lantern mantle) to test the skills of the monitors. The demonstration will be limited to include:

Monroe County

- One vehicle monitoring station with at least 1 monitor monitoring at least 2 vehicles;
- One portal monitoring station monitoring at least 6 individuals;
- One registration station (social services) with 2 personnel registering at least 2 individuals each;
- One male and one female decon station with 2 monitors (one each) to simulate at least 1 personnel decon each;
- One vehicle decon station with at least 1 monitor to simulate at least 2 vehicle decons.

Wayne County

- One vehicle monitoring station with at least 1 monitor monitoring at least 2 vehicles;
- Two portal monitoring station monitoring at least 6 individuals;
- One registration station (social services) with 2 personnel registering at least 2 individuals each;
- One decon station (male or female) with 2 monitors will be set-up during the exercise to simulate at least 1 personnel decon each;
- One vehicle decon station with at least 1 monitor to simulate at least 2 vehicle decons.

Other staff will be demonstrated through the use of rosters. Evacuees, some of which will be contaminated using controller inject messages, will be simulated by members of the facility staff. The facility will be set up as it would be in an actual emergency with all route markings and contamination control measures in place with the exception that Reception Center floors will not be covered with paper/plastic. Monitors will not suit up in anti-contamination clothing although one monitor may suit up at FEMA's request.

ARCAs:       None



**OBJECTIVE 19: CONGREGATE CARE.** Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

**Locations:** Monroe County:Greece Olympia High School  
Wayne County:Kelley Middle School

**Extent of Play:**

**NOTE:** SEMO, Wayne County, Monroe County and FEMA have agreed that the congregate care will be demonstrated under the following schedule:

Wayne County - 4/30 1830-completion  
Monroe County - 7/30 1000 -1300

It will be the responsibility of FEMA to have evaluators available at the times agreed upon. FEMA evaluators should advise the participants when their evaluation is complete so that participants can resume their normal duties.

The facility will be demonstrated out of sequence with the scenario by a walkthrough of the facility with the Shelter Manager, Registrar and one support staff. The facility will not be set up nor will equipment and supplies be brought to the center. Center personnel will make estimates of supplies required for the potential evacuees.

**ARCAs:** None

**OBJECTIVE 20: MEDICAL SERVICES - TRANSPORTATION.** Demonstrate the adequacy of vehicles, equipment, procedures, and personnel for transporting contaminated, injured, or exposed individuals.

**Locations:** Monroe County: Monroe Community College

**Extent of Play:**

An ambulance crew and one (1) monitor will be stationed at the Reception Center in sequence with the scenario. An individual with a simulated injury and contamination will be presented. The individual will be surveyed, administered first aid and placed in the ambulance. The drill will end when the vehicle is ready to depart with the victim. Communications will be simulated and include information relative to ETA, patient status, etc. This objective will be demonstrated out of sequence on\_7/30 1400-completion.

**ARCAs:** None

**OBJECTIVE 21: MEDICAL SERVICES - FACILITIES.** Demonstrate the adequacy of equipment, procedures, supplies, and personnel of medical facilities responsible for treatment of contaminated, injured, or exposed individuals.

Locations:

Extent of Play:

ARCAs: None

**OBJECTIVE 22: EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES - MONITORING AND DECONTAMINATION.** Demonstrate the adequacy of procedures for the monitoring and decontamination of emergency workers, equipment, and vehicles.

Locations: Monroe County: Culver Road Armory  
Wayne County: Wayne County Highway Department Garage in Lyons

Extent of Play:

The Personnel Monitoring Centers (PMC) at the Culver Road Armory in Monroe County and at the Highway Department Facilities in Wayne County will be demonstrated the day of the exercise. A controller will provide simulated contamination levels to drive demonstration of the various activities. The demonstration will be limited to include:

- One station for vehicle monitoring with at least 1 monitor monitoring at least 2 vehicles;
- One personnel monitoring station to monitor at least 2 individuals;
- One personnel decon station with 1 monitor to simulate at least 2 personnel decons.
- One vehicle decon station with at least 1 monitor to simulate at least 1 vehicle decon.

Other staff will be demonstrated through the use of rosters. Contaminated individuals will be simulated by members of the facility staff. The facility will be set up as it would be in an actual emergency with all route markings and contamination control measures in place with the exception that PMC floors will not be covered with paper/plastic. Monitors will not suit up in anti-contamination clothing although one monitor may suit up at FEMA's request. Monroe may use radio controlled survey meters for exercise purposes only.

ARCAs: None

The following objectives are not included in this revision in that they have been demonstrated previously and will not be demonstrated during this



exercise.

**OBJECTIVE 23: SUPPLEMENTARY ASSISTANCE (FEDERAL/OTHER).** Demonstrate the capability to identify the need for external assistance and to request such assistance from Federal or other support organizations.

Date demonstrated 7/15/93 Next year required for demonstration 1999

**OBJECTIVE 24: POST-EMERGENCY SAMPLING.** Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that received deposition from the airborne plume.

Date demonstrated 7/15/93 Next year required for demonstration 1999

**OBJECTIVE 25: LABORATORY OPERATIONS.** Demonstrate laboratory operations and procedures for measuring and analyzing samples.

Date demonstrated 7/15/93 Next year required for demonstration 1999

**OBJECTIVE 26: INGESTION EXPOSURE PATHWAY - DOSE PROJECTION AND PROTECTIVE ACTION DECISION MAKING.** Demonstrate the capability to project dose to the public for the ingestion exposure pathway and to recommend protective actions.

Date demonstrated 7/15/93 Next year required for demonstration 1999

**OBJECTIVE 27: INGESTION EXPOSURE PATHWAY - DOSE PROTECTIVE ACTION IMPLEMENTATION.** Demonstrate the capability to implement protective actions for the ingestion exposure pathway.

Date demonstrated 7/15/93 Next year required for demonstration 1999

**OBJECTIVE 28: RELOCATION, RE-ENTRY, AND RETURN - DECISION MAKING.** Demonstrate the capability to develop decisions on relocation, re-entry, and return.

Date demonstrated 7/15/93 Next year required for demonstration 1999

**OBJECTIVE 29: RELOCATION, RE-ENTRY, AND RETURN - IMPLEMENTATION.** Demonstrate the capability to implement relocation, re-entry, and return.

Date demonstrated 7/15/93 Next year required for demonstration 1999

**OBJECTIVE 30: CONTINUOUS, 24-HOUR STAFFING.** Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.



Date demonstrated 11/17/93 Next year required for demonstration 1999

**OBJECTIVE 31: OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE PERSONNEL.**

Demonstrate the capability to provide offsite support for the evacuation of onsite personnel.

Date demonstrated 11/17/93 Next year required for demonstration 1999

**OBJECTIVE 32: UNANNOUNCED EXERCISE OR DRILL.** Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.

Date demonstrated 1996 Next year required for demonstration 2001

**OBJECTIVE 33: OFF-HOURS EXERCISE OR DRILL.** Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.

Date demonstrated 1996 Next year required for demonstration 2001

**ROBERT E. GINNA NUCLEAR POWER PLANT  
1997 FULL SCALE EXERCISE  
OFFSITE OBJECTIVES AND EXTENT OF PLAY  
OVERVIEW**

<u>Facility/Activity</u>	<u>NY State</u>	<u>Monroe</u>	<u>Wayne</u>
Warning Point	Actual	Actual	Actual
EOC	Actual	Actual <sup>1</sup>	Actual <sup>1</sup>
EOF	Actual <sup>1</sup>	Actual	Actual
JENC	Actual <sup>1</sup>	Actual	Actual
Reception Center	N/A	Actual <sup>1,6</sup>	Actual <sup>1,6</sup>
Congregate Care Center	N/A	Actual <sup>1,6</sup>	Actual <sup>1,6</sup>
Emergency Worker PMC	None	Actual <sup>1</sup>	Actual <sup>1</sup>
Siren Activation	N/A	Simulated	Simulated
EAS Formulation	Actual <sup>2</sup>	Actual	Actual
EAS Broadcast	Simulated <sup>3</sup> (1 test only)	Simulated <sup>4</sup> (1 test only)	Simulated <sup>4</sup> (1 test only)
Route Alerting			
-Primary	N/A	N/A	N/A
-Backup	N/A	1-EOC Discussion	1-EOC Discussion
Field Monitoring Teams	N/A	1-Actual Team 1-RGE Team	1-Actual Team 1-RGE-Team

---

<sup>1</sup> Staffing is limited as described in the objective/extent of play

<sup>2</sup> To be demonstrated at the SEOC should the governor declare a State of Emergency

<sup>3</sup> News releases will be developed and simulated to be disseminated from the State EOC

<sup>4</sup> EAS Message will be sent to WHAM but no test message will be broadcast



<u>Facility/Activity</u>	<u>NY State</u>	<u>Monroe</u>	<u>Wayne</u>
Special Population Bus Run	N/A	1-Actual	1-Actual
School Evacuation Bus Run	N/A	1-Actual	4-Actual
Notification of Hearing Impaired	N/A	Simulated via EOC Discussion	Simulated via EOC Discussion
Evacuation of Mobility Impaired -Special Population	N/A	Simulated via EOC Discussion	N/A (None in EPZ)
Evacuation of Mobility Impaired -Non-Institutionalized	N/A	Simulated via EOC Discussion	Simulated via EOC Discussion
Traffic Control Points	N/A	2-Actual	2-Actual
Impediments to Evacuation	N/A	Simulated via EOC Discussion	Simulated via EOC Discussion
KI Administration	Discussion	Discussion	Discussion
School Interviews	N/A	1-Actual <sup>6</sup>	4-Actual <sup>6</sup>
Medical Drill - Hospital	N/A	Actual <sup>6</sup>	

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<sup>5</sup> Number of school districts in EPZ

<sup>6</sup> Out of sequence with the exercise



**SECTION 2.0**  
**EXERCISE INFORMATION**

## **2.0        EXERCISE INFORMATION**

### **2.1        Exercise Participants**

The participants in the Exercise will include the following:

#### **2.1.1      ROCHESTER GAS AND ELECTRIC CORPORATION**

##### **A.   Facilities Management and Support Personnel**

1. Simulator Control Room
2. Technical Support Center (TSC)
3. Operations Support Center (OSC)
4. Survey Center (SC)
5. Emergency Operations Facility (EOF)
6. Joint Emergency News Center (JENC)
7. Engineering Support Center (ESC)

##### **B.   Emergency Response Teams**

1. Radiation Survey Teams (RSTs)
2. First Aid Team (if necessary)
3. Emergency OSC Teams
4. Security Force
5. Post Accident Sampling System (PASS) Team
6. Chemistry/Health Physics Support
7. Fire Brigade (if necessary)

#### **2.1.2      OFFSITE AGENCIES/ORGANIZATIONS**

Participation of the following agencies/organizations is expected:

##### **A.   Federal**

1. Nuclear Regulatory Commission
2. National Weather Service
3. Other Supporting Federal Agencies

**B. State**

1. New York State Emergency Management Office
2. New York State Department of Health
3. New York State Police
4. Other Supporting State Agencies

**C. Local**

1. Wayne County
2. Monroe County
3. Other Supporting County Agencies

**2.2 Exercise Organization**

The organization for this Exercise will consist of the Exercise Coordinator, the Controllers, the Players and the Observers, as follows:

- 2.2.1 The Exercise Coordinator will coordinate Exercise preparations including the development of the scenario and controller input messages. He will control all aspects of the conduct of the Exercise, prepare a consolidated evaluation and critique report at the conclusion of the Exercise, and prepare and follow up on an itemized list of corrective actions recommended as a result of the evaluation and critique.

- 2.2.2 Controllers are qualified personnel selected to perform functions as follows:

- A. A Lead Controller is assigned to each emergency response facility. The Lead Controller is responsible for all Controller, Evaluator and Observer activities for that facility and, if appropriate, its associated teams. Controllers for teams or sub areas of a facility report to the Lead Controller of that facility.





- B. The Controllers will deliver "Exercise Messages" to the designated Players at various times and places during the Exercise, inject or deliver additional messages as may be required to initiate the appropriate Player response and keep the Exercise action moving according to the scenario and Exercise objectives, observe the Exercise participants at their assigned locations, and prepare evaluation forms. Controllers/Observers submit written recommendations on corrective actions to the Lead Controller, who in turn summarizes all comments for submittal to the Exercise Coordinator prior to the scheduled critique. The Controllers will be provided with a list of instructions in the Exercise scenario.
- C. Persons designated as Controllers/Observers for a given function will also be assigned as Evaluators of that function when feasible. Evaluators will record their observations using an evaluation form and provide recommendations on corrective actions to the Lead Controller in whose facility they evaluate exercise performance on the basis of standards or requirements contained in the appropriate Emergency Plan, Implementing Procedures, and Exercise messages as described herein. They will take steps, whenever possible, to collect data on the time and motion aspects of the activity observed for post-Exercise use for implementing improvements.

Controllers will be identified by wearing green badges with white lettering stating "Controller".

2.2.3 Players include Ginna Station and other Rochester Gas and Electric Corporation personnel assigned to perform emergency functions, as described in the Emergency Plan and Implementing Procedures. Players from offsite organizations and agencies (County and State) are participants in the Exercise as described in their respective Emergency Plans and Standard Operating Procedures.

2.2.4 Observers from the Rochester Gas and Electric Corporation and other organizations may be assigned on a limited basis, for the sole purpose of observing Exercise activities for personal education. They will not be provided scenario information.

Observers will be identified by wearing blue badges.



Requests to participate as a Observer should be made in writing and contain the Visitor's full name, home address, phone number and organization affiliation. Requests to participate as Observers must be submitted to the RG&E Corporate Nuclear Emergency Planner (CNEP) no later than one week before the Exercise.

### 2.3

#### Emergency Response Facilities

During the Exercise, special facilities must be activated to manage, assess and support emergency response.

## RG&E FACILITIES

The Rochester Gas and Electric Corporation Emergency Response Facilities are:

### A. Simulator Control Room

The Ginna Simulator Control Room will be used. Control Room emergency response measures will be exercised under the direction of the Exercise Shift Supervisor, acting as the Emergency Coordinator, until relieved by the Plant Manager or alternate. The Simulator Control Room is located in the Simulator Building next to the Ginna Training Center.

### B. Technical Support Center (TSC)

When emergency conditions escalate to an Alert status or higher, coordination of the emergency response will shift from the Control Room to the TSC, located off the Mezzanine Level of the Turbine Building. The TSC Director relieves the Shift Supervisor as Emergency Coordinator and directs activities from the TSC. The TSC is the location from which technical management personnel utilize information on Plant status provided in the TSC to support actions being performed in the Control Room. The TSC serves as the primary communications source to the NRC, OSC, EOF and offsite agencies, and will perform other functions of the EOF until the EOF is activated.

### C. Operations Support Center

The OSC, which is located in the TSC, provides a location where emergency response teams can be assembled and coordinated during an emergency. The OSC will be activated for emergency conditions classified as an Alert or higher, and may be activated for an Unusual Event at the discretion of the Emergency Coordinator.



**D. Emergency Operations Facility (EOF)**

The EOF, which is located in the basement of 49 East Avenue in Rochester, will be activated for emergency conditions classified as a Site Area Emergency or General Emergency (optional for the Alert status). The EOF/Recovery Manager directs the activities of the EOF/Recovery Organization from the EOF.

The TSC Emergency Coordinator reports to the EOF/Recovery Manager. The EOF is the command post for coordination of response measures with offsite organizations, assessment of radiological and environmental conditions and determination of recommended protective actions for the public. The EOF also provides direction and management of recovery operations.

**E. Joint Emergency News Center (JENC)**

The JENC, which is located at 89 East Avenue in Rochester, provides the point of contact for the coordinated release of news and information to the news media and the general public. The JENC is staffed by RG&E Corporation, County, State and Federal officials and will be activated for emergency conditions classified as an Alert, Site Area Emergency or General Emergency.

## 2.4 Exercise Conduct

### 2.4.1 Overview

The Exercise will simulate an abnormal radiological incident at Ginna Station which will start with an Unusual Event and escalate to a General Emergency.

During the course of the Exercise, in order to evaluate coordination with appropriate State and local agencies, incidents will arise which require response by offsite emergency response organizations/agencies. The Exercise will also simulate an offsite radiological release which will require deployment of Ginna Station, and Wayne County and Monroe County radiological survey teams for offsite monitoring.

The conduct of the Exercise will demonstrate the effectiveness of selected organizations, personnel, functions, and/or activities of the appropriate Emergency Plans and Implementing Procedures. The simulated emergency will then de-escalate. Recovery/Re-entry discussions and planning will be initiated and the Exercise will then be terminated.

### 2.4.2 Actions

Emergency response actions during the simulated emergency will include: recognition and classification of emergency conditions; assessment of onsite/offsite radiological consequences; alert/notification and mobilization of emergency response organizations; implementation of in-Plant corrective actions; activation/operation of emergency response facilities and equipment; preparation of reports, messages and record-keeping; and recommendation of protective actions.





### 2.4.3 Communications

The Exercise will also demonstrate the effective use of communications systems. An actual emergency operation usually requires the extensive use of both telephone and radios. The telephone is the primary means of communication and will be attempted first, with radio as a backup, unless radio is the only means available. Separate telephone numbers will be used for Controller communications to prevent the Players from learning in advance of the situation to which they are to be subjected during the Exercise. Close cooperation and coordination among Controllers is essential due to the number of persons assigned to the Controller role.

RG&E offsite radiation survey teams are equipped with portable radios, and are provided cellular telephones for back-up communications. Survey team controllers are encouraged to use the cellular telephones if clarifications of controller instructions are required while in the field.

### 2.4.4 Controllers

Lead Controllers will be stationed in the Simulator Control Room, OSC, TSC, EOF, JENC and County EOCs. Only Lead Controllers can modify Exercise messages or initiate free play messages.

A. The Simulator Control Room will be the central point for organization of Exercise messages and is the key to ensuring that the Exercise progresses on schedule. Simulated Plant parameters will be provided to the Simulator Control Room operators using Ginna Simulator. Since it is necessary that the emergency escalate to the General Emergency level, it may be necessary to postulate non-credible situations. The operators will accept the Exercise conditions as displayed. If corrective actions are postulated that would terminate the emergency, they should be identified to the Lead Controller in the affected facility so that the scenario will progress as designed. The Exercise Players are expected to "free play" the scenario to the extent practical. Notifications of, and contact with, supervisors, Plant management and offsite agencies will be made in accordance with the Emergency Plan Implementing Procedures.



- B. The TSC will be the coordination point for onsite emergency response activities. TSC personnel will also coordinate offsite emergency response activities until activation of the EOF. TSC and EOF personnel will be aware that if the Exercise is to proceed as planned, and if the offsite organizations are to be exercised, it may be necessary to postulate non-credible situations. This is done to ensure that various aspects of the onsite and offsite emergency response organizations are tested. TSC and EOF personnel will accept Exercise conditions as presented. The intended response is not to explain why a situation could not occur, but to react as though it did occur. If corrective actions are postulated that would terminate the emergency, they should be noted to the Lead Controller.

The Exercise Players in the TSC and EOF are expected to "free play" the scenario to the extent practical. Notifications of, and contact with, supervisors, Plant management and offsite agencies should be made in accordance with the Emergency Plant Implementing Procedures. The scenario is designed to activate on-site and offsite emergency response capabilities.

The Lead Controller may inject other information or change a message to ensure that the Exercise progresses as planned.

#### 2.4.5

#### Players

The success of the Exercise is largely dependent upon Player reaction, Player knowledge of their appropriate Emergency Plan and Implementing Procedures and an understanding of the purpose of the Exercise. Initial conditions which will affect Player action or reaction will be provided to the Players at the time the Exercise begins. However, most of the elements of the Exercise play will be introduced through the use of controlled Exercise message forms and messages generated by Players as a result of the particular emergency activity performed. Players, therefore, are responsible for initiating actions during the Exercise in accordance with instructions, responsibilities and tasks for their particular function. Each Player will advise his/her Controller prior to performing required emergency actions during the play of simulated activities to ensure that the Player is credited for his/her actions.



Players are reminded not to be excessively concerned with the mechanics or cause of the Exercise scenario. This Exercise is designed to evaluate the Emergency Plan, Implementing Procedures and emergency preparedness training program and not the probability, feasibility or detailed mechanics of the simulated accident. Additionally, the Exercise is a training vehicle for Rochester Gas and Electric Corporation personnel to practice coordinating with outside organizations in a simulated emergency environment. Players should note any needed improvements that come to their attention during the Exercise and submit them to the appropriate Controller at the conclusion of the Exercise.

## 2.5

### Precautions and Limitations

This section provides information for all Exercise Controllers and Observers related to the rules and guidelines to be followed throughout the conduct of this Exercise. Prior to initiation of the Exercise, a pre-Exercise briefing will be held to review the entire Exercise process with all the Exercise Controllers and Observers identified in this manual.

- A. Should at any time during the course of the conduct of this Exercise, an actual emergency situation arise, all activities and communications related to the Exercise will be suspended. It will be the responsibility of any Exercise Controller or Observer that becomes aware of an actual emergency to suspend exercise response in his/her immediate area and to inform the Lead Exercise Controller of the situation. Upon notification of an actual emergency, the Lead Exercise Controller may notify all other Controllers/Observers to suspend all Exercise activities. The Lead Exercise Controller will make a determination at that point whether to continue, place a temporary hold on, or terminate the Exercise.
- B. Should, at any time during the course of the conduct of this Exercise, an Exercise Controller or Observer witness an Exercise participant undertake any action which would, in the opinion of the Controller/Observer, place either an individual or component in an unsafe condition, the Controller/Observer is responsible for intervening in the individual's actions and terminating the unsafe activity immediately. Upon termination of the activity, the Controller/Observer is responsible for contacting the Lead Exercise Controller and informing him of the situation. The Lead Exercise Controller will make a determination at that point whether to continue, place a temporary hold on, or terminate the Exercise.



- C. No pressurization of fire hoses, discharging of fire extinguishers, or initiation of any fire suppression systems will be required for the Exercise.
- D. Manipulation of any Plant operating systems (except for the PASS system), valves, breakers, or controls in response to this Exercise are only to be simulated. There is to be no alteration of any Plant operating equipment, systems or circuits during the response to this Exercise.
- E. All repair activities associated with the scenario will be simulated with extreme caution emphasized around operating equipment.
- F. All telephone communications, radio transmissions and public address announcements related to the exercise must begin and end with the statement, "This is an exercise". Should a Controller or Observer witness an Exercise participant not observing this practice, it is the Controller's/Observer's responsibility to remind the individual of the need to follow this procedure.
- G. Any motor vehicle response to this Exercise, whether it be ambulance, fire fighting equipment, police/security vehicles or field monitoring teams, should observe all normal motor vehicle operating laws included posted speed limits, stop lights/signs, one way streets, etc.
- H. Should any onsite security actions be required in response to this Exercise, participants are to cooperate as directed by the Security Force, and security representatives are to be prudent and tolerant in their actions.
- I. Exercise participants are to inject as much realism into the Exercise as is consistent with its safe performance; however, caution must be used to prevent over-reaction.
- J. Care must be taken to assure that any non-participating individuals who may observe Exercise activities or overhear Exercise communications are not misled into believing that an actual emergency exists. Any Exercise Controller or Observer who is aware of an individual or group of individuals in the immediate vicinity who may have become alarmed or confused about the situation, should approach that individual or group and explain the nature of the Exercise and its intent.





Evaluation and Critique

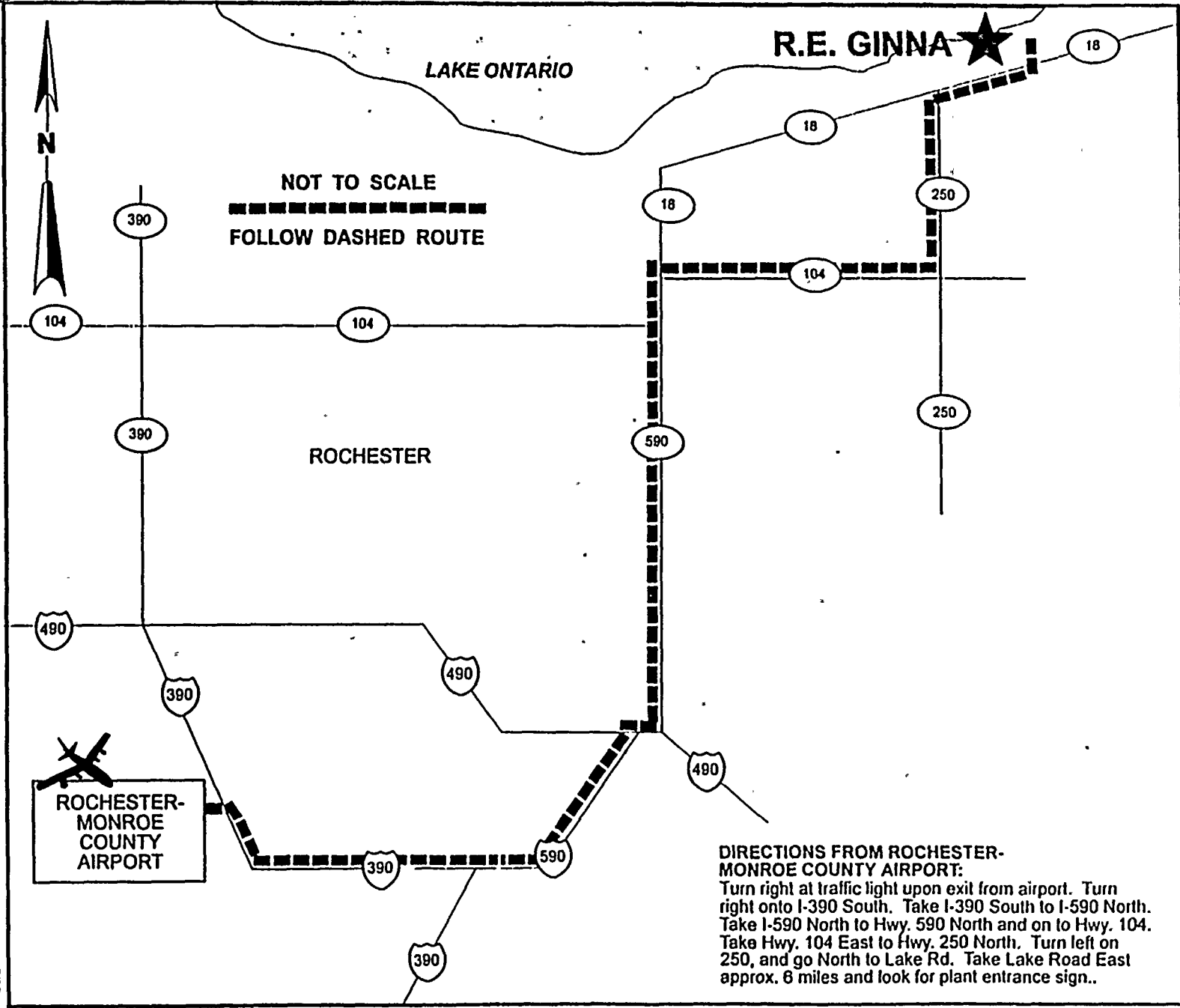
The Exercise will be evaluated by Controllers/Observers who have expertise in, or qualifications to evaluate the activity in their assigned location. Controllers/Observers will evaluate Exercise performance on the basis of requirements contained in the Emergency Plan Implementing Procedures and Exercise messages. Controllers/Observers will prepare evaluation forms and provide recommendations on corrective actions to the Exercise Coordinator.

After the Exercise is completed, the Exercise Coordinator will conduct a post-Exercise critique. Deficiencies in the Emergency Plan, Implementing Procedures, emergency preparedness training program, facilities, equipment and/or other areas will be identified through the critique process. The deficiencies will be documented by the Exercise Coordinator and corrected by the individuals who have responsibility in the area of the identified deficiency.

Controller and Observer information is contained in Section 5.0.

The schedule for the critiques is shown in Section 6.0.

PLANT: **R.E. GINNA** LOCATION: Ontario, NY  
MEMBER UTILITY: **Rochester Gas & Electric Corporation**



**DIRECTIONS FROM ROCHESTER-MONROE COUNTY AIRPORT:**  
Turn right at traffic light upon exit from airport. Turn right onto I-390 South. Take I-390 South to I-590 North. Take I-590 North to Hwy. 590 North and on to Hwy. 104. Take Hwy. 104 East to Hwy. 250 North. Turn left on 250, and go North to Lake Rd. Take Lake Road East approx. 6 miles and look for plant entrance sign..



SECTION 3.0

TRAVEL INFORMATION

### 3.0

### TRAVEL INFORMATION

This section of the Ginna Station Exercise Manual provides travel information to those individuals from RG&E, other utilities, local/State/Federal government, and/or other organizations who will participate/observe the Drill.

Permission for Visitors to observe the Exercise must be obtained from:

**Mr. Peter Polfleit  
Corporate Nuclear Emergency Planner  
Rochester Gas and Electric Corporation  
49 East Avenue  
Rochester, NY 14649-0001.**

### 3.1

#### Directions to Ginna Nuclear Station

Ginna Station is located on the southern shore of Lake Ontario in Wayne County, New York, approximately 24 miles northeast of Rochester, New York (see Figure 3.1).

#### 3.1.1

##### Air

Several airlines provide passenger service to the Rochester-Monroe County Airport.

#### 3.1.2

##### Car

- A. Several car rental agencies are available at the Rochester-Monroe County Airport to provide rental vehicles for ground transportation to Ginna Station.
- B. Persons traveling from the Rochester-Monroe County Airport via auto should take Route 204 East to Route 390 South. Route 390 becomes Route 590 as one proceeds around the Outer Loop. Follow Route 590 North to Route 104 East. Follow Route 104 to Route 350 (Ontario Center Road). Turn left (North) and proceed to Ginna Station. Total distance is approximately 40 miles.



### 3.2 Directions to the EOF, ESC and JENC

#### 3.2.1 Air

From the Rochester-Monroe County Airport take 204 to 390 North, 490 East into the City onto the Inner Loop to the East Avenue ramp to the third signal light. Turn right.

#### 3.2.2 Car

From the Thruway, use Exits 45 or 46 into Rochester and the Inner Loop to the East Avenue ramp as in 3.2.1.

3.2.3 To get to the Emergency Operations Facility (EOF) and Engineering Support Center (ESC), go to the intersection of East Avenue and Chestnut Street (black square on map). EOF and ESC are in 49 East Avenue. The JENC is at 89 East Avenue (see Figure 3.2).

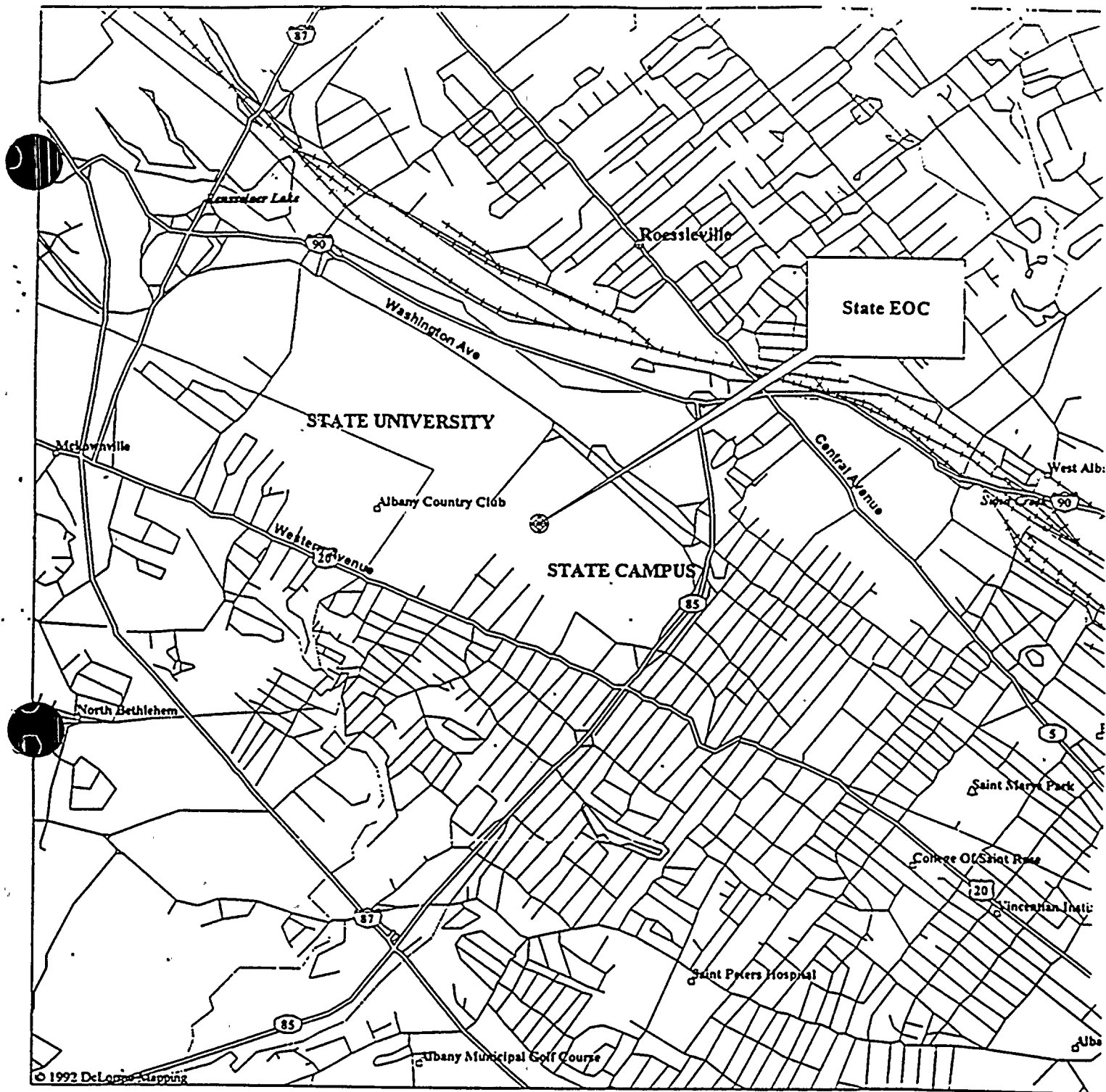
### 3.3 Accommodations

Hotel/motel accommodations may be obtained at the following locations:

Depot Hotel, Pittsford	(716) 381-9900
Marriott Hotel, Greece	(716) 225-6880
Red Roof Inn, Henrietta	(716) 359-1100
Brookwood Inn, Pittsford	(716) 248-9000
Woodcliff Lodge, Perinton	(716) 248-4810
Holiday Inn, Henrietta	(716) 457-1510
Hyatt, 125 E. Main St. Rochester	(716) 546-1234







# LEGEND

- State route
- Marker
- Large town
- Park
- Interstate route
- U.S. route
- Boundary
- Road

- Interstate highway
- State highway
- U.S. highway
- Railroad
- River
- Shoreline
- Open water

Scale 1:31,250 (at center)

2000 Feet

1000 Meters

Procedure D-1

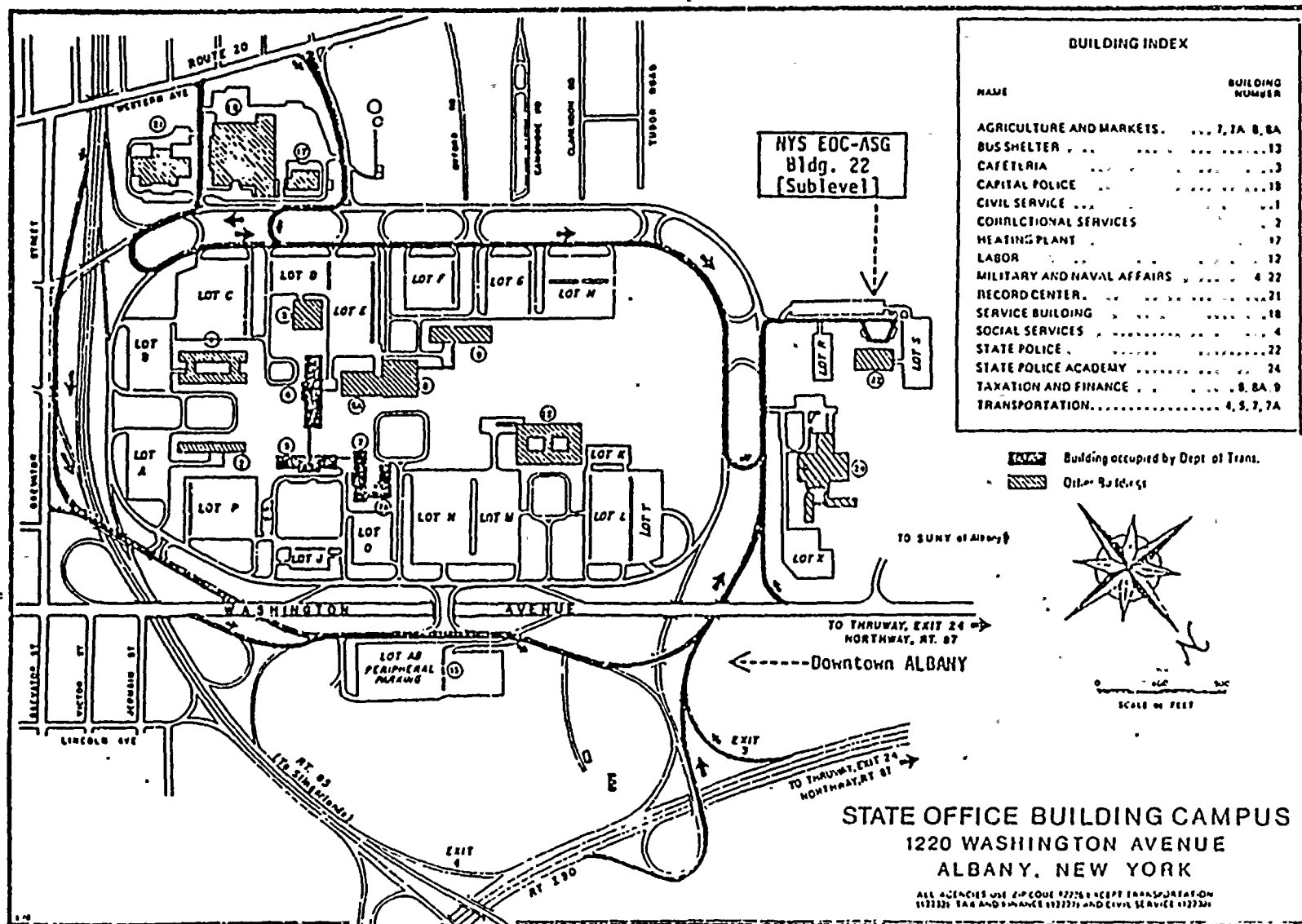
STATE EOC

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Attachment 1

STATE EMERGENCY OPERATIONS CENTER  
(Alternate Seat of Government)  
EOC-ASG



1

Rev. 7/93

\* FROM THE SOUTH or WEST take the N.Y.S. Thruway (I-87 Northbound/I-90 Eastbound) to Exit 24. After the toll booth proceed straight on I-90 to Exit 3.

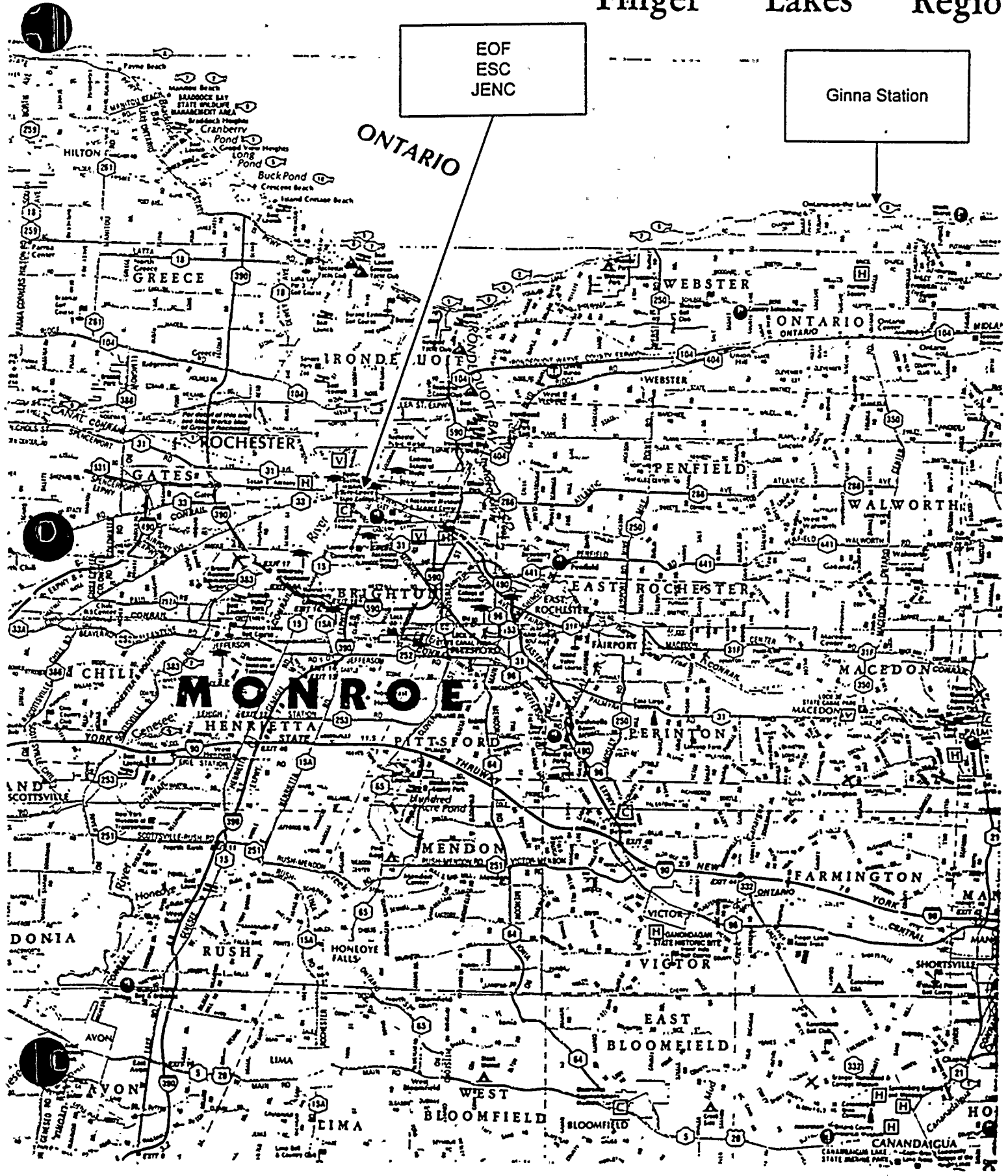
\* FROM THE NORTH take the Adirondack Northway (I-87) South to Exit 1E. Proceed East on I-90 to Exit 3.

\* FROM DOWNTOWN ALBANY take I-90 Westbound to Exit 3.

\* FROM DOWNTOWN ALBANY take Washington Avenue to Western Avenue (Rte 20) to the State Office Building Campus



# Finger Lakes Regio



EOF  
ESC  
JENC

Ginna Station

## **SECTION 4.0**

### **REFERENCES/ABBREVIATIONS - ACRONYMS**



4.1      References

- 4.1.1      10 CFR 50.47, 50.54, Appendix E
- 4.1.2      44 CFR 350.9
- 4.1.3      NUREG-0654/FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
- 4.1.4      RG&E Nuclear Emergency Response Plan (NERP)
- 4.1.5      Ginna Station Radiation Emergency Plan Implementing Procedures (EPIPS)
- 4.1.6      Ginna Station License and Technical Specifications
- 4.1.7      Ginna Station Piping and Instrumentation Drawings
- 4.1.8      New York State Radiological Emergency Response Plan
- 4.1.9      Monroe County Emergency Preparedness Plan
- 4.1.10     Wayne County Radiological Response Plan



Abbreviations - Acronyms

A/E	Architect Engineer
ALARA	As Low As Reasonably Achievable
AOV	Air-Operated Valve
ARMS	Area Radiation Monitor(s)
ARV	Atmospheric Relief Valve
ATWS	Anticipated Transient Without Scram
BAST	Boric Acid Storage Tank
CD	Civil Defense
CFR	Code of Federal Regulations
CV	Containment
CR	Control Room
DOE	Department of Energy
DOE-IRAP	DOE Interagency Radiological Assistance Plan
EAL(s)	Emergency Action Level(s)
EAS	Emergency Alert System
EC	Emergency Coordinator
ECL(s)	Emergency Classification Level(s)
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EPA	Environmental Protection Agency
EPC	Emergency Planning Coordinator
EPIP(s)	Emergency Plan Implementation Procedure(s)
EPZ	Emergency Planning Zone
ERF(s)	Emergency Response Facility(s)
ERDS	Emergency Response Data System
ERPA	Emergency Response Planning Area
ESC	Engineering Support Center
FEMA	Federal Emergency Management Agency
FRERP	Federal Radiological Emergency Response Plan
GS	Ginna Station
HALM	High Alarm
HP	Health Physicist
HPN	Health Physics Network
HVAC	Heating Ventilation Air Conditioning
INHB	Inhibited (Alarm Suppressed)
INPO	Institute of Nuclear Power Operations
JENC	Joint Emergency News Center
KI	Potassium Iodide
LALM	Low Alarm
LCO	Limited Condition of Operation
LOCA	Loss of Coolant Accident

Abbreviations - Acronyms (Cont'd)

LWR	Light Water Reactor
MOV	Motor-Operated Valve
PIO	Public Information Officer
MPC	Maximum Permissible Concentration
NERP	Nuclear Emergency Response Plan
NRC	Nuclear Regulatory Commission
OSC	Operational Support Center
OOS	Out of Service (on site)
OOS	Out of Sequence (off site)
PAG(s)	Protective Action Guide(s)
PAR(s)	Protective Action Recommendation(s)
PASS	Post Accident Sampling System
PWR	Pressurized Water Reactor
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RG&E	Rochester Gas and Electric Corporation
RST	Radiation Survey Team
SC	Survey Center
SI	Safety Injection
SPING	High Range Effluent Monitor
TSC	Technical Support Center

**SECTION 5.0**

**CONTROLLER AND EVALUATOR INFORMATION**



**CONTROLLER AND EVALUATOR INSTRUCTIONS**

Each Controller and Evaluator should be familiar with the following:

- a. The basic objectives of the Exercise.
- b. The assumptions and precautions being taken.
- c. The Exercise scenario, including the initiating events and the expected course of actions to be taken.
- d. The various locations that will be involved and the specific items to be observed when at those locations.
- e. The purpose and importance of the evaluation checklist and record sheets.

**5.1****Controller Instructions**

- 5.1.1 Controllers will position themselves at their assigned locations prior to the activation of the facility for which they have responsibility (see Section 5.3).
- 5.1.2 Communications will be tested to ensure satisfactory communications among Controllers prior to Exercise commencement. All watches and clocks will be synchronized with the Ginna Simulator Time.
- 5.1.3 All Controllers will comply with instructions from the Lead Controller.
- 5.1.4 Each Controller will have copies of the messages controlling the progress of the Exercise scenario. No message shall be delivered out of sequence or other than as written unless specifically authorized by the Lead Controller.
- 5.1.5 Messages controlling the progress of the scenario are noted with a number. Contingency messages are noted with a number followed by the letter "X" (e.g., 10X).
- 5.1.6 Each Controller will have copies of time-related plant data sheets. Data sheets will be distributed only if the Simulator experiences a sustained malfunction. The decision to use these sheets will be made by the lead exercise controller. Radiological information will also be displayed on the Simulator. Radiological survey information and meteorological data will be provided by controllers at locations where it is normally available.



5.1.7 Controllers will not provide information to the Players regarding scenario development or resolution of problem areas encountered in the course of the simulated emergency. The Exercise participants are expected to obtain information through their own organizations and exercise their own judgement in determining response actions and resolving problems.

5.1.8 Some Players may insist that certain parts of the scenario are unrealistic. The Lead Controllers have the sole authority to clarify any questions regarding scenario content.

5.1.9 Each Controller will take detailed notes regarding the progress of the Exercise and the responses of the Exercise participants at their respective assigned locations. Each Controller will carefully note the arrival and departure time for participants, the times at which major activities or milestones occur and problem areas encountered. The Controllers will retain their notes for the purposes of reconstructing the Exercise chronology and preparing a written evaluation of the Exercise.

5.1.10 Controllers should display the same behavior as the players. This includes **No eating drinking or smoking and frisking upon entering the TSC or Survey Center.** The controllers should let the players enter the facility first and follow their actions. **Controllers are not to enter first and frisk.** This is prompting.

## 5.2 Evaluation Instructions

Each Controller/Evaluator will take detailed notes regarding the progress of the Exercise and the response of the Exercise participants at their respective assigned locations. Each Controller/Evaluator should carefully note the arrival and departure times of participants, the times when major activities or milestones occur and problem areas encountered.

The standards below should be used by the Controller/Evaluator to evaluate assigned areas pertaining to the emergency response. A dual purpose will be served by this rating system. First, the capability of each facility or response area will be evaluated and second, the system will provide a vehicle for guiding and directing improvement. The rating scale is as follows:

### Good

Personnel and equipment generally performed better than expected. Any errors or problems were minor and easily correctable.





Satisfactory

Personnel and equipment generally performed as expected. Any errors noted were not severe and could be corrected without undue labor or expense.

Unsatisfactory

Personnel and equipment generally performed below expectations and there were several significant deficiencies noted. The area's ability to carry out its functions was diminished.

NA - Not applicable to the situation or not observed.

Controller/Evaluator comments should consider the demonstration of the following facility and team evaluation elements:

**5.2.1**

Facility

- o Accurate and timely determination of emergency action and classification levels.
- o Timely activation and staffing for each classification level.
- o Familiarity of personnel with appropriate emergency instructions, duties and responsibilities.
- o Timely notification of Rochester Gas and Electric Corporation, local, State and Federal personnel/agencies (information updates performed).
- o Adequacy of internal information systems (i.e., message handling, displays, status boards and maps).
- o Properly controlled documentation and accurate, timely record-keeping.
- o Utilization of correct communications procedures and techniques.
- o Capability of facility supervisors/directors to interface with personnel and coordinate facility activities.
- o Consideration of personnel safety (exposure control).
- o Adequacy of interface between emergency response facilities.



- o Adequacy of equipment and supplies.
- o Timely initiation of onsite protective/corrective actions.
- o Development of protective action recommendations.
- o Radiological surveys and assessment of plant damage and hazardous conditions performed.
- o Timely request of emergency support services.
- o Coordinated, accurate and orderly dissemination of information to the news media.
- o Proper assumption of command and control.

#### 5.2.2 Team

- o Timely notification and activation.
- o Adequacy of staffing.
- o Familiarity with appropriate emergency procedures, duties and responsibilities.
- o Availability and utilization of proper equipment.
- o Performance of contamination/decontamination control.
- o Proper interface with emergency support personnel.
- o Utilization of correct communications instructions and techniques.
- o Availability of referenced documents to team members.
- o Utilization of proper radiological control practices (i.e., access control, protective clothing, shielding, stay time).
- o Performance of radiological surveys.
- o Timely and proper performance of damage assessment.



- o Properly maintained survey records and maps.
- o Adequacy of briefing sessions prior to dispatch.
- o Direction and control by team leaders.
- o Timely requests for offsite assistance if required.
- o Coordination and interface between emergency response team members.
- o Proper interfaces with plant supervisory personnel.  
 Controllers/Observers will record their comments for the purpose of reconstructing the Exercise chronology and preparing a written evaluation of the Exercise.

### 5.3 Personnel Assignments

Table 5.1 lists the personnel assignments for the on-site Controller organization.

### 5.4 Evaluation Packages

The following evaluation packages will be provided to the appropriate Controllers/Observers at the pre- Exercise briefing:

- Simulator Control Room
- Technical Support Center
- Operational Support Center
- Survey Center
- Emergency Operations Facility
- Joint Emergency News Center
- Health Physics Personnel
- Dose Assessment (TSC and EOF)
- Radiation Survey Teams (SC and EOF)
- Post-Accident Sampling System
- Fire Brigade
- Engineering Support Center

TABLE 5.1

The following personnel have been designated to act as Controllers during the 1997 Exercise activities:

<u>Facility</u>	<u>Controllers</u>
Control Room (Simulator)	Jim Zulawski (lead) Rick Jenkins
Control Room (Real)	Day Shift Supervisor in Operations Office
<u>TSC:</u>	
Lead	Ken Masker
Technical/Ops. Assessment	Ron Ruedin/Tom Alexander
Security	Rod Albrecht
Dose Assessment & RP/Chemistry	Tony Hedges
Admin/Communications	Frank Cordaro
<u>OSC:</u>	
I&C	Greg Rawa
Mechanical	John Liese
Electrical	
Radiation Protection	Gary Combs/Bud Meighan
<u>SC:</u>	
Lead	Greg Jones
"A" Team	Janice Walters
"B" Team	Dean Ganskop
"C" Team	Roy Marriott
"D" Team	June Anderson
"E" Team (Spare)	Sam Poulton
"F" Team (Spare)	Kim Magnuson
<u>EOF:</u>	
Lead	Peter Polfleit
Operations/Technical	John Fischer
Admin/Communications/Data Flow	Kathy McGinnis
Dose Assessment	Rick Watts
County/State/NRC Operations	Glenn Litzenberger
Survey Team	Dave Lovgren

**GINNA STATION  
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**5.5 PUBLIC INFORMATION, RUMOR CONTROL AND SPOUSE PHONE QUESTIONS  
FOR THE EVALUATED EXERCISE**

A significant aspect of emergency response is to provide the news media and general public with accurate and timely information about the incident. Public perception and reaction are influenced by the information relayed to them. To ensure that the Rochester Gas and Electric Corporation Emergency Organization is prepared to deal with outside inquiries during an incident at the Ginna Station, the exercise provides certain elements that test Public Information and Rumor Control activities. During the course of the Exercise, the Joint Emergency News Center (JENC) will be activated and exercised. The RG&E "Spouse Phone" will also be staffed by the RG&E Medical Department.

Exercise Controllers have been selected to test the Rumor Control and News Media Contact Staffs, as well as the JENC. Controllers will act as concerned citizens, employees, employee relatives and as members of the media, posing questions to the staffs. When acting as members of the media, controllers shall make up a name and a media outlet (print or electronic) located outside of the Rochester area. Each time a rumor control message is delivered, a different fictitious name and address will be given. The phone number to be given will be the number from which the exercise controller is calling so as to allow the county Rumor Control person(s) to return calls with appropriate information, if necessary. The exercise controllers should maintain the theme of each rumor control message and answer inquiries of the counties' Rumor Control persons appropriately.

The following pages denote questions that these controllers can use. The questions are grouped by time in relation to the events specified in the Exercise Scenario. The Controllers are allowed to use questions previously utilized. The lead JENC Controller shall verify that the exercise is adhering to schedule, otherwise time adjustments will be necessary. Forms are provided for controllers to make notes on the response. Controllers need not use the questions herein; free play is encouraged. However, controllers must not get carried away with unusual or pointless questions.

When calling in questions, always precede questions with "THIS IS AN EXERCISE". If you are playing a reporter at the JENC, free play questions based on the information given during the briefing. Additionally, ask questions about RG&E, the State or counties, Ginna Station, radiation, state/county/utility interface, protective actions, etc. Questions and relevant telephone numbers will be distributed at the special Pre-Exercise Controllers Briefing.

- |                     |  |
|---------------------|--|
| <u>Attachment 1</u> | lists Public Information questions generally for RG&E;                         |
| <u>Attachment 2</u> | lists County Rumor Control Questions;  |
| <u>Attachment 3</u> | lists questions for simulated press corps individuals.                         |
| <u>Attachment 4</u> | lists questions for testing the "Spouse Phone" in the RG&E Medical Department. |

JENC:

Lead

Frank Orienter

NATIONAL WEATHER SERVICE:

Lead

S. Levine (NWS/NOAA)



**GINNA STATION  
1997 EMERGENCY EXERCISE**

**ATTACHMENT 1**

**PUBLIC INFORMATION QUESTIONS**

TIME	QUESTION
09:45	This is _____ from Radio Station WHCU. We've heard that there is an incident at the Ginna Nuclear Plant. Can you tell us what is happening?
	My husband's a Wayne County Sheriff's Deputy. He said he's heard that there's a problem at the nuclear plant. I'm worried that they're going to send him out there. What is happening there?
	<p>This is _____ from the Associated Press. I understand that you have an incident at the Ginna Nuclear Plant. What's going on up there?</p> <ul style="list-style-type: none"> <li>▶ How extensive is the problem?</li> <li>▶ Where did the trouble start in the plant?</li> <li>▶ Is it under control?</li> <li>▶ What's the status of the plant?</li> <li>▶ Any radiation exposures to the workers?</li> <li>▶ Is the safety of the public threatened?</li> <li>▶ When will you have a press conference?</li> <li>▶ We'd like to send someone to the plant..Where do they go?</li> </ul>
09:50	<p>This is _____ from Radio Station WJRR. We have a report you have a problem at the Ginna Station. Would you tell our listeners the story?</p> <ul style="list-style-type: none"> <li>▶ Could the problem become as serious as Chernobyl?</li> <li>▶ Is the plant experiencing a meltdown? How do you know?</li> <li>▶ Any injuries? Any radioactive contamination released?</li> <li>▶ Who is in charge of the emergency?</li> <li>▶ Did you declare an emergency?</li> <li>▶ Was the reactor damaged?</li> <li>▶ Did you evacuate the site? Why not?</li> <li>▶ Are you going to evacuate the public living by the plant?</li> <li>▶ Is the reactor under control?</li> <li>▶ Do you have a press conference scheduled?</li> </ul>
10:15	What is happening at Ginna?
	Any deaths or serious injuries?
	Have the federal authorities been notified?
	Have State and local officials been notified? Which agencies are involved?
	What is going on at Ginna?
	What are you doing to fix the problem?



	Are you evacuating the site?
	Are you going to tell the pregnant women and children to evacuate the area around the plant like the Governor of Pennsylvania did at TMI?
	Has Governor Pataki been notified?
	Are the sirens going to all go off?
10:30	I've heard you declared an "ALERT". What's that? What happened?
	How did the problems start?
	Has anyone been killed? Any injuries?
	The situation seems to be getting worse...is this true?
	<p>I work at Nine Mile Point Unit II.</p> <ul style="list-style-type: none"> <li>▸ I'm confused about what's going on at Ginna...is the leak into Containment or to the outside atmosphere?</li> <li>▸ Are the plant safety systems working?</li> <li>▸ How much radiation is being released?</li> <li>▸ Do you need any help from us?</li> </ul>
10:45	<p>What is the significance of an "ALERT"?</p> <ul style="list-style-type: none"> <li>▸ How bad is that?</li> </ul>
	Have government officials been called?
	What will the Governor do?
	What is RG&E doing?
	Didn't Ginna have a problem several years ago?
	Who do I talk to for getting more information about radiation being released from the plant?
	I've got a large farm in Ontario and I need to know what should I do?
	Where would I get more stored feed for my cattle if my pasture gets contaminated?
	I think I heard the sirens...do I need to evacuate?
11:00	I have heard that you declared a "Nuclear Alert". Is this true?
	How much of the plant has been damaged?
	Is there is a release?
	Has anyone been killed around the plant?
	Have the authorities been informed?
	Can't you just shut a valve or something?
11:30	<p>What does a General Emergency mean? Doesn't that mean a meltdown is happening?</p> <p>Is this accident similar to the one you had in 1982?</p>

	Why didn't we have more warning about this problem before now?
	When will the NRC take over the plant?
	Will you evacuate people around the plant?
	In simple terms, what are they doing to control this accident?
	Is this as bad as Chernobyl?
	Will there be a big release, or has one started?
11:40	Are farm animals safe?
	What about the crops and orchards around the plant?
	Are you releasing radiation? What are the levels?
	How are you checking radiation around the plant?
	Should we get out if we live in the 10-mile zone?
	My father is in the Maplewood Nursing Home in Webster. What will happen to him?
	How long will this emergency last?
	If we evacuate, how long do we have to stay away?
	Is this like the movie "China Syndrome" come true?
12:00	How much radiation is being released?
	Is the radiation like bomb fallout? How dangerous is it?
	Who is in charge of the emergency?
	When will the next press briefing be held?
	Where is the radiation heading?
	What protective actions have been recommended?
	Whom should I call for further information concerning Wayne (Monroe) County?
	If we're evacuated, will my house ever be safe to return to?
	Who gets the bill for all of this? Who's liable?
	How did the problem start ?
	If I have to evacuate, can I return whenever I want to?
	What protective actions are in effect for Wayne (Monroe) County?
	Is this plant similar to Chernobyl or TMI?
	How much radiation is being released off site?

	My dog is at a vets office in Penfield on Atlantic Avenue. What's being done to protect him from radiation?
12:30	<p>I'm Jim Johnson from Ontario County. My neighbor said they expect the contamination to blow all the way down here.</p> <ul style="list-style-type: none"> <li>▶ What should I do about my turf farm?</li> <li>▶ If I can't sell the turf from my farm, who's going to pay me for my losses?</li> </ul>
	Is the release over?
	How bad was it?
	How large an area is contaminated... for how long?
	Is the area around Ginna uninhabitable now?
	Is the government going to have to relocate everyone permanently?
	Where do I go to have my family and cars tested for radiation?
	What are electric rates going to be because of this?
	Where are you going to get power if Ginna is out of service?
	Are the shareholders going to have to pay for this?
	<p>Should I sell my RG&amp;E stock?</p> <ul style="list-style-type: none"> <li>▶ What effect will this have on RG&amp;E stock?</li> <li>▶ What was your stock selling for this morning?</li> <li>▶ What is your stock selling for now?</li> </ul>

**GINNA STATION  
1997 EMERGENCY EXERCISE**

**ATTACHMENT 2**

**RUMOR CONTROL MESSAGES  
FOR MONROE COUNTY**

TIME	QUESTION
09:30	I hear there's an emergency at the nuclear power plant. ▸ How will I know if we have to leave?
	I'm _____ of Radio Station WWLE. You're on our "LIVE LINE" and could you tell our listeners what's happening at the Ginna Nuclear plant? ▸ What does the County Executive intend to recommend to the public?
	How much damage did the problem do to the plant?
09:45	Has any radiation been leaked yet? ▸ How can you be sure? ▸ Are you checking it? ▸ How can I find out when there is a release?
10:20	My daughter is at the Webster Library. How will she know about this? ▸ Can I drive over there to look for her?
	We've lost our emergency information handbook and need one right away. ▸ Will one of the emergency people you have deliver one to us?
11:00	If there's an evacuation, I'm going to need help with my two infant twins. Can you help me?
	I need to talk to the County Executive. ▸ What's his number? ▸ I need to know what to do. ▸ Is RG&E telling us the truth?
11:15	I live near the plant and heard there is "NUCLAR ALERT". ▸ Are you checking the radiation levels outside? ▸ Did the New York Militia people do this?
	What's this I hear about a radiation leak at Ginna? ▸ Was that because of a big explosion or something? ▸ How many got hurt and who's running the plant now?
	Somebody told me the Ginna workers bail out from the plant when there's a leak, is that true?
11:30	My wife is concerned because she doesn't think you county disaster people are being told everything by RG&E. I can't even get a straight answer on my monthly electric bill. What's really going on?



	Where is the County getting its information from?
	Can you tell RG&E to shut down the plant?
	Are you going to demand a "Nuclear Free Zone" from now on? <ul style="list-style-type: none"> <li>▸ I don't trust the power plant people; they'd lie to save their own skins.</li> <li>▸ Do you have anybody checking on them?</li> </ul>
	Is the County Legislature going to look into this accident and stop Ginna from starting up again?
	Where is all the radioactive waste going to go now from this accident?
	Should I close my restaurant due to the accident at Ginna Station? I'm over by the Bay. What are we supposed to do? <ul style="list-style-type: none"> <li>▸ Who do I call to find out if we're going to have to leave?</li> <li>▸ Who will pay for the lost income?</li> </ul>
12:00	I heard nobody at Ginna can fix this plant accident! <ul style="list-style-type: none"> <li>▸ Is it true that the Feds are coming to take over?</li> <li>▸ Are they gonna stop the release?</li> </ul>
	What's happening to all the school kids in Webster School District?
	I heard the siren but nobody said which way to go. My neighbor says the siren means to leave your house immediately. Is he right?
	What do I do? I live on Schlegel Road near the Elementary School.
	I hear that the Maplewood Nursing Home will evacuate its patients. My father is in there. Where will he be when it's over so I can go make sure he's okay?
12:30	I'm leaving now. Where do I go for temporary housing? I live on Jackson Road near Ridge Road.
	I'm evacuating now. Which way is safe to travel?
	I am supposed to leave but don't have a place to stay. <ul style="list-style-type: none"> <li>▸ Which school can I stay at?</li> <li>▸ I live on Lake Road near Basket Road.</li> <li>▸ How do I get there?</li> <li>▸ Who's going to pay my expenses?</li> <li>▸ Who do I call to get a check for my expenses?</li> </ul>
	We live near Salt Road and Atlantic Avenue. We need temporary housing. I've got 5 kids with me.
13:00 1:00PM	Is it true that the milk is now poisoned? Where are we supposed to get our milk now?
	We don't have any money or a car. How do we get away from the radiation? Where do we live and eat?



	I live up on Five Mile Line Road by the R.L. Thomas School. I heard the accident at the Ginna Station is getting worse. Are we gonna be moved out of our homes after this?
	Why haven't you made the announcement on TV?
	What is the Governor doing?
	Who's in charge of handling this accident anyway?
	What is the status of the problem that occurred this morning?
	What caused the problem?
	I've heard that the reactor is destroyed. Is this true?
	My homeowner's insurance states that I am not covered for nuclear accidents! <ul style="list-style-type: none"> <li>▸ Does the county have insurance?</li> <li>▸ Who will pay for this?</li> </ul>
	I'm calling from Penn Yan ...I just heard about the Ginna problem and we're coming home from vacation - We live near Hegedorn's on Shoecraft Road in Webster. Can we go home or should we stay over another night?
	I'm low on cash...is there some way I can get some expense money from RG&E's insurance company?

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**RUMOR CONTROL MESSAGES  
FOR WAYNE COUNTY**

TIME	QUESTION
09:30	I hear there's an emergency at the nuclear power plant. How will I know if my family and I need to do something?
	I'm Jane Thomas of Radio Station WZZZ. Can you tell our listeners what's happening at the Ginna Nuclear plant? You're live on our "MORNING SOUND-OFF SHOW". Go ahead.. <ul style="list-style-type: none"> <li>▶ How much damage did the explosion do to the plant?</li> <li>▶ What does Wayne County intend to recommend to the public?</li> <li>▶ Will you have a press conference?</li> </ul>
09:40	Has any radiation been released yet? <ul style="list-style-type: none"> <li>▶ How can you be sure?</li> <li>▶ How can I find out when there is a release of dangerous radiation?</li> </ul>
09:45	My daughter and a friend are out shopping at Ames Plaza in Ontario. They're probably near the plant. <ul style="list-style-type: none"> <li>▶ How are they going to be warned about the plant problem?</li> <li>▶ Can I go there to warn them?</li> </ul>
	My mother works in the office at the Freewill Elementary School. <ul style="list-style-type: none"> <li>▶ How do they know there's problem?</li> <li>▶ Are they safe?</li> <li>▶ If they evacuate the students, will they also evacuate the staff?</li> <li>▶ Where will they take them?</li> </ul>
10:15	We've lost our emergency information handbook and need one right away. Will one of the emergency people you have deliver one to us?
	We live near Kenyon Road and Ontario Center Road are we going to have to evacuate? We're very close to Ginna! Where are we supposed to go if we're told to leave?
11:00	If there's an evacuation, I'm going to need help with my father who is bedridden due to a heart attack last month. Can you help me?
	We live in a one-story woodframe house. The calendar we received from RG&E talks about "sheltering". Isn't that supposed to apply only to brick buildings with thick walls? We don't even have a basement!
	I wanna talk to Marvin Decker or someone in charge! I need to know what's going on and what to do. I live near the plant and don't want that nuclear stuff falling on my house.
	Can we go outside? Are we in danger?

	Are you people checking the radiation?
	What's this I hear about a release at Ginna? Is that what caused the plant to send everybody home? How many got hurt and who's gonna run the plant now? (Note: This caller is under the mistaken impression that Ginna has been abandoned and is now out of control.)
11:30	My wife is concerned because she doesn't think you county disaster people know what you're doing! I told her not to worry because the County Chairman knows how to run the plant because he's practiced it before. Just one thing, why doesn't he turn it off before we get melted down?
	Is Wayne County going to be declared a disaster area?
	Is this accident as bad as Chernobyl or TMI?
	Where do the school kids go?
	Should I close my business due to the accident? Who will pay for the lost income? (The business is Route 104 near Knickerbocker Road).
12:00	What are we supposed to do - leave or stay put?
	We live in Marion - is there radiation heading this way?
	What can I tell my neighbor to calm her down?
	Should I cover my vegetable garden to protect it from radiation?
	I heard nobody at Ginna knows what the hell is going on! Is it true that State people are coming to take over?
	We heard the Governor is coming to take charge of Ginna.
	Are the crops going to be condemned because of the contamination?
12:30	I heard the siren but nobody said which way to go. My neighbor, says the siren doesn't mean to go; you're supposed to hide in your basement! Which is it? We don't have a basement!
	I live in Walworth...we just had a problem a few weeks ago with the drinking water. Are we going to have to boil our drinking water again because of the plant's radiation?
	My car's in the shop for repair...could I get transportation?
	I'm leaving now. Can I pick my daughter up? She's got a job at the Ontario Manor Motel in Ontario.
	How am I going to feed my family for the next several days?
13:00 1:00 PM	I think I am supposed to leave but don't have a place to stay. I live in Wayne ERPA Number 2 near the plant. Which county shelter can I stay at? How do I get there?
	Who's going to pay my expenses?

	Who do I call to get a check for my expenses?
	Can I get my family and car checked for radiation?
	I heard the accident at the Ginna Station hasn't been stopped. <ul style="list-style-type: none"> <li>▶ When are we gonna be allowed to go home?</li> <li>▶ Why haven't you made the announcement on TV?</li> </ul>
	What is the County Chairman doing about Ginna? <ul style="list-style-type: none"> <li>▶ Has he taken charge of this thing yet?</li> <li>▶ Will the County shut Ginna down for good?</li> </ul>
13:30 1:30 PM	What is the Ginna problem that occurred this morning?
	I've heard that the reactor has a hole in it. Is this true?
	Were we supposed to hear the sirens?
	Is there a place where we can buy "anti-radiation" pills to protect against the fallout? Do they make you immune against radiation?
	My neighbor says we should take potassium or eat shellfish or something. What are you keeping from us?
	Does the County have insurance for such a disaster?
	My homeowners insurance states I'm not covered for nuclear accidents! What do I do now?
	I'm calling from Syracuse...I got my family out of our house in Pultneyville this morning. when will it be safe to go home again?
	Can we be checked out for nuclear radiation somewhere?

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ATTACHMENT 3

PRESS CORPS QUESTIONS

- ▶ What back-up safety systems are available and working at Ginna?
- ▶ How bad a leak occurred? Where did it go?
- ▶ Is the reactor stable and under control?
- ▶ Is this plant similar to TMI?
- ▶ Were any workers contaminated?
- ▶ How much radiation was released around the plant?
- ▶ What protective actions are in effect for Wayne (Monroe) County?
- ▶ How many people live in Wayne (Monroe) County?
- ▶ What are you going to do to fix the situation?
- ▶ When is the next press briefing?
- ▶ How many media are at the News Center?
- ▶ What agencies are at the News Center?
- ▶ Where is the wind going?
- ▶ Who's in charge of the emergency?
- ▶ For any news organization wishing to take footage of Ginna, who do we see at the plant gate?
- ▶ How will home-bound, mobility impaired or nursing home patients be protected?
- ▶ What exactly does "sheltering" involve..does this apply to any type of home?
- ▶ Does RG&E have enough power without Ginna to supply its customers?
- ▶ How is the plant getting power now to run its safety systems?
- ▶ Will the shareholders or ratepayers absorb the cost of this mishap?
- ▶ Is this the same type of problem that Ginna experienced in 1982?
- ▶ Who will pay for all the damage to personal property from this accident?
- ▶ After cleaning up the radioactive waste from this accident, where does it all get sent?
- ▶ Has RG&E significantly added to the State's low-level waste crisis?
- ▶ Why doesn't RG&E distribute potassium iodide to the public?...do RG&E people get it?
- ▶ How close have you come to a meltdown?
- ▶ How do you know the extent of damage to the Ginna reactor?
- ▶ This is \_\_\_\_\_ from WKBZ TV in Buffalo.
  - ▶ How many people live in the 10-mile zone?
  - ▶ What are you going to do to fix the situation?
  - ▶ When is the next press briefing?
  - ▶ How many media are at the News Center?
  - ▶ What agencies are at the News Center?
  - ▶ Where is the wind going?
  - ▶ Who's in charge of the emergency?
- ▶ Can the press go to the Ginna plant?
- ▶ Don't you think that all your downsizing has contributed to this situation?
- ▶ What does this accident do to RG&E's plans to deregulate and place Ginna into a state-wide holding company configuration? Will the other nuclear plants share the expense of this accident? How this accident factor into your sunk nuclear costs that you expect electric customers to pick up?



**GINNA STATION  
1997 EMERGENCY EXERCISE**

**RUMOR CONTROL MESSAGES**

**ATTACHMENT 4**

**"SPOUSE PHONE " QUESTIONS**

TIME	QUESTION
09:15	My husband is a mechanic at Ginna Station, and I've heard they've had an emergency. How serious is it?
	How long is this accident expected to go on?
	Do you know if workers have evacuated the plant?
	Are the workers all okay?
09:45	This is JANE CORDARO. My husband, Frank is at Ginna Station or East Avenue. I need to get a message to him. We live 2 miles from the plant and may need to evacuate. Do you know for sure if we will have to evacuate? If we evacuate, tell Frank that the kids and I will go to my parents house in Maine.
10:15	My husband works in the Ginna Training Department. I can't reach him at Ginna. His name is Sam Poulton. My neighbor told me there was a problem with possible injuries. <ul style="list-style-type: none"> <li>▶ Is that true?</li> <li>▶ Has everyone evacuated the plant?</li> <li>▶ Were any of the employees hurt?</li> <li>▶ How can I reach my husband? i just need to know he's okay.</li> </ul>
10:45	My son is an operator at Ginna. What's happening at the plant? How bad is it? Are the workers in danger? Are they keeping the workers at Ginna?
	How much of a dose are workers receiving and how does that number compare to their annual allowed dose?
11:15	My husband works at Ginna in Health Physics. Where are the plant workers now... have they left the plant? How can I reach my husband if he doesn't call soon? I'm worried about him since he had a medical problem just two years ago. This stress could be very bad for him.
11:30	My husband called me this morning and said there was a problem at the plant, and said he'd keep me posted. I haven't heard anything from him for 3 hours. He's on one of the survey teams...are they safe? Will the workers be relieved and allowed to come home today?

12:00	My husband works at Ginna, and is there now. I've been listening to the news....is it as bad as it sounds? What's really going on? Do they have the accident under control yet? How badly have the workers been exposed to radiation? Do they expect the plant will ever start up again? Can I drive to the plant and drop off a change of clothes for my husband if he's got to stay overnight?
01:30	With all the equipment failures, don't you think that all the efforts RG&E made to reduce the workforce resulted in these failures. Don't you think this accident is due the too few and poorly trained workers?
	Both my son and his wife work at the plant, do you know when they will be released or should I pick up their kids from the reception center? How will the people at the reception center know that it's ok for me to pick up my grand kids? How do I get in touch with my son or his wife to find out what to do?





**SECTION 6.0**

**SCHEDULE OF EVENTS**

## SECTION 6.0

### 1997 GINNA PLUME EXPOSURE PATHWAY EXERCISE

#### SCHEDULE OF EVENTS

<u>DATE</u>	<u>TIME</u>	<u>GROUPS</u>	<u>ACTIVITY</u>
6/9	9-10	ALL (TSC)	PLAYER BRIEFING
	2-3	ALL (JENC/EOF)	PLAYER BRIEFING
6/10	8-11	AS ASSIGNED	CONTROLLER BRIEFING
	1-3	NRC EVALUATORS	SCENARIO BRIEFING
6/11	??-??	ALL	1997 EXERCISE
6/12	8-10	CONTROLLERS	PRE-CRITIQUE MEETING
	10-11	ALL	RG&E CORPORATE CRITIQUE
	11-12	ALL	NRC CRITIQUE
6/13	9-11	FEMA, RG&E, New York State, Wayne County, Monroe County	FEMA CRITIQUE
	1-3	Public, Media	NRC & FEMA PRESS CONFERENCE



**SECTION 7.0**

**EXERCISE SCENARIO**



**GINNA STATION  
1997 EMERGENCY PREPAREDNESS EXERCISE**

**INITIAL CONDITIONS**

1. The R.E. Ginna Nuclear Power Plant is operating at approximately 100% rated thermal power. The Plant has been on line for the past 14 months.
2. Equilibrium Primary Coolant Isotopic activity as of 0300 hours (6/11/97) is provided in Table 9.2 of scenario section 9.3. Total activity is 1.87  $\mu\text{Ci/gm}$ . Chemistry log sheet will be available from the controller.
3. General Weather conditions are partly cloudy with no current precipitation. For purposes of the exercise, additional meteorological information in the simulator control room should be obtained from the plant process computer system (PPCS).
4. The reactor core has a burn up of 15,900 MWD/MTU and RCS boron concentration is <1ppm. Boric Acid Storage Tanks boron concentration are 11,000ppm.
5. Entered procedure AP-TURB.3 for turbine vibrations on bearing #9 due to change in lake water temperature. Operators were able to adjust seal oil temperatures and reduce turbine vibrations into the normal range.

GINNA STATION  
1997 EMERGENCY PREPAREDNESS EXERCISE

ONSITE SEQUENCE OF EVENTS

APPROPRIATE TIME	SCENARIO TIME	EVENT DESCRIPTION
06:45	-00:15	Initial conditions established.
07:00	00:00	Announcement to commence annual exercise.
07:14	+00:14	Annunciator panel "A" fails.
07:15	+00:15	The operating Component Cooling Water (CCW) pump trips. The standby pump automatically starts.
		<u>Anticipated results</u> Operators should enter procedure AP-CCW.2 "Loss of CCW at Power".
07:20 UNUSUAL EVENT	+00:20	Operators should determine that annunciator panel "A" does not function.  An unusual event should be declared in accordance with EPIP 1-0 "Ginna Station Event Evaluation and Classification" EAL number: 7.3.1 "Unplanned loss of annunciators or indications on any of the Control Room Panels for greater than 15 minutes".  If an unusual event is not declared in approximately 15 minutes, a contingency message should be given out to declare it.  <u>Anticipated results</u> Operators should implement EPIP 1-1 "Unusual Event"



<u>APPROPRIATE TIME</u>	<u>SCENARIO TIME</u>	<u>EVENT DESCRIPTION</u>
08:20	+01:20	Turbine vibrations start to increase due to a change in lake water temperature.
08:25	+01:25	The turbine trips on High Thrust Bearing Trip. The reactor DOES NOT automatically trip on a reactor trip signal as expected. The reactor remains at power. The plant enters an Anticipated Transient Without SCRAM (ATWS) event.  <u>Anticipated results</u> Operators should manually trip the reactor. The manual trip of the reactor DOES NOT function to trip the reactor. The reactor remains at power. Operators should trip electrical busses 13 and 15. This will trip the motor-generator sets. This will cause a trip of the reactor. A plant shutdown will occur.
08:30 ALERT	+01:30	An ALERT should be declared in accordance with EPIP 1-0 "Ginna Station Event Evaluation and Classification". EAL number 1.1.1 "Any failure of an automatic reactor trip to reduce power <5% and manual trip is successful".  <u>Anticipated results</u> Operators should implement procedure EPIP 1-2 "Alert".
08:35	+01:35	<u>Anticipated results</u> Operators should enter procedure E-0 "Reactor Trip or Safety Injection" and transition to procedure ES-0.1 for post trip recovery.
08:45	01:45	When letdown flow is re-established, the letdown line radiation monitor (R-9) starts to slowly increase.
09:00	+02:00	Letdown pressure control valve (PCV-135) fails closed.  <u>Anticipated results</u> Operators should isolate letdown by closing air operate valves AOV-427, AOV-202, AOV-200A and AOV-200B. The TSC should be staffing up and checking operational readiness.



APPROPRIATE TIME	SCENARIO TIME	EVENT DESCRIPTION
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09:45	+02:45	<p>The following alarms are received in the control room and on the plant computer:</p> <ul style="list-style-type: none"> <li>- Pressurizer low pressure</li> <li>- Pressurizer low pressure trip</li> <li>- Pressurizer low pressure SI</li> </ul> <p>All safeguards equipment starts except the "A" and "C" safety injection pumps. However they will start manually. A loss of coolant has occurred. The leak is approximately a 60,000gpm leak from a severed "B" RCP discharge pipe where it connects to the pump.</p>
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Anticipated results

Control room operators should take immediate actions in accordance with E-0 "Reactor trip or safety injection" and E-1 "Loss of reactor or secondary coolant". Operators should inform the TSC of the loss of coolant accident.

The TSC should have all of the minimum functions staffed and should be making preparations to assume command and control from the Control Room.

The EOF should be nearing operational readiness.

09:46	+02:46	<p>The core uncovers during the blowdown phase of the large break LOCA. A large amount of the fuel gap activity is released due to fuel rod bursting because of core uncover during the initial reactor coolant system blowdown. Containment radiation levels are increasing.</p>
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09:47	+02:47	<p>The loss of coolant accident continues.</p>
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Anticipated results

Operators should realize that RCP trip criteria is met when at least two safety injection pumps are operating.

<u>APPROPRIATE TIME</u>	<u>SCENARIO TIME</u>	<u>EVENT DESCRIPTION</u>
10:00 SITE AREA EMERGENCY	+03:00	<p>A site area emergency should be declared in accordance with EPIP 1-0 "Ginna Station Event Evaluation and Classification" EAL number: 2.3.2 "Containment radiation monitor R-29/30 reading &gt;100 R/hr".</p> <p>If a site area emergency is not declared in approximately 15 minutes, a contingency message should be given out to declare it.</p> <p><u>Anticipated results</u> The TSC should implement EPIP 1-3 "Site Area Emergency" The EOF should commence being manned if not already activated.</p>
10:15	+03:15	<p>Due to flow anomalies, some of the fuel rods are experiencing overheating due to low flow. Containment radiation levels continue to increase.</p>
~10:30 GENERAL EMERGENCY	+03:30	<p>A general emergency should be declared in accordance with EPIP 1-0 "Ginna Station Event Evaluation and Classification" EAL number: 2.3.3 "Containment radiation monitor R-29/30 reading &gt;1000 R/hr".</p> <p>If a general emergency is not declared in approximately 15 minutes, a contingency message should be given out to declare it</p> <p><u>Anticipated results</u> The TSC should implement EPIP 1-4 "General Emergency". Protective action recommendations should be made in accordance with EPIP 2-1.</p>
10:45	+03:45	<p>The EOF should be nearing operational readiness.</p>
~11:00	+04:00	<p>The injection phase of the accident is done or almost done.</p> <p><u>Anticipated results</u> Operations personnel should be aligning systems for the recirculation phase. The TSC should be discussing concerns of operation with only one CCW pump for long-term heat removal.</p>

APPROPRIATE TIME	SCENARIO TIME	EVENT DESCRIPTION
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11:16	+04:16	<p>The following alarms are received in the control room and on the plant computer:</p> <ul style="list-style-type: none"> <li>- Auxiliary building sump pump auto start</li> <li>- Auxiliary building sump high level</li> </ul> <p>The 1A RHR pump shaft seal has failed creating approximately a 50gpm leak into the auxiliary building sub-basement. Plant vent monitors show a rapid increase in radiation levels. A major release to the environment begins. (Release path: from containment through 1A RHR pump failed seal, out the plant vent).</p> <p><u>Anticipated results</u> TSC and control room operators should try to locate the source of the leak in the auxiliary building. The TSC should be informing the EOF of plant status, actions being taken and any required needs. The TSC should be evaluating the increase of radiation in the auxiliary building as to its source and its effect offsite. The TSC and EOF should identify that the plant has exceeded the release rate limits.</p>
11:18	+04:18	<p>The following alarm is received in the control room and on the plant computer:</p> <ul style="list-style-type: none"> <li>- Safeguards breaker trip</li> </ul> <p>The 1A RHR pump trips out on overcurrent due to the failed seal.</p> <p>Motor operated valve MOV-850A will not close from the Control Room.</p> <p><u>Anticipated results</u> Efforts should be underway to track the plume, terminate the release and implement/coordinate PARs.</p>
11:30	+04:30	<p><u>Anticipated results</u> The TSC should be working on isolating the 1A RHR pump to terminate the offsite release.</p>
12:00	+05:00	<p><u>Anticipated results</u> A maintenance repair team should be assembled and briefed. The team should enter the auxiliary building to isolate the leak.</p>



<u>APPROPRIATE TIME</u>	<u>SCENARIO TIME</u>	<u>EVENT DESCRIPTION</u>
12:15	+05:15	<u>Anticipated results</u> The repair teams should have entered the auxiliary building to isolate the leak. The team can isolate the leak by either: (a) re-energizing MOV-851A from Motor Control Center "C" (b) locally closing MOV-850A
12:45	+05:30	The radiation levels in the auxiliary building have decreased significantly. The offsite release is terminated.
13:15	+06:15	Recovery/Re-entry discussions should commence. This should include preliminary discussions about short term and intermediate term concerns, including preliminary designation of the recovery organization. State and counties may also conduct parallel discussions. Recovery/Re-entry interface between TSC/EOF and offsite agencies should be demonstrated as time allows.
14:00	+07:00	After all exercise objectives have been demonstrated, the lead controller will terminate the exercise.





Time: 06:45  
Message: 1

**GINNA STATION**  
**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**  
**MESSAGE FORM**

Message for: Control Room

Message: \*\*\*THIS IS A EXERCISE\*\*\*

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Review initial conditions and plant status with the exercise operating crew.
2. Review exercise precautions/limitations and any exercise activities that are not normal (i.e. extent of offsite participation, simulations, abnormal conditions to conduct exercise)
3. Ensure that the operating crew understands that the exercise is not to interfere with safe plant operation.

**Actions Expected:**

1. Participants should review initial conditions, turnover sheets, applicable procedures.



Time: 07:00  
Message: 2

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room Shift Supervisor**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

**Make the following PA announcement after sounding the "Attention" signal:**

**"Attention, Attention all personnel. The Ginna Nuclear Station is now starting its 1997 Emergency Preparedness Exercise. All Exercise messages must be started and ended with 'This is an Exercise'." (Announce twice)**

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Ensure that the PA announcement is made.

**Actions Expected:**



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	6000
2	RXT	REACTOR TRIP BREAKER STATUS	NOT TRIP	6000
3	K31	SOURCE RANGE DETECTOR N-31	1.00000+00	INH-B CPS
4	K32	SOURCE RANGE DETECTOR N-32	1.00000+00	INH-B CPS
5	K35	INTERMEDIATE RANGE DETECTOR N-35	8.05376-04	INH-B AMP
6	K36	INTERMEDIATE RANGE DETECTOR N-36	7.04690-04	INH-B AMP
7	NP	AVERAGE NUCLEAR POWER	99.51	6000 %
8	PPCS	REACTOR COOLANT SYSTEM AVG PRESS	2240.	6000 PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	50.0	6000 %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	100.1	6000 %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	100.1	6000 %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	6000
13	RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	6000
14	TSUBTC	INDCORE TC SUBCOOLED MARGIN	43.8	600+ DEGF
15	LSSA	STM GEN A NARROW RANGE AVG LEVEL	52.1	6000 %
16	LSSB	STM GEN B NARROW RANGE AVG LEVEL	52.1	6000 %
17	PSSA	STM GEN A AVERAGE PRESSURE	727.	6000 PSIG
18	PSSB	STM GEN B AVERAGE PRESSURE	727.	6000 PSIG
19	GENBKRI	GENERATOR ON LINE BREAKER 1G1372	NOT TRIP	6000
20	GENBKRI2	GENERATOR ON LINE BREAKER 9X1372	NOT TRIP	6000
21	BUS11A	BUS 11A SUPPLY BREAKER	NOT TRIP	6000
22	BUS11B	BUS 11B SUPPLY BREAKER	NOT TRIP	6000
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	TRIPPED	6000
26	B11B12B	BUS 11B TO 12B TIE BREAKER	TRIPPED	6000
27	PCV	CONTAINMENT AVERAGE PRESSURE	.36	6000 PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.4	6000 FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	6000
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	6000
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	6000
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	6000
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	6000
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	6000
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	6000
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	6000
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	6000
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	6000
39	T0409A	RCLA HOT LEG TEMPERATURE	588.7	6000 DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	588.7	6000 DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	532.9	6000 DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	532.9	6000 DEGF
43	TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	560.8	6000 DEGF
44	TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	560.8	6000 DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	100.2	6000 %
46	TDCCRE	E1.1 INDCORE TC AVERAGE TEMP	595.1	600+ DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
49	BKRO81	MTR AUXILIARY FEEDWATER PUMP A	OFF	6000
50	BKRO82	MTR AUXILIARY FEEDWATER PUMP B	OFF	6000
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	6000
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	6000

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLOW	1422.	LALM	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	94.5	6000	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	7.4	6000	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	222.	6000	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	50.2	6000	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	48.6	6000	DEGF
7 WOT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-1.6	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	9.44062-02	6000	HR/HR
9 R02	AREA 2-CONTAINMENT	3.98107+00	6000	HR/HR
10 R05	AREA 5-SPENT FUEL PIT	4.92605-01	6000	HR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.93865+01	6000	HR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	8.26989-01	6000	HR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	HR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.17595+02	6000	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.22850+02	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	1.65481+02	6000	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	9.45420+00	6000	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	3.92983+01	6000	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.13960+01	6000	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.68122+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.19546+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	6000	HR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	6000	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	HR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	HR/HR
42 R32RRQ	SGB NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	71.3	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	83.2	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	83.2	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	83.2	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	83.2	6000	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	95.1	6000	DEGF





Time: 07:10  
Message: 3

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

---

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Fail the "A" annunciator panel at this time.

**Actions Expected:**

Time: 07:14

Message: 4

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The annunciator alarms in the control room. No light is displayed on the control room alarm panels.

---

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The operating Component Cooling Water (CCW) pump trips and the standby pump starts.
2. Use mini-scenarios to control auxiliary operators and repair teams investigating CCW pump failure and annunciator failure.

**Actions Expected:**

1. The control room should investigate why the CCW pump tripped.
2. Operators should determine that the operating CCW pump has tripped. Operators should enter procedure AP-CCW.2 "Loss of CCW at Power"



Time: 07:14  
Message: 5

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for:** Personnel investigating CCW pump trip and failure of the "A" annunciator panel

**Message:** \*\*\*THIS IS A EXERCISE\*\*\*

---

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Provide information verbally when the appropriate investigations are made by the auxiliary operator or repair team.

**Actions Expected:**

1. The auxiliary operator and repair team should inspect the CCW pump and "A" annunciator panel and make an assessment of the problem and any necessary repairs.



## GINNA STATION

### JUNE 11, 1997 PLUME EXPOSURE EXERCISE

#### Mini-Scenario

**Activity: CCW pump trip**  
The CCW pump tripped.

**Controller Notes:**

When the auxiliary operator investigates the CCW pump, he reports a burnt insulation smell from the motor. The cause of the pump tripping is a direct short in the motor windings. There is a direct short that electricians will find when they troubleshoot the pump.

**Actions Expected:**

1. The electricians should troubleshoot the pump and find that there is a direct short.
2. Electricians should determine that the pump motor needs to be repaired/replaced.
3. The plant should determine if they have a spare motor in stock to replace the damaged motor.
4. Maintenance planners should prepare a work package for the motor repair/replacement.
5. Work should commence (simulated) on the component.

## GINNA STATION

### JUNE 11, 1997 PLUME EXPOSURE EXERCISE

#### Mini-Scenario

##### Activity: Failure of the "A" Annunciator Panel

The "A" annunciator panel has failed.

##### Controller Notes:

When the auxiliary operator investigates the "A" annunciator panel, he reports that panel has no power. The cause of the failure is a failed power supply. There is no power to the annunciator panel when tested by the I&C technicians.

##### Actions Expected:

1. The I&C technicians should troubleshoot the failure of the annunciator panel and find that there is a problem with the power supply.
2. I&C technicians should determine that the power supply needs to be repaired/replaced.
3. The plant should determine if they have a spare power supply in stock to replace the damaged power supply.
4. Maintenance planners should prepare a work package for the power supply repair/replacement.
5. Work should commence (simulated) on the component.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	6000
2	RXT	REACTOR TRIP BREAKER STATUS	NOT TRIP	6000
3	K31	SOURCE RANGE DETECTOR N-31	1.00000+00	INHB CPS
4	K32	SOURCE RANGE DETECTOR N-32	1.00000+00	INHB CPS
5	K35	INTERMEDIATE RANGE DETECTOR N-35	8.05376-04	INHB AMP
6	K36	INTERMEDIATE RANGE DETECTOR N-36	7.04690-04	INHB AMP
7	NP	AVERAGE NUCLEAR POWER	99.50	6000 %
8	PRCS	REACTOR COOLANT SYSTEM AVG PRESS	2240.	6000 PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	49.9	6000 %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	100.1	6000 %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	100.1	6000 %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	6000
13	RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	6000
14	TSUBTC	INDORE TC SUBCOOLED MARGIN	42.4	600+ DEGF
15	LSSA	STM GEN A NARROW RANGE AVG LEVEL	52.1	6000 %
16	LSSB	STM GEN B NARROW RANGE AVG LEVEL	52.1	6000 %
17	PSGA	STM GEN A AVERAGE PRESSURE	726.	6000 PSIG
18	PSGB	STM GEN B AVERAGE PRESSURE	726.	6000 PSIG
19	GENXR1	GENERATOR ON LINE BREAKER 161372	NOT TRIP	6000
20	GENXR2	GENERATOR ON LINE BREAKER 9X1372	NOT TRIP	6000
21	BUS11A	BUS 11A SUPPLY BREAKER	NOT TRIP	6000
22	BUS11B	BUS 11B SUPPLY BREAKER	NOT TRIP	6000
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	TRIPPED	6000
26	B11B12B	BUS 11B TO 12B TIE BREAKER	TRIPPED	6000
27	PCV	CONTAINMENT AVERAGE PRESSURE	.39	6000 PSIG
28	LSJMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	6000 FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	6000
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	6000
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	6000
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	6000
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	6000
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	6000
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	6000
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	6000
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	6000
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	6000
39	T0409A	RCLA HOT LEG TEMPERATURE	588.7	6000 DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	588.7	6000 DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	532.9	6000 DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	532.9	6000 DEGF
43	TAVSAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	560.8	6000 DEGF
44	TAVSBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	560.8	6000 DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	100.1	6000 %
46	TCORE	E1.1 INDORE TC AVERAGE TEMP	595.5	600+ DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	OFF	6000
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	OFF	6000
51	V3505	AUX FM PUMP STEAM SUPPLY VALVE A	CLOSED	6000
52	V3504	AUX FM PUMP STEAM SUPPLY VALVE B	CLOSED	6000





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1427.	LALM	GPM
2 LR65T	REFUELING WATER STORAGE TANK LVL	94.5	6000	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	3.0	6000	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	231.	6000	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	52.1	6000	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	50.2	6000	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-1.9	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	8.75992-02	6000	NR/HR
9 R02	AREA 2-CONTAINMENT	3.91292+00	6000	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.15822-01	6000	NR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.93865+01	6000	NR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	7.98914-01	6000	NR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.17595+02	6000	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.16647+02	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	1.61250+02	6000	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	9.45420+00	6000	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	3.87926+01	6000	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.13960+01	6000	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.64531+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.19546+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	6000	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	6000	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	NR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15NAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	NR/HR
42 R32RRQ	SEB NOBLE GAS RELEASE RATE:15NAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	73.5	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	84.7	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	84.7	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	84.7	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	84.7	6000	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	96.0	6000	DEGF

Time: 07:20  
Message: 6

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. If an Unusual Event is not declared in approximately 15 minutes, a contingency message should be given out to declare it.

**Actions Expected:**

1. Operators should determine that the "A" annunciator panel does not function.
2. An Unusual Event should be declared in accordance with EPIP 1-0, EAL# 7.3.1.
3. Operators should implement EPIP 1-1 "Unusual Event".

Time: 07:30  
Message: 7

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. Operators should be in the process of performing notifications in EPIP 1-5, "Notifications" for an Unusual Event.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATMS ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	6000	
2	RXT REACTOR TRIP BREAKER STATUS	NOT TRIP	6000	
3	K31 SOURCE RANGE DETECTOR N-31	1.00000+00	INH	CPS
4	K32 SOURCE RANGE DETECTOR N-32	1.00000+00	INH	CPS
5	K35 INTERMEDIATE RANGE DETECTOR N-35	8.05376-04	INH	AMP
6	K36 INTERMEDIATE RANGE DETECTOR N-36	7.04690-04	INH	AMP
7	NP AVERAGE NUCLEAR POWER	99.51	6000	%
8	PPCS REACTOR COOLANT SYSTEM AVG PRESS	2240.	6000	PSIG
9	LPZR PRESSURIZER AVERAGE LEVEL	49.9	6000	%
10	FRCLA REACTOR COOLANT LOOP A AVG FLOW	100.2	6000	%
11	FRCLB REACTOR COOLANT LOOP B AVG FLOW	100.1	6000	%
12	RXT16 RCPA BREAKER CAUSE RX TRIP	NOT TRIP	6000	
13	RXT17 RCPB BREAKER CAUSE RX TRIP	NOT TRIP	6000	
14	TSUBTC INCORE TC SUBCOOLED MARGIN	43.8	600+	DEGF
15	LSEA STM GEN A NARROW RANGE AVG LEVEL	52.1	6000	%
16	LSEB STM GEN B NARROW RANGE AVG LEVEL	52.1	6000	%
17	PSEA STM GEN A AVERAGE PRESSURE	726.	6000	PSIG
18	PSEB STM GEN B AVERAGE PRESSURE	726.	6000	PSIG
19	GENXR1 GENERATOR ON LINE BREAKER 161372	NOT TRIP	6000	
20	GENXR2 GENERATOR ON LINE BREAKER 9X1372	NOT TRIP	6000	
21	BUS11A BUS 11A SUPPLY BREAKER	NOT TRIP	6000	
22	BUS11B BUS 11B SUPPLY BREAKER	NOT TRIP	6000	
23	BUS12A NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24	BUS12B NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25	B11A12A BUS 11A TO 12A TIE BREAKER	TRIPPED	6000	
26	B11B12B BUS 11B TO 12B TIE BREAKER	TRIPPED	6000	
27	PCV CONTAINMENT AVERAGE PRESSURE	.41	6000	PSIG
28	LSUPA CONTAINMENT SUMP A AVERAGE LEVEL	1.5	6000	FEET
29	L0942E SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	6000	
30	L0943E SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	6000	
31	L0942D SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	6000	
32	L0943D SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	6000	
33	L0942C SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	6000	
34	L0943C SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	6000	
35	L0942B SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	6000	
36	L0943B SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	6000	
37	L0942A SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	6000	
38	L0943A SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	6000	
39	T0409A RCLA HOT LEG TEMPERATURE	588.7	6000	DEGF
40	T0410A RCLB HOT LEG TEMPERATURE	588.7	6000	DEGF
41	T0409B RCLA COLD LEG TEMPERATURE	532.8	6000	DEGF
42	T0410B RCLB COLD LEG TEMPERATURE	532.8	6000	DEGF
43	TAVGAW1D RCLA TAVG (THOT/TCOLD WIDE RNG)	560.7	6000	DEGF
44	TAVGBW1D RCLB TAVG (THOT/TCOLD WIDE RNG)	560.7	6000	DEGF
45	LRV REACTOR VESSEL AVERAGE LEVEL	100.3	6000	%
46	TCORE E1.1 INCORE TC AVERAGE TEMP	595.8	600+	DEGF
47	FAUXFWA S/G A TOTAL AUX FEEDWATER FLOW	0.	6000	GPM
48	FAUXFWB S/G B TOTAL AUX FEEDWATER FLOW	0.	6000	GPM
49	BKR081 MTR AUXILIARY FEEDWATER PUMP A	OFF	6000	
50	BKR082 MTR AUXILIARY FEEDWATER PUMP B	OFF	6000	
51	V3505 AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	6000	
52	V3504 AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1422.	LALM	GPM
2 LRMST	REFUELING WATER STORAGE TANK LVL	94.5	6000	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	3.3	6000	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	240.	6000	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	52.9	6000	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	51.1	6000	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-1.8	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	6000	MR/HR
9 R02	AREA 2-CONTAINMENT	3.98107+00	6000	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.04080-01	6000	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.93865+01	6000	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	7.80728-01	6000	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.17595+02	6000	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.23915+02	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	1.62648+02	6000	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	9.45420+00	6000	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	3.87926+01	6000	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.19429+01	6000	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.64531+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.19546+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	6000	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	6000	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	MR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	MR/HR
42 R32RRQ	SGB NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	74.9	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	85.8	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	85.8	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	85.8	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	85.8	6000	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	96.7	6000	DEGF





Time: 07:35  
Message: 8X

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

**Declare an UNUSUAL EVENT**  
in accordance with EPIP 1-0 "Ginna Station Event Evaluation and Classification"

**EAL number: 7.3.1**

**"Unplanned loss of annunciators or indications on any of the Control Room panels for greater than 15 minutes".**

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Deliver this message only if an unusual event has not yet been declared.
2. No not deliver this message if emergency classifications are in progress.

**Actions Expected:**

Time: 07:45  
Message: 9

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. Appropriate plant staff should be responding for an Unusual Event.



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	6000	
2 RXT	REACTOR TRIP BREAKER STATUS	NOT TRIP	6000	
3 K31	SOURCE RANGE DETECTOR N-31	1.00000+00	INHIB	CPS
4 K32	SOURCE RANGE DETECTOR N-32	1.00000+00	INHIB	CPS
5 K35	INTERMEDIATE RANGE DETECTOR N-35	8.05376-04	INHIB	AMP
6 K36	INTERMEDIATE RANGE DETECTOR N-36	7.04690-04	INHIB	AMP
7 NP	AVERAGE NUCLEAR POWER	99.48	6000	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	2241.	6000	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	49.9	6000	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	100.2	6000	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	100.1	6000	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	6000	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	6000	
14 TSUBTC	INCORE TC SUBCOOLED MARGIN	42.4	600+	DEGF
15 LSSA	STM GEN A NARROW RANGE AVG LEVEL	52.1	6000	%
16 LSSB	STM GEN B NARROW RANGE AVG LEVEL	52.1	6000	%
17 PSSA	STM GEN A AVERAGE PRESSURE	725.	6000	PSIG
18 PSSB	STM GEN B AVERAGE PRESSURE	725.	6000	PSIG
19 GENBKRI	GENERATOR ON LINE BREAKER 161372	NOT TRIP	6000	
20 GENBKRI2	GENERATOR ON LINE BREAKER 9X1372	NOT TRIP	6000	
21 BUS11A	BUS 11A SUPPLY BREAKER	NOT TRIP	6000	
22 BUS11B	BUS 11B SUPPLY BREAKER	NOT TRIP	6000	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	TRIPPED	6000	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	TRIPPED	6000	
27 PCV	CONTAINMENT AVERAGE PRESSURE	.41	6000	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	6000	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	6000	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	6000	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	6000	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	6000	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	6000	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	6000	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	6000	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	6000	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	6000	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	6000	
39 T0409A	RCLA HOT LEG TEMPERATURE	588.4	6000	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	588.4	6000	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	532.7	6000	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	532.7	6000	DEGF
43 TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	560.5	6000	DEGF
44 TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	560.5	6000	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	100.3	6000	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	595.2	600+	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	6000	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	6000	GPM
49 BKR081	MTR AUXILIARY FEEDWATER PUMP A	OFF	6000	
50 BKR082	MTR AUXILIARY FEEDWATER PUMP B	OFF	6000	
51 V3S05	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	6000	
52 V3S04	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FSIA	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FSIB	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLM	1422.	LALM	GPM
2 LR6ST	REFUELING WATER STORAGE TANK LVL	94.5	6000	%
3 MS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	3.7	6000	MPH
4 MD033Q15	33FT LVL WIND DIRECTION 15M AVG	254.	6000	DEG.
5 MT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	54.0	6000	DEGF
6 MT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	52.4	6000	DEGF
7 MDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-1.6	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	8.81048-02	6000	MR/HR
9 R02	AREA 2-CONTAINMENT	4.12097+00	6000	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.24807-01	6000	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.87283+01	6000	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	7.85236-01	6000	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.10812+02	6000	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.21794+02	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	1.59175+02	6000	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	8.86135+00	6000	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	3.74756+01	6000	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.27812+01	6000	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.68122+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.29659+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.61532+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UC1/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	6000	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UC1/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UC1/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	6000	UC1/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UC1/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UC1/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	6000	UC1/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UC1/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UC1/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	MR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15NAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	MR/HR
42 R32RRQ	SEB NOBLE GAS RELEASE RATE:15NAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	76.2	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	86.7	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	86.7	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	86.7	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	86.7	6000	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	97.2	6000	DEGF

Time: 08:00  
Message: 10

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	6000
2	RXT	REACTOR TRIP BREAKER STATUS	NOT TRIP	6000
3	K31	SOURCE RANGE DETECTOR N-31	1.00000+00	INH-B CPS
4	K32	SOURCE RANGE DETECTOR N-32	1.00000+00	INH-B CPS
5	K35	INTERMEDIATE RANGE DETECTOR N-35	8.05376-04	INH-B AMP
6	K36	INTERMEDIATE RANGE DETECTOR N-36	7.04690-04	INH-B AMP
7	NP	AVERAGE NUCLEAR POWER	99.46	6000 %
8	PRCS	REACTOR COOLANT SYSTEM AVG PRESS	2241.	6000 PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	49.9	6000 %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	100.2	6000 %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	100.2	6000 %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	6000
13	RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	6000
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	42.1	600+ DEGF
15	L5GA	5TH GEN A NARROW RANGE AVG LEVEL	52.1	6000 %
16	L5GB	5TH GEN B NARROW RANGE AVG LEVEL	52.1	6000 %
17	P5GA	5TH GEN A AVERAGE PRESSURE	725.	6000 PSIG
18	P5GB	5TH GEN B AVERAGE PRESSURE	725.	6000 PSIG
19	GENBXR1	GENERATOR ON LINE BREAKER 161372	NOT TRIP	6000
20	GENBXR2	GENERATOR ON LINE BREAKER 9X1372	NOT TRIP	6000
21	BUS11A	BUS 11A SUPPLY BREAKER	NOT TRIP	6000
22	BUS11B	BUS 11B SUPPLY BREAKER	NOT TRIP	6000
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	TRIPPED	6000
26	B11B12B	BUS 11B TO 12B TIE BREAKER	TRIPPED	6000
27	PCV	CONTAINMENT AVERAGE PRESSURE	.43	6000 PSIG
28	LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	6000 FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	6000
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	6000
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	6000
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	6000
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	6000
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	6000
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	6000
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	6000
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	6000
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	6000
39	T0409A	RCLA HOT LEG TEMPERATURE	588.4	6000 DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	588.4	6000 DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	532.7	6000 DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	532.7	6000 DEGF
43	TAVSAMID	RCLA TAVG (THOT/TCOLD WIDE RNG)	560.5	6000 DEGF
44	TAVSBMID	RCLB TAVG (THOT/TCOLD WIDE RNG)	560.5	6000 DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	100.3	6000 %
46	TCORE	E1.1 INCORE TC AVERAGE TEMP	594.8	600+ DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
49	BKROB1	NTR AUXILIARY FEEDWATER PUMP A	OFF	6000
50	BKROB2	NTR AUXILIARY FEEDWATER PUMP B	OFF	6000
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	6000
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	6000

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1422.	LALM	GPM
2 LR6ST	REFUELING WATER STORAGE TANK LVL	94.5	6000	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	3.9	6000	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	264.	6000	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	54.8	6000	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	53.3	6000	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-1.5	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	8.75992-02	6000	MR/HR
9 R02	AREA 2-CONTAINMENT	3.91292+00	6000	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.15822-01	6000	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.80925+01	6000	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	8.17524-01	6000	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	2.97680+02	6000	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.16647+02	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	1.61250+02	6000	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	9.13323+00	6000	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	3.87926+01	6000	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.13960+01	6000	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.64531+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.27808+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	6000	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.37804+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	6000	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	6000	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	MR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	MR/HR
42 R32RRQ	SGB NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCX03	CV BASEMENT LEVEL 6FT TEMP #3	77.1	6000	DEGF
45 TCX07	CV INTERMEDIATE LVL 6FT TEMP #7	87.3	6000	DEGF
46 TCX08	CV INTERMEDIATE LVL 6FT TEMP #8	87.3	6000	DEGF
47 TCX09	CV INTERMEDIATE LVL 6FT TEMP #9	87.3	6000	DEGF
48 TCX10	CV INTERMEDIATE LVL 6FT TEMP #10	87.3	6000	DEGF
49 TCX17	CV OPERATING LEVL 6FT TEMP #17	97.5	6000	DEGF



Time: 08:15  
Message: 11

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	6000
2	RXT	REACTOR TRIP BREAKER STATUS	NOT TRIP	6000
3	K31	SOURCE RANGE DETECTOR N-31	1.00000+00	IN-H CPS
4	K32	SOURCE RANGE DETECTOR N-32	1.00000+00	IN-H CPS
5	K35	INTERMEDIATE RANGE DETECTOR N-35	8.05376-04	IN-H AMP
6	K36	INTERMEDIATE RANGE DETECTOR N-36	7.04690-04	IN-H AMP
7	NP	AVERAGE NUCLEAR POWER	99.47	6000 %
8	PPCS	REACTOR COOLANT SYSTEM AVG PRESS	2241.	6000 PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	49.9	6000 %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	100.2	6000 %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	100.2	6000 %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	6000
13	RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	6000
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	43.5	600+ DEGF
15	LSSA	5TH GEN A NARROW RANGE AVG LEVEL	52.1	6000 %
16	LSSB	5TH GEN B NARROW RANGE AVG LEVEL	52.1	6000 %
17	PSSA	5TH GEN A AVERAGE PRESSURE	725.	6000 PSIG
18	PSSB	5TH GEN B AVERAGE PRESSURE	725.	6000 PSIG
19	GENXR1	GENERATOR ON LINE BREAKER 161372	NOT TRIP	6000
20	GENXR2	GENERATOR ON LINE BREAKER 9X1372	NOT TRIP	6000
21	BUS11A	BUS 11A SUPPLY BREAKER	NOT TRIP	6000
22	BUS11B	BUS 11B SUPPLY BREAKER	NOT TRIP	6000
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	TRIPPED	6000
26	B11B12B	BUS 11B TO 12B TIE BREAKER	TRIPPED	6000
27	PCV	CONTAINMENT AVERAGE PRESSURE	.45	6000 PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	6000 FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	6000
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	6000
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	6000
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	6000
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	6000
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	6000
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	6000
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	6000
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	6000
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	6000
39	T0409A	RCLA HOT LEG TEMPERATURE	588.4	6000 DEGF
40	T0410A	ROLB HOT LEG TEMPERATURE	588.4	6000 DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	532.7	6000 DEGF
42	T0410B	ROLB COLD LEG TEMPERATURE	532.7	6000 DEGF
43	TAVSAWID	RCLA TAVS (THOT/TCOLD WIDE RNG)	560.5	6000 DEGF
44	TAVSBWID	ROLB TAVS (THOT/TCOLD WIDE RNG)	560.5	6000 DEGF
45	LKV	REACTOR VESSEL AVERAGE LEVEL	100.3	6000 %
46	TCORE	E1.1 INCORE TC AVERAGE TEMP	595.7	600+ DEGF
47	FAUXFMA	S/G A TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
48	FAUXFMB	S/G B TOTAL AUX FEEDWATER FLOW	0.	6000 GPM
49	BXR081	MTR AUXILIARY FEEDWATER PUMP A	OFF	6000
50	BXR082	MTR AUXILIARY FEEDWATER PUMP B	OFF	6000
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	6000
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	6000

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1422.	LALM	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	94.5	GOOD	%
3 WS033015	33 FT LEVEL WIND SPEED: 15M AVG	4.5	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	278.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	57.1	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	55.8	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-1.3	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.44062-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	3.98107+00	GOOD	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	4.92605-01	GOOD	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.93865+01	GOOD	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	7.94328-01	GOOD	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.17595+02	GOOD	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.22850+02	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	1.65481+02	GOOD	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	9.45420+00	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	3.92983+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.13960+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.56900+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.19546+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	GOOD	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-05	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RR0	S6A NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RR0	S6B NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	78.9	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	88.6	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	88.6	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	88.6	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	88.6	GOOD	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	98.3	GOOD	DEGF

Time: 08:20  
Message: 12

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The turbine vibration alarm is received in the control room on bearing number 1.

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Over the past 3 minutes, Turbine vibrations started to slowly increase due to a mechanical malfunction.

**Actions Expected:**

1. Operators attempt to reduce turbine vibrations by reducing turbine load.

Time: 08:25  
Message: 13

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The following alarms are received in the control room:

High Thrust Bearing Trip

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**FOR CONTROLLER USE ONLY**

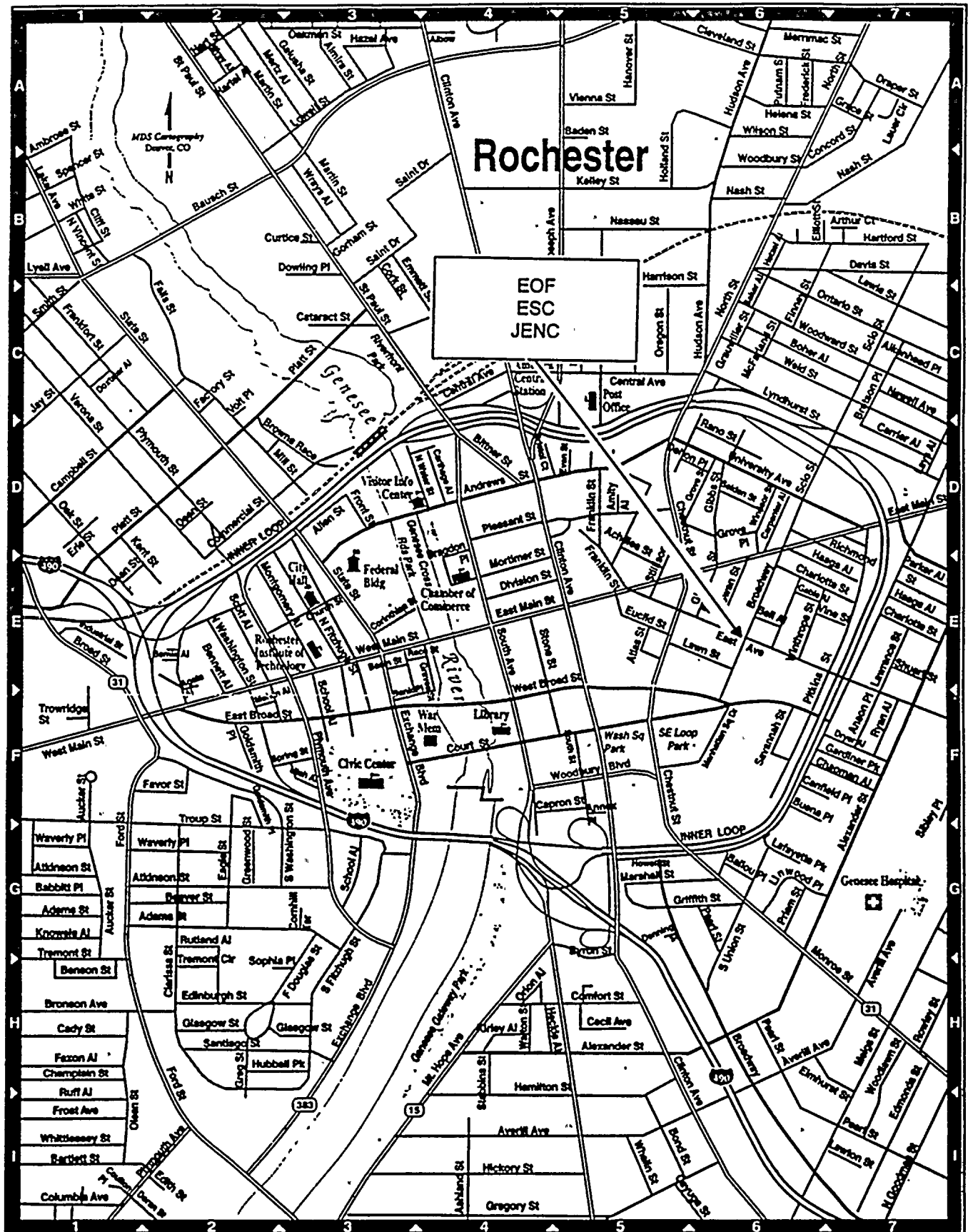
**Controller Notes:**

1. The turbine trips on High Thrust Bearing Trip. The reactor DOES NOT automatically trip on a reactor trip signal as expected. The reactor remains at power. The plant enters an Anticipated Transient Without SCRAM (ATWS) event.

**Actions Expected:**

1. The operators should manually trip the reactor. The manual trip of the reactor DOES NOT function to trip the reactor. The reactor remains at power. Operators should trip the electrical busses 13 and 15. This will trip the motor-generator sets. This will cause a trip of the reactor. A plant shutdown will occur.
2. Operators should enter procedure E-0 "Reactor trip of safety injection"
3. Operators should be consulting EPIP 1-0 to increase event classification

# Area Maps, cont.



Time: 08:30  
Message: 14

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

Message for: Control Room

Message: **\*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. Response to a reactor trip continues.
2. An ALERT should be declared in accordance with EPIP 1-0, EAL# 1.1.1. "Any failure of an automatic reactor trip to reduce power <5% and manual trip is successful".
3. Operators should implement procedure EPIP 1-2 "Alert".





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	ATWS	ALRM	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	1.00000+00	INH	CPS
4 N32	SOURCE RANGE DETECTOR N-32	1.00000+00	INH	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.05682-07	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	9.90834-08	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.02	GOOD	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	1903.	GOOD	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	37.8	GOOD	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	97.9	GOOD	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	97.9	GOOD	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
14 TSBTC	INCORE TC SUBCOOLED MARGIN	68.3	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	61.2	GOOD	%
16 LSEB	STM GEN B NARROW RANGE AVG LEVEL	60.6	GOOD	%
17 PSGA	STM GEN A AVERAGE PRESSURE	994.	GOOD	PSIG
18 PSEB	STM GEN B AVERAGE PRESSURE	994.	GOOD	PSIG
19 GENBXR1	GENERATOR ON LINE BREAKER 1G1372	TRIPPED	ALRM	
20 GENBXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	.47	GOOD	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	GOOD	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	GOOD	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	GOOD	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	GOOD	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	GOOD	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	GOOD	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	GOOD	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	548.8	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	548.8	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	546.9	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	546.9	GOOD	DEGF
43 TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	547.9	GOOD	DEGF
44 TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	547.9	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	100.0	GOOD	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	553.3	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	450.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	450.	GOOD	GPM
49 BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	OPEN	ALRM	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	OPEN	ALRM	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	GOOD	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	GOOD	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	GOOD	PS16
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	GOOD	PS16
57 BKR041	SERVICE WATER PUMP A	ON	GOOD	
58 BKR042	SERVICE WATER PUMP B	ON	GOOD	
59 BKR043	SERVICE WATER PUMP C	ON	GOOD	
60 BKR044	SERVICE WATER PUMP D	OFF	GOOD	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1422.	LALM	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	94.5	GOOD	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	4.9	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	288.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	58.8	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	57.6	GOOD	DEGF
7 WOT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-1.2	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	8.81048-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	4.70436+00	GOOD	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.24807-01	GOOD	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	3.19888+01	GOOD	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	7.85236-01	GOOD	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	2.49746+04	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.79013+02	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	2.06835+03	GOOD	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	9.70230+00	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	3.79642+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.36414+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.68122+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.27808+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.37804+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	GOOD	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15NAV	4.45514-05	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RRQ	SGB NOBLE GAS RELEASE RATE:15NAV	4.45514-05	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	80.2	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	89.5	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	89.5	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	89.5	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	89.5	GOOD	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	98.8	GOOD	DEGF

Time: 08:35  
Message: 15

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. Operators should transition from procedure E-0 to procedure ES-0.1 for post trip recovery.

Time: 08:45  
Message: 16

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

- D** 1. When letdown flow is re-established, the letdown line radiation monitor (R-9) starts to slowly increase.

**Actions Expected:**

1. The Technical Support Center, Operations Support Center and Survey Center should be activating.





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	3.06901+02	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	3.03738+02	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.31826-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.29420-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PPCS	REACTOR COOLANT SYSTEM AVG PRESS	2132.	GOOD	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	38.6	GOOD	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	98.0	GOOD	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	98.0	GOOD	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
14 TSUBTC	INCORE TC SUBCOOLED MARGIN	85.6	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	82.2	HWRN	%
16 LSEB	STM GEN B NARROW RANGE AVG LEVEL	81.1	HWRN	%
17 PSGA	STM GEN A AVERAGE PRESSURE	995.	GOOD	PSIG
18 PSGB	STM GEN B AVERAGE PRESSURE	995.	GOOD	PSIG
19 GENBKR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	.45	GOOD	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	GOOD	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	GOOD	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	GOOD	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	GOOD	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	GOOD	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	GOOD	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	GOOD	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	548.2	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	548.2	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	547.0	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	547.0	GOOD	DEGF
43 TAVSAWID	RCLA TAVS (THOT/TCOLD WIDE RNG)	547.6	GOOD	DEGF
44 TAVGBWID	RCLB TAVS (THOT/TCOLD WIDE RNG)	547.6	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	99.9	GOOD	%
46 TDCORE	E1.1 INCORE TC AVERAGE TEMP	553.2	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0..	GOOD	GPM
49 BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EP1P 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	GOOD	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	GOOD	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	GOOD	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	GOOD	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	GOOD	
58 BKR042	SERVICE WATER PUMP B	ON	GOOD	
59 BKR043	SERVICE WATER PUMP C	ON	GOOD	
60 BKR044	SERVICE WATER PUMP D	OFF	GOOD	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1427.	LALM	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	94.5	GOOD	%
3 WS033015	33 FT LEVEL WIND SPEED: 15M AVG	4.9	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	301.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	59.0	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	57.8	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-1.2	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	8.75992-02	GOOD	HR/HR
9 R02	AREA 2-CONTAINMENT	7.20278+00	GOOD	HR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.15822-01	GOOD	HR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	7.49893+01	GOOD	HR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	8.17524-01	GOOD	HR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	HR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	1.04713+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	7.30718+02	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	7.98912+03	GOOD	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.11879+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.06794+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.46736+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.63117+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.29659+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.61532+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-MID RANGE GAS	1.99995-02	GOOD	HR/HR
27 R12A7	CV VENT CHAN 7-HIGH RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	HR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15NAV	5.40724-05	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	HR/HR
42 R32RRQ	SEB NOBLE GAS RELEASE RATE:15NAV	5.32138-05	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	81.0	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	89.7	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	89.7	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	89.7	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	89.7	GOOD	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	98.5	GOOD	DEGF

Time: 08:45  
Message: 17X

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

Declare an Alert in accordance with EPIP 1-0

EAL # 1.1.1

"Any failure of an automatic reactor trip to reduce power <5% and manual trip is successful."

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Deliver only if an Alert has not yet been declared. Do not deliver if emergency classifications are in progress.

**Actions Expected:**

Time: 09:00  
Message: 18

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Letdown pressure control valve (PVC-135) fails closed. Operators may not notice this alarm due to the failure of the "A" annunciator panel. This control valve failure should result in an alarm on annunciator panel "A". This results in letdown going to the PRT through relief valve RV-203.
2. Refer to attached mini-scenario for PVC-135 failure.

**Actions Expected:**

1. Operators should observe rising PRT level. The operators should find PCV-135 closed.
2. Operators should isolate letdown by closing air operated valves AOV-427, AOV-202, AOV-200A and AOV-200B.
3. The TSC, OSC and Survey Center should be staffing up and checking operational readiness.

## **GINNA STATION**

### **JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

#### **Mini-Scenario**

**Activity: Failure of PCV-135**  
PCV-135 has failed

#### **Controller Notes:**

When the I&C technicians investigate PCV-135 they report that the circuit has a ground.

#### **Actions Expected:**

1. The I&C technicians should troubleshoot the failure of PCV-135 panel and find that there is a problem ground.
2. I&C technicians should determine that the circuit needs to be repaired/replaced.
3. The plant should determine if they have a spare circuit in stock to replace the damaged component.
4. Maintenance planners should prepare a work package for the component repair/replacement.
5. Work should commence (simulated) on the component.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	2.35233+02	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	2.49459+02	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.25314-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.23595-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	2248.	GOOD	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	35.7	GOOD	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	98.2	GOOD	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	98.2	GOOD	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
14 TSUBTC	INCORE TC SUBCOOLED MARGIN	93.2	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	51.3	GOOD	%
16 LSEB	STM GEN B NARROW RANGE AVG LEVEL	50.0	GOOD	%
17 PSGA	STM GEN A AVERAGE PRESSURE	994.	GOOD	PSIG
18 PSGB	STM GEN B AVERAGE PRESSURE	994.	GOOD	PSIG
19 GENXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	.47	GOOD	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	GOOD	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	GOOD	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	GOOD	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	GOOD	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	GOOD	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	GOOD	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	GOOD	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	547.7	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	547.7	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	546.8	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	546.8	GOOD	DEGF
43 TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	547.3	GOOD	DEGF
44 TAVSBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	547.3	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	100.3	GOOD	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	551.9	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
49 BXR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BXR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1405.	LALN	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	94.5	GOOD	%
3 WS033Q15	33 FT-LEVEL WIND SPEED: 15M AVG	4.9	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	313.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	59.1	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	57.9	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-1.2	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.44062-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	9.60506+00	GOOD	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	4.92605-01	GOOD	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.22320+02	HWRN	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	7.62957-01	GOOD	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	1.84342+05	HALN	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.23737+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	1.40645+04	GOOD	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.36458+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.24741+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.69934+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.68122+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.19546+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	GOOD	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RR2	SGA NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RR2	SEB NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	81.3	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	89.9	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	89.9	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	89.9	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	89.9	GOOD	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	98.6	GOOD	DEGF

Time: 09:15  
Message: 19

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. Operators continue to stabilize the plant.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATMS	ANTICIPATED TRANSIENT W/D SCRAM	NO ATMS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 K31	SOURCE RANGE DETECTOR N-31	2.42660+02	GOOD	CPS
4 K32	SOURCE RANGE DETECTOR N-32	2.30408+02	GOOD	CPS
5 K35	INTERMEDIATE RANGE DETECTOR N-35	1.24738-11	GOOD	AMP
6 K36	INTERMEDIATE RANGE DETECTOR N-36	1.23027-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	2278.	GOOD	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	42.7	GOOD	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	98.2	GOOD	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	98.2	GOOD	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
14 TSUBTC	INCORE TC SUBCOOLED MARGIN	95.4	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	43.6	LWRN	%
16 LSCB	STM GEN B NARROW RANGE AVG LEVEL	41.6	LWRN	%
17 PSGA	STM GEN A AVERAGE PRESSURE	994.	GOOD	PSIG
18 PSGB	STM GEN B AVERAGE PRESSURE	994.	GOOD	PSIG
19 GENBKR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	.49	GOOD	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	GOOD	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	GOOD	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	GOOD	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	GOOD	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	GOOD	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	GOOD	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	GOOD	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	547.7	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	547.7	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	546.8	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	546.8	GOOD	DEGF
43 TAVSAMID	RCLA TAVS (THOT/TCOLD WIDE RNS)	547.3	GOOD	DEGF
44 TAVSBMID	RCLB TAVS (THOT/TCOLD WIDE RNS)	547.3	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	100.3	GOOD	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	553.1	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	103.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	103.	GOOD	GPM
49 BXR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BXR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1338.	LALN	GPM
2 LRKST	REFUELING WATER STORAGE TANK LVL	94.5	GOOD	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	5.6	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	317.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	61.9	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	61.0	GOOD	DEGF
7 WDT2815	250-33 FT LVL DELTA TEMP 15M AVG	-.9	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	8.75992-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	1.18850+01	GOOD	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.15822-01	GOOD	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.14156+02	HWRN	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	8.17524-01	GOOD	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	2.45118+05	HALN	CPM
15 R11	CONTAINMENT AIR PARTICULATE	1.61017+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	1.92752+04	HWRN	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.48765+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.32140+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	3.92983+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.64531+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.27808+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.37804+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	GOOD	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RRQ	S6A NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RRQ	S6B NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	83.1	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	91.2	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	91.2	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	91.2	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	91.2	GOOD	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	99.4	GOOD	DEGF

Time: 09:30  
Message: 20

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. Plant shutdown continues
2. The TSC, OSC and Survey Center should be nearing operational readiness.



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	2.32005+02	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	2.30408+02	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.24164-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.22462-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PPCS	REACTOR COOLANT SYSTEM AVG PRESS	2277.	GOOD PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	50.1	GOOD %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	98.2	GOOD %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	98.2	GOOD %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	GOOD
13	RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	GOOD
14	TSUBTC	INORE TC SUBCOOLED MARGIN	96.5	GOOD+ DEGF
15	LSSA	STM GEN A NARROW RANGE AVG LEVEL	48.2	GOOD %
16	LSSB	STM GEN B NARROW RANGE AVG LEVEL	45.5	GOOD %
17	PSGA	STM GEN A AVERAGE PRESSURE	994.	GOOD PSIG
18	PSGB	STM GEN B AVERAGE PRESSURE	994.	GOOD PSIG
19	GENBKRI	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENBKRI2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	.49	GOOD PSIG
28	LSNPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	GOOD FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	LOWER	GOOD
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	LOWER	GOOD
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	GOOD
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	GOOD
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	GOOD
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	GOOD
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	547.5	GOOD DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	547.5	GOOD DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	546.7	GOOD DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	546.7	GOOD DEGF
43	TAVSAND	RCLA TAVG (THOT/TCOLD WIDE RNG)	547.1	GOOD DEGF
44	TAVSBAND	RCLB TAVG (THOT/TCOLD WIDE RNG)	547.1	GOOD DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	100.1	GOOD %
46	TCCORE	E1.1 INORE TC AVERAGE TEMP	552.1	GOOD+ DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	103.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	99.	GOOD GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FSIA	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FSIB	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1338.	LALM	GPM
2 LRKST	REFUELING WATER STORAGE TANK LVL	94.5	GOOD	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	5.6	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	317.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	62.0	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	61.1	GOOD	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-.9	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	1.51356+01	GOOD	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.04080-01	GOOD	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.18168+02	HMRY	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	7.80728-01	GOOD	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.30178+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.18776+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	2.51912+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.69336+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.45399+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.24741+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.63117+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	8.99627-01	GOOD	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.59112+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99995-02	GOOD	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RRQ	SEA NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RRQ	SEA NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	83.7	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	91.7	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	91.7	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	91.7	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	91.7	GOOD	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	99.7	GOOD	DEGF



Time: 09:45  
Message: 21

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

**The following alarms are received in the control room:**

F-10 (Pressurizer low pressure trip 2185 psi)  
D-20 (Pressurizer low pressure trip 1873 psi)  
D-19 (Pressurizer low pressure SI 1750 psig)

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The loss of coolant is an initial 60,000 gpm leak from a severed "B" RCP discharge pipe where it connects to the pump.
2. The A&C SI pumps do not automatically start.

**Actions Expected:**

1. Operators take immediate actions in accordance with procedure E-0 "Reactor trip or safety injection"
2. Operators take actions to manually start the A&C SI pumps. The pumps start manually.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	2.28034+02	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	2.27247+02	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.23595-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.22462-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PROS	REACTOR COOLANT SYSTEM AVG PRESS	2276.	GOOD	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	57.1	GOOD	%
10 FRLA	REACTOR COOLANT LOOP A AVG FLOW	98.2	GOOD	%
11 FRLB	REACTOR COOLANT LOOP B AVG FLOW	98.2	GOOD	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	NOT TRIP	GOOD	
14 TSUBTC	INCORE TC SUBCOOLED MARGIN	96.4	GOOD*	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	54.5	GOOD	%
16 LSEB	STM GEN B NARROW RANGE AVG LEVEL	51.3	GOOD	%
17 PSSA	STM GEN A AVERAGE PRESSURE	994.	GOOD	PSIG
18 PSGB	STM GEN B AVERAGE PRESSURE	994.	GOOD	PSIG
19 GENBKR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	.49	GOOD	PSIG
28 LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	1.5	GOOD	FEET
29 L0942E	SUMP B LEVEL 9 INCHES (TRAIN A)	LOWER	GOOD	
30 L0943E	SUMP B LEVEL 9 INCHES (TRAIN B)	LOWER	GOOD	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	GOOD	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	GOOD	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	GOOD	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	GOOD	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	547.5	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	547.5	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	546.7	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	546.7	GOOD	DEGF
43 TAVGANID	RCLA TAVG (THOT/TCOLD WIDE RNS)	547.1	GOOD	DEGF
44 TAVGBNID	RCLB TAVG (THOT/TCOLD WIDE RNS)	547.1	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	100.1	GOOD	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	552.2	GOOD*	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	102.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	100.	GOOD	GPM
49 BKR081	NTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BKR082	NTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	0.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	0.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	83.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	75.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	OFF	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	1338.	1ALM	GPM
2 LRMT	REFUELING WATER STORAGE TANK LVL	94.5	6000	%
3 MS033015	33 FT LEVEL WIND SPEED: 15M AVG	5.6	6000	MPH
4 MD033015	33FT LVL WIND DIRECTION 15M AVG	317.	6000	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	62.0	6000	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	61.1	6000	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-9	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	8.75992-02	6000	NR/HR
9 R02	AREA 2-CONTAINMENT	1.63117+03	HALM	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	5.85464-01	6000	NR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.14156+02	HWRN	NR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	9.01571-01	6000	NR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.87368+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.49028+03	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	3.04614+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.82232+01	6000	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.59065+01	6000	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.41570+01	6000	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.63117+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.27808+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	2.61706+00	6000	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	2.60390+00	6000	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.37804+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	3.32441-02	6000	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99964-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	6000	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMSVA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	NR/HR
38 R31RRQ	S6A NOBLE GAS RELEASE RATE:15MAY	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMSVB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	NR/HR
42 R32RRQ	S6B NOBLE GAS RELEASE RATE:15MAY	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	84.0	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	91.9	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	91.9	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	91.9	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	91.9	6000	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	99.7	6000	DEGF

Time: 09:46  
Message: 22

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The core uncovers during the blowdown phase of the large break LOCA.
2. A large amount of the fuel gap activity is released due to fuel rod bursting because of core uncover during the initial reactor coolant system blowdown. Containment radiation levels are increasing.

**Actions Expected:**

1. Operators are taking immediate actions in accordance with procedure E-0.



Time: 09:47  
Message: 23

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The vessel is being refilled. Fuel rods continue to burst due to the uncover.
2. RCP trip criteria IS NOT met, if the A&C SI pumps have not been manually started.

**Actions Expected:**

1. Operators should be taking action in accordance with E-0 and E-1 "Loss of reactor or secondary coolant".



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	4.93741+01	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	5.16415+01	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.05195-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.04713-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PPCS	REACTOR COOLANT SYSTEM AVG PRESS	31.	LALM PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHG %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHG %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	100.8	GOOD* DEGF
15	LSSA	STM GEN A NARROW RANGE AVG LEVEL	57.1	GOOD %
16	LSSB	STM GEN B NARROW RANGE AVG LEVEL	53.3	GOOD %
17	PSSA	STM GEN A AVERAGE PRESSURE	792.	GOOD PSIG
18	PSSB	STM GEN B AVERAGE PRESSURE	795.	GOOD PSIG
19	GENBXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENBXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	29.79	HALM PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG FEET
29	L0942E	SUMP B LEVEL 9 INCHES (TRAIN A)	HIGHER	ALRM
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	ALRM
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	LOWER	GOOD
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	LOWER	GOOD
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	LOWER	GOOD
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	LOWER	GOOD
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	372.5	GOOD DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	195.8	GOOD DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	480.5	GOOD DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	455.8	GOOD DEGF
43	TAVSAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	426.5	GOOD DEGF
44	TAVSBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	325.8	GOOD DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	65.5	LALM %
46	TCCORE	E1.1 INCORE TC AVERAGE TEMP	173.9	GOOD* DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	142.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	125.	GOOD GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	421.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	586.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	884.	LALM	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	86.3	GOOD	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	5.8	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	321.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	62.4	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	61.5	GOOD	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-9	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.44062-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	3.67282+04	HALM	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	2.05352+00	GOOD	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.24451+02	HMRN	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	3.10814+00	GOOD	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.62270+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.12607+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.86209+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.65050+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.41570+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.56900+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	3.77734+01	HMRN	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	3.77734+01	HMRN	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	5.59112+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	5.08179-01	GOOD	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RRQ	S6A NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RRQ	S6B NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	236.1	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	234.9	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	235.2	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	234.9	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	235.2	GOOD	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	234.4	GOOD	DEGF



Time: 10:00  
Message: 24

GINNA STATION

JUNE 11, 1997 PLUME EXPOSURE EXERCISE

MESSAGE FORM

From: Control Room

\*\*\*THIS IS A EXERCISE\*\*\*

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ROLLER USE ONLY

Expected:

Operators should be stabilizing the plant using emergency operating procedures.

Area Emergency should be declared in accordance with EPIP 1-0,  
2.3.2 "Containment radiation levels >100R/hr on R-29/30

Plant should implement EPIP 1-3 "Site Area Emergency"

JUN 11, 1997 10:00

TREND GROUP ASSIGNMENT: EMT

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QVAL	E. U.
53 PS1A	SAFETY INJECTION LOOP A AVG FLOW	534.	6000	GPM
54 PS1B	SAFETY INJECTION LOOP B AVG FLOW	534.	6000	GPM
55 PS160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 PS161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 SR041	SERVICE WATER PUMP A	ON	6000	
58 SR042	SERVICE WATER PUMP B	ON	6000	
59 SR043	SERVICE WATER PUMP C	ON	6000	
60 SR044	SERVICE WATER PUMP D	ON	6000	

JUN 11, 1997 10:00

R. E. GULL

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	U/L	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLOW	892.	LALM	GPM
2 L0001	REFUELING WATER STORAGE TANK LVL	66.2	GOOD	%
3 W0033015	33 FT LEVEL WIND SPEED 15M AVG	6.3	GOOD	MPH
4 W0033015	33 FT LVL WIND DIRECTION 15M AVG	333	GOOD	DEG.
5 W0033015	33 FT LVL WIND TEMP 15M AVG	62.9	GOOD	DEGF
6 W0033015	330 FT LVL WIND TEMP 15M AVG	62.2	GOOD	DEGF
7 W0033015	330-57 FT LVL WIND TEMP 15M AVG	60.7	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.17375-01	GOOD	NR/HR
9 R02	AREA 2-CONTAINMENT	9.71824+04	HALM	NR/HR
10 R05	AREA 3-SPENT FUEL POND	4.24131+00	GOOD	NR/HR
11 R09	AREA 4-REACTOR BUILDING	1.2332-01	GOOD	NR/HR
12 R34	AREA 34 - AUX BLDG 1 SPRAY PUMP	6.0135+00	NR/HR	NR/HR
13 R35	AREA 35-PAGE SAMPLE PUMP	1.75438+01	GOOD	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	4.64380+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.54463+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.00694+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.76307+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.30277+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.32140+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.56900+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.20313+02	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.19107+02	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	9.33179+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50106-07	GOOD	UCL/CC
26 R12A6	CV VENT CHAN 6-MID RANGE GAS	1.04312+00	GOOD	NR/HR
27 R12A7	CV VENT CHAN 7-HIGH RANGE GAS	9.99984-06	GOOD	UCL/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCL/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCL/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99994-06	GOOD	UCL/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	9.99977-05	GOOD	UCL/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	7.79983-06	GOOD	UCL/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99994-06	GOOD	UCL/CC
34 R15A9	AIR EJECTOR CHAN 9-HIGH RANGE GAS	9.99997-04	GOOD	UCL/CC
35 V3411C	STEAM LINE ARM 1	CLOSED	GOOD	
36 VMSVA	NUMBER OF S/S - REP - OPEN	0	GOOD	= OPEN
37 R31	AREA 31 STEAM LINE 1 - OPEN	1.00000-00	GOOD	= OPEN
38 R31R00	SGA NOBLE GAS RELEASE POTENTIAL	1.00000-00	GOOD	= OPEN
39 V3410C	STEAM LINE ARM 2	CLOSED	GOOD	
40 VMSVB	NUMBER OF S/S - REP - OPEN	0	GOOD	= OPEN
41 R32	AREA 32 STEAM LINE 2 - OPEN	1.00000-00	GOOD	= OPEN
42 R32R00	SGA NOBLE GAS RELEASE POTENTIAL	1.00000-00	GOOD	= OPEN
43 CVH	CV - HYDROGEN CONCENTRATION	0.0	GOOD	%
44 TCV03	CV - HYDROGEN LEVEL 1 - 100% TEMP	100.0	GOOD	DEGF

Time: 10:15  
Message: 25

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Containment radiation levels continue to increase due to hot channels caused by flow anomalies that occurred due to the thermohydraulic effects of RCS blowdown.

**Actions Expected:**

1. Operators are stabilizing the plant using procedure E-1 "Loss of reactor or secondary coolant"



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	3.86367+01	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	3.98565+01	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.03753-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.03753-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRC5	REACTOR COOLANT SYSTEM AVG PRESS	2.	ALRM	PSIG
9 LFZR	FRESSURIZER AVERAGE LEVEL	.0	LENG	%
10 FRC1A	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB	%
11 FRC1B	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB	%
12 RXT16	SCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
13 RXT17	SCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
14 TSUBTC	INCORE TO SUBCOOLED MARGIN	118.6	GOOD	DEGF
15 LSGA	5TH GEN A NARROW RANGE AVG LEVEL	66.6	GOOD	%
16 LSGB	5TH GEN B NARROW RANGE AVG LEVEL	57.3	GOOD	%
17 PSGA	5TH GEN A AVERAGE PRESSURE	577.	LMRN	PSIG
18 PSGB	5TH GEN B AVERAGE PRESSURE	580.	LMRN	PSIG
19 GENBXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENBXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	2.01	LMRN	PSIG
28 LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	LENG	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	341.0	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	158.6	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	391.3	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	219.2	GOOD	DEGF
43 TAVSAND	RCLA TAVS T-HOT/COLD WIDE RAG	366.2	GOOD	DEGF
44 TAVSBND	RCLB TAVS T-HOT/COLD WIDE RAG	169.7	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	14.1	ONLY	%
46 TDCORE	51.1 INCHES TO AVERAGE TEMP	55.3	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	SPH
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	SPH
49 EXR081	NTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 EXR082	NTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	425.	GOOD	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	594.	GOOD	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	GOOD	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	GOOD	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	GOOD	
58 BKR042	SERVICE WATER PUMP B	ON	GOOD	
59 BKR043	SERVICE WATER PUMP C	ON	GOOD	
60 BKR044	SERVICE WATER PUMP D	ON	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	884.	LALM	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	29.7	LMRN	%
3 WS033015	33 FT LEVEL WIND SPEED: 15M AVG	6.6	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	346.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.0	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	63.4	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-6	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	8.81048-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	3.34964+05	HALM	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	1.34122+01	GOOD	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.18168+02	HWRN	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	1.53993+01	HWRN	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	4.02716+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.60015+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.00694+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	2.68766+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.43480+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.61051+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.56900+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.29659+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	3.26164+02	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	3.26164+02	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	3.27368+00	GOOD	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPINS)	2.05126-02	GOOD	MR/HR
38 R31RRQ	S6A NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPINS)	2.05126-02	GOOD	MR/HR
42 R32RRQ	S6B NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	209.9	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	157.5	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	157.5	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	157.5	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	157.5	GOOD	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	105.1	GOOD	DEGF

Time: 10:15  
Message: 26X

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Emergency Coordinator**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

**Declare a Site Area Emergency using EPIP 1-0  
EAL # 2.3.2 "Containment radiation levels >100R/hr on R-29/30**

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Deliver only if a Site Area Emergency has not been declared. Do not deliver if emergency classifications are in progress.
2. Containment radiation levels continue to increase due to localized fuel overheating.

**Actions Expected:**



Time: 10:30  
Message: 27

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Containment radiation levels continue to increase.

**Actions Expected:**

1. Operators still stabilizing the plant using emergency operating procedures.
2. The Emergency Operations Facility should be staffing up.
3. A Site Evacuation should be implemented.
4. A General Emergency should be declared per EPIP 1-0, EAL # 2.3.3
5. Immediate protective actions should be made using procedure EPIP 2-1

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	5.34562+01	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	4.76979+01	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.05195-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.04713-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PPCS	REACTOR COOLANT SYSTEM AVG PRESS	3.	LALN PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	105.4	GOOD+ DEGF
15	LSSA	STM GEN A NARROW RANGE AVG LEVEL	68.5	HMRN %
16	LSSB	STM GEN B NARROW RANGE AVG LEVEL	57.1	GOOD %
17	PSGA	STM GEN A AVERAGE PRESSURE	560.	LWRN PSIG
18	PSGB	STM GEN B AVERAGE PRESSURE	566.	LWRN PSIG
19	GENBXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENBXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	2.32	HMRN PSIG
28	LSUPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	341.5	GOOD DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	166.7	GOOD DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	368.3	GOOD DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	219.6	GOOD DEGF
43	TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	354.9	GOOD DEGF
44	TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	193.2	GOOD DEGF
45	LRY	REACTOR VESSEL AVERAGE LEVEL	64.0	LALN %
46	TOCORE	E1.1 INCORE TC AVERAGE TEMP	114.4	GOOD+ DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	19.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
49	BKROB1	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKROB2	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	424.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	424.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLM	3616.	GOOD	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	21.5	WARN	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	358.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	64.7	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	64.2	GOOD	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-.5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	8.81046-02	GOOD	HR/HR
9 R02	AREA 2-CONTAINMENT	8.56051+05	HALM	HR/HR
10 R05	AREA 5-SPENT FUEL PIT	2.88402+01	HALM	HR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.24451+02	WARN	HR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	1.47062+01	WARN	HR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	HR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.60015+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.12607+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	3.32065+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.65050+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.41570+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.56900+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.13589+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.13589+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	5.28662+00	WARN	HR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	HR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	HR/HR
42 R32RRQ	SSB NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	191.7	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	150.1	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	150.1	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	150.1	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	150.1	GOOD	DEGF
49 TCV17	CV OPERATING LVL 6FT TEMP #17	108.5	GOOD	DEGF

Time: 10:45  
Message: 28

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Operators are still stabilizing the plant per emergency operating procedures.

**Actions Expected:**

1. The TSC and the control room operators should be assessing sump "B" recirculation availability.
2. The EOF should be staffing up.



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	5.55263+01	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	5.23599+01	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.05195-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.05195-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PPCS	REACTOR COOLANT SYSTEM AVG PRESS	3.	LALM PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	110.0	GOOD+ DEGF
15	LSSA	STM GEN A NARROW RANGE AVG LEVEL	71.2	HARM %
16	LSSB	STM GEN B NARROW RANGE AVG LEVEL	56.7	GOOD %
17	PSGA	STM GEN A AVERAGE PRESSURE	539.	LARM PSIG
18	PSGB	STM GEN B AVERAGE PRESSURE	552.	LARM PSIG
19	GENBKR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	2.25	HARM PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	341.2	GOOD DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	164.3	GOOD DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	349.7	GOOD DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	219.4	GOOD DEGF
43	TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	345.5	GOOD DEGF
44	TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	191.8	GOOD DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	64.4	LALM %
46	TCORE	E1.1 INCORE TC AVERAGE TEMP	109.8	GOOD+ DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	19.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	423.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	423.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLM	3614.	GOOD	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	17.3	LMRN	%
3 WS033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	2.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.44062-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	1.31069+06	HALM	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	3.93549+01	HALM	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.24451+02	HMNR	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	1.53108+01	HMNR	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.62270+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.12607+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	3.73143+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.65050+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.41570+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.56900+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.30974+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.30974+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	7.00000+00	HMNR	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPINS)	2.05126-02	GOOD	MR/HR
38 R31RRQ	SSA NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPINS)	2.05126-02	GOOD	MR/HR
42 R32RRQ	SSB NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	173.5	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	139.9	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	139.9	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	139.9	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	139.9	GOOD	DEGF
49 TCV17	CV OPERATING LVL 6FT TEMP #17	106.2	GOOD	DEGF

Time: 10:45  
Message: 29X

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Emergency Coordinator**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

Declare a General Emergency using EPIP 1-0  
EAL # 2.3.3 "Containment radiation levels >1000R/hr on R-29/30

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Deliver only if a General Emergency has not yet been declared. Do not deliver if emergency classifications are in progress.

**Actions Expected:**

Time: 11:00  
Message: 30

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Containment radiation levels have stabilized.
2. The injection phase of the accident is done or almost done.

**Actions Expected:**

1. Operations personnel should be aligning systems for the recirculation phase.
2. The TSC should be discussing concerns of operation with only one CCW pump for long-term heat removal.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	5.04080+01	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	5.18202+01	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.05195-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.04713-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRC5	REACTOR COOLANT SYSTEM AVG PRESS	3.	LALM	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
14 TSUBTC	INCORE TC SUBCOOLED MARGIN	112.3	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	74.1	HWRN	%
16 LSGB	STM GEN B NARROW RANGE AVG LEVEL	56.5	GOOD	%
17 PSGA	STM GEN A AVERAGE PRESSURE	519.	LWRN	PSIG
18 PSGB	STM GEN B AVERAGE PRESSURE	541.	LWRN	PSIG
19 GENBXR1	GENERATOR ON LINE BREAKER 161J72	TRIPPED	ALRM	
20 GENBXR2	GENERATOR ON LINE BREAKER 9X1J72	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	2.91	HWRN	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	340.6	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	164.7	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	322.5	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	221.2	GOOD	DEGF
43 TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	331.6	GOOD	DEGF
44 TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	192.9	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	64.3	LALM	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	108.8	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	20.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
49 BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	131.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	159.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLOW	3612.	GOOD	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	14.7	LOW	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	5.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	64.6	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-.5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	1.50487+06	HALM	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	4.05042+01	HALM	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.24451+02	WARN	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	1.57580+01	WARN	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.64544+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.07255+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	3.73143+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.59065+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.49262+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.64531+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.50812+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.50812+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	7.00000+00	WARN	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RRQ	SSA NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RRQ	SSB NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	159.0	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	137.5	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	137.5	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	137.5	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	137.5	GOOD	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	116.1	GOOD	DEGF



Time: 11:15  
Message: 31

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The plant safety systems are re-aligned and operating in the recirculation mode.

**Actions Expected:**

1. Operations personnel are continuing the emergency procedures.





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	5.36412+01	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	5.41999+01	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.05195-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.04713-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PRCS	REACTOR COOLANT SYSTEM AVG PRESS	4.	LALM PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	116.7	GOOD* DEGF
15	L5SA	STM GEN A NARROW RANGE AVG LEVEL	76.6	HWRN %
16	L5SB	STM GEN B NARROW RANGE AVG LEVEL	56.3	GOOD %
17	P5SA	STM GEN A AVERAGE PRESSURE	500.	LALM PSIG
18	P5SB	STM GEN B AVERAGE PRESSURE	532.	LWRN PSIG
19	GENBKR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	3.41	HWRN PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	339.7	GOOD DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	164.7	GOOD DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	311.1	GOOD DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	223.0	GOOD DEGF
43	TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	325.4	GOOD DEGF
44	TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	193.9	GOOD DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	64.3	LALM %
46	TCCORE	E1.1 INCORE TC AVERAGE TEMP	107.6	GOOD* DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	131.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	159.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BXR041	SERVICE WATER PUMP A	ON	6000	
58 BXR042	SERVICE WATER PUMP B	ON	6000	
59 BXR043	SERVICE WATER PUMP C	ON	6000	
60 BXR044	SERVICE WATER PUMP D	ON	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	3612.	GOOD	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	14.5	LMRN	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	5.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	64.8	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	8.81048-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	1.65958+06	HALM	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	4.19275+01	HALM	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	1.14156+02	HMRY	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	1.53993+01	HMRY	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.87368+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.60015+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.00694+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	3.65174+01	GOOD	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	4.43480+01	GOOD	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	4.61051+01	GOOD	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.68122+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.29659+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	7.00000+00	HMRY	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	1.50001-07	GOOD	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPIN6)	2.05126-02	GOOD	MR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPIN6)	2.05126-02	GOOD	MR/HR
42 R32RRQ	SEB NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	146.5	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	134.5	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	134.6	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	134.5	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	134.6	GOOD	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	122.6	GOOD	DEGF

Time: 11:16  
Message: 32

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The "A" RHR pump shaft seal has failed creating approximately a 50 gpm leak into the auxiliary building sub-basement.
2. Plant vent monitors show rapid increases in radiation levels. A major release to the environment begins.
3. Release path: from containment through the "A" RHR pump failed seal out the plant vent.

**Actions Expected:**

1. TSC and control room operators should try to locate the leak in the auxiliary building.

Time: 11:18  
Message: 33

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The "A" RHR pump trips.

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The "A" RHR pump trips out on overcurrent due to the failed seals.

**Actions Expected:**

1. TSC should be working on the leak in the auxiliary building.
2. Efforts should be underway to track the plume, terminate the release and implement/coordinate PARs.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	K31	SOURCE RANGE DETECTOR N-31	4.65585+01	GOOD CPS
4	K32	SOURCE RANGE DETECTOR N-32	4.90341+01	GOOD CPS
5	K35	INTERMEDIATE RANGE DETECTOR N-35	1.04713-11	GOOD AMP
6	K36	INTERMEDIATE RANGE DETECTOR N-36	1.04713-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PRCS	REACTOR COOLANT SYSTEM AVG PRESS	4.	LALM PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	IN-H %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	IN-H %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	116.4	GOOD DEG
15	LSEA	STM GEN A NARROW RANGE AVG LEVEL	76.4	HWRN %
16	LSEB	STM GEN B NARROW RANGE AVG LEVEL	56.3	GOOD %
17	PSEA	STM GEN A AVERAGE PRESSURE	490.	LALM PSIG
18	PSEB	STM GEN B AVERAGE PRESSURE	528.	LWRN PSIG
19	GENBKR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	3.45	HWRN PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	IN-H
30	L0943E	SUMP B LEVEL 9 INCHES (TRAIN B)	HIGHER	IN-H
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	IN-H
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	IN-H
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LES TEMPERATURE	339.1	GOOD DEG
40	T0410A	RCLB HOT LES TEMPERATURE	164.7	GOOD DEG
41	T0409B	RCLA COLD LES TEMPERATURE	304.7	GOOD DEG
42	T0410B	RCLB COLD LES TEMPERATURE	223.1	GOOD DEG
43	TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	321.9	GOOD DEG
44	TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	193.9	GOOD DEG
45	LRV	REACTOR VESSEL AVERAGE LEVEL	64.5	LALM %
46	TCORE	E1.1 INCORE TC AVERAGE TEMP	107.3	GOOD DEG
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FSIA	SAFETY INJECTION LOOP A AVG FLOW	95.	6000	GPM
54 FSIB	SAFETY INJECTION LOOP B AVG FLOW	115.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	3612.	GOOD	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	14.4	LRWK	%
3 WS033015	33 FT-LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	5.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	GOOD	NR/HR
9 R02	AREA 2-CONTAINMENT	1.70804+06	HALM	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	3.54812+04	HALM	NR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	4.16869+04	HALM	NR/HR
12 R34	AREA 34 - AUX BLUE CV SPRAY PUMP	3.45737+04	HALM	NR/HR
13 R35	AREA 35-PAGE SAMPLE PANEL	1.09545+03	GOOD	NR/HR
14 R104	CONTAINMENT IODINE MONITOR R104	3.94116+05	HALM	CFM
15 R11	CONTAINMENT AIR PARTICULATE	2.64344+03	GOOD	CFM
16 R12	CONTAINMENT GAS MONITOR	3.07265+04	HALM	CFM
17 R108	PLANT VENT IODINE MONITOR R108	1.02314+07	HEMS	CFM
18 R17	AUX BLUE EXHAUST AIR PARTICULATE	1.02162+07	HEMS	CFM
19 R17	AUX BLUE EXHAUST GAS MONITOR	9.99992+06	HALM	CFM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.02424+07	HEMS	CFM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	GOOD	CFM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSED AIR EJECTOR EXHAUST	3.06813+02	GOOD	CFM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.30006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-MID RANGE GAS	1.99994+03	HALM	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14E	PLANT VENT CHAN 5-LOW RANGE GAS	9.98974-03	HALM	UCI/CC
30 R14F	PLANT VENT CHAN 7-MID RANGE GAS	8.59985+03	HALM	UCI/CC
31 R14G	PLANT VENT CHAN 9-HIGH RANGE GAS	8.59985+03	HALM	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V04110	STEAM LINE ARV A	CLOSED	GOOD	
36 V0504	NUMBER OF S/G A NSSV OPEN	0.	GOOD	# OPEN
37 R01	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	NR/HR
38 R0501	S6A NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V04110	STEAM LINE ARV B	CLOSED	GOOD	
40 V0503	NUMBER OF S/G B NSSV OPEN	0.	GOOD	# OPEN
41 R02	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	NR/HR
42 R0502	S6B NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 C14	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	141.3	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	132.2	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	132.1	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 5FT TEMP #9	132.2	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 5FT TEMP #10	132.1	GOOD	DEGF
49 TCV17	CV OPERATING LVL 6FT TEMP #17	123.0	GOOD	DEGF

Time: 11:30  
Message: 34

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The following alarms are received in the control room:

L-9 (Auxiliary building sump high level) clearing and coming back intermittently

---

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The TSC should be concluding that the "A" RHR pump seal has failed.
2. The release will continue until 1245 hours.

**Actions Expected:**

1. The TSC and control room should be working on isolating the "A" RHR pump to terminate the offsite release.
2. Efforts should be under way to track the plume and implement/coordinate PARs.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATWS	ANTICIPATED TRANSIENT W/D SCRAM	NO ATWS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	4.63979+01	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	4.76979+01	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.04713-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.04713-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PROS	REACTOR COOLANT SYSTEM AVG PRESS	4.	LALM PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	106.0	GOOD DEGF
15	LSSA	STM GEN A NARROW RANGE AVG LEVEL	76.2	HWRN %
16	LSSB	STM GEN B NARROW RANGE AVG LEVEL	56.2	GOOD %
17	PSGA	STM GEN A AVERAGE PRESSURE	482.	LALM PSIG
18	PSGB	STM GEN B AVERAGE PRESSURE	525.	LWRN PSIG
19	GENBXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENBXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	3.37	HWRN PSIG
28	LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	338.2	GOOD DEGF
40	T0410A	RCLB HOT LEG TEMPERATURE	170.0	GOOD DEGF
41	T0409B	RCLA COLD LEG TEMPERATURE	295.3	GOOD DEGF
42	T0410B	RCLB COLD LEG TEMPERATURE	222.9	GOOD DEGF
43	TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	316.7	GOOD DEGF
44	TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	196.4	GOOD DEGF
45	LRV	REACTOR VESSEL AVERAGE LEVEL	64.4	LALM %
46	TCORE	E1.1 INCORE TC AVERAGE TEMP	117.8	GOOD DEGF
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
49	BKRO81	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKRO82	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	81.	GOOD	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	99.	GOOD	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	GOOD	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	GOOD	PSIG
57 BXR041	SERVICE WATER PUMP A	ON	GOOD	
58 BXR042	SERVICE WATER PUMP B	ON	GOOD	
59 BXR043	SERVICE WATER PUMP C	ON	GOOD	
60 BXR044	SERVICE WATER PUMP D	ON	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	3610.	GOOD	GPM
2 LRMST	REFUELING WATER STORAGE TANK LVL	14.2	LMRN	%
3 WS033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	5.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.44062-02	GOOD	NR/HR
9 R02	AREA 2-CONTAINMENT	1.69824+06	HALM	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	3.44746+04	HALM	NR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	4.07380+04	HALM	NR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	3.56861+04	HALM	NR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	4.11504+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.62270+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.12607+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.04864+07	HENG	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	1.03514+07	HENG	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	9.78647+06	HALM	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.04864+07	HENG	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.06813+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99994+03	HALM	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	9.98974-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	8.59985+00	HALM	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	8.59985+00	LMRN	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	NR/HR
38 R31RR0	S6A NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	NR/HR
42 R32RR0	S6B NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	136.6	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	129.3	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	129.3	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	129.3	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	129.3	GOOD	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	121.9	GOOD	DEGF

Time: 11:45  
Message: 35

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The following alarms are received in the control room:

L-9 (auxiliary building sump high level) clearing and coming back intermittently.

---

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The release will continue until 1245 hours.

**Actions Expected:**

1. The TSC and control room should be working on isolating the "A" RHR pump to terminate the off-site release.
2. Efforts should be underway to track the plume and implement/coordinate PARs.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	4.62379+01	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	4.83615+01	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.04713-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.04232-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PRCS	REACTOR COOLANT SYSTEM AVG PRESS	4.	LALM PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	106.7	GOOD DEG
15	LSGA	STM GEN A NARROW RANGE AVG LEVEL	75.9	HWRN %
16	LSGB	STM GEN B NARROW RANGE AVG LEVEL	56.1	GOOD %
17	PSGA	STM GEN A AVERAGE PRESSURE	469.	LALM PSIG
18	PSGB	STM GEN B AVERAGE PRESSURE	519.	LWRN PSIG
19	GENXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	3.21	HWRN PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM
35	L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	336.7	GOOD DEG
40	T0410A	RCLB HOT LEG TEMPERATURE	168.7	GOOD DEG
41	T0409B	RCLA COLD LEG TEMPERATURE	286.0	GOOD DEG
42	T0410B	RCLB COLD LEG TEMPERATURE	222.4	GOOD DEG
43	TAVSAMID	RCLA TAVG (THOT/TCOLD WIDE RNG)	311.3	GOOD DEG
44	TAVSBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	195.5	GOOD DEG
45	LRV	REACTOR VESSEL AVERAGE LEVEL	64.6	LALM %
46	TDCORE	E1.1 INCORE TC AVERAGE TEMP	115.5	GOOD DEG
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BXR041	SERVICE WATER PUMP A	ON	6000	
58 BXR042	SERVICE WATER PUMP B	ON	6000	
59 BXR043	SERVICE WATER PUMP C	ON	6000	
60 BXR044	SERVICE WATER PUMP D	ON	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	3612.	GOOD	GPM
2 LR05T	REFUELING WATER STORAGE TANK LVL	14.0	LRN	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	5.	GOOD	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	64.8	GOOD	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	8.75992-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	1.69824+06	HALN	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	3.60994+04	HALN	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	4.07380+04	HALN	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	3.36898+04	HALN	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	4.11504+05	HALN	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.49028+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.04614+04	HALN	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.04864+07	HENG	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	1.02182+07	HENG	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	9.78647+06	HALN	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.02624+07	HENG	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALN	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALN	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.06813+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99994+03	HALN	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	9.98974-03	HALN	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	8.59985+00	HALN	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	8.59985+00	LRN	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RRQ	S6A NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RRQ	S6B NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	128.8	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	124.2	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	124.2	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	124.2	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	124.2	GOOD	DEGF
49 TCV17	CV OPERATING LVL 6FT TEMP #17	119.5	GOOD	DEGF

Time: 12:00  
Message: 36

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. The TSC should be working on the isolation of the "A" RHR pump to terminate the release.



## **JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

### **Mini-Scenario**

#### **Activity: Isolation of the "A" RHR Pump**

##### **Controller Notes:**

1. The shaft seal has failed on the "A" RHR pump creating an approximately 50 gpm leak to the auxiliary building sump. The sump pumps are working normally.
2. The leak can be stopped by closing valves MOV-850A and MOV-704A as the discharge check valve 710A will hold. MOV-850A will not close therefore, MOV-851A will have to be closed.

##### **Actions Expected:**

1. The TSC will request the following valves be closed to isolate the "A" RHR pump:
  - MOV-704A (will close from the main control board)
  - MOV-851A (to close MOV-851A, an entry into the auxiliary will be required to perform either of the following:
    - Close the breaker on MCC-C for MOV-851A, then electrically close MOV-851A from the main control board.
    - Send a team into the auxiliary building sub-basement to close MOV-850A.
2. If the TSC decides to close MOV-850A and MOV-704A locally, the controllers may allow the valves to be closed to isolate the leak.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	4.36013+01	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	4.85287+01	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.04713-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.04232-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	3.	LALN	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
14 TSBTC	INCORE TC SUBCOOLED MARGIN	107.1	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	75.7	HWRN	%
16 LSEB	STM GEN B NARROW RANGE AVG LEVEL	56.0	GOOD	%
17 PSGA	STM GEN A AVERAGE PRESSURE	458.	LALN	PSIG
18 PSEB	STM GEN B AVERAGE PRESSURE	514.	LALN	PSIG
19 GENBKR1	GENERATOR ON LINE BREAKER 1G1372	TRIPPED	ALRM	
20 GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	3.07	HWRN	PSIG
28 LSUPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENG	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	335.3	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	167.8	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	276.9	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	221.9	GOOD	DEGF
43 TAVSAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	306.1	GOOD	DEGF
44 TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	194.9	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	64.4	LALN	%
46 TCCRE	E1.1 INCORE TC AVERAGE TEMP	114.3	GOOD	DEGF
47 FAUXFNA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
48 FAUXFNB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
49 BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FM PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FM PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1    PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	GOOD	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	GOOD	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	GOOD	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	GOOD	PSIG
57 BKRO41	SERVICE WATER PUMP A	ON	GOOD	
58 BKRO42	SERVICE WATER PUMP B	ON	GOOD	
59 BKRO43	SERVICE WATER PUMP C	ON	GOOD	
60 BKRO44	SERVICE WATER PUMP D	ON	GOOD	





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	3610.	6000	GPM
2 LRMT	REFUELING WATER STORAGE TANK LVL	13.8	LWRN	%
3 WS033Q15	33 FT LEVEL WIND SPEED: 15M AVG	7.0	6000	MPH
4 WD033Q15	33FT LVL WIND DIRECTION 15M AVG	5.	6000	DEG.
5 WT033Q15	33 FOOT LEVEL TEMP. (15M AVG)	64.8	6000	DEGF
6 WT250Q15	250 FOOT LEVEL TEMP. (15M AVG)	64.3	6000	DEGF
7 WDT2Q15	250-33 FT LVL DELTA TEMP 15M AVG	-5	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	6000	NR/HR
9 R02	AREA 2-CONTAINMENT	1.70804+06	HALM	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	3.54812+04	HALM	NR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	4.16869+04	HALM	NR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	3.65173+04	HALM	NR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.64544+03	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	3.07255+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.03514+07	HENG	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	1.02182+07	HENG	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	9.99992+06	HALM	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.02624+07	HENG	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99994+03	HALM	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	9.98974-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	8.59985+00	HALM	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	8.59985+00	NR/HR	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMSVA	NUMBER OF S/S A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	NR/HR
38 R31RRQ	SGA NOBLE GAS RELEASE RATE:15NAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMSVB	NUMBER OF S/S B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	NR/HR
42 R32RRQ	SGB NOBLE GAS RELEASE RATE:15NAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	122.2	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	119.9	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	119.9	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	119.9	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	119.9	6000	DEGF
49 TCV17	CV OPERATING LEVL 6FT TEMP #17	117.7	6000	DEGF



Time: 12:15  
Message: 37

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The following alarms are received in the control room:

L-9 (auxiliary building sump high level) clearing and coming back in intermittently

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The isolation can take place anytime after 12:15. The release above technical specifications will continue until 12:45.

**Actions Expected:**

1. The TSC and the control room should be working on isolating the "A" RHR pump to terminate the offsite release.
2. Efforts should be underway to track the plume and implement/coordinate PARs.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1	ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD
2	RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM
3	N31	SOURCE RANGE DETECTOR N-31	4.37521+01	GOOD CPS
4	N32	SOURCE RANGE DETECTOR N-32	4.33011+01	GOOD CPS
5	N35	INTERMEDIATE RANGE DETECTOR N-35	1.04232-11	GOOD AMP
6	N36	INTERMEDIATE RANGE DETECTOR N-36	1.04232-11	GOOD AMP
7	NP	AVERAGE NUCLEAR POWER	.00	GOOD %
8	PRCS	REACTOR COOLANT SYSTEM AVG PRESS	3.	LALM PSIG
9	LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG %
10	FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHG %
11	FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHG %
12	RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM
13	RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM
14	TSUBTC	INCORE TC SUBCOOLED MARGIN	108.5	GOOD DEG
15	L5GA	STM GEN A NARROW RANGE AVG LEVEL	75.4	HIGH %
16	L5GB	STM GEN B NARROW RANGE AVG LEVEL	55.8	GOOD %
17	P5SA	STM GEN A AVERAGE PRESSURE	448.	LALM PSIG
18	P5GB	STM GEN B AVERAGE PRESSURE	508.	LALM PSIG
19	GENXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM
20	GENXR2	GENERATOR ON LINE BREAKER 911372	TRIPPED	ALRM
21	BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM
22	BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM
23	BUS12A	NOT TERMINATED ON PFCS (7/19/91)	NOT TRIP	DEL
24	BUS12B	NOT TERMINATED ON PFCS (7/19/91)	NOT TRIP	DEL
25	B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM
26	B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM
27	PCV	CONTAINMENT AVERAGE PRESSURE	2.95	HIGH PSIG
28	LSUMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HIGH FEET
29	L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHG
30	L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHG
31	L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHG
32	L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHG
33	L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM
34	L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM
35	L0942B	SUMP B LEVEL 130 INCHES (TRAIN A)	LOWER	GOOD
36	L0943B	SUMP B LEVEL 130 INCHES (TRAIN B)	LOWER	GOOD
37	L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD
38	L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD
39	T0409A	RCLA HOT LEG TEMPERATURE	334.2	GOOD DEG
40	T0410A	RCLB HOT LEG TEMPERATURE	166.9	GOOD DEG
41	T0409B	RCLA COLD LEG TEMPERATURE	267.5	GOOD DEG
42	T0410B	RCLB COLD LEG TEMPERATURE	221.6	GOOD DEG
43	TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	300.9	GOOD DEG
44	TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	194.2	GOOD DEG
45	LRV	REACTOR VESSEL AVERAGE LEVEL	64.6	LALM %
46	TCOCRE	E1.1 INCORE TC AVERAGE TEMP	112.8	GOOD DEG
47	FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
48	FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD GPM
49	BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD
50	BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD
51	V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD
52	V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1    PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLOW	3612.	GOOD	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	13.5	LOW	%
3 WS033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	5.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	GOOD	MR/HR
9 R02	AREA 2-CONTAINMENT	1.70804+06	HALM	MR/HR
10 R05	AREA 5-SPENT FUEL PIT	3.54812+04	HALM	MR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	4.16869+04	HALM	MR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	3.46737+04	HALM	MR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	MR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.64544+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.07255+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.03514+07	HEMS	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	1.02182+07	HEMS	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	9.99992+06	HALM	CPM
20 R18	LIQUID WASTE DISPOSAL MONITOR	1.02624+07	HEMS	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.37144+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.06813+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.99994+03	HALM	MR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	9.98974-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	8.59985+00	HALM	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	8.59985+00	HALM	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMSSVA	NUMBER OF S/G A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	MR/HR
38 R31RR0	SGA NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMSSVB	NUMBER OF S/G B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	MR/HR
42 R32RR0	SEB NOBLE GAS RELEASE RATE:15MAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 5FT TEMP #3	115.5	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	115.3	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	115.9	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	115.3	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	115.9	GOOD	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP #17	116.2	GOOD	DEGF

Time: 12:30  
Message: 38

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

The following alarms are received in the control room:

L-9 (auxiliary building sump high level) clearing and coming back in intermittently

The "A" RHR pump is isolated with the closing of MOV-704A and either MOV-850A or MOV-851A. This leak into the auxiliary building is isolated.

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The release above technical specifications will continue until 12:45.
2. For scenario purposes, the leak will be considered isolated at this time if not previously isolated.
3. The leak in the auxiliary building must be considered isolated at 1230 hours whether accomplished by players or not. The remainder of the scenario assumes isolation at 1230.

**Actions Expected:**

1. The TSC and the control room should be working on isolating the "A" RHR pump to terminate the offsite release.
2. Efforts should be underway to track the plume and implement/coordinate PARs.
3. MOV-850A or MOV-851A and MOV-704A should be closed at this time.



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EFIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATMS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATMS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	4.27070+01	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	4.24129+01	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.04232-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.03753-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	3.	LALM	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG	%
10 FROLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB	%
11 FROLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
14 TSUBTC	INCORE TC SUBCOOLED MARGIN	108.8	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	75.3	HIGH	%
16 LSSB	STM GEN B NARROW RANGE AVG LEVEL	55.8	GOOD	%
17 PSSA	STM GEN A AVERAGE PRESSURE	442.	LALM	PSIG
18 PSSB	STM GEN B AVERAGE PRESSURE	505.	LALM	PSIG
19 GENXR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENXR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	2.91	HIGH	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HIGH	FEET
29 L0942E	SUMP B LEVEL 6 INCHES (TRAIN A)	HIGHER	INHB	
30 L0943E	SUMP B LEVEL 6 INCHES (TRAIN B)	HIGHER	INHB	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHB	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHB	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	333.6	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	166.5	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	263.3	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	221.4	GOOD	DEGF
43 TAVGAWID	RCLA TAVG (THOT/TCOLD WIDE RNG)	298.4	GOOD	DEGF
44 TAVGBWID	RCLB TAVG (THOT/TCOLD WIDE RNG)	193.9	GOOD	DEGF
45 LPV	REACTOR VESSEL AVERAGE LEVEL	64.7	LALM	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	112.1	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
49 BKX001	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BKX002	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3325	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3324	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1    PROCEDURE: EP1P 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EP1F 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLOW	3612.	6000	GPM
2 LRNST	REFUELING WATER STORAGE TANK LVL	13.3	LMRN	%
3 MS033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	6000	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	5.	6000	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	6000	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	64.3	6000	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	8.81048-02	6000	NR/HR
9 R02	AREA 2-CONTAINMENT	1.75792+06	HALM	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	3.67282+04	HALM	NR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	3.93549+04	HALM	NR/HR
12 R34	AREA 34 - AUX BLDG CV SFRAY PUMP	3.42767+04	HALM	NR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	4.02716+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.60015+03	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	3.00694+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	9.87136+05	HALM	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	9.87136+05	HALM	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	1.02182+07	HENS	CPM
20 R16	LIQUID WASTE DISPOSAL MONITOR	9.78647+05	HALM	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.29659+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA SAMPLE	1.99994+03	HALM	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-05	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	9.98974-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	8.59985+00	HALM	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	8.59985+00	LMRN	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-05	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMS5VA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 F21	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	NR/HR
38 R31RR9	SGB NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMS5VB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 F22	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	NR/HR
42 R32RR9	SGB NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.6	6000	%
44 TC003	CV BASEMENT LEVEL 6FT TEMP #3	112.2	6000	DEGF
45 TC007	CV INTERMEDIATE LVL 6FT TEMP #7	113.2	6000	DEGF
46 TC008	CV INTERMEDIATE LVL 6FT TEMP #8	113.2	6000	DEGF
47 TC009	CV INTERMEDIATE LVL 6FT TEMP #9	113.2	6000	DEGF
48 TC010	CV INTERMEDIATE LVL 6FT TEMP #10	113.2	6000	DEGF
49 TC017	CV OPERATING LVL 6FT TEMP #17	115.4	6000	DEGF

Time: 12:45  
Message: 39

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

**Actions Expected:**

1. The TSC should inform the other emergency centers that the leak is isolated.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EP1F 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	4.16859+01	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	4.40553+01	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.04232-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.03753-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	3.	LALN	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	.0	LENG	%
10 FCCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INHS	%
11 FCCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INHS	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
14 TSUSTC	INCORE TC SUBCOOLED MARGIN	110.0	GOOD	DEGF
15 LSSA	STM GEN A NARROW RANGE AVG LEVEL	75.1	HWRN	%
16 LSSB	STM GEN B NARROW RANGE AVG LEVEL	55.7	GOOD	%
17 PSSA	STM GEN A AVERAGE PRESSURE	435.	LALN	PSIG
18 PSSB	STM GEN B AVERAGE PRESSURE	501.	LALN	PSIG
19 GENBKR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	2.85	HWRN	PSIG
28 LSMPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HEMG	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHS	
30 L0942E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHS	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INHS	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INHS	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	332.7	GOOD	DEGF
40 T0410A	RCLB HOT LEG TEMPERATURE	166.0	GOOD	DEGF
41 T0409B	RCLA COLD LEG TEMPERATURE	258.1	GOOD	DEGF
42 T0410B	RCLB COLD LEG TEMPERATURE	221.2	GOOD	DEGF
43 TAVS2W1D	RCLA TAVS (THOT/TCOLD WIDE RNG)	295.4	GOOD	DEGF
44 TAVS2W1D	RCLB TAVS (THOT/TCOLD WIDE RNG)	193.6	GOOD	DEGF
45 LRV	REACTOR VESSEL AVERAGE LEVEL	64.8	LALN	%
46 TCCORE	E1.1 INCORE TC AVERAGE TEMP	111.3	GOOD	DEGF
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
49 BKR081	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 BKR082	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	6000	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	6000	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	6000	
58 BKR042	SERVICE WATER PUMP B	ON	6000	
59 BKR043	SERVICE WATER PUMP C	ON	6000	
60 BKR044	SERVICE WATER PUMP D	ON	6000	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	UNL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	3610.	6000	CPH
2 LKWT	REFUELING WATER STORAGE TANK LVL	12.9	LKRN	%
3 W0033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	6000	MPH
4 W0033015	33FT LVL WIND DIRECTION 15M AVG	5.	6000	DEG.
5 W0033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	6000	DEGF
6 W0250215	250 FOOT LEVEL TEMP. (15M AVG)	64.3	6000	DEGF
7 W012015	250-33 FT LVL DELTA TEMP 15M AVG	-5	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	6000	NR/HR
9 R02	AREA 2-CONTAINMENT	1.54881+06	HALM	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	1.21618+02	HALM	NR/HR
11 R09	AREA 9-LETDOWN LINE MONITOR	5.92241+01	6000	NR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	3.60991+02	600	NR/HR
13 R35	AREA 35-PAGE SAMPLE PANEL	1.09648+00	6000	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPH
15 R11	CONTAINMENT AIR PARTICULATE	2.64544+03	6000	CPH
16 R12	CONTAINMENT GAS MONITOR	3.07255+04	HALM	CPH
17 R10B	PLANT VENT IODINE MONITOR R10B	1.03514+07	4000	CPH
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	1.02182+07	4000	CPH
19 R14	AUX BLDG EXHAUST GAS MONITOR	2.24986+06	HALM	CPH
20 R15	LIQUID WASTE DISPOSAL MONITOR	5.09917+03	6000	CPH
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	6000	CPH
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	6000	CPH
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.68825+03	HALM	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	2.99982-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V04112	STEAM LINE ARV A	CLOSED	6000	
36 V05004	MEMBER OF S/S A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	NR/HR
38 R31A9	SEA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
39 V04100	STEAM LINE ARV B	CLOSED	6000	
40 V05002	MEMBER OF S/S B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	NR/HR
42 R32A9	SEA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 T0V03	CV BASEMENT LEVEL 6FT TEMP 43	106.4	6000	DEGF
45 T0V07	CV INTERMEDIATE LVL 6FT TEMP 47	110.2	6000	DEGF
46 T0V09	CV INTERMEDIATE LVL 6FT TEMP 49	110.2	6000	DEGF
47 T0V09	CV INTERMEDIATE LVL 6FT TEMP 49	110.2	6000	DEGF
48 T0V10	CV INTERMEDIATE LVL 6FT TEMP 410	110.2	6000	DEGF
49 T0V17	CV OPERATING LVL 6FT TEMP 417	113.9	6000	DEGF



Time: 13:00  
Message: 40

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. The release into the auxiliary building is isolated due to the isolation of the "A" RHR pump. Releases of noble gas, radioiodine and particulates through the plant vent will now be significantly lower.

**Actions Expected:**

1. Efforts should be underway to track the plume and implement/coordinate PARs.
2. Plant staff should make preparations to change out Particulate & I<sub>2</sub> filters. Until this is performed, the release will not be considered terminated.



## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EFIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 R31	SOURCE RANGE DETECTOR N-31	4.34568+01	GOOD	CPS
4 R32	SOURCE RANGE DETECTOR N-32	4.39034+01	GOOD	CPS
5 R35	INTERMEDIATE RANGE DETECTOR N-35	1.04232-11	GOOD	AMP
6 R36	INTERMEDIATE RANGE DETECTOR N-36	1.03753-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRC3	REACTOR COOLANT SYSTEM AVG PRESS	3.	ALRM	PSIG
9 LP2R	PRESSURIZER AVERAGE LEVEL	.0	LENG	%
10 FRC1A	REACTOR COOLANT LOOP A AVG FLOW	.0	INHB	%
11 FRC1B	REACTOR COOLANT LOOP B AVG FLOW	.0	INHB	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
14 TSUSTC	INCORE TC SUBCOOLED MARGIN	110.5	GOOD	DESF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	75.0	HRRN	%
16 LSGE	STM GEN B NARROW RANGE AVG LEVEL	55.6	GOOD	%
17 P5GA	STM GEN A AVERAGE PRESSURE	430.	ALRM	PSIG
18 P5GB	STM GEN B AVERAGE PRESSURE	497.	ALRM	PSIG
19 GENBKR1	GENERATOR ON LINE BREAKER 191372	TRIPPED	ALRM	
20 GENBKR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PFC3 (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PFC3 (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	2.79	HRRN	PSIG
28 LSWPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HRRN	FEET
29 LSW42E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INHB	
30 LSW42E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INHB	
31 LSW42D	SUMP B LEVEL 76 INCHES (TRAIN A)	HIGHER	INHB	
32 LSW42D	SUMP B LEVEL 76 INCHES (TRAIN B)	HIGHER	INHB	
33 LSW42C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM	
34 LSW42C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM	
35 LSW42B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 LSW42B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 LSW42A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 LSW42A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T4409A	RCLA HOT LEG TEMPERATURE	332.1	GOOD	DESF
40 T4409A	RCLB HOT LEG TEMPERATURE	345.6	GOOD	DESF
41 T4409B	RCLA COLD LEG TEMPERATURE	254.3	GOOD	DESF
42 T4409B	RCLB COLD LEG TEMPERATURE	221.0	GOOD	DESF
43 T4VSAK1D	RCLA T4V6 (HOT/COLD WIDE RANG)	293.2	GOOD	DESF
44 T4VGEN1D	RCLB T4V6 (HOT/COLD WIDE RANG)	193.3	GOOD	DESF
45 LA7	REACTOR VESSEL AVERAGE LEVEL	64.7	ALRM	%
46 T000RE	E1.1 INCORE TC AVERAGE TEMP	110.2	GOOD	DESF
47 P40AFM	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
48 P40FMB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
49 S400S1	MTR AUXILIARY FEEDWATER PUMP 2	ON	GOOD	
50 S400S2	MTR AUXILIARY FEEDWATER PUMP 3	ON	GOOD	
51 V3505	AUX FW PUMP STEAM SUPPLY VALVE 4	CLOSED	GOOD	
52 V3504	AUX FW PUMP STEAM SUPPLY VALVE 3	CLOSED	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1    PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.	
53	FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	GOOD	GPM
54	FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	GOOD	GPM
55	F2160	SERVICE WATER PUMPS A & B HEADER	27.	GOOD	PSIG
56	F2161	SERVICE WATER PUMPS C & D HEADER	56.	GOOD	PSIG
57	EXR041	SERVICE WATER PUMP A	ON	GOOD	
58	EXR042	SERVICE WATER PUMP B	ON	GOOD	
59	EXR043	SERVICE WATER PUMP C	ON	GOOD	
60	EXR044	SERVICE WATER PUMP D	ON	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EP1F 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	GOAL	U. S.
1 F0619	COMPONENT COOLING LOOP TOTAL FLW	3610.	6000	GPM
2 LRWST	REFUELING WATER STORAGE TANK LVL	12.9	LRWST	%
3 NS033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	6000	MPH
4 ND033015	33FT LVL WIND DIRECTION 15M AVG	5.	6000	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	6000	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	64.3	6000	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	6000	HR/HR
9 R02	AREA 2-CONTAINMENT	1.54881+06	HALM	HR/HR
10 R05	AREA 5-SPENT FUEL PIT	1.21618+02	HALM	HR/HR
11 R09	AREA 9-LETICIA LINE MONITOR	5.92241+01	6000	HR/HR
12 R34	AREA 34 - AUX BLDS CV SPRAY PUMP	9.60991+02	600	HR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	6000	HR/HR
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.54544+03	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	3.97255+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.03514+07	6000	CPM
18 R13	AUX BLDS EXHAUST AIR PARTICULATE	1.02182+07	6000	CPM
19 R14	AUX BLDS EXHAUST GAS MONITOR	8.24986+06	HALM	CPM
20 R19	LIQUID WASTE DISPOSAL MONITOR	5.09917+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.68825+03	HALM	HR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	8.99982-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMS5VA	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPINS)	2.05126-02	6000	HR/HR
38 R31FA2	SEA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMS5VB	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPINS)	2.05126-02	6000	HR/HR
42 R32FA2	SEA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP 43	106.4	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP 47	110.2	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP 48	110.2	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP 49	110.2	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP 410	110.2	6000	DEGF
49 TCV17	CV OPERATING LEVEL 6FT TEMP 417	113.7	6000	DEGF

Time: 13:15  
Message: 41

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Plume tracking continues. Off-site radiation levels near the Ginna plant have dropped substantially due to the departure of the plume.

**Actions Expected:**

1. See recovery mini-scenario

## JUNE 11, 1997 PLUME EXPOSURE EXERCISE

### Mini-Scenario

#### Activity: Recovery/Re-entry

##### Controller Notes:

1. Recovery/Re-entry discussions should commence per the guidance in EPIP 3-4 "Emergency termination and recovery".
2. Preliminary discussions should take place between the EOF and TSC.
3. State and counties may also conduct parallel recovery/re-entry discussions.
4. Recovery/Re-entry interface between the EOF and off-site agencies should be demonstrated as time allows.

##### Actions Expected:

1. Discussions may include:

##### Short term concerns

- a. Repair and return to service of the "A" RHR pump for redundancy in the core cooling recirculation mode.
- b. Possible makeup of borated water to the RWST for safety injection or containment spray operation if needed.
- c. Initial clean up of the auxiliary building basement.
- d. Repair and return to service of the CCW pump
- e. Highly radioactive waste water in the Waste Holdup Tank from the "A" RHR pump seal failure.
- f. Surveys of plume areas for contamination
- g. Failure of the automatic and manual reactor trip (ATWS event).
- h. Failure of PCV-135

##### Long term concerns

- a. Containment vessel inspection and clean up plans.
  - b. More extensive clean up effort in the auxiliary building.
  - c. Re-entry of evacuated population
2. Preliminary designation of the recovery organization should commence.
  3. End point is use EPIP 3-4 for Recovery. Identify current status and items needed to transition from a GE classification to Recovery.

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1. PROCEDURE: EP1P 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RX TRIPPED	ALRM	
3 N31	SOURCE RANGE DETECTOR N-31	3.90390+01	GOOD	CPS
4 N32	SOURCE RANGE DETECTOR N-32	3.69401+01	GOOD	CPS
5 N35	INTERMEDIATE RANGE DETECTOR N-35	1.03753-11	GOOD	AMP
6 N36	INTERMEDIATE RANGE DETECTOR N-36	1.03753-11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.00	GOOD	%
8 PRCS	REACTOR COOLANT SYSTEM AVG PRESS	3.	ALRM	PSIG
9 LPZR	PRESSURIZER AVERAGE LEVEL	.0	LEW	%
10 FRCLA	REACTOR COOLANT LOOP A AVG FLOW	.0	INB	%
11 FRCLB	REACTOR COOLANT LOOP B AVG FLOW	.0	INB	%
12 RXT16	RCPA BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
13 RXT17	RCPB BREAKER CAUSE RX TRIP	TRIPPED	ALRM	
14 TSUBTC	INORE TO SUBCOOLED MARGIN	111.1	GOOD	DEG
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	74.9	HARN	%
16 LSEB	STM GEN B NARROW RANGE AVG LEVEL	55.5	GOOD	%
17 PSGA	STM GEN A AVERAGE PRESSURE	426.	ALRM	PSIG
18 PSGB	STM GEN B AVERAGE PRESSURE	494.	ALRM	PSIG
19 GENGR1	GENERATOR ON LINE BREAKER 161372	TRIPPED	ALRM	
20 GENGR2	GENERATOR ON LINE BREAKER 9X1372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
24 BUS12B	NOT TERMINATED ON PPCS (7/19/91)	NOT TRIP	DEL	
25 B11A12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 B11B12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 FCV	CONTAINMENT AVERAGE PRESSURE	2.76	HARN	PSIG
28 LSUPA	CONTAINMENT SUMP A AVERAGE LEVEL	31.2	HENS	FEET
29 L0942E	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INB	
30 L0943E	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INB	
31 L0942D	SUMP B LEVEL 78 INCHES (TRAIN A)	HIGHER	INB	
32 L0943D	SUMP B LEVEL 78 INCHES (TRAIN B)	HIGHER	INB	
33 L0942C	SUMP B LEVEL 113 INCHES (TRAIN A)	HIGHER	ALRM	
34 L0943C	SUMP B LEVEL 113 INCHES (TRAIN B)	HIGHER	ALRM	
35 L0942B	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 L0943B	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 L0942A	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 L0943A	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 T0409A	RCLA HOT LEG TEMPERATURE	331.6	GOOD	DEG
40 T0410A	RCLB HOT LEG TEMPERATURE	165.2	GOOD	DEG
41 T0409B	RCLA COLD LEG TEMPERATURE	250.8	GOOD	DEG
42 T0410B	RCLB COLD LEG TEMPERATURE	220.8	GOOD	DEG
43 TAVSAND	RCLA TAVS (HOT/COLD WIDE RANG)	291.2	GOOD	DEG
44 TAVSBWD	RCLB TAVS (HOT/COLD WIDE RANG)	193.0	GOOD	DEG
45 LRY	REACTOR VESSEL AVERAGE LEVEL	65.0	ALRM	%
46 TCCORE	E1.1 INORE TO AVERAGE TEMP	110.0	GOOD	DEG
47 FAUXFWA	S/G A TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
48 FAUXFWB	S/G B TOTAL AUX FEEDWATER FLOW	0.	GOOD	GPM
49 EXR001	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 EXR002	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 V3505	AUX FM PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 V3504	AUX FM PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	





## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1    PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53 FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	GOOD	GPM
54 FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	GOOD	GPM
55 P2160	SERVICE WATER PUMPS A & B HEADER	87.	GOOD	PSIG
56 P2161	SERVICE WATER PUMPS C & D HEADER	86.	GOOD	PSIG
57 BKR041	SERVICE WATER PUMP A	ON	GOOD	
58 BKR042	SERVICE WATER PUMP B	ON	GOOD	
59 BKR043	SERVICE WATER PUMP C	ON	GOOD	
60 BKR044	SERVICE WATER PUMP D	ON	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EPIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	UNITS	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLOW	3610.	6000	GPM
2 LRKST	REFUELING WATER STORAGE TANK LVL	12.9	LEARN	%
3 WS033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	6000	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	5.	6000	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	6000	DEGF
6 WT250215	250 FOOT LEVEL TEMP. (15M AVG)	64.3	6000	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-0.5	6000	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	6000	MPH
9 R02	AREA 2-CONTAINMENT	1.54881+06	HALM	MPH
10 R05	AREA 5-SPENT FUEL PIT	1.21618+02	HALM	MPH
11 R09	AREA 9-LETDOWN LINE MONITOR	5.92241+01	6000	MPH
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	8.40991+02	600	MPH
13 R35	AREA 35-PAGE SAMPLE PANEL	1.09648+00	6000	MPH
14 R10A	CONTAINMENT IODINE MONITOR R10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.64544+03	6000	CPM
16 R12	CONTAINMENT GAS MONITOR	3.07255+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR R10B	1.03514+07	6000	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	1.02182+07	6000	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	8.26986+06	HALM	CPM
20 R19	LIQUID WASTE DISPOSAL MONITOR	5.09917+03	6000	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	6000	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	6000	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	6000	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA 34/35	1.68825+03	HALM	MPH
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	6000	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	2.99982-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	6000	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	6000	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	6000	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	6000	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	6000	
36 VMS00A	NUMBER OF S/G A MSSV OPEN	0.	6000	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	6000	MPH
38 R31A5	SSA NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	6000	
40 VMS00B	NUMBER OF S/G B MSSV OPEN	0.	6000	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	6000	MPH
42 R32A5	SSB NOBLE GAS RELEASE RATE:15MAV	.00000+00	6000	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	6000	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP 43	106.4	6000	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP 47	110.2	6000	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP 48	110.2	6000	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP 49	110.2	6000	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP 410	110.2	6000	DEGF
49 TCV17	CV OPERATIONS LVL 6FT TEMP 417	113.9	6000	DEGF

Time: 13:30  
Message: 42

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

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**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Plume tracking continues. Off-site radiation levels near the Ginna plant have dropped substantially due to the departure of the plume.

**Actions Expected:**

1. See recovery mini-scenario

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1 PROCEDURE: EFIP 1-3 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	CUPL	E. U.
1 ATWS	ANTICIPATED TRANSIENT W/O SCRAM	NO ATWS	GOOD	
2 RXT	REACTOR TRIP BREAKER STATUS	RA TRIPPED	ALRM	
3 NS1	SOURCE RANGE DETECTOR N-31	3.72441+01	GOOD	CPB
4 NS2	SOURCE RANGE DETECTOR N-32	3.77191+01	GOOD	CPB
5 NS3	INTERMEDIATE RANGE DETECTOR N-33	1.03753+11	GOOD	AMP
6 NS4	INTERMEDIATE RANGE DETECTOR N-34	1.12753+11	GOOD	AMP
7 NP	AVERAGE NUCLEAR POWER	.03	GOOD	%
8 PRCR	REACTOR COOLANT SYSTEM AVG PRESS	3.	LOALM	PSIG
9 LPTP	PRESSURIZER AVERAGE LEVEL	.0	LENG	%
10 FREL4	REACTOR COOLANT LOOP A AVG FLOW	.0	INME	%
11 FREL5	REACTOR COOLANT LOOP B AVG FLOW	.0	INME	%
12 RXT12	RCPA BREAKER CAUSE RA TRIP	TRIPPED	ALRM	
13 RXT17	RCPB BREAKER CAUSE RA TRIP	TRIPPED	ALRM	
14 TSUBTC	INCORE TO SUBCOOLED MARGIN	111.7	GOOD	DEGF
15 LSGA	STM GEN A NARROW RANGE AVG LEVEL	74.8	WARN	%
16 LSGB	STM GEN B NARROW RANGE AVG LEVEL	55.5	GOOD	%
17 PSGA	STM GEN A AVERAGE PRESSURE	422.	LOALM	PSIG
18 PSGB	STM GEN B AVERAGE PRESSURE	491.	LOALM	PSIG
19 GEN5KRI	GENERATOR ON LINE BREAKER 151372	TRIPPED	ALRM	
20 GEN5KRI	GENERATOR ON LINE BREAKER 151372	TRIPPED	ALRM	
21 BUS11A	BUS 11A SUPPLY BREAKER	TRIPPED	ALRM	
22 BUS11B	BUS 11B SUPPLY BREAKER	TRIPPED	ALRM	
23 BUS12A	NOT TERMINATED ON PFOS (7/12/91)	NOT TRIP	SEL	
24 BUS12B	NOT TERMINATED ON PFOS (7/12/91)	NOT TRIP	SEL	
25 BUS12A	BUS 11A TO 12A TIE BREAKER	NOT TRIP	ALRM	
26 BUS12B	BUS 11B TO 12B TIE BREAKER	NOT TRIP	ALRM	
27 PCV	CONTAINMENT AVERAGE PRESSURE	2.70	WARN	PSIG
28 LSGFA	CONDENSER BUMP A AVERAGE LEVEL	31.2	WARN	FEET
29 LSGA15	SUMP B LEVEL 8 INCHES (TRAIN A)	HIGHER	INME	
30 LSGA16	SUMP B LEVEL 8 INCHES (TRAIN B)	HIGHER	INME	
31 LSGA17	SUMP B LEVEL 72 INCHES (TRAIN A)	HIGHER	INME	
32 LSGA18	SUMP B LEVEL 72 INCHES (TRAIN B)	HIGHER	INME	
33 LSGA19	SUMP B LEVEL 112 INCHES (TRAIN A)	HIGHER	ALRM	
34 LSGA20	SUMP B LEVEL 112 INCHES (TRAIN B)	HIGHER	ALRM	
35 LSGA21	SUMP B LEVEL 180 INCHES (TRAIN A)	LOWER	GOOD	
36 LSGA22	SUMP B LEVEL 180 INCHES (TRAIN B)	LOWER	GOOD	
37 LSGA23	SUMP B LEVEL 214 INCHES (TRAIN A)	LOWER	GOOD	
38 LSGA24	SUMP B LEVEL 214 INCHES (TRAIN B)	LOWER	GOOD	
39 TGA10A	ROD HOT LSS TEMPERATURE	331.2	GOOD	DEGF
40 TGA10B	ROD HOT LSS TEMPERATURE	164.9	GOOD	DEGF
41 TGA10C	ROD COLD LSS TEMPERATURE	246.6	GOOD	DEGF
42 TGA10D	ROD COLD LSS TEMPERATURE	200.7	GOOD	DEGF
43 TGA10E	ROD AVG HOT/COLD WIDE AVG	299.6	GOOD	DEGF
44 TGA10F	ROD AVG HOT/COLD WIDE AVG	192.3	GOOD	DEGF
45 LA	REACTOR VESSEL AVERAGE LEVEL	64.8	LOALM	%
46 TSG10E	STEAM JACINE TO AVERAGE TEMP	109.3	GOOD	DEGF
47 FALXFA	S/S A TOTAL AUX FEEDWATER FLOW	0.	GOOD	CPH
48 FALXFB	S/S B TOTAL AUX FEEDWATER FLOW	0.	GOOD	CPH
49 FALXFC	MTR AUXILIARY FEEDWATER PUMP A	ON	GOOD	
50 FALXFD	MTR AUXILIARY FEEDWATER PUMP B	ON	GOOD	
51 FALXFE	AUX PA PUMP STEAM SUPPLY VALVE A	CLOSED	GOOD	
52 FALXFF	AUX PA PUMP STEAM SUPPLY VALVE B	CLOSED	GOOD	

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT1      PROCEDURE: EFIP 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
53	FS1A	SAFETY INJECTION LOOP A AVG FLOW	80.	6000 GPM
54	FS1B	SAFETY INJECTION LOOP B AVG FLOW	97.	6000 GPM
55	P2160	SERVICE WATER PUMPS A & B HEADER	87.	6000 PSIG
56	P2161	SERVICE WATER PUMPS C & D HEADER	86.	6000 PSIG
57	EXR041	SERVICE WATER PUMP A	ON	6000
58	EXR042	SERVICE WATER PUMP B	ON	6000
59	EXR043	SERVICE WATER PUMP C	ON	6000
60	EXR044	SERVICE WATER PUMP D	ON	6000

## TREND GROUP ASSIGNMENT SUMMARY

GROUP: EVENT2 PROCEDURE: EP1F 1-5 PLANT STATUS

POINT ID	DESCRIPTION	VALUE	QUAL	E. U.
1 F0619	COMPONENT COOLING LOOP TOTAL FLOW	3610.	GOOD	GPM
2 LRMT	REFUELING WATER STORAGE TANK LVL	12.9	WARN	%
3 NS033015	33 FT LEVEL WIND SPEED: 15M AVG	7.0	GOOD	MPH
4 WD033015	33FT LVL WIND DIRECTION 15M AVG	5.	GOOD	DEG.
5 WT033015	33 FOOT LEVEL TEMP. (15M AVG)	64.8	GOOD	DEGF
6 WT250015	250 FOOT LEVEL TEMP. (15M AVG)	64.3	GOOD	DEGF
7 WDT2015	250-33 FT LVL DELTA TEMP 15M AVG	-5	GOOD	DEGF
8 R01	AREA 1-CONTROL ROOM	9.33255-02	GOOD	NR/HR
9 R02	AREA 2-CONTAINMENT	1.54881+06	HALM	NR/HR
10 R05	AREA 5-SPENT FUEL PIT	1.21618+02	HALM	NR/HR
11 R09	AREA 9-LETICIA LINE MONITOR	5.92241+01	GOOD	NR/HR
12 R34	AREA 34 - AUX BLDG CV SPRAY PUMP	8.40991+02	END	NR/HR
13 R35	AREA 35-PASS SAMPLE PANEL	1.09648+00	GOOD	NR/HR
14 R10A	CONTAINMENT IODINE MONITOR #10A	3.94116+05	HALM	CPM
15 R11	CONTAINMENT AIR PARTICULATE	2.64544+03	GOOD	CPM
16 R12	CONTAINMENT GAS MONITOR	3.97255+04	HALM	CPM
17 R10B	PLANT VENT IODINE MONITOR #10B	1.03514+07	WARN	CPM
18 R13	AUX BLDG EXHAUST AIR PARTICULATE	1.02182+07	WARN	CPM
19 R14	AUX BLDG EXHAUST GAS MONITOR	8.24986+06	HALM	CPM
20 R19	LIQUID WASTE DISPOSAL MONITOR	5.09917+03	GOOD	CPM
21 R19	STEAM GENERATOR BLOWDOWN DRAIN	4.52506+02	GOOD	CPM
22 R29	AREA 29-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
23 R30	AREA 30-CONTAINMENT HIGH RANGE	1.70191+03	HALM	R/HR
24 R15	CONDENSER AIR EJECTOR EXHAUST	3.31607+02	GOOD	CPM
25 R12A5	CV VENT CHAN 5-LOW RANGE GAS	7.50006-07	GOOD	UCI/CC
26 R12A6	CV VENT CHAN 6-AREA GAMMA	1.68225+03	HALM	NR/HR
27 R12A7	CV VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
28 R12A9	CV VENT CHAN 9-HIGH RANGE GAS	9.99987-04	GOOD	UCI/CC
29 R14A5	PLANT VENT CHAN 5-LOW RANGE GAS	8.59982-03	HALM	UCI/CC
30 R14A7	PLANT VENT CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
31 R14A9	PLANT VENT CHAN 9-HIGH RANGE GAS	3.99971-03	GOOD	UCI/CC
32 R15A5	AIR EJECTOR CHAN 5-LOW RANGE GAS	9.00007-07	GOOD	UCI/CC
33 R15A7	AIR EJECTOR CHAN 7-MID RANGE GAS	9.99984-06	GOOD	UCI/CC
34 R15A9	AIR EJECTOR CHAN 9-HI RANGE GAS	9.99987-04	GOOD	UCI/CC
35 V3411C	STEAM LINE ARV A	CLOSED	GOOD	
36 VMS5VA	NUMBER OF 3/8 A MSSV OPEN	0.	GOOD	# OPEN
37 R31	AREA 31 STEAM LINE A (SPING)	2.05126-02	GOOD	NR/HR
38 R31FA2	SEA NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
39 V3410C	STEAM LINE ARV B	CLOSED	GOOD	
40 VMS5VB	NUMBER OF 3/8 B MSSV OPEN	0.	GOOD	# OPEN
41 R32	AREA 32 STEAM LINE B (SPING)	2.05126-02	GOOD	NR/HR
42 R32FA2	SEA NOBLE GAS RELEASE RATE:15NAV	.00000+00	GOOD	CI/SEC
43 CVH	CV HYDROGEN CONCENTRATION	.0	GOOD	%
44 TCV03	CV BASEMENT LEVEL 6FT TEMP #3	106.4	GOOD	DEGF
45 TCV07	CV INTERMEDIATE LVL 6FT TEMP #7	110.2	GOOD	DEGF
46 TCV08	CV INTERMEDIATE LVL 6FT TEMP #8	110.2	GOOD	DEGF
47 TCV09	CV INTERMEDIATE LVL 6FT TEMP #9	110.2	GOOD	DEGF
48 TCV10	CV INTERMEDIATE LVL 6FT TEMP #10	110.2	GOOD	DEGF
49 TCV17	CV OPERATING LVL 6FT TEMP #17	113.9	GOOD	DEGF





Time: 13:45  
Message: 43

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Control Room**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

---

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Plume tracking continues. Off-site radiation levels near the Ginna plant have dropped substantially due to the departure of the plume.

**Actions Expected:**

1. See recovery mini-scenario



Time: 14:00  
Message: 44

**GINNA STATION**

**JUNE 11, 1997 PLUME EXPOSURE EXERCISE**

**MESSAGE FORM**

**Message for: Emergency Coordinator and Recovery Manager**

**Message: \*\*\*THIS IS A EXERCISE\*\*\***

**The Exercise is Terminated.**

---

**FOR CONTROLLER USE ONLY**

**Controller Notes:**

1. Deliver when all exercise objectives have been demonstrated.

**Actions Expected:**

1. Close out by making an announcement to all facilities (including RECS) that the exercise is terminated.

SECTION 9.0

ONSITE RADIOLOGICAL AND CHEMISTRY DATA



SECTION 9.1  
RADIOLOGICAL SUMMARY



## 9.1 Radiological Summary

### A. Source Term

The radiological source term assumed for this scenario was selected to include appropriate quantities of noble gas and radioiodine resulting from the postulated accident scenario.

Immediate protective action recommendations (e.g., sheltering, evacuation) will be required based upon the anticipated declaration of a General Emergency and plant conditions. As a results of accident release rates, the projected whole body (TEDE) and thyroid (CDE) doses will exceed the EPA Protective Action Guide beyond the site boundary.

The assumed noble gas, radioiodine and particulate release quantities are shown in Figure 9.1 as a function of time. The scenario involves 1 release point which is from the Plant Vent. This occurs as follows:

Time	Release Point	Release Rate (Ci/sec)
1115-	Plant Vent	3.11 E+2 (Noble Gas)
1245		6.24 E-2 (Radioiodine)

The noble gas-to-radioiodine ratio assumed in this scenario is 5,000:1, during the period of release. Isotopic breakdowns of assumed noble gas, radioiodine and particulate release quantities are provided in Table 9.1.

### B. Integrated Offsite Doses Due to Plume Exposure

The downwind integrated doses from the 1.5-hour scenario release are as follows:

Whole Body (TEDE) Dose (at Site Boundary) = 4.62 Rem

Child Thyroid (CDE) Dose (at Site Boundary) = 2.81 Rem

### C. Principal Plant Radiological Indications

Figures 9.1 through 9.3 provide trends plots for key plant radiological indications, including the plant vent concentration, letdown monitor level, containment radiation level and reactor coolant concentration.





**TABLE 9.1**

The assumed release quantities for the Ginna Exercise Scenario are summarized as follows:

**Time : 1115-1245 hr**

<b>Nuclide</b>	<b>Curie/Sec</b>	<b>Total Curies Released</b>
Kr-85	2.7 E+01	1.1 E+05
Kr-85m	1.6 E-01	6.6 E+02
Kr-87	6.8 E+00	2.8 E+04
Kr-88	2.9 E+01	1.2 E+05
Xe-131m	3.7 E+00	1.5 E+04
Xe-133	2.1 E+02	8.8 E+05
Xe-133m	2.9 E-05	1.2 E-01
Xe-135	3.5 E+01	1.5 E+05
Xe-135m	2.6 E-03	1.0 E+01
<b>Total Noble Gas</b>	<b>3.1E+02</b>	<b>1.3 E+06</b>
I-131	1.3 E-02	5.6 E+01
I-132	6.8 E-03	2.8 E+01
I-133	2.4 E-02	1.0 E+02
I-134	1.1 E-03	4.7 E+00
I-135	1.7 E-02	7.0 E+01
<b>Total Radioiodine</b>	<b>6.2 E-02</b>	<b>2.6 E+02</b>
Rb-87	4.3 E-16	2.3 E-12
Rb-88	1.1 E-01	6.2 E+02
Y-90	1.7 E-11	9.4 E-08
Cs-134	4.7 E-07	2.5 E-03
Cs-135	1.7 E-11	9.4 E-08
Cs-137	2.2 E-07	1.2 E-03
Ba-137m	2.0 E-07	1.1 E-03
Ba-140	1.1 E-08	6.0 E-05
La-140	1.1 E-08	6.1 E-05
<b>Total Particulate</b>	<b>1.1 E-01</b>	<b>6.2 E+02</b>

Downwind Dose Calculation (DownCalc)

Session Number: 97001 Calculation Number: 1.01  
 Shutdown Date: 06/11/97 Calculation Date: 06/11/97  
 Shutdown Time: 0830 Calculation Time: 1115

Environmental Data: Temp 250: 65.000 Stability: E  
 Temp 33: 65.000 Windspeed: 7.000  
 Delta Temp: 0.000

RadioIodine Release Data: R-10A: NA uCi/cc  
 R-10B: NA uCi/cc  
 Other Iodine: NA Ci/sec  
 Total RadioIodine Release Rate: 0.03113 Ci/sec

Noble Gas Release Data: R-12: NA uCi/cc  
 R-14: 8.600 uCi/cc  
 R-15: NA uCi/cc  
 R-31: NA mRem/hr  
 R-32: NA mRem/hr  
 Other Noble Gas: NA Ci/sec  
 Total Noble Gas Release Rate: 311.306 Ci/sec

Time Data: Data Date: 06/11/97 Time since Shutdown: 2.750  
 Data Time: 1115 Exposure Duration: 4.000

External & Internal Effective Dose Equivalent in REMS 'X' miles: 1.200

	Site Boundary	2 miles	5 miles	10 miles	1.200 miles
(TEDE):	14.136	1.766	0.6465	0.3023	3.092
(DI):	3.492	0.4362	0.1597	0.07468	0.7637

Result at 1.200 Miles: WHOLE BODY (TEDE) PAR: Evacuate  
 THYROID (CDE) PAR: Administer KI

Initial Dose Projection at 11:15am

Defaults

- 10,000:1 NG:I<sub>2</sub> ratio
- 4 hour release duration

## Downwind Dose Calculation (DownCalc)

Session Number: 97001  
 Shutdown Date: 06/11/97  
 Shutdown Time: 0830

Calculation Number: 1.01  
 Calculation Date: 06/11/97  
 Calculation Time: 1300

Met Ecological Data: Temp 250: 65.000 Stability: E  
 Temp 33: 65.000 Windspeed: 7.000  
 Delta Temp: 0.000

RadioIodine Release Data: R-10A: NA uCi/cc  
 R-10B: NA uCi/cc  
 Other Iodine: 0.06240 Ci/sec  
 Total RadioIodine Release Rate: 0.06240 Ci/sec

Noble Gas Release Data: R-12: NA uCi/cc  
 R-14: 8.600 uCi/cc  
 R-15: NA uCi/cc  
 R-31: NA mRem/hr  
 R-32: NA mRem/hr  
 Other Noble Gas: NA Ci/sec  
 Total Noble Gas Release Rate: 311.306 Ci/sec

Time Data: Data Date: 06/11/97 Time since Shutdown: 3.500  
 Data Time: 1200 Exposure Duration: 1.500

External & Internal Effective Dose Equivalent in REMS 'X' miles: 1.200

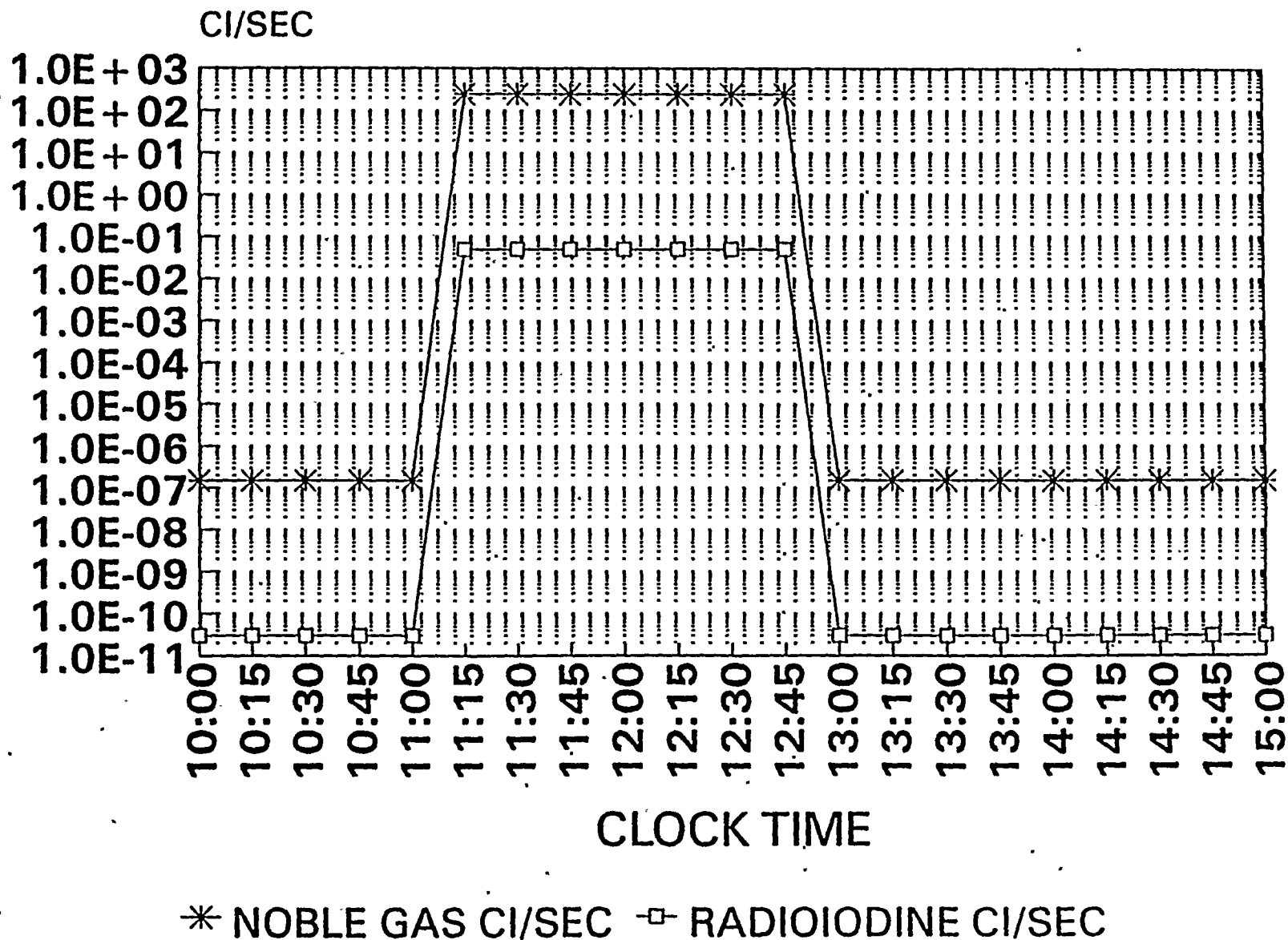
	Site Boundary	2 miles	5 miles	10 miles	1.200 miles
3 (TEDE):	4.620	0.5771	0.2113	0.09881	1.010
(D):	2.812	0.3513	0.1286	0.06015	0.6150

PAR at 1.200 Miles: WHOLE BODY (TEDE) PAR: Evacuate  
 THYROID (CDE) PAR: No Action

Final Dose Projection at 1300 hours

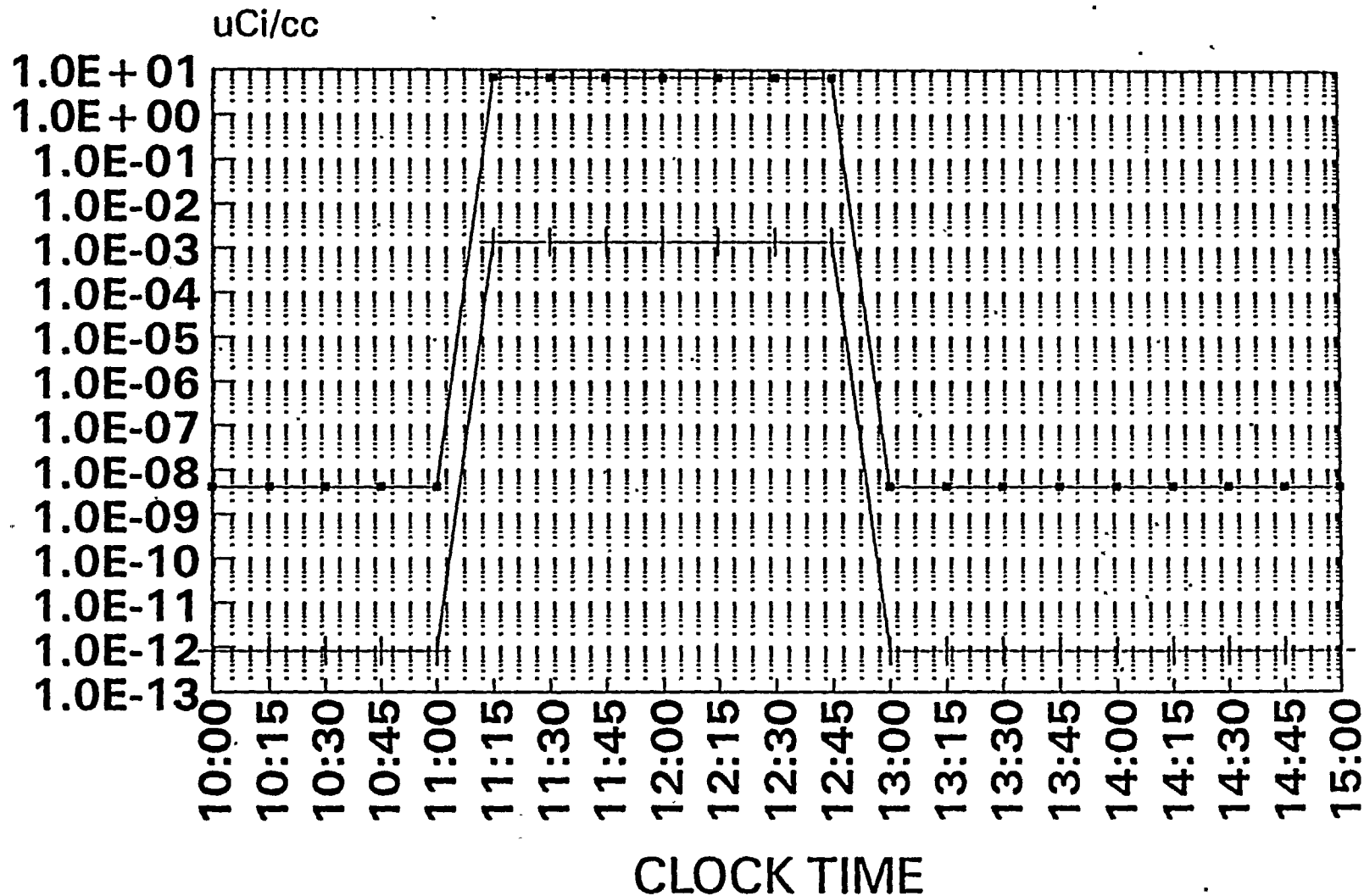
- 1.5 hour release duration
- Decayed to midpoint of release time (12:00)
- 5,000:1 NG:I<sub>2</sub> ratio

**FIGURE 9.1**  
**ASSUMED SOURCE TERMS**



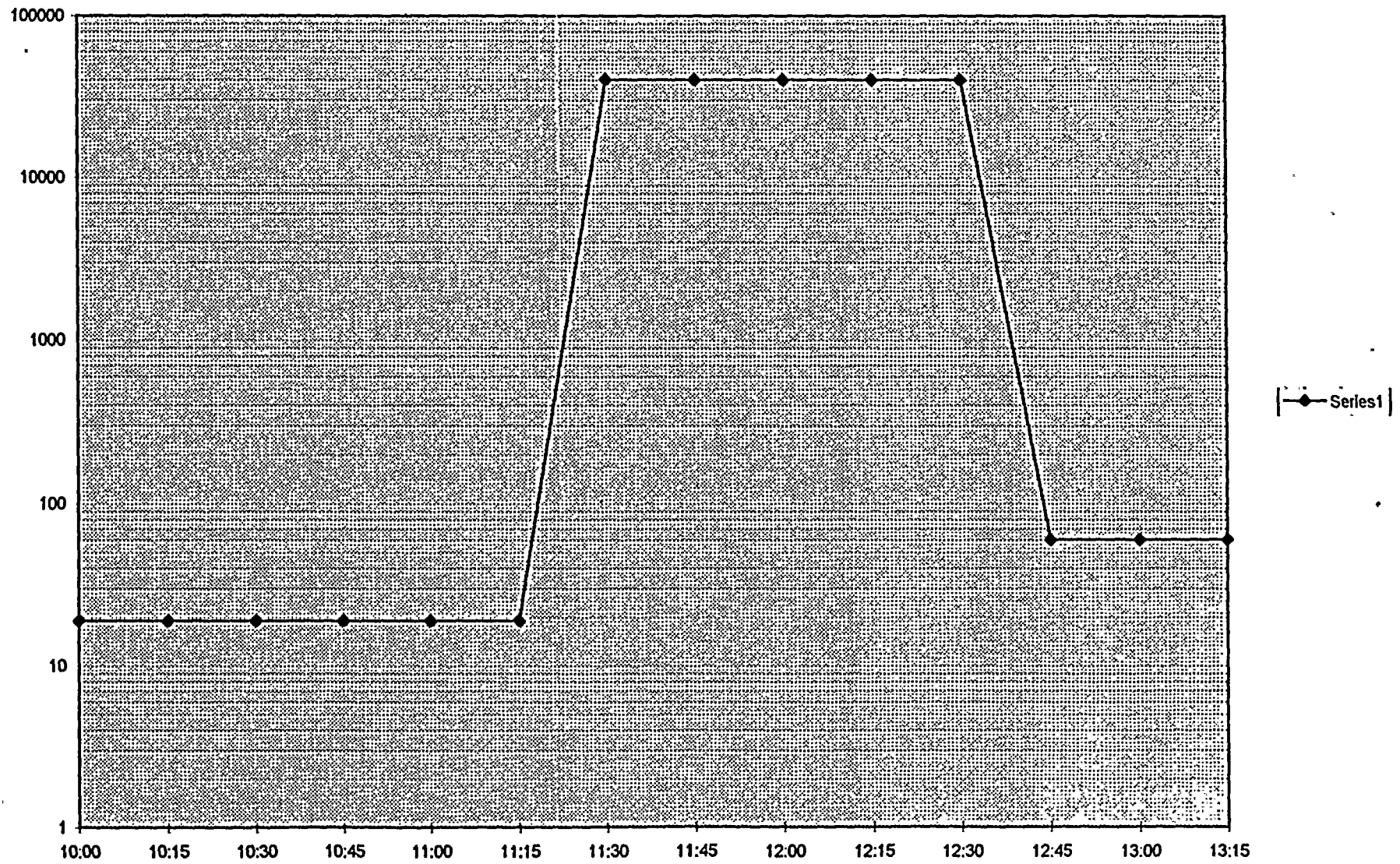


**FIGURE 9.2**  
**Plant Vent Concentrations**



+ NOBLE GAS + RADIOIODINE

Figure 9.3







## SECTION 9.2

### IN-PLANT RADIOLOGICAL DATA MAPS

(REFER TO APPROPRIATE MAP)

FIGURE 9.5

R.G. & E. CORPORATION  
GINNA STATION  
AUXILIARY BUILDING OPER.  
FLOOR SURVEY MAP

All readings in MR/HR.  
unless otherwise noted.

Date: \_\_\_\_\_  
Time: 0700-0945  
Instrument: \_\_\_\_\_  
Survey done by: \_\_\_\_\_

①'s are SHEAR locations.

$$A = 0.15 \frac{m}{hr}$$

SHEARS

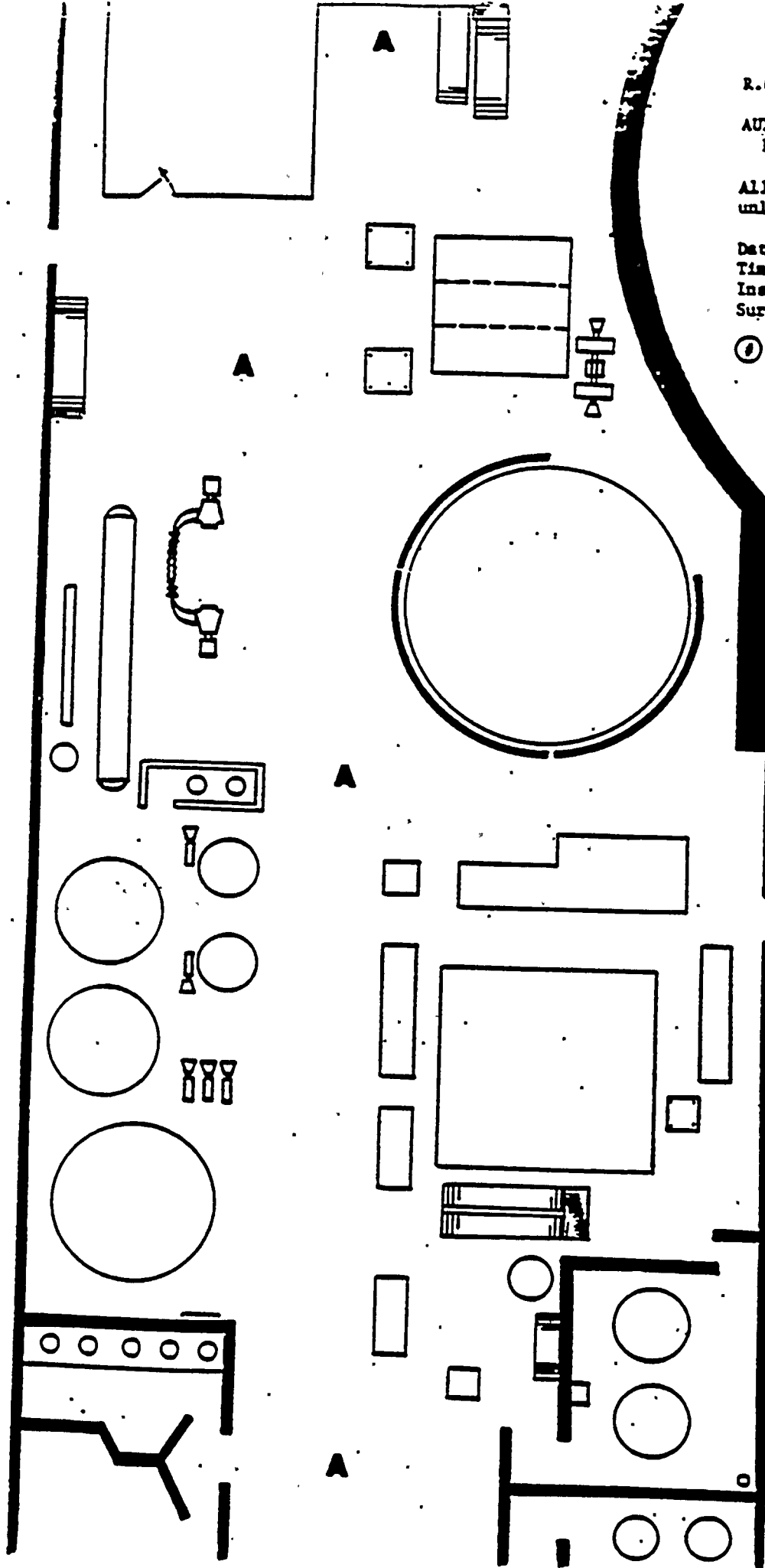
1 | DPM/100 cm<sup>2</sup>

ALL AREAS  
< 500

REMARKS: (uci/cc)

IODINE < 1E-11

PARTICULATE < 1E-10





R.G. & E. CORPORATION  
GINNA STATION  
AUXILIARY BUILDING OPER.  
FLOOR SURVEY MAP

All readings in MR/HR.  
unless otherwise noted.

Date:

Time: 0940-1115

Instrument:

Survey done by:

①'s are SHEAR locations.

B = 20 MR/HR  
A = 8 MR/HR

SHEARS

1 | DPM/100 CM<sup>2</sup>

ALL AREAS  
< 500

REMARKS: (uCi/cc)

IODINE 21E-11

PARTICULATE 1E-10

A = 25 R/H R

**STARS**

1 DPM/100 cm<sup>2</sup>

**WATERS**

**200,000**

REMARKS: AIRBORNE  
ACTIVITY (4C/CC)

**COBINE, M. J. -**

**2.857-10731-5**

**7.9E-0**

$A = 250 \text{ NR/NR}$

**17,000,000**

**25-6**

# FLOOR SURVEY LOG

All readings in g. unless otherwise noted.

Date: 0700 - 0945

Time:

Instrument:

SURVEY METER

DONE BY

A = 0.2 mR/NA

SHEARS

DPH/100 c

ALL  
AREAS  
500

REMARKS:

AIRBORNE  
ACTIVITY (MG/CC)

LOBING: 61E-11

PARTICULATE: 15-10

UPPER CATWALK AREA





UPPER CATWALK AREA

UPPER CATWALK AREA

**UPPER CATWALK AREA**

All readings in MR/HR.  
unless otherwise noted.

Time: \_\_\_\_\_  
Instrument: \_\_\_\_\_

**DONE BY** \_\_\_\_\_

$$A = 0.5 \frac{mL}{mL}$$

[illegible]

**27E-10**

 INDICATES GATES



R.S.S. CORPORATION  
 GINNA STATION  
 AUXILIARY BUILDING BASEMENT  
 FLOOR SURVEY MAP

All readings in MR/HR.  
 unless otherwise noted.

Date: 0946-1115  
 Time: \_\_\_\_\_  
 Instrument: \_\_\_\_\_

SURVEY METER \_\_\_\_\_

**A** = 10 MR/hr

**B** = 25 MR/hr

DPH/100 cm

ALL AREAS

1,000,000 -

2,000,000

REMARKS:

AIRBORNE  
ACTIVITY (uCi/cc)

FOOTING:

4 E-1

PARTICULATE:

3.0 E+0

.... INDICATES CATZS

All readings in MR/MR.  
unless otherwise noted.

All readings in MR/MR.  
unless otherwise noted

Date: 1115-1245

Time:

**Instrument:**

## SURVEY METER

$$A = 60 \text{ R/hr}$$
$$B = 1000 \text{ R/hr}$$

REMARKS:  
AIRBORNE  
ACTIVITY (uCi/cc)  
IODINE: 2E-9  
PHTHALATE:  
2E-10

**INDICATES GASES**



R. J. & E. CORPORATION  
GINNA STATION  
-AUXILIARY BUILDING BASEMENT  
FLOOR SURVEY MAP

All readings in MR/HR.  
unless otherwise noted.

Date: After 1245

Time:

**Instrument:**

## SURVEY METER

**A** = 600 MR/hr

**B = 10** <sup>100</sup> R/HF

[illegible]

**LIBRARIES:**

AIRBORNE  
ACTIVITY (uCi/cc)

**EXPINE:**

6-5

PARTICULATE:

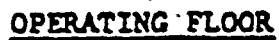
**7-85**

**INDICATES GATES**

PARTICULATE: 2/E-10

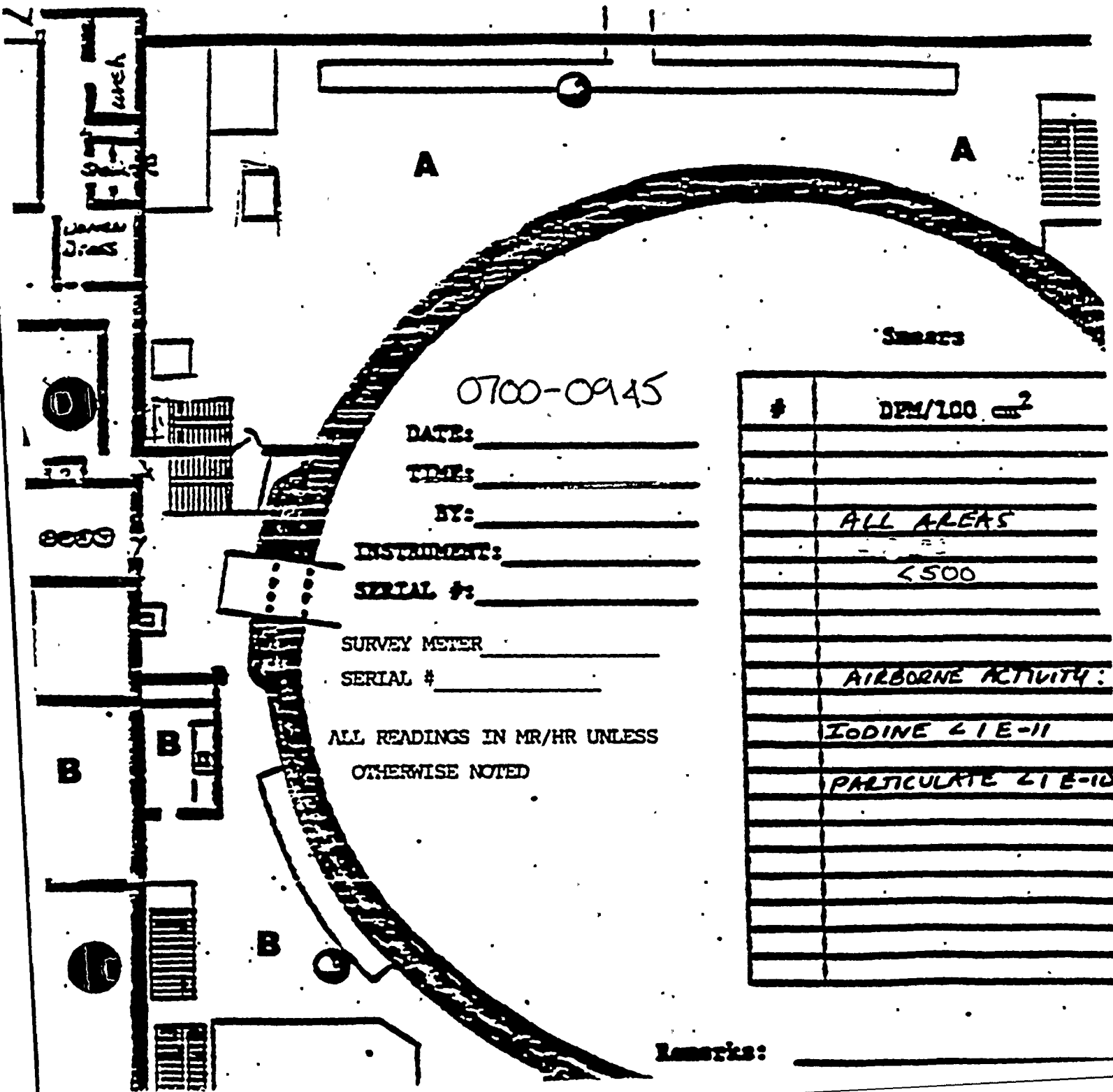








INTERMEDIATE BUILDING MEZZANINE FLOOR

$$A = 0.01 \text{ mR/hr}$$
$$B = 0.1 \text{ MR/HR}$$
**Remarks:**

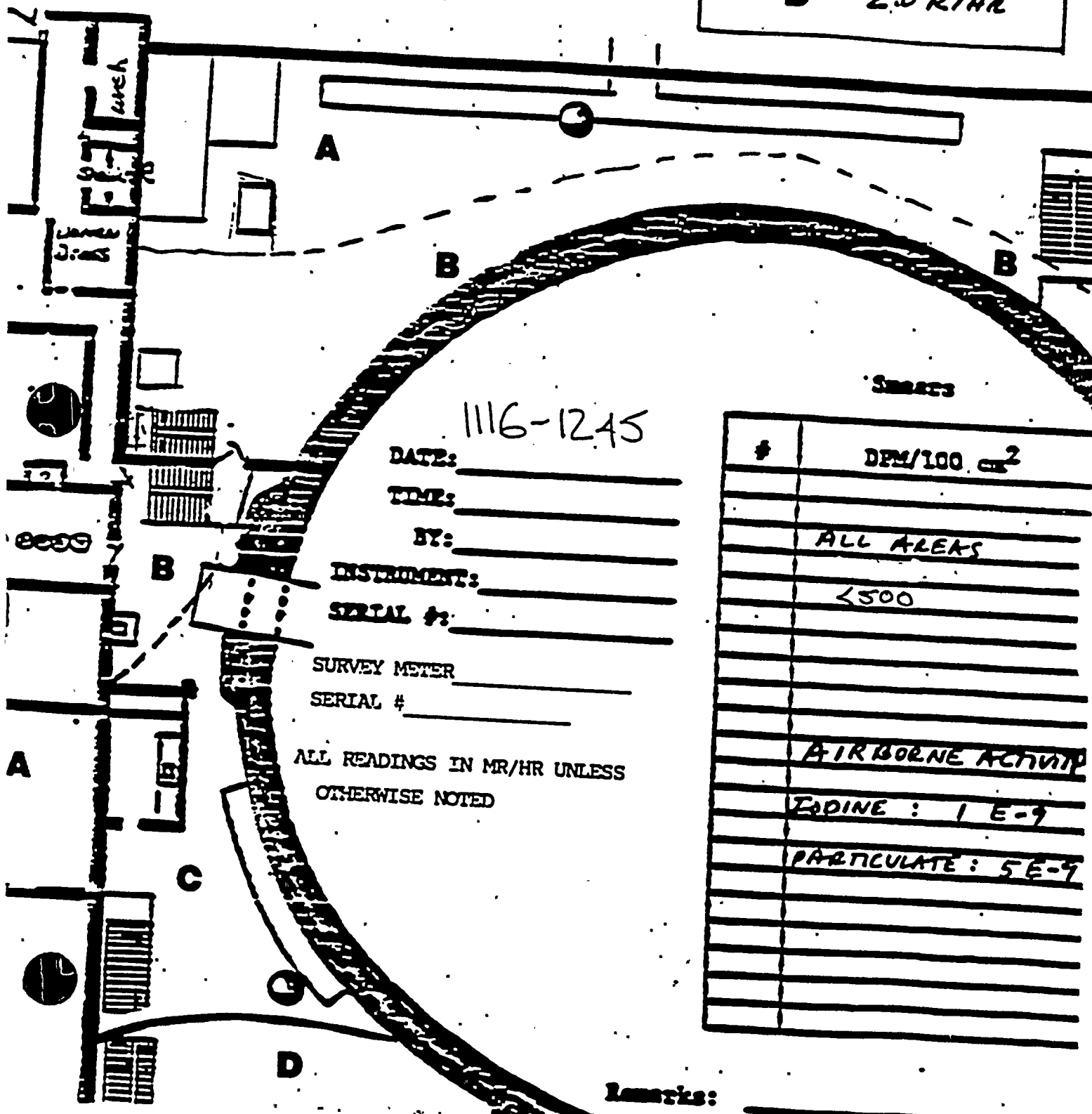






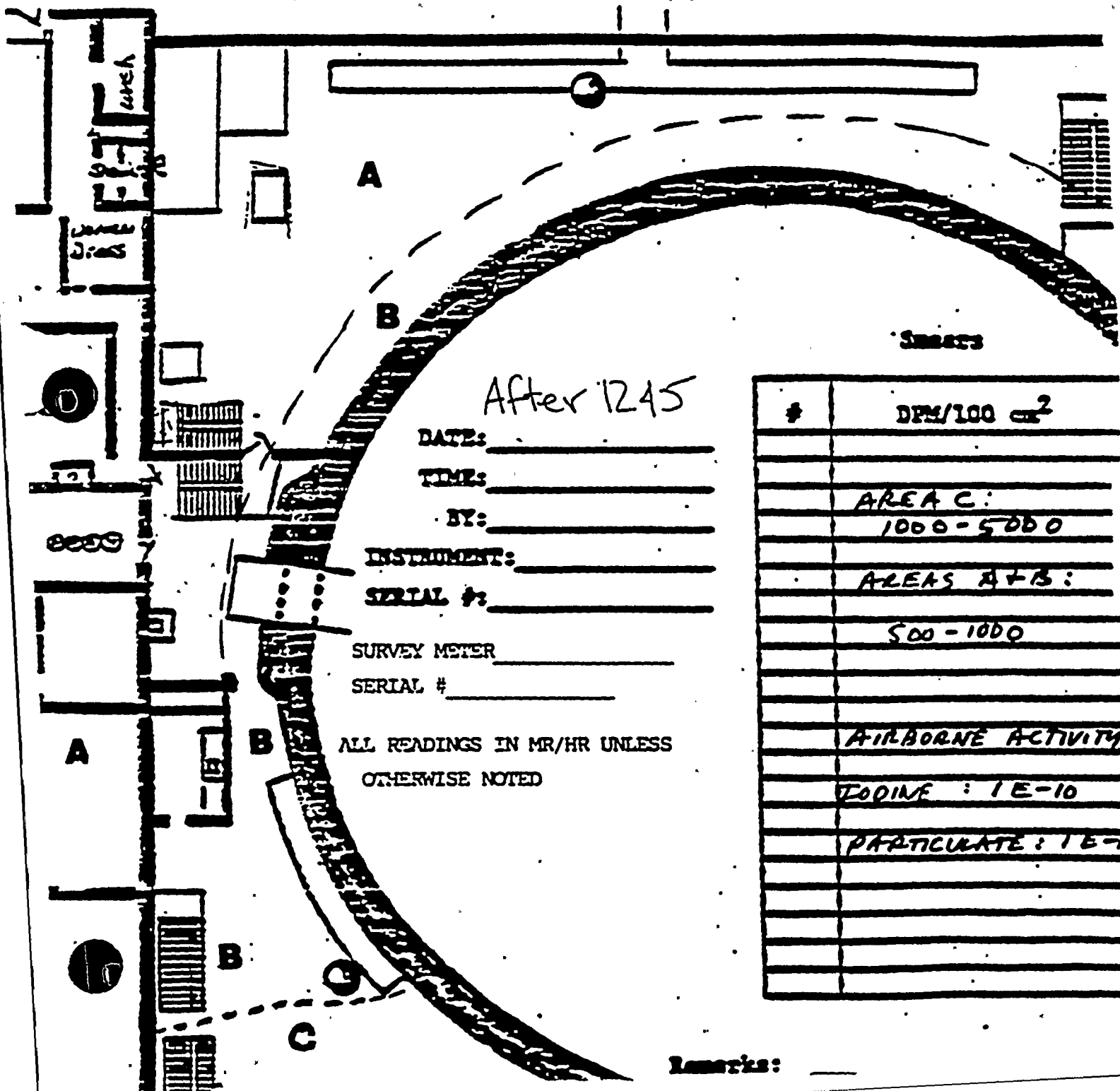
INTERMEDIATE BUILDING MEZZANINE FLOOR

**A** = 0.3 m/s/hr  
**B** = 25 m/s/hr  
**C** = 350 m/s/hr  
**D** = 2.0 R/hr





INTERMEDIATE BUILDING MEZZANINE FLOOR

 $\dot{C} = 10 \text{ mA/Hz}$ **Links:**





GINNA STATION

INTERMEDIATE BUILDING BASEMENT FLOOR

## SURVEY MAP

\* NO PASS OPERATION \*

0946-1115

$$A = 0.2 \text{ mL/hr}$$
$$B \cdot = 1.2 \text{ mR/hr}$$
$$C = 25 \text{ mR/hr}$$

DATE: \_\_\_\_\_

TIME: \_\_\_\_\_

BY: \_\_\_\_\_

INSTRUMENT: \_\_\_\_\_

SERIAL #: \_\_\_\_\_

SURVEY METER \_\_\_\_\_

SERIAL # \_\_\_\_\_

ALL READINGS IN MR/HR UNLESS OTHERWISE NOTED

#	DEM/100 cm <sup>2</sup>
	ALL AREAS
	<500
	AIRBORNE
	ACTIVITY (uCi/cc)
	IODINE: 1 E-10
	PARTICULATE:
	2 E-10

Remarks: \_\_\_\_\_

P.A.S.S. 1961









$$A = 0.01 \frac{NR}{NR}$$

GINNA STATION

TURBINE BUILDING OPERATING FLOOR

## SURVEY MAP

0700-1115

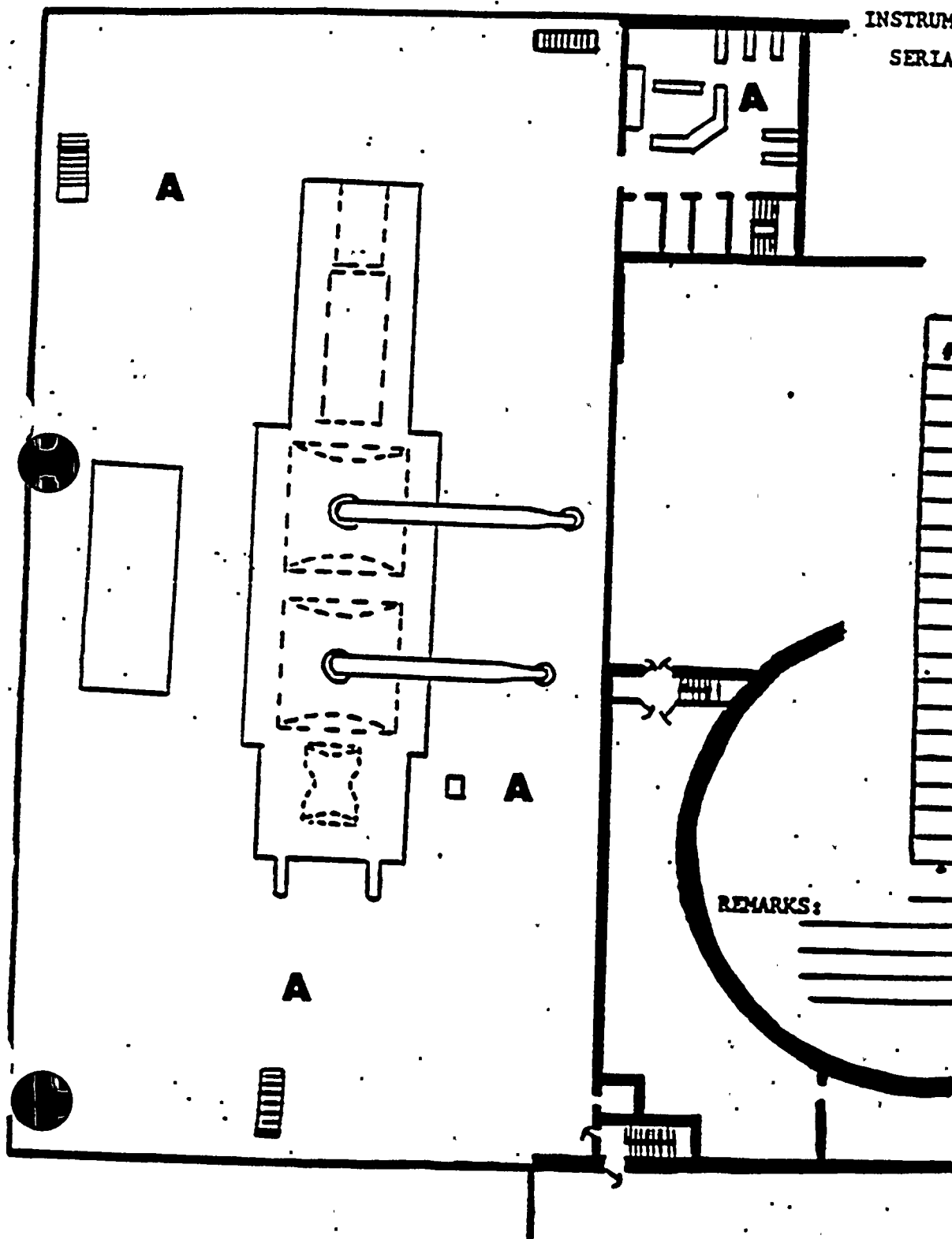
**NORTH**

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

POWER: \_\_\_\_\_ BY: \_\_\_\_\_

**INSTRUMENT:**

SERIAL #:



## SMEARS

#	DPM/100 Cm <sup>2</sup>
	ALL AREAS
	<500
	AIRBORNE
	ACTIVITY (uc/c)
.	IODINE L I E - II
	PARTICULATE
	L I E - III

REMARKS:

RG&E  
GINNA STATION  
TURBINE BUILDING OPERATING FLOOR

SURVEY MAP

**A** = 0.2 m/hr  
**B** = 1 m/hr

After 1115

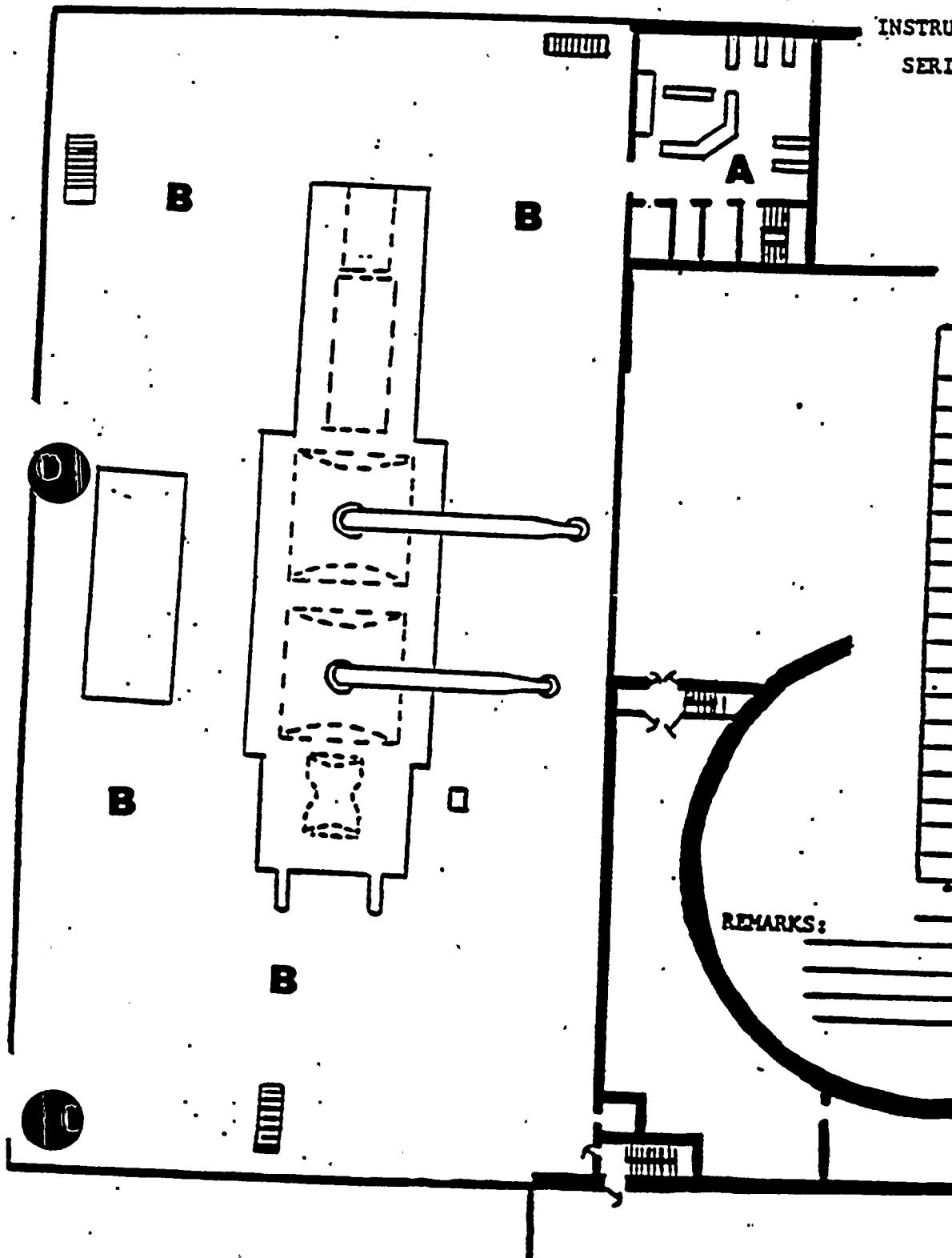
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

POWER: \_\_\_\_\_ BY: \_\_\_\_\_

INSTRUMENT: \_\_\_\_\_

SERIAL #: \_\_\_\_\_

NORTH  

SMEARS

#	DPH/100 cm <sup>2</sup>
	AREA B
	250-1000
	AREA A
	< 500
	AIRBORNE
	ACTIVITY (uCi/g)
	IODINE: 1E-8
	PARTICULATE:
	2E-8

REMARKS:

GINNA STATION

TURBINE BUILDING MEZZANINE FLOOR

SURVEY MAP

$$A = 0.02 \text{ m}^2/\text{hr}$$
$$TSC = 0.02 \text{ mC/hr}$$

0700-1115

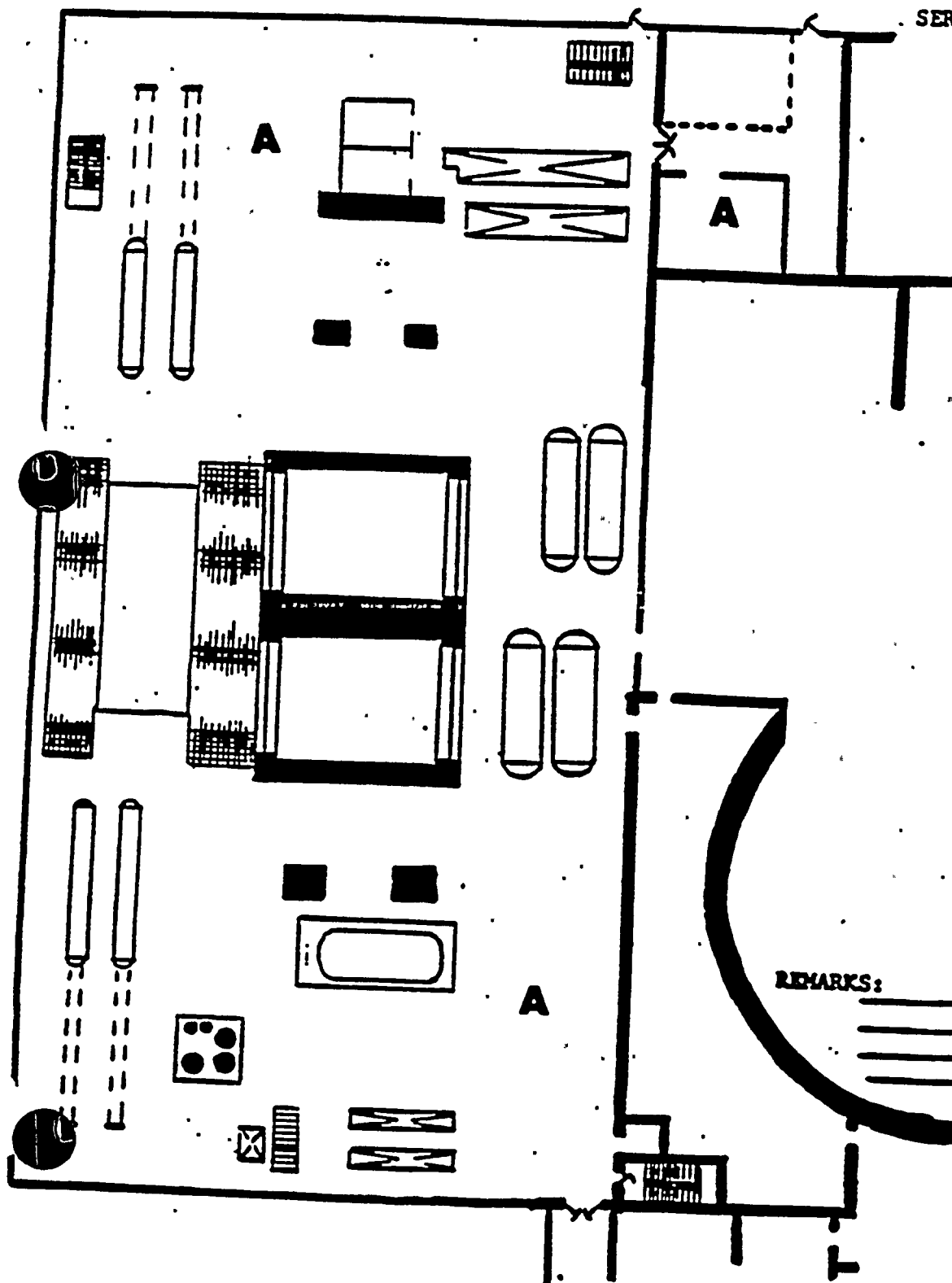
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

POWER: \_\_\_\_\_ BY: \_\_\_\_\_

**INSTRUMENT:**

SERIAL #: \_\_\_\_\_

**NORTH**



## SMELLS

#	DPH/100 cm <sup>2</sup>
	ALL AREAS
	< 500
	AIRBORNE
	ACTIVITY / uc
	IODINE: L I E
	PARTICULATE
	L I E - I

REMARKS:



RG&E

GINNA STATION

TURBINE BUILDING MEZZANINE FLOOR

SURVEY MAP

A = 0.02 MR/HR

B = 0.5 MR/HR

TSC = 0.02 MR/HR

After 1115

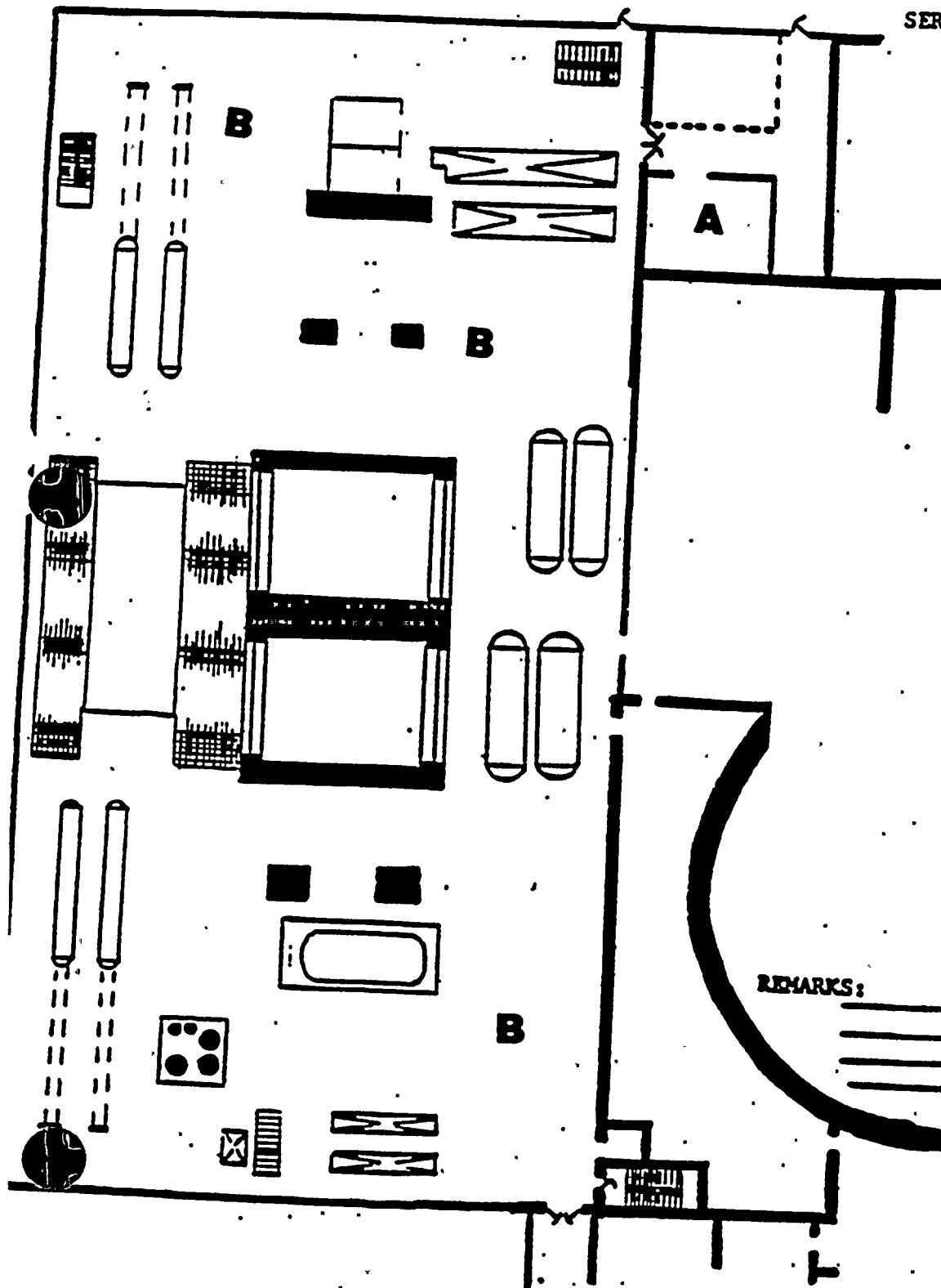
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

POWER: \_\_\_\_\_ BY: \_\_\_\_\_

INSTRUMENT: \_\_\_\_\_

SERIAL #: \_\_\_\_\_

NORTH



SMEARS

#	DFM/100 CM <sup>2</sup>
	ALL AREAS
	1500
	AIRBORNE
	ACTIVITY (uL
	IODINE: 3 E.
	PARTICULATE
	9 E-9

REMARKS:

$$A = 0.02 \text{ hr/hr}$$

**NORTH**

0700-1500

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

POWER: \_\_\_\_\_ BY: \_\_\_\_\_

**INSTRUMENT:**

SERIAL #:

## SMEARS

# DPM/LCC C<sub>m</sub><sup>2</sup>

ALL AREAS  
<.500

**AIRBORNE  
ACTIVITY:**

**IODINE:**

21 E-11.

PARTICULATE  
21 E-10

REMARKS:



Surveyed by: \_\_\_\_\_ (PRINT)

Signature \_\_\_\_\_

Dose Rate Inst.

RO2 / RO2A / ASP1 / ASP1nrd / J2000

RO7 / RO20

Serial No.: \_\_\_\_\_

Cal Due: \_\_\_\_\_

Beta Y / N BCF= \_\_\_\_\_

Instruments Source Checked Y / N

Contamination Inst.:

RM14 / RM14s / Tenn / BC4 / MS3

MS2 / SAM 9

Serial No.: \_\_\_\_\_

Cal Due: \_\_\_\_\_

LLD= \_\_\_\_\_

Instruments Source Checked Y / N

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

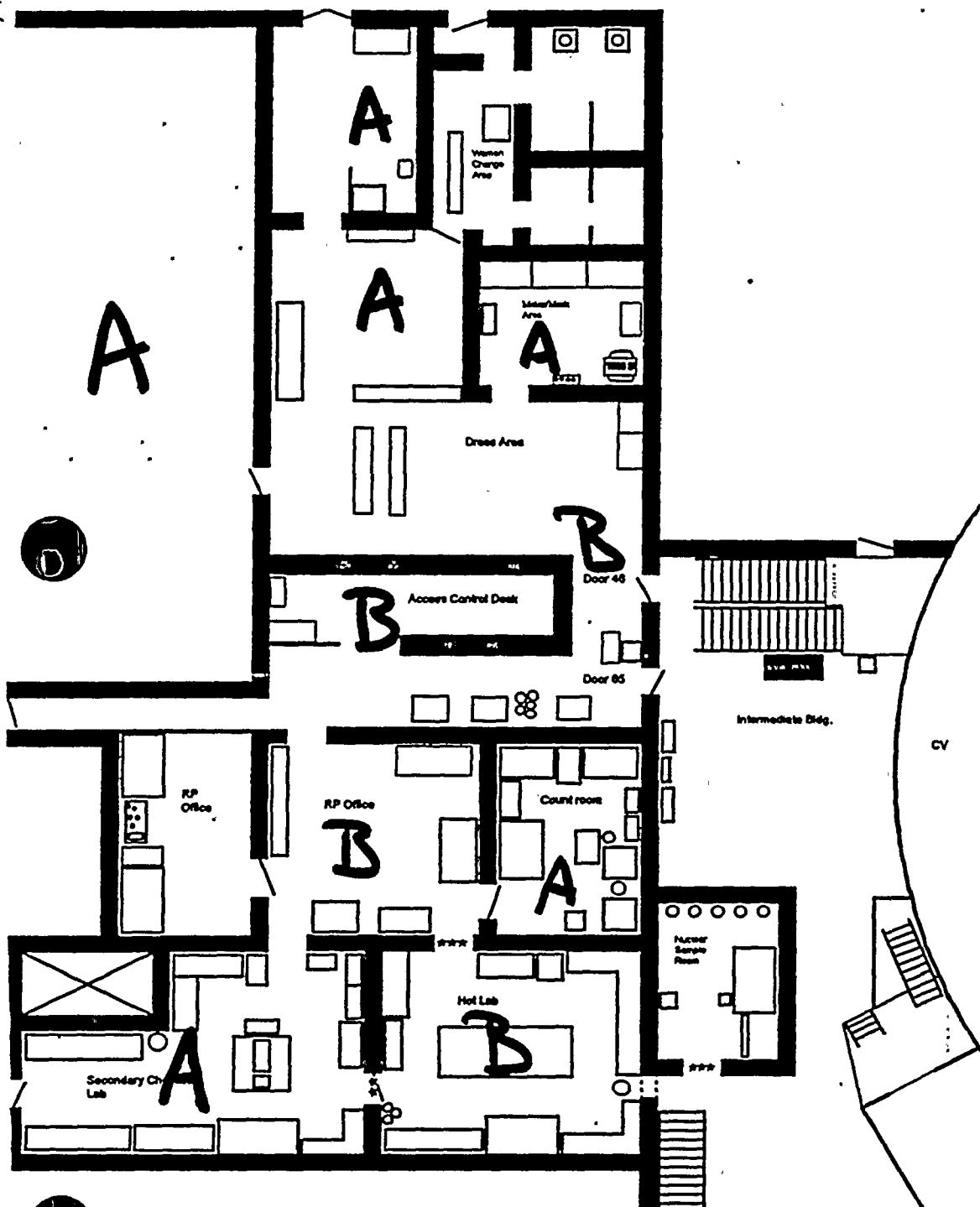
Time: \_\_\_\_\_

RWP#(s): \_\_\_\_\_

Frequency: D / W / M / SA / A / JS

Rx Power: \_\_\_\_\_%

accscntl.pcx / REV 1



No.	dpm/100cm <sup>2</sup>
1	
2	0700 -
3	0945
4	
5	
6	A = 0.02 mR/hr
7	
8	B = 0.1 mR/hr
9	
10	SMEARS
11	ALL AREAS
12	< 500 DPM/100cm <sup>2</sup>
13	
14	
15	AIRBORNE
16	(mCi/cc)
17	
18	IODINE
19	21E-11
20	
21	PART
22	21E-10
23	
24	
25	
26	

HIGHEST G/A DOSE RATE=

mrem/hr

LOCATION OF HIGHEST D/R=

1. Circled numbers ① indicate smear locations
2. Squares □ indicate airsample locations
3. numbers indicate gamma dose rates in mrem/hr at waist level unless otherwise indicated.
4. B indicates beta dose rates.
5. \* indicates contact dose rate
6. Triangle Δ indicates neutron dose rates in mRem/hr.
7. XXXX is contaminated area boundary
8. \*\*\*\*\* is Rad Area Boundary

LEAD TECH REVIEW \_\_\_\_\_

Approved abbreviations - RMA=Rad Material Area, RE=Restricted Area, RA=Rad Area, HRA=High Rad, LHRA=Locked High Rad, CA=Contaminated Area, ICA=High Contam Area, AB=Airborne Area, LB=Laundry Barrel, TB=Trash Barrel

TKS:

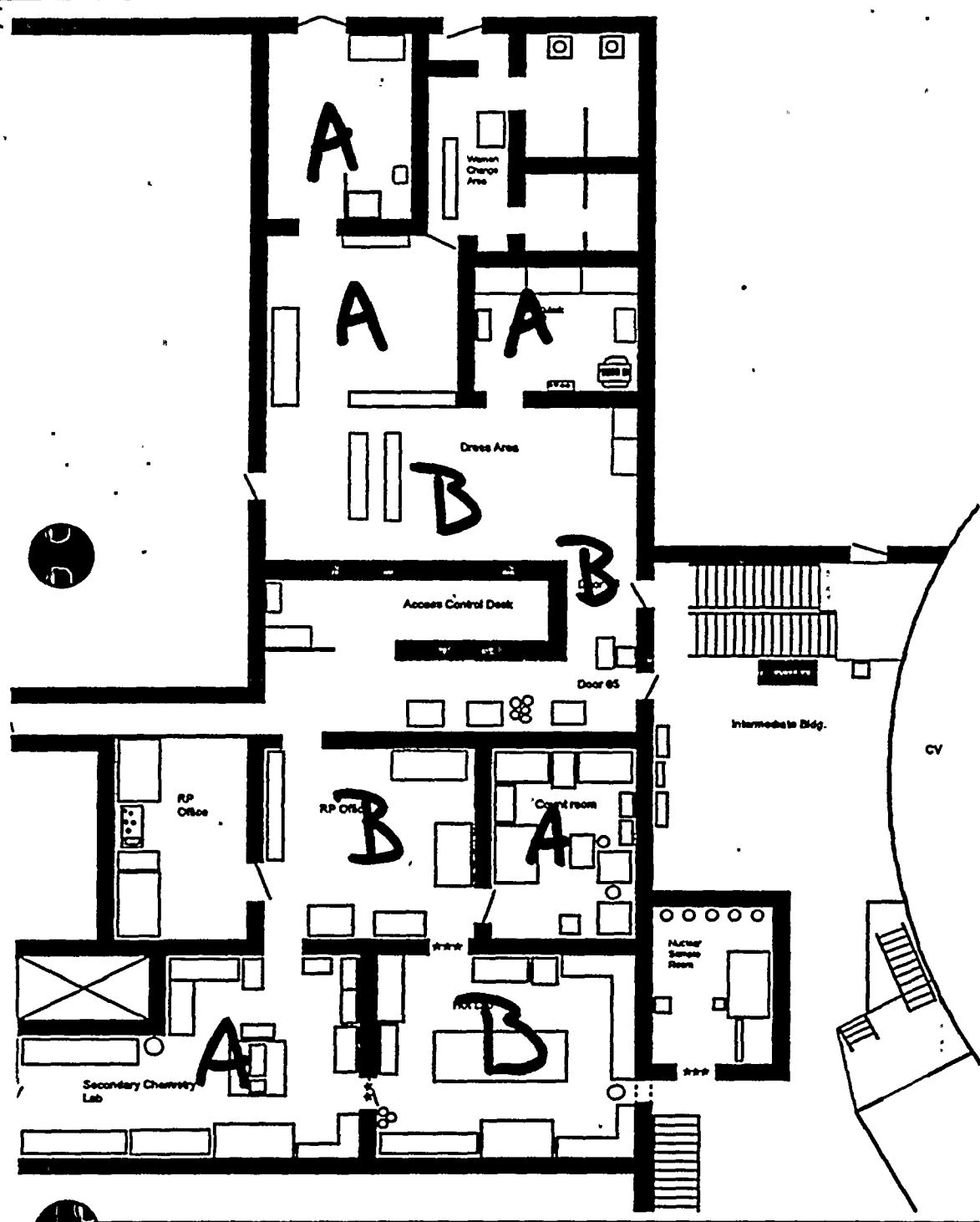
Signature \_\_\_\_\_

**Dose Rate Inst.**  
702 / RO2A / ASP1 / ASP1nrd / J2000  
R / RO7 / RO20  
Serial No.: \_\_\_\_\_  
Cal Due: \_\_\_\_\_  
Beta Y / N      BCF= \_\_\_\_\_  
Instruments Source Checked Y / N

**Contamination Inst.:**  
RM14 / RM14s / Tenn / BC4 / MS3  
MS2 / SAM 9  
Serial No.: \_\_\_\_\_  
Cal Due: \_\_\_\_\_  
LLD= \_\_\_\_\_  
Instruments Source Checked Y / N

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Time: \_\_\_\_\_  
RWP#(s): \_\_\_\_\_  
Frequency: D / W / M / SA / A / JS  
Rx Power: \_\_\_\_\_%

accscntl.pcx / REV 1



No.	dpm/100cm <sup>2</sup>
1	
2	AFTER
3	0945
4	
5	A = 0.1 mR/hr
6	B = 0.5 mR/hr
7	
8	
9	
10	
11	SMEARS
12	<500 dpm/100cm <sup>2</sup>
13	
14	
15	AIRBORNE
16	(mCi/cc)
17	
18	
19	10 DIAE
20	1E-9
21	PART
22	2E-9
23	
24	
25	
26	
HIGHEST G/A DOSE RATE=	
mrem/hr	
LOCATION OF HIGHEST D/R=	
1. Circled numbers ① indicate smear locations	
2. Squares □ indicate air sample locations	
3. numbers indicate gamma dose rates in mrem/hr at waist level unless otherwise indicated.	
4. S indicates beta dose rates.	
5. * indicates contact dose rate	
6. Triangle Δ indicates neutron dose rates in mRem/hr.	
7. XXXX is contaminated area boundary	
8. ***** is Rad Area Boundary	

Approved abbreviations - RMA=Rad Material Area, RE=Restricted Area, RA=Rad Area, HRA=High Rad, LHRA=Locked High Rad, CA=Contaminated Area, AA=High Contam Area, AB=Airborne Area, LB=Laundry Barrel, TB=Trash Barrel

LEAD TECH REVIEW \_\_\_\_\_

# R.E. GINNA STATION

Surveyed by: \_\_\_\_\_ (PRINT)

Map No. 12 Service Building South - South End

Signature \_\_\_\_\_

## Dose Rate Inst.

702 / RO2A / ASP1 / ASP1nrd / J2000

07 / RO7 / RO20

No: \_\_\_\_\_ / \_\_\_\_\_

Cal Due: \_\_\_\_\_ / \_\_\_\_\_

Beta Y / N BCF= \_\_\_\_\_

Instruments Source Checked Y / N

## Contamination Inst.:

RM14 / RM14s / Tenn / BC4 / MS3

MS2 / SAM 9 \_\_\_\_\_

Serial No.: \_\_\_\_\_ / \_\_\_\_\_

Cal Due: \_\_\_\_\_ / \_\_\_\_\_

LLD= \_\_\_\_\_ / \_\_\_\_\_

Instruments Source Checked Y / N

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

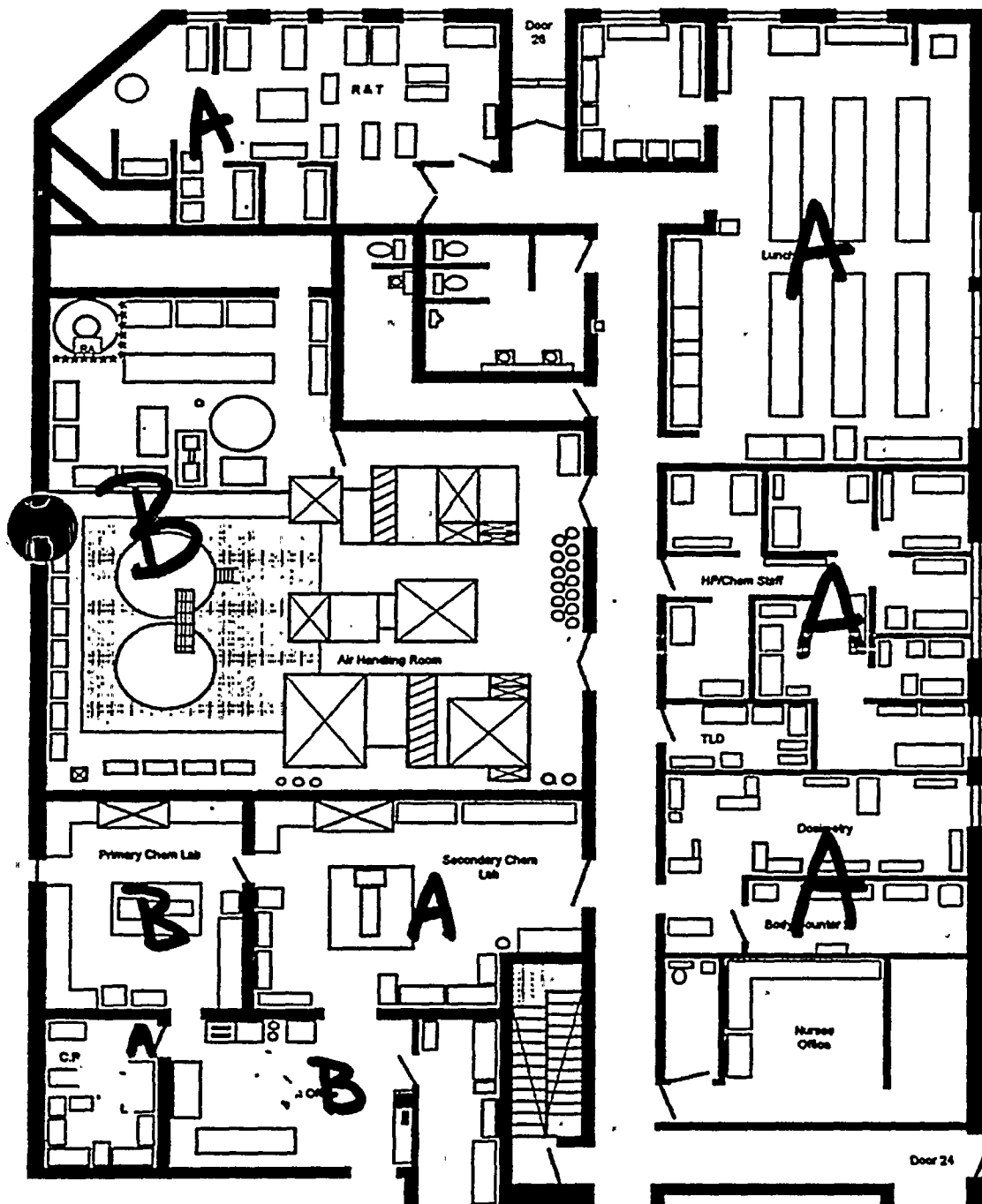
Time: \_\_\_\_\_

RWP#(s): \_\_\_\_\_

Frequency: D / W / M / SA / A / JS

Rx Power: \_\_\_\_\_ %

svcss.pcx / REV. 1



No.	dpm/100cm <sup>2</sup>
1	
2	0700-
3	0945
4	
5	
6	A = 0.02 MR/hr
7	
8	B = 0.1 MR/hr
9	
10	
11	SMEARS
12	ALL AREAS
13	< 500 DPM
14	100cm
15	
16	
17	AIRBORNE
18	(M/LI/CC)
19	
20	IODINE
21	CIE-11
22	
23	PART
24	CIE-10
25	
26	

HIGHEST G/A DOSE RATE=

mrem/hr

LOCATION OF HIGHEST D/R=

1. Circled numbers ① indicate street locations
2. Squares □ indicate sample locations
3. Numbers indicate gamma dose rates in mrem/hr at waist level unless otherwise indicated.
4. B indicates beta dose rates.
5. \* indicates contact dose rate
6. Triangle Δ indicates neutron dose rate in mRem/hr.
7. XXX is contaminated area boundary
8. \*\*\*\*\* is Rad Area Boundary

LEAD TECH REVIEW \_\_\_\_\_

Approved abbreviations - RMA=Rad Material Area, RE=Restricted Area, RA=Rad Area, HRA=High Rad, LHRA=Locked High Rad, CA=Contaminated Area, HCA=High Contam Area, AB=Airborne Area, LB=Laundry Barrel, TB=Trash Barrel



# R.E. GINNA STATION

Surveyed by: \_\_\_\_\_ (PRINT)

Map No. 12 Service Building South - South End

Signature \_\_\_\_\_

## Dose Rate Inst.

RO2 / RO2A / ASP1 / ASP1nrd / J2000

RO7 / RO20

Serial No: \_\_\_\_\_

Cal Due: \_\_\_\_\_

Beta Y / N BCF= \_\_\_\_\_

Instruments Source Checked Y / N

## Contamination Inst.:

RM14 / RM14s / Tenn / BC4 / MS3

MS2 / SAM 9

Serial No.: \_\_\_\_\_

Cal Due: \_\_\_\_\_

LLD= \_\_\_\_\_

Instruments Source Checked Y / N

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

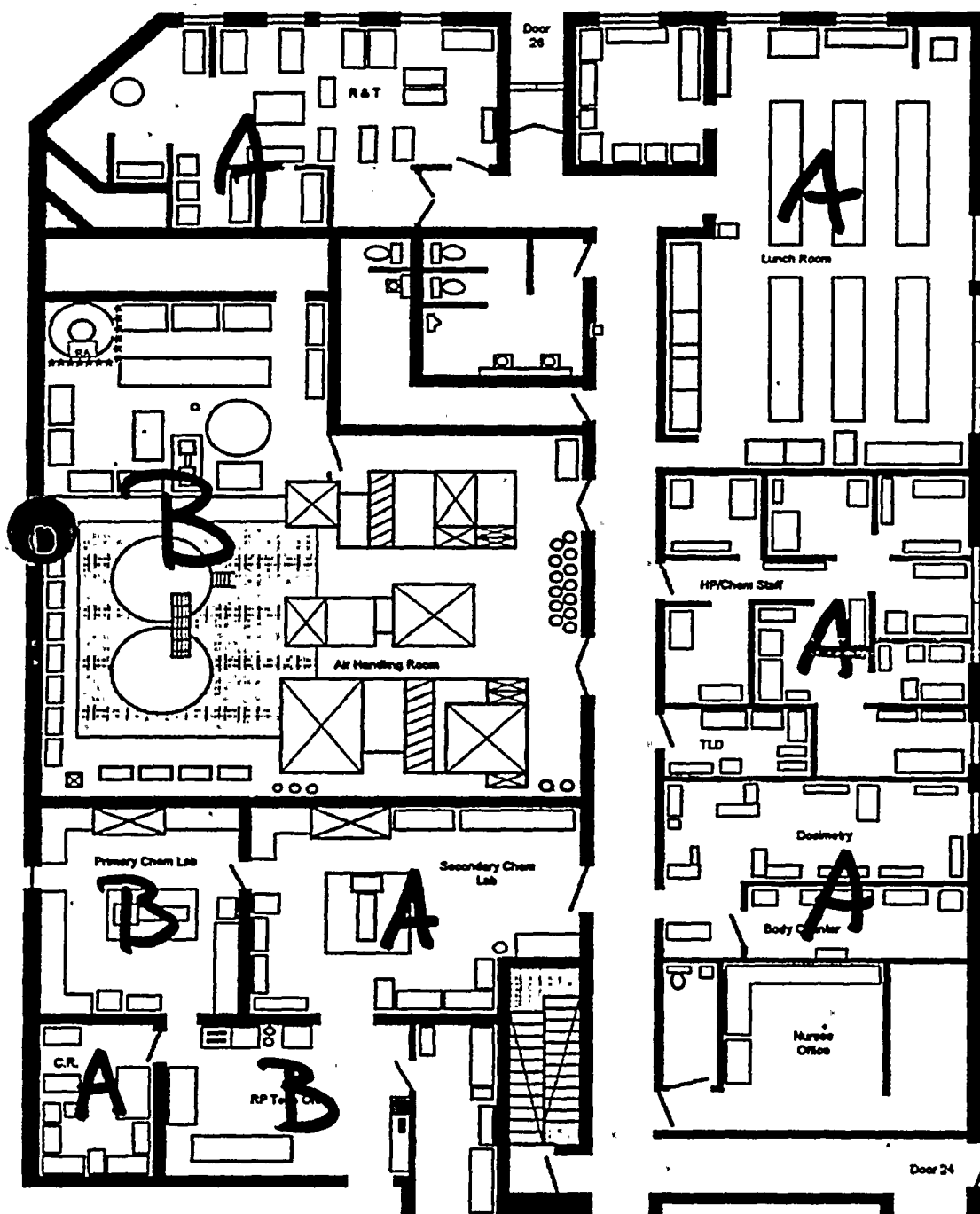
Time: \_\_\_\_\_

RWP#(s): \_\_\_\_\_

Frequency: D / W / M / SA / A / JS

Rx Power: \_\_\_\_\_ %

svcss.pcx / REV. 1



No.	dpm/100cm <sup>2</sup>
1	
2	AFTER
3	0945
4	
5	
6	A = 0.1 mR/hr
7	
8	B = 0.5 mR/hr
9	
10	
11	ALL SMEARS
12	< 500 dpm
13	100cm <sup>2</sup>
14	
15	
16	AIRBORNE
17	(mCi/cc)
18	
19	100 dpm
20	1E-9
21	
22	PART
23	
24	2E-9
25	
26	

HIGHEST G/A DOSE RATE=

mrem/hr

LOCATION OF HIGHEST D/R=

1. Circled numbers ① indicate smear locations
2. Squares □ indicate air sample locations
3. Numbers indicate gamma dose rates in mrem/hr at waist level unless otherwise indicated.
4. B indicates beta dose rate.
5. \* indicates contact dose rate
6. Triangle Δ indicates neutron dose rate in mrem/hr.
7. XXX is contaminated area boundary
8. \*\*\*\*\* is Rad Area Boundary

LEAD TECH REVIEW \_\_\_\_\_

KEYS:

Approved abbreviations - RMA=Rad Material Area, RE=Restricted Area, RA=Rad Area, HRA=High Rad, LHRA=Locked High Rad, CA=Contaminated Area, ICA=High Contam Area, AB=Airborne Area, LB=Laundry Barrel, TB=Trash Barrel



# R.E. GINNA STATION

Surveyed by: \_\_\_\_\_ (PRINT)

Map No. 15

Service Building North - Offices

Signature \_\_\_\_\_

## Dose Rate Inst.

72 / RO2A / ASP1 / ASP1nrd / J2000

72 / RO7 / RO20

S No: \_\_\_\_\_ / \_\_\_\_\_

Cal Due: \_\_\_\_\_ / \_\_\_\_\_

Beta Y / N BCF= \_\_\_\_\_

Instruments Source Checked Y / N

## Contamination Inst.:

RM14 / RM14s / Tenn / BC4 / MS3

MS2 / SAM 9

Serial No.: \_\_\_\_\_ / \_\_\_\_\_

Cal Due: \_\_\_\_\_ / \_\_\_\_\_

LLD= \_\_\_\_\_ / \_\_\_\_\_

Instruments Source Checked Y / N

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

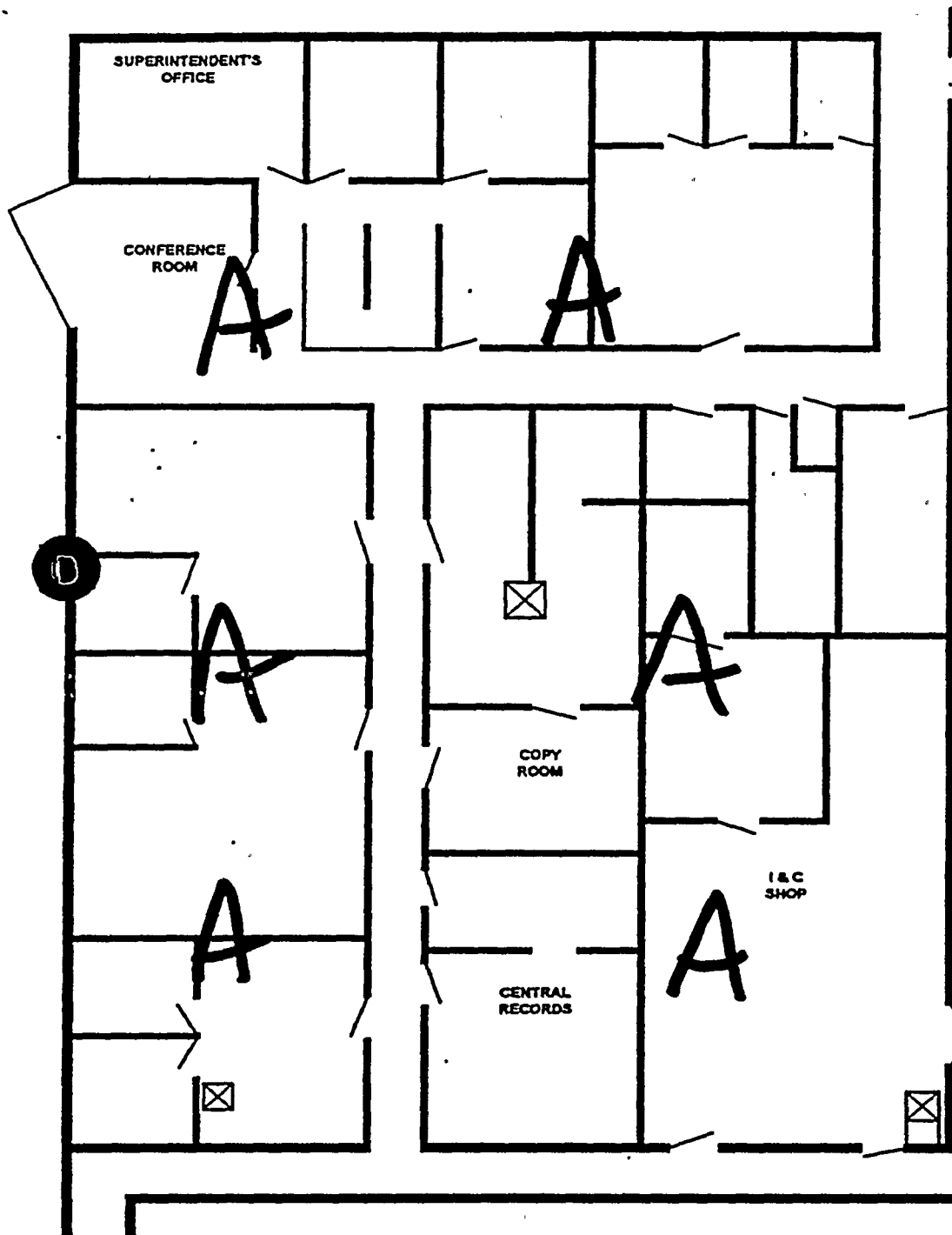
Time: \_\_\_\_\_

RWP#(s): \_\_\_\_\_

Frequency: D / W / M / SA / A / JS

Rx Power: \_\_\_\_\_ %

svcn.pcx / REV. 1



No.	dpm/100cm <sup>2</sup>
1	
2	<b>A = 0.02 mR/hr</b>
3	
4	
5	<b>ALL SMEARS</b>
6	
7	<b>&lt; 500 DPM</b>
8	<b>100cm<sup>2</sup></b>
9	
10	
11	
12	<b>ALL</b>
13	<b>DA-1</b>
14	
15	<b>AIRBORNE</b>
16	
17	<b>10 DIVE</b>
18	<b>EIE-II</b>
19	
20	
21	<b>PART</b>
22	
23	<b>&lt; 1E-10</b>
24	
25	
26	

HIGHEST G/A DOSE RATE=

mrem/hr

LOCATION OF HIGHEST D/R=

1. Circled numbers ① indicate smear locations
2. Squares □ indicate sample locations
3. Numbers indicate gamma dose rates in mrem/hr at waist level unless otherwise indicated.
4. B indicates beta dose rate.
5. \* indicates contact dose rate
6. Triangle Δ indicates neutron dose rate in mRem/hr.
7. XXX is contaminated area boundary
8. \*\*\*\*\* is Rad Area Boundary

LEAD TECH REVIEW \_\_\_\_\_

CKS:

Approved abbreviations - RMA=Rad Material Area, RE=Restricted Area, RA=Rad Area, HRA=High Rad, LHRA=Locked High Rad, CA=Contaminated Area, ICA=High Contam Area, AB=Airborne Area, LB=Laundry Barrel, TB=Trash Barrel





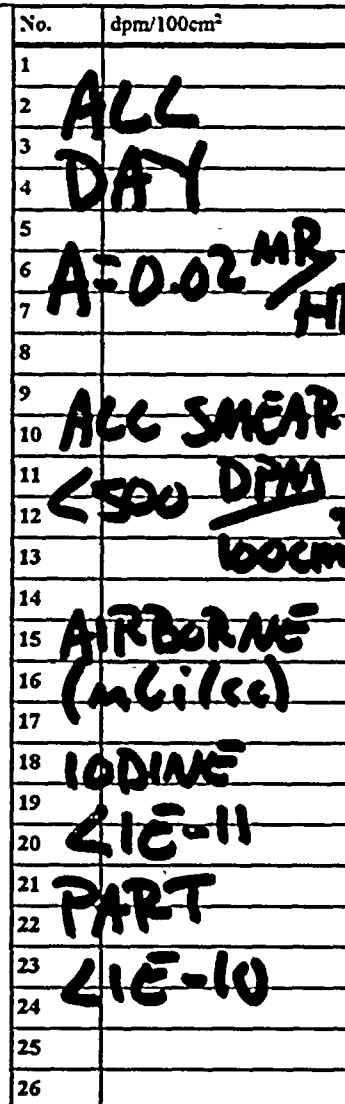
**Signature**\_\_\_\_\_

Instruments Source Checked Y / N

Instruments Source Checked Y / N

Rx Power: %

**svcbas.pcx / REV 1**



**HIGHEST G/A DOSE RATE=**

msec/hr

LOCATION OF HIGHEST D/R=

1. Circled numbers ① indicate smear locations
2. Squares □ indicate sample locations
3. Numbers indicate gamma dose rates in mrem/hr at waist level unless otherwise indicated.
4. B indicates beta dose rate.
5. \* indicates contact dose rate
6. Triangle Δ indicates neutron dose rate in mrem/hr.
7. XXXX is contaminated area boundary
8. \*\*\*\*\* is Rad Area Boundary

## LEAD TECH REVIEW

**WORKS:**

Approved abbreviations - RMA=Rad Material Area, RE=Restricted Area, RA=Rad Area, HRA=High Rad, LHRA=Locked High Rad, CA=Contaminated Area, HCA=High Contam Area, AB=Airborne Area, LB=Laundry Barrel, TB=Trash Barrel

## SECTION 9.3

### IN-PLANT AND POST-ACCIDENT SAMPLING RESULTS

**TABLE 9.2****REACTOR COOLANT SYSTEM SAMPLE ACTIVITY**  
**EQUILIBRIUM ACTIVITY****(AS OF 0500 HR, 6/11/97)**

<b><u>Nuclide</u></b>	<b><u>Corrected Concentration (UCI/GM)</u></b>
I-131	4.70E-03
I-132	8.09E-03
I-133	3.29E-03
I-134	5.05E-03
I-135	1.87E-03
<b>Total Iodine</b>	<b>1.57E-02</b>
<b>I-131 Dose Equivalent</b>	<b>5.56E-03</b>
Kr-85	1.16E-03
Kr-85m	1.16E-01
Kr-87	2.02E-02
Kr-88	1.47E-01
Xe-131m	3.34E-03
Xe-133	1.06E+00
Xe-133M	1.57E-01
Xe-135	1.87E-01
Xe-135m	1.87E-01
<b>Total Gas</b>	<b>1.87E+00</b>



TABLE 9.3A

REACTOR COOLANT SYSTEM SAMPLE:  
GAS COLLECTION BOMB

(Collection Between 0825-1000)

<u>Nuclide</u>	<u>Concentration (<math>\mu\text{Ci/gm}</math>)</u> <u>Corrected to Time of Shutdown</u>
Kr-85	1.8 E+01
Kr-85m	1.7 E+03
Kr-87	2.9 E+03
Kr-88	4.4 E+03
Xe-131m	2.3 E+02
Xe-133	1.5 E+04
Xe-133m	2.3 E+03
Xe-135	2.9 E+03
Xe-135m	2.9 E+02
<b>Total Gas</b>	<b>2.9 E+04</b>

Undiluted Sample Dose Rate at 1 Meter = 170 MR/HR

Undiluted Sample Dose Rate at Contact = 1700 R/HR

Diluted Sample Dose Rate at 1 Meter = 0.03 MR/HR

Diluted Sample Dose Rate at Contact = 300 MR/HR

\* NOTE: Dose rates based upon assumed use of 12 cc sample.

TABLE 9.3B

REACTOR COOLANT SYSTEM SAMPLE:  
GAS COLLECTION BOMB

(Collection After 1000)

<u>Nuclide</u>	<u>Concentration (<math>\mu\text{Ci/gm}</math>)</u> <u>Corrected to Time of Shutdown</u>
Kr-85	7.6 E+00
Kr-85m	7.4 E+02
Kr-87	1.2 E+03
Kr-88	1.8 E+03
Xe-131m	9.8 E+01
Xe-133	6.3 E+03
Xe-133m	9.8 E+02
Xe-135	1.2 E+03
Xe-135m	1.2 E+02
<b>Total Gas</b>	<b>1.2 E+04</b>

Undiluted Sample Dose Rate at 1 Meter = 70 MR/HR

Undiluted Sample Dose Rate at Contact = 700 R/HR

Diluted Sample Dose Rate at 1 Meter = 0.01 MR/HR

Diluted Sample Dose Rate at Contact = 130 MR/HR

\* NOTE: Dose rates based upon assumed use of 12 cc sample.

TABLE 9.4A

PRIMARY COOLANT SAMPLE:  
DEGASSED ACTIVITY

(Collection Between 0825-1000)

<u>Nuclide</u>	<u>Concentration (UCI/GM)</u> <u>Corrected to Time of Shutdown</u>
I-131	7.6 E+03
I-132	1.1 E+04
I-133	1.5 E+04
I-134	4.7 E+02
I-135	1.4 E+04
Cs-134	8.0 E+03
Cs-137	4.5 E+03
Ba-140	1.1 E+02
La-140	9.8 E+01
<b>Total Iodine</b>	<b>4.7 E+04</b>
<b>I-131 Dose Equivalent</b>	<b>1.0 E+04</b>
<b>Total Degassed Activity</b>	<b>6.1 E+04</b>

Undiluted Sample Dose Rate at 1 Meter = 280 MR/HR

Undiluted Sample Dose Rate at Contact = 2800 R/HR

Diluted Sample Dose Rate at 1 Meter = 0.05 MR/HR

Diluted Sample Dose Rate at Contact = 500 MR/HR

\* NOTE: Dose rates based upon assumed use of 12 cc sample.





**TABLE 9.4B**

**PRIMARY COOLANT SAMPLE:**  
**DEGASSED ACTIVITY**

**(Collection After 1000)**

<b><u>Nuclide</u></b>	<b><u>Concentration (UCI/GM)</u></b> <b><u>Corrected to Time of Shutdown</u></b>
I-131	5.1 E+03
I-132	7.3 E+03
I-133	1.0 E+04
I-134	3.2 E+02
I-135	9.2 E+03
Cs-134	8.0 E+03
Cs-137	4.5 E+03
Ba-140	1.1 E+02
La-140	9.8 E+01
<b>Total Iodine</b>	<b>3.2 E+04</b>
<b>I-131 Dose Equivalent</b>	<b>7.0 E+03</b>
<b>Total Degassed Activity</b>	<b>4.5 E+04</b>

**Undiluted Sample Dose Rate at 1 Meter = 190 MR/HR**

**Undiluted Sample Dose Rate at Contact = 1900 R/HR**

**Diluted Sample Dose Rate at 1 Meter = 0.03 MR/HR**

**Diluted Sample Dose Rate at Contact = 340 MR/HR**

**\* NOTE: Dose rates based upon assumed use of 12 cc sample.**



**TABLE 9.5A**

**CONTAINMENT SUMP SAMPLE:**  
**DEGASSED ACTIVITY**

**(Collection Between 1000 - 1115)**

<b><u>Nuclide</u></b>	<b><u>Concentration (<math>\mu\text{Ci/gm}</math>)</u></b> <b><u>Corrected to Time of Shutdown</u></b>
I-131	3.6 E+02
I-132	5.2 E+02
I-133	7.3 E+02
I-134	2.2 E+01
I-135	6.6 E+02
Cs-134	2.2 E+02
Cs-137	1.2 E+02
Ba-140.	3.1 E+00
La-140	2.8 E+00
<b>Total Iodine</b>	<b>2.2 E+03</b>
<b>I-131 Dose Equivalent</b>	<b>5.0 E+02</b>
<b>Total Degassed Activity</b>	<b>2.7 E+03</b>

Undiluted Sample Dose Rate at 1 Meter = 13 MR/HR

Undiluted Sample Dose Rate at Contact = 135 R/HR

Diluted Sample Dose Rate at 1 Meter = 0.01 MR/HR

Diluted Sample Dose Rate at Contact = 25 MR/HR

**\* NOTE: Dose rates based upon assumed use of 12 cc sample.**



**TABLE 9.5A**

**CONTAINMENT SUMP SAMPLE:**  
**DEGASSED ACTIVITY**

**(Collection After 1115)**

<b><u>Nuclide</u></b>	<b><u>Concentration (<math>\mu\text{Ci/gm}</math>)</u></b> <b><u>Corrected to Time of Shutdown</u></b>
I-131	6.7 E+02
I-132	9.9 E+02
I-133	1.4 E+03
I-134	4.2 E+01
I-135	1.2 E+03
Cs-134	8.4 E+02
Cs-137	4.8 E+02
Ba-140	1.2 E+01
La-140	1.0 E+01
<b>Total Iodine</b>	<b>4.2 E+03</b>
<b>I-131 Dose Equivalent</b>	<b>9.5 E+02</b>
<b>Total Degassed Activity</b>	<b>5.7 E+03</b>

Undiluted Sample Dose Rate at 1 Meter = 26 MR/HR

Undiluted Sample Dose Rate at Contact = 260 R/HR

Diluted Sample Dose Rate at 1 Meter = 0.01 MR/HR

Diluted Sample Dose Rate at Contact = 46 MR/HR

**\* NOTE: Dose rates based upon assumed use of 12 cc sample.**



**TABLE 9.6A**  
**CONTAINMENT AIR SAMPLE:**

(Collection Between 1000-1115)

<b><u>Nuclide</u></b>	<b><u>Concentration (<math>\mu\text{Ci/cc}</math>)</u></b> <b><u>Corrected to Time of Shutdown</u></b>
Kr-85	3.4 E-02
Kr-85m	3.2 E+00
Kr-87	5.4 E+00
Kr-88	8.1 E+00
Xe-131m	4.3 E-01
Xe-133	2.8 E+01
Xe-133m	4.3 E+00
Xe-135	5.4 E+00
Xe-135m	5.4 E-01
<b>Total Gas</b>	<b>5.4 E+01</b>
I-131	1.4 E+00
I-132	2.0 E+00
I-133	2.8 E+00
I-134	8.9 E-02
I-135	2.6 E+00
<b>Total Iodine</b>	<b>8.9 E+00</b>
Cs-134	2.5 E-06
Cs-137	1.0 E-04
Ba-140	3.1 E-06
La-140	3.0 E-06

Undiluted Sample Dose Rate at 1 Meter = 0.3 MR/HR

Undiluted Sample Dose Rate at Contact = 3.0 R/HR

Diluted Sample Dose Rate at 1 Meter = 0.01 MR/HR

Diluted Sample Dose Rate at Contact = 0.5 MR/HR

**\* NOTE: Dose rates based upon assumed use of 10 cc sample.**





**TABLE 9.6B**  
**CONTAINMENT AIR SAMPLE:**

(Collection After 1115)

<b>Nuclide</b>	<b>Concentration (<math>\mu\text{Ci/cc}</math>) Corrected to Time of Shutdown</b>
Kr-85	1.9 E-02
Kr-85m	1.8 E+00
Kr-87	3.0 E+00
Kr-88	4.6 E+00
Xe-131m	2.4 E-01
Xe-133	1.6 E+01
Xe-133m	2.4 E+00
Xe-135	3.0 E+00
Xe-135m	3.0 E-01
<b>Total Gas</b>	<b>3.0 E+01</b>
I-131	6.0 E-01
I-132	8.6 E-01
I-133	1.2 E+00
I-134	3.8 E-02
I-135	1.1 E+00
<b>Total Iodine</b>	<b>3.8 E+00</b>
Cs-134	1.0 E-06
Cs-137	6.0 E-05
Ba-140	2.1 E-06
La-140	2.1 E-06

Undiluted Sample Dose Rate at 1 Meter = 0.2 MR/HR

Undiluted Sample Dose Rate at Contact = 1.6 R/HR

Diluted Sample Dose Rate at 1 Meter = 0.01 MR/HR

Diluted Sample Dose Rate at Contact = 0.3 MR/HR

**\* NOTE: Dose rates based upon assumed use of 10 cc sample.**

TABLE 9.7

CONTAINMENT HYDROGEN CONCENTRATION (VIA PASS)

<u>TIME</u>	<u>HYDROGEN (VOL.%)</u>
0700-0945	0.00
0946-1145	0.02
1146-1330	0.01
After 1330	0.00



TABLE 9.8

RCS AND SUMP BORON/pH DATA

<u>Sample</u>	<u>Time</u>	<u>ppm Boron</u>	<u>pH</u>
RCS	0700-0945	< 10	6.3
Sump		< 10	7.5

NOTE: Safety Injection starts at 0945 hr (LOCA)

RCS	0946-1115	1400	5.8
Sump		1100	6.1
RCS	After 1116	2300	5.2
Sump		2100	5.3

TABLE 9.9

CONTINUOUS AIR MONITOR READINGS IN AUXILIARY BUILDING

(READINGS IN COUNTS PER MINUTE)

<u>0700-0945 hrs:</u>	<u>GAS</u>	<u>IODINE</u>	<u>PARTICULATE</u>
TOP FLOOR	50	200	100
INTERMEDIATE FLOOR	50	200	100
BASEMENT FLOOR	100	300	200

0946-1115 hrs:

TOP FLOOR	150	300	200
INTERMEDIATE FLOOR	150	300	200
BASEMENT FLOOR	200	400	300

1116-1300 hrs:

ALL CAMS ALARMING. ALL READINGS OFFSCALE HIGH.

After 1300 hrs:

TOP FLOOR	100	500,000 *	600,000 *
INTERMEDIATE FLOOR	100	600,000 *	700,000 *
BASEMENT FLOOR	200	700,000 *	800,000 *

NOTE : \* = CAM ALARMING

SECTION 10.0

METEOROLOGICAL AND OFFSITE RADIOLOGICAL DATA

SECTION 10.1

METEOROLOGICAL DATA

(PLUME DIRECTION, WEATHER FORECASTS AND TOWER DATA)





A. Basis

The meteorological conditions for this scenario were based upon historical meteorological data recorded by the Ginna primary weather tower and the National Weather Service on May 7, 1993. Minor editing was performed on the data to provide the wind direction and atmospheric stability conditions required by the scenario during the period of release.

National Weather Service and New York State Exercise controllers will provide Exercise participants weather forecast summaries based on the meteorological data and other supporting information available from the historical record. The goal of this approach is to provide participants with more realistic forecast information.

B. Scenario Assumptions

The scenario will begin with light, southwesterly winds which will shift and become northerly by mid-morning.

During the period of release (1115-1245 hr), the average meteorological conditions are as follows:

Wind Speed = 7 mph (at 33 ft)

Wind Direction = 5 degrees (at 33 ft; wind from)

Pasquill Stability = E



TABLE 10.1

WEATHER FORECAST INFORMATION

JUNE 11, 1997      7:00 AM - 14:30 PM

LAKE ONTARIO FORECAST :

TODAY:      A stationary high off of the Atlantic coast will dominate our weather during the early morning hours and provide light southwesterly winds. A weak high pressure system located in Canada will dip south during mid-day. As the front passes through our area, the winds will shift to be from the north. In the vicinity where the two high pressure systems meet, winds will be variable. The front will become stationary over the southern tier by mid-afternoon. Temperatures will reach the mid-60's by mid-morning and remain there throughout the daytime hours as the cool Canadian high moves into our area. Winds will be between 5-10 mph. Probability of precipitation is 10% for today. For tonight, temperatures will retreat into the low 50's.

PRINTOUTS FROM GINNA PRIMARY MET. TOWER

(15-MINUTE AVERAGES)

06/11/97 07:00

RECORD NUMBER 1316

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	---	---
SPD 33A	3.0	MPH	0	1.7	2.7	6.1
SPD 33B	3.1	MPH	0	1.8	2.2	6.2
SPD150A	3.2	MPH	0	2.1	2.5	6.1
SPD150B	2.9	MPH	0	2.2	2.3	6.1
SPD250	2.9	MPH	0	2.2	2.7	6.2
DIR 33A	230	DEG	0	1.7	191	277
DIR 33B	231	DEG	0	1.8	192	271
DIR150A	239	DEG	0	2.1	197	277
DIR150B	238	DEG	0	1.7	191	275
DIR250	235	DEG	0	2.1	195	272
TER 33A	52.0	F	0			
TER 33B	52.2	F	0			
TER150A	51.0	F	0			
TER150B	51.2	F	0			
TER250A	50.0	F	0			
TER250B	50.1	F	0			
DT150-33A	-1.0	F/	0			
DT150-33B	-1.0	F/	0			
DT250-33A	-2.0	F/	0			
DT250-33B	-2.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 07:15

RECORD NUMBER 1317

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	---	---
SPD 33A	3.3	MPH	0	1.7	2.7	8.1
SPD 33B	3.4	MPH	0	1.8	2.2	9.2
SPD150A	3.5	MPH	0	2.1	2.5	9.1
SPD150B	3.2	MPH	0	2.2	2.3	8.1
SPD250	3.3	MPH	0	2.2	2.7	9.2
DIR 33A	241	DEG	0	1.7	191	277
DIR 33B	242	DEG	0	1.8	192	271
DIR150A	249	DEG	0	2.1	197	277
DIR150B	248	DEG	0	1.7	191	275
DIR250	245	DEG	0	2.1	195	272
TER 33A	53.1	F	0			
TER 33B	53.3	F	0			
TER150A	52.2	F	0			
TER150B	52.4	F	0			
TER250A	51.3	F	0			
TER250B	51.4	F	0			
DT150-33A	-0.9	F/	0			
DT150-33B	-0.9	F/	0			
DT250-33A	-1.8	F/	0			
DT250-33B	-1.9	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 07:30

RECORD NUMBER 1318

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	---	---
SPD 33A	3.7	MPH	0	1.7	2.7	6.1
SPD 33B	3.7	MPH	0	1.8	2.2	6.2
SPD150A	3.9	MPH	0	2.1	2.5	6.1
SPD150B	3.6	MPH	0	2.2	2.3	6.1
SPD250	3.6	MPH	0	2.2	2.7	6.2
DIR 33A	252	DEG	0	1.7	231	317
DIR 33B	252	DEG	0	1.8	232	311
DIR150A	259	DEG	0	2.1	237	317
DIR150B	258	DEG	0	1.7	231	315
DIR250	256	DEG	0	2.1	235	312
TER 33A	54.1	F	0			
TER 33B	54.3	F	0			
TER150A	53.3	F	0			
TER150B	53.5	F	0			
TER250A	52.5	F	0			
TER250B	52.6	F	0			
DT150-33A	-0.8	F/	0			
DT150-33B	-0.8	F/	0			
DT250-33A	-1.6	F/	0			
DT250-33B	-1.7	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 07:45

RECORD NUMBER 1319

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	----	----
SPD 33A	4.0	MPH	0	1.7	1.7	6.1
SPD 33B	4.0	MPH	0	1.8	1.2	6.2
SPD150A	4.2	MPH	0	2.1	1.5	6.1
SPD150B	3.9	MPH	0	2.2	1.3	6.1
SPD250	4.0	MPH	0	2.2	1.7	6.2
DIR 33A	262	DEG	0	1.7	221	317
DIR 33B	263	DEG	0	1.8	222	311
DIR150A	269	DEG	0	2.1	227	317
DIR150B	268	DEG	0	1.7	221	315
DIR250	266	DEG	0	2.1	225	312
TER 33A	55.2	F	0			
TER 33B	55.4	F	0			
TER150A	54.5	F	0			
TER150B	54.7	F	0			
TER250A	53.8	F	0			
TER250B	53.9	F	0			
DT150-33A	-0.7	F/	0			
DT150-33B	-0.7	F/	0			
DT250-33A	-1.4	F/	0			
DT250-33B	-1.5	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 08:00

RECORD NUMBER 1320

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	4.3	MPH	0	1.7	2.7	6.1
SPD 33B	4.4	MPH	0	1.8	2.2	6.2
SPD150A	4.5	MPH	0	2.1	2.5	6.1
SPD150B	4.3	MPH	0	2.2	2.3	6.1
SPD250	4.4	MPH	0	2.2	2.7	6.2
DIR 33A	273	DEG	0	1.7	231	317
DIR 33B	274	DEG	0	1.8	232	311
DIR150A	272	DEG	0	2.1	237	317
DIR150B	278	DEG	0	1.7	231	315
DIR250	276	DEG	0	2.1	235	312
TER 33A	56.3	F	0			
TER 33B	56.5	F	0			
TER150A	55.6	F	0			
TER150B	55.8	F	0			
TER250A	55.0	F	0			
TER250B	55.1	F	0			
DT150-33A	-0.7	F/	0			
DT150-33B	-0.7	F/	0			
DT250-33A	-1.3	F/	0			
DT250-33B	-1.4	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 08:15

RECORD NUMBER 1321

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	----	----
SPD 33A	4.7	MPH	0	1.7	2.7	6.1
SPD 33B	4.6	MPH	0	1.8	2.2	6.2
SPD150A	4.9	MPH	0	2.1	2.5	6.1
SPD150B	4.6	MPH	0	2.2	2.3	6.1
SPD250	4.7	MPH	0	2.2	2.7	6.2
DIR 33A	284	DEG	0	1.7	231	317
DIR 33B	284	DEG	0	1.8	232	311
DIR150A	289	DEG	0	2.1	237	317
DIR150B	288	DEG	0	1.7	231	315
DIR250	287	DEG	0	2.1	235	312
TER 33A	57.3	F	0			
TER 33B	57.5	F	0			
TER150A	56.8	F	0			
TER150B	57.0	F	0			
TER250A	56.3	F	0			
TER250B	56.4	F	0			
DT150-33A	-0.6	F/	0			
DT150-33B	-0.6	F/	0			
DT250-33A	-1.1	F/	0			
DT250-33B	-1.2	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

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RECORD NUMBER 1322

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	-----	-----	---	---
SPD 33A	5.0	MPH	0	1.7	2.7	6.1
SPD 33B	5.0	MPH	0	1.8	2.2	6.2
SPD150A	5.2	MPH	0	2.1	2.5	6.1
SPD150B	5.0	MPH	0	2.2	2.3	6.1
SPD250	5.1	MPH	0	2.2	2.7	6.2
DIR 33A	295	DEG	0	1.7	241	317
DIR 33B	295	DEG	0	1.8	242	311
DIR150A	299	DEG	0	2.1	247	317
DIR150B	298	DEG	0	1.7	241	315
DIR250	297	DEG	0	2.1	245	312
TER 33A	58.4	F	0			
TER 33B	58.6	F	0			
TER150A	57.9	F	0			
TER150B	58.1	F	0			
TER250A	57.5	F	0			
TER250B	57.6	F	0			
DT150-33A	-0.5	F/	0			
DT150-33B	-0.5	F/	0			
DT250-33A	-0.9	F/	0			
DT250-33B	-1.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 08:45

RECORD NUMBER 1323

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	---	---
SPD 33A	5.3	MPH	0	1.7	2.7	6.1
SPD 33B	5.3	MPH	0	1.8	2.2	6.2
SPD150A	5.5	MPH	0	2.1	2.5	6.1
SPD150B	5.3	MPH	0	2.2	2.3	6.1
SPD250	5.5	MPH	0	2.2	2.7	6.2
DIR 33A	305	DEG	0	1.7	241	337
DIR 33B	306	DEG	0	1.8	242	331
DIR150A	308	DEG	0	2.1	247	337
DIR150B	307	DEG	0	1.7	241	335
DIR250	307	DEG	0	2.1	245	332
TER 33A	59.5	F	0			
TER 33B	59.7	F	0			
TER150A	59.1	F	0			
TER150B	59.3	F	0			
TER250A	58.8	F	0			
TER250B	58.9	F	0			
DT150-33A	-0.4	F/	0			
DT150-33B	-0.4	F/	0			
DT250-33A	-0.7	F/	0			
DT250-33B	-0.8	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 09:00

RECORD NUMBER 1324

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	-----	-----	---	---
SPD 33A	5.7	MPH	0	1.7	1.7	4.1
SPD 33B	5.6	MPH	0	1.8	1.2	4.2
SPD150A	5.9	MPH	0	2.1	1.5	4.1
SPD150B	5.6	MPH	0	2.2	1.3	4.1
SPD250	5.8	MPH	0	2.2	1.7	4.2
DIR 33A	316	DEG	0	1.7	241	347
DIR 33B	316	DEG	0	1.8	242	341
DIR150A	318	DEG	0	2.1	247	347
DIR150B	317	DEG	0	1.7	241	355
DIR250	318	DEG	0	2.1	245	352
TER 33A	60.5	F	0			
TER 33B	60.7	F	0			
TER150A	60.2	F	0			
TER150B	60.4	F	0			
TER250A	60.0	F	0			
TER250B	60.1	F	0			
DT150-33A	-0.3	F/	0			
DT150-33B	-0.3	F/	0			
DT250-33A	-0.5	F/	0			
DT250-33B	-0.6	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00





06/11/97 09:15

RECORD NUMBER 1325

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	----	----
SPD 33A	6.0	MPH	0	1.7	2.7	6.1
SPD 33B	5.9	MPH	0	1.8	2.2	6.2
SPD150A	6.2	MPH	0	2.1	2.5	6.1
SPD150B	6.0	MPH	0	2.2	2.3	6.1
SPD250	6.2	MPH	0	2.2	2.7	6.2
DIR 33A	327	DEG	0	1.7	291	397
DIR 33B	327	DEG	0	1.8	292	391
DIR150A	328	DEG	0	2.1	287	397
DIR150B	327	DEG	0	1.7	291	395
DIR250	328	DEG	0	2.1	295	392
TER 33A	61.6	F	0			
TER 33B	61.8	F	0			
TER150A	61.4	F	0			
TER150B	61.6	F	0			
TER250A	61.3	F	0			
TER250B	61.4	F	0			
DT150-33A	-0.2	F/	0			
DT150-33B	-0.2	F/	0			
DT250-33A	-0.3	F/	0			
DT250-33B	-0.4	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



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RECORD NUMBER 1326

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	-----	-----	---	---
SPD 33A	6.3	MPH	0	1.7	2.7	8.1
SPD 33B	6.2	MPH	0	1.8	2.2	8.2
SPD150A	6.5	MPH	0	2.1	2.5	8.1
SPD150B	6.3	MPH	0	2.2	2.3	8.1
SPD250	6.6	MPH	0	2.2	2.7	8.2
DIR 33A	338	DEG	0	1.7	301	377
DIR 33B	338	DEG	0	1.8	302	371
DIR150A	338	DEG	0	2.1	307	377
DIR150B	337	DEG	0	1.7	301	375
DIR250	338	DEG	0	2.1	305	372
TER 33A	62.7	F	0			
TER 33B	62.9	F	0			
TER150A	62.5	F	0			
TER150B	62.7	F	0			
TER250A	62.5	F	0			
TER250B	62.6	F	0			
DT150-33A	-0.2	F/	0			
DT150-33B	-0.2	F/	0			
DT250-33A	-0.2	F/	0			
DT250-33B	-0.3	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



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RECORD NUMBER 1327

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-------------	---------	------	------	--------	-----	-----

SPD 33A	6.7	MPH	0	1.7	4.7	9.1
SPD 33B	6.5	MPH	0	1.8	4.2	9.2
SPD150A	6.9	MPH	0	2.1	4.5	9.1
SPD150B	6.7	MPH	0	2.2	4.3	9.1
SPD250	6.9	MPH	0	2.2	4.7	9.2
DIR 33A	348	DEG	0	1.7	291	17
DIR 33B	348	DEG	0	1.8	322	11
DIR150A	348	DEG	0	2.1	327	17
DIR150B	347	DEG	0	1.7	321	15
DIR250	349	DEG	0	2.1	325	12
TER 33A	63.7	F	0			
TER 33B	63.9	F	0			
TER150A	63.7	F	0			
TER150B	63.9	F	0			
TER250A	63.8	F	0			
TER250B	63.9	F	0			
DT150-33A	-0.1	F/	0			
DT150-33B	-0.1	F/	0			
DT250-33A	0.0	F/	0			
DT250-33B	-0.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

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RECORD NUMBER 1328

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.0	MPH	0	1.7	3.7	9.1
SPD 33B	6.8	MPH	0	1.8	4.2	9.2
SPD150A	7.2	MPH	0	2.1	3.5	9.1
SPD150B	7.0	MPH	0	2.2	4.3	9.1
SPD250	7.3	MPH	0	2.2	3.7	9.2
DIR 33A	359	DEG	0	1.7	311	17
DIR 33B	359	DEG	0	1.8	312	11
DIR150A	358	DEG	0	2.1	317	17
DIR150B	357	DEG	0	1.7	311	15
DIR250	359	DEG	0	2.1	315	12
TER 33A	64.8	F	0			
TER 33B	65.0	F	0			
TER150A	64.8	F	0			
TER150B	65.0	F	0			
TER250A	65.0	F	0			
TER250B	65.1	F	0			
DT150-33A	0.0	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	0.2	F/	0			
DT250-33B	0.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

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RECORD NUMBER 1329

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	----	----
SPD 33A	7.0	MPH	0	1.7	4.7	9.1
SPD 33B	6.9	MPH	0	1.8	4.2	9.2
SPD150A	7.1	MPH	0	2.1	4.5	9.1
SPD150B	7.1	MPH	0	2.2	4.3	9.1
SPD250	7.3	MPH	0	2.2	4.7	9.2
DIR 33A	1	DEG	0	1.7	341	37
DIR 33B	3	DEG	0	1.8	342	31
DIR150A	3	DEG	0	2.1	347	37
DIR150B	2	DEG	0	1.7	341	35
DIR250	1	DEG	0	2.1	345	32
TER 33A	64.9	F	0			
TER 33B	65.0	F	0			
TER150A	64.9	F	0			
TER150B	65.0	F	0			
TER250A	65.0	F	0			
TER250B	65.1	F	0			
DT150-33A	0.0	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	0.2	F/	0			
DT250-33B	0.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



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RECORD NUMBER 1330

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	---	---
SPD 33A	7.0	MPH	0	1.7	4.7	9.1
SPD 33B	7.0	MPH	0	1.8	4.2	9.2
SPD150A	7.0	MPH	0	2.1	4.5	9.1
SPD150B	7.2	MPH	0	2.2	4.3	9.1
SPD250	7.3	MPH	0	2.2	4.7	9.2
DIR 33A	0	DEG	0	1.7	321	17
DIR 33B	2	DEG	0	1.8	332	21
DIR150A	4	DEG	0	2.1	347	37
DIR150B	1	DEG	0	1.7	341	35
DIR250	6	DEG	0	2.1	345	32
TER 33A	64.9	F	0			
TER 33B	65.0	F	0			
TER150A	65.0	F	0			
TER150B	64.9	F	0			
TER250A	65.0	F	0			
TER250B	65.0	F	0			
DT150-33A	0.0	F/	0			
DT150-33B	-0.1	F/	0			
DT250-33A	0.1	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 10:45

RECORD NUMBER 1331

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	----	----
SPD 33A	7.0	MPH	0	1.7	3.7	9.1
SPD 33B	7.0	MPH	0	1.8	4.2	9.2
SPD150A	6.9	MPH	0	2.1	3.5	9.1
SPD150B	7.2	MPH	0	2.2	4.3	9.1
SPD250	7.3	MPH	0	2.2	3.7	9.2
DIR 33A	2	DEG	0	1.7	341	67
DIR 33B	4	DEG	0	1.8	342	61
DIR150A	2	DEG	0	2.1	347	67
DIR150B	5	DEG	0	1.7	341	65
DIR250	3	DEG	0	2.1	345	62
TER 33A	65.0	F	0			
TER 33B	64.9	F	0			
TER150A	65.0	F	0			
TER150B	64.9	F	0			
TER250A	65.0	F	0			
TER250B	65.0	F	0			
DT150-33A	0.1	F/	0			
DT150-33B	-0.1	F/	0			
DT250-33A	0.1	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 11:00

RECORD NUMBER 1332

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	---	---
SPD 33A	7.0	MPH	0	1.7	3.7	9.1
SPD 33B	7.1	MPH	0	1.8	4.2	9.2
SPD150A	6.8	MPH	0	2.1	3.5	9.1
SPD150B	7.3	MPH	0	2.2	4.3	9.1
SPD250	7.3	MPH	0	2.2	3.7	9.2
DIR 33A	0	DEG	0	1.7	341	67
DIR 33B	2	DEG	0	1.8	342	61
DIR150A	3	DEG	0	2.1	347	67
DIR150B	1	DEG	0	1.7	341	65
DIR250	2	DEG	0	2.1	345	62
TER 33A	65.0	F	0			
TER 33B	64.9	F	0			
TER150A	65.1	F	0			
TER150B	64.8	F	0			
TER250A	65.0	F	0			
TER250B	64.9	F	0			
DT150-33A	0.1	F/	0			
DT150-33B	-0.1	F/	0			
DT250-33A	0.0	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



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RECORD NUMBER 1333

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	----	-----	---	---
SPD 33A	7.1	MPH	0	1.7	3.7	9.1
SPD 33B	7.2	MPH	0	1.8	4.2	9.2
SPD150A	6.8	MPH	0	2.1	3.5	9.1
SPD150B	7.2	MPH	0	2.2	4.3	9.1
SPD250	7.2	MPH	0	2.2	3.7	9.2
DIR 33A	1	DEG	0	1.7	341	67
DIR 33B	2	DEG	0	1.8	342	61
DIR150A	4	DEG	0	2.1	347	67
DIR150B	2	DEG	0	1.7	341	65
DIR250	2	DEG	0	2.1	345	62
TER 33A	65.0	F	0			
TER 33B	65.0	F	0			
TER150A	65.1	F	0			
TER150B	64.9	F	0			
TER250A	65.1	F	0			
TER250B	65.0	F	0			
DT150-33A	0.0	F/	0			
DT150-33B	-0.1	F/	0			
DT250-33A	0.1	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

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RECORD NUMBER 1334

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.1	MPH	0	1.7	3.7	9.1
SPD 33B	7.2	MPH	0	1.8	4.2	9.2
SPD150A	6.9	MPH	0	2.1	3.5	9.1
SPD150B	7.2	MPH	0	2.2	4.3	9.1
SPD250	7.1	MPH	0	2.2	3.7	9.2
DIR 33A	1	DEG	0	1.7	341	67
DIR 33B	3	DEG	0	1.8	342	61
DIR150A	4	DEG	0	2.1	347	67
DIR150B	4	DEG	0	1.7	341	65
DIR250	2	DEG	0	2.1	345	62
TER 33A	65.1	F	0			
TER 33B	65.0	F	0			
TER150A	65.0	F	0			
TER150B	65.0	F	0			
TER250A	65.2	F	0			
TER250B	65.0	F	0			
DT150-33A	0.0	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	0.1	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 11:45

RECORD NUMBER 1335

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.2	MPH	0	1.7	3.7	9.1
SPD 33B	7.3	MPH	0	1.8	4.2	9.2
SPD150A	6.9	MPH	0	2.1	3.5	9.1
SPD150B	7.1	MPH	0	2.2	4.3	9.1
SPD250	6.9	MPH	0	2.2	3.7	9.2
DIR 33A	2	DEG	0	1.7	341	67
DIR 33B	3	DEG	0	1.8	342	61
DIR150A	5	DEG	0	2.1	347	67
DIR150B	5	DEG	0	1.7	341	65
DIR250	2	DEG	0	2.1	345	62
TER 33A	65.1	F	0			
TER 33B	65.1	F	0			
TER150A	65.0	F	0			
TER150B	65.1	F	0			
TER250A	65.2	F	0			
TER250B	65.1	F	0			
DT150-33A	-0.1	F/	0			
DT150-33B	0.1	F/	0			
DT250-33A	0.2	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 12:00

RECORD NUMBER 1336

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.2	MPH	0	1.7	3.7	9.1
SPD 33B	7.3	MPH	0	1.8	4.2	9.2
SPD150A	6.9	MPH	0	2.1	3.5	9.1
SPD150B	7.0	MPH	0	2.2	4.3	9.1
SPD250	6.8	MPH	0	2.2	3.7	9.2
DIR 33A	2	DEG	0	1.7	341	67
DIR 33B	3	DEG	0	1.8	342	61
DIR150A	5	DEG	0	2.1	347	67
DIR150B	6	DEG	0	1.7	341	65
DIR250	2	DEG	0	2.1	345	62
TER 33A	65.1	F	0			
TER 33B	65.1	F	0			
TER150A	64.9	F	0			
TER150B	65.2	F	0			
TER250A	65.3	F	0			
TER250B	65.1	F	0			
DT150-33A	-0.2	F/	0			
DT150-33B	0.1	F/	0			
DT250-33A	0.2	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 12:15

RECORD NUMBER 1337

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.2	MPH	0	1.7	3.7	9.1
SPD 33B	7.3	MPH	0	1.8	4.2	9.2
SPD150A	7.1	MPH	0	2.1	3.5	9.1
SPD150B	7.1	MPH	0	2.2	4.3	9.1
SPD250	6.9	MPH	0	2.2	3.7	9.2
DIR 33A	3	DEG	0	1.7	341	67
DIR 33B	3	DEG	0	1.8	342	61
DIR150A	5	DEG	0	2.1	347	67
DIR150B	5	DEG	0	1.7	341	65
DIR250	3	DEG	0	2.1	345	62
TER 33A	65.0	F	0			
TER 33B	65.2	F	0			
TER150A	65.0	F	0			
TER150B	65.2	F	0			
TER250A	65.2	F	0			
TER250B	65.1	F	0			
DT150-33A	0.0	F/	0			
DT150-33B	0.1	F/	0			
DT250-33A	0.2	F/	0			
DT250-33B	-0.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 12:30

RECORD NUMBER 1338

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.1	MPH	0	1.7	3.7	9.1
SPD 33B	7.2	MPH	0	1.8	3.2	9.2
SPD150A	7.2	MPH	0	2.1	3.5	9.1
SPD150B	7.2	MPH	0	2.2	4.3	9.1
SPD250	7.0	MPH	0	2.2	3.7	9.2
DIR 33A	4	DEG	0	1.7	341	67
DIR 33B	4	DEG	0	1.8	342	61
DIR150A	4	DEG	0	2.1	347	67
DIR150B	4	DEG	0	1.7	341	65
DIR250	3	DEG	0	2.1	345	62
TER 33A	65.0	F	0			
TER 33B	65.2	F	0			
TER150A	65.1	F	0			
TER150B	65.2	F	0			
TER250A	65.1	F	0			
TER250B	65.1	F	0			
DT150-33A	0.2	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	0.1	F/	0			
DT250-33B	-0.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 12:45

RECORD NUMBER 1339

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	-----	-----	---	---
SPD 33A	7.1	MPH	0	1.7	3.7	9.1
SPD 33B	7.2	MPH	0	1.8	3.2	9.2
SPD150A	7.4	MPH	0	2.1	3.5	9.1
SPD150B	7.3	MPH	0	2.2	3.3	9.1
SPD250	7.1	MPH	0	2.2	3.7	9.2
DIR 33A	3	DEG	0	1.7	341	67
DIR 33B	4	DEG	0	1.8	342	61
DIR150A	4	DEG	0	2.1	347	67
DIR150B	3	DEG	0	1.7	341	65
DIR250	4	DEG	0	2.1	345	62
TER 33A	64.9	F	0			
TER 33B	65.3	F	0			
TER150A	65.2	F	0			
TER150B	65.2	F	0			
TER250A	64.9	F	0			
TER250B	65.0	F	0			
DT150-33A	0.3	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	0.1	F/	0			
DT250-33B	-0.2	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 13:00

RECORD NUMBER 1340

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.0	MPH	0	1.7	4.7	9.1
SPD 33B	7.1	MPH	0	1.8	4.2	9.2
SPD150A	7.5	MPH	0	2.1	4.5	9.1
SPD150B	7.4	MPH	0	2.2	4.3	9.1
SPD250	7.2	MPH	0	2.2	4.7	9.2
DIR 33A	5	DEG	0	1.7	341	67
DIR 33B	4	DEG	0	1.8	342	61
DIR150A	3	DEG	0	2.1	347	67
DIR150B	2	DEG	0	1.7	341	65
DIR250	4	DEG	0	2.1	345	62
TER 33A	64.8	F	0			
TER 33B	65.3	F	0			
TER150A	65.3	F	0			
TER150B	65.2	F	0			
TER250A	64.8	F	0			
TER250B	65.0	F	0			
DT150-33A	0.5	F/	0			
DT150-33B	-0.1	F/	0			
DT250-33A	0.0	F/	0			
DT250-33B	-0.3	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00



06/11/97 13:15

RECORD NUMBER 1341

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	7.0	MPH	0	1.7	3.7	9.1
SPD 33B	7.1	MPH	0	1.8	4.2	9.2
SPD150A	7.4	MPH	0	2.1	3.5	9.1
SPD150B	7.3	MPH	0	2.2	4.3	9.1
SPD250	7.1	MPH	0	2.2	3.7	9.2
DIR 33A	5	DEG	0	1.7	341	67
DIR 33B	4	DEG	0	1.8	342	61
DIR150A	3	DEG	0	2.1	347	67
DIR150B	2	DEG	0	1.7	341	65
DIR250	4	DEG	0	2.1	345	62
TER 33A	64.9	F	0			
TER 33B	65.3	F	0			
TER150A	65.3	F	0			
TER150B	65.2	F	0			
TER250A	64.8	F	0			
TER250B	65.1	F	0			
DT150-33A	0.4	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	0.0	F/	0			
DT250-33B	-0.2	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 13:30

RECORD NUMBER 1342

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	-----	-----	---	---
SPD 33A	6.9	MPH	0	1.7	3.7	9.1
SPD 33B	7.0	MPH	0	1.8	4.2	9.2
SPD150A	7.3	MPH	0	2.1	3.5	9.1
SPD150B	7.3	MPH	0	2.2	3.3	9.1
SPD250	7.1	MPH	0	2.2	3.7	9.2
DIR 33A	5	DEG	0	1.7	341	67
DIR 33B	5	DEG	0	1.8	341	61
DIR150A	2	DEG	0	2.1	347	67
DIR150B	3	DEG	0	1.7	341	65
DIR250	3	DEG	0	2.1	345	62
TER 33A	65.0	F	0			
TER 33B	65.3	F	0			
TER150A	65.2	F	0			
TER150B	65.3	F	0			
TER250A	64.9	F	0			
TER250B	65.1	F	0			
DT150-33A	0.3	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	-0.1	F/	0			
DT250-33B	-0.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 13:45

RECORD NUMBER 1343

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
SPD 33A	6.9	MPH	0	1.7	3.7	9.1
SPD 33B	7.0	MPH	0	1.8	3.2	9.2
SPD150A	7.1	MPH	0	2.1	3.5	9.1
SPD150B	7.2	MPH	0	2.2	3.3	9.1
SPD250	7.0	MPH	0	2.2	3.7	9.2
DIR 33A	4	DEG	0	1.7	341	67
DIR 33B	5	DEG	0	1.8	342	61
DIR150A	2	DEG	0	2.1	347	67
DIR150B	3	DEG	0	1.7	341	65
DIR250	3	DEG	0	2.1	345	62
TER 33A	65.0	F	0			
TER 33B	65.2	F	0			
TER150A	65.2	F	0			
TER150B	65.3	F	0			
TER250A	64.9	F	0			
TER250B	65.2	F	0			
DT150-33A	0.1	F/	0			
DT150-33B	0.0	F/	0			
DT250-33A	-0.1	F/	0			
DT250-33B	-0.1	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

06/11/97 14:00

RECORD NUMBER 1344

GINNA PLANT

ORIGINAL

SENSOR NAME	AVERAGE	UNIT	CODE	STDDEV	MIN	MAX
-----	-----	-----	-----	-----	---	---
SPD 33A	6.8	MPH	0	1.7	4.7	9.1
SPD 33B	6.9	MPH	0	1.8	4.2	9.2
SPD150A	7.0	MPH	0	2.1	4.5	9.1
SPD150B	7.1	MPH	0	2.2	4.3	9.1
SPD250	6.9	MPH	0	2.2	3.7	9.2
DIR 33A	4	DEG	0	1.7	341	67
DIR 33B	5	DEG	0	1.8	342	61
DIR150A	1	DEG	0	2.1	347	67
DIR150B	3	DEG	0	1.7	341	65
DIR250	2	DEG	0	2.1	345	62
TER 33A	65.1	F	0			
TER 33B	65.2	F	0			
TER150A	65.1	F	0			
TER150B	65.3	F	0			
TER250A	64.9	F	0			
TER250B	65.2	F	0			
DT150-33A	0.0	F/	0			
DT150-33B	0.1	F/	0			
DT250-33A	-0.2	F/	0			
DT250-33B	0.0	F/	0			
DEWPOINT	58.7	F	0			
RAIN	0.00	INCH	0	1.02	1.02	0.00

SECTION 10.2

FIELD DATA AND MAPS

**TABLE 10.2**  
**PLUME ARRIVAL/DEPARTURE TIMES**

	<b>ARRIVAL *</b> <b><u>DISTANCE (MI)</u></b>	<b>DEPARTURE **</b> <b><u>TABLE 10.3</u></b>
0.5	11:19	12:49
1.0	11:23	12:53
2.0	11:32	13:02
3.0	11:40	13:10
4.0	11:49	13:19
5.0	11:57	13:27
6.0	12:06	13:36
7.0	12:15	13:45
8.0	12:23	13:53
9.0	12:40	14:02
10.0	12:49	14:10
11.0	12:57	14:19
12.0	13:06	14:27
13.0	13:15	14:36
14.0	13:23	14:45
15.0	13:40	14:53

**NOTES:**

\* After indicated arrival time, refer to offsite radiological data shown on Table 10.3 the zone of interest.

\*\* After indicated departure time, all dose rates (mr/hr) will be background. For ground deposition readings, refer to post-plume radiological data shown on Tables 10.4 and 10.5.

# GINNA STATION ON-SITE SURVEY MAP

DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

## TEAM MEMBERS

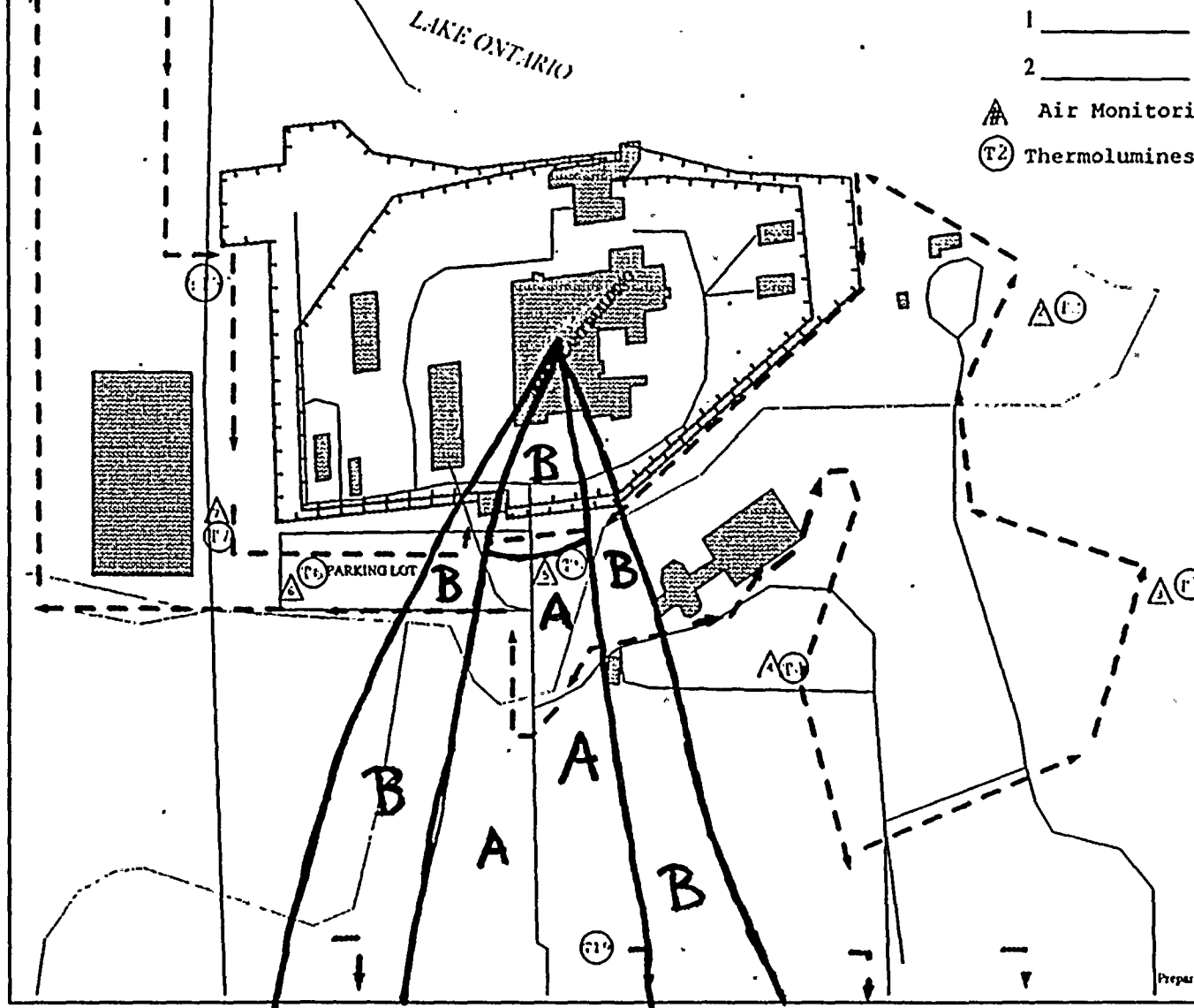
On-Site East Team      On-Site West Team

1. \_\_\_\_\_ 1. \_\_\_\_\_

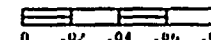
2. \_\_\_\_\_ 2. \_\_\_\_\_

△ Air Monitoring Station

⊙ T2 Thermoluminescent Dosimeter Locations



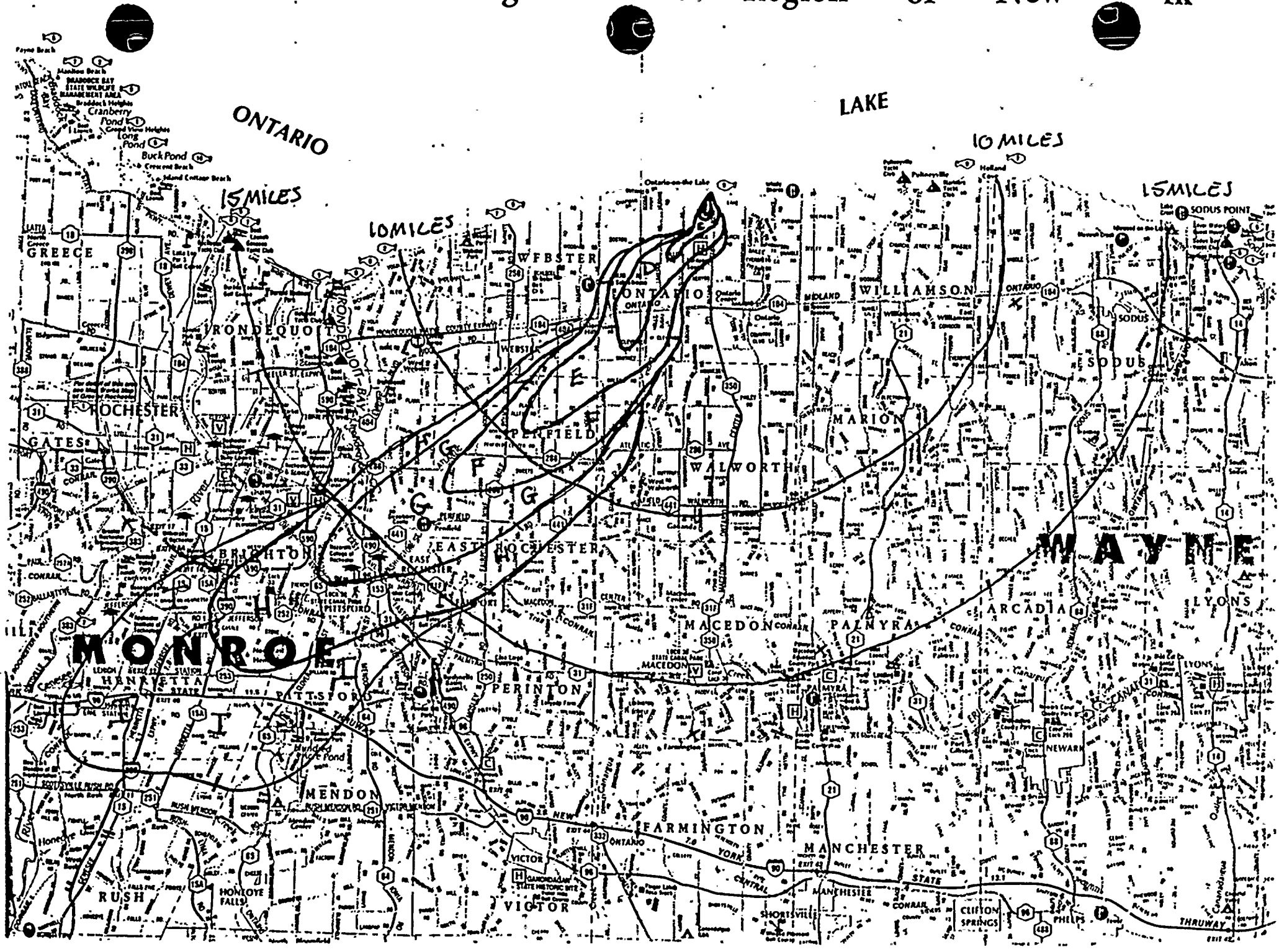
Miles



Prepared by Center for Governmental Research Inc. 11/16/95









**TABLE 10.3B**  
**RADIOLOGICAL SURVEY DATA**  
**(COUNTY SURVEY TEAMS)**

ZONE	CLOSED WINDOW AT 3 FEET (mR/hr)	CLOSED WINDOW ON CONTACT (mR/hr)	OPEN WINDOW AT 3 FEET (mR/hr)	OPEN WINDOW ON CONTACT (mR/hr)	DOSIMETRY INCREMENT EXPOSURE (mREM)	IODINE CARTRIDGE (CPM)	PARTICULATE FILTER (CPM)
A	1547	1547	2509	2509	300	3500	12,300
B	724	724	1174	1174	125	1700	5000
C	323	323	524	524	50	800	2000
D	151	151	245	245	22	400	900
E	93	93	150	150	12	250	530
F	30	30	50	50	7	180	340
G	18	18	29	29	5	140	220
H	12	12	19	19	3	110	160
I	9	9	15	15	2	100	130

**NOTES:**

- 1) Dose rate readings apply to Victoreen 450 dose rate instrument or equivalent.
- 2) Dosimeter incremental exposure assumes a 15-minute stay-time in the particular zone of interest.
- 3) Air samples assume use of RADECO H-809C air sampler or equivalent. Volume assumed is approximately 250 liters (25 lpm for 10 minutes), and field reading is with E-140 and a HP-210 probe.



**TABLE 10.3A  
RADIOLOGICAL SURVEY DATA  
(RG&E SURVEY TEAMS)**

ZONE	CLOSED WINDOW AT 3 FEET (mR/hr)	CLOSED WINDOW ON CONTACT (mR/hr)	OPEN WINDOW AT 3 FEET (mR/hr)	OPEN WINDOW ON CONTACT (mR/hr)	DOSIMETRY INCREMENT EXPOSURE (mREM)	IODINE CARTRIDGE (CPM)	PARTICULATE FILTER (CPM)
A	1547	1547	2509	2509	300	2100	9700
B	724	724	1174	1174	125	1010	4300
C	323	323	524	524	50	490	2000
D	151	151	245	245	22	250	950
E	93	93	150	150	12	170	600
F	30	30	50	50	7	130	220
G	18	18	29	29	5	100	150
H	12	12	19	19	3	80	110
I	9	9	15	15	2	70	90

**NOTES:**

- 1) Dose rate readings apply to Victoreen 450 dose rate instrument or equivalent.
- 2) Dosimeter incremental exposure assumes a 15-minute stay-time in the particular zone of interest.
- 3) Air samples assume use of RADECO H-809C air sampler or equivalent. Volume assumed is approximately 150 liters (25 lpm for 6 minutes), and field reading is with HP-260.



TABLE 10.4

POST-PLUME SURVEY DATA  
(FOR PANCAKE PROBES IN CPM)

ZONE	1 METER	1 CM
A	2700	50,000
B	1300	27,000
C	570	12,000
D	270	5700
E	160	3500
F	110	2300
G	69	1500
H	49	1100
I	BKG	830

POST-PLUME SURVEY DATA  
(FOR END WINDOW PROBES IN CPM)

ZONE	1 METER	1 CM
A	1700	23,000
B	780	11,000
C	350	4900
D	160	2300
E	100	1400
F	66	920
G	BKG	590
H	BKG	420
I	BKG	330

NOTE: BKG = Use actual background reading of survey instrument being used.

TABLE 10.5

POST-PLUME SURVEY DATA  
(FOR  $\mu\text{R}$  METERS IN  $\mu\text{R}/\text{HR}$ )

ZONE	1 METER	1 CM
A	760	1300
B	350	600
C	160	270
D	74	130
E	46	77
F	BKG	BKG
G	BKG	BKG
H	BKG	BKG
I	BKG	BKG

NOTE: BKG = Use actual background reading of survey instrument being used.



SECTION 10.3

FIELD AIR SAMPLE ISOTOPIC DATA

TABLE 10.6

## GROUND DEPOSITION ISOTOPIC ACTIVITY FOR SOIL SAMPLES

ZONE	TOTAL GROUND ACTIVITY $\mu\text{Ci}/\text{M}^2$	I-131 $\mu\text{Ci}/\text{M}^2$	I-133 $\mu\text{Ci}/\text{M}^2$	CS-134 $\mu\text{Ci}/\text{M}^2$	CS-137 $\mu\text{Ci}/\text{M}^2$	BA-140 $\mu\text{Ci}/\text{M}^2$	LA-140 $\mu\text{Ci}/\text{M}^2$	SR-89 $\mu\text{Ci}/\text{M}^2$	SR-90 $\mu\text{Ci}/\text{M}^2$
A	5.84E+01	1.11E+01	2.14E+01	1.29E-02	5.94E-03	3.10E-04	3.07E-04	1.41E-05	1.29E-05
B	2.73E+01	5.20E+00	9.99E+00	6.02E-03	2.78E-03	1.45E-04	1.44E-04	6.61E-06	6.02E-06
C	1.22E+01	2.32E+00	4.47E+00	2.69E-03	1.24E-03	6.49E-05	6.43E-05	2.96E-06	2.69E-06
D	5.70E+00	1.09E+00	2.09E+00	1.26E-03	5.81E-04	3.03E-05	3.00E-05	1.38E-06	1.26E-06
E	3.51E+00	6.67E-01	1.28E+00	7.73E-04	3.57E-04	1.86E-05	1.85E-05	8.49E-07	7.73E-07
F	2.30E+00	4.38E-01	8.43E-01	5.08E-04	2.35E-04	1.22E-05	1.21E-05	5.58E-07	5.08E-07
G	1.47E+00	2.80E-01	5.38E-01	3.24E-04	1.50E-04	7.81E-06	7.74E-06	3.56E-07	3.24E-07
H	1.06E+00	2.01E-01	3.86E-01	2.33E-04	1.08E-04	5.61E-06	5.56E-06	2.56E-07	2.33E-07
I	8.33E-01	1.59E-01	3.05E-01	1.84E-04	8.48E-05	4.43E-06	4.39E-06	2.02E-07	1.84E-07

NOTE: To convert to  $\mu\text{Ci}/\text{Kg}$ , use the following factors:

<u>Soil Sample Depth</u>	<u>Conversion</u>
1 cm	$\mu\text{Ci}/\text{M}^2$ /20
2.5 cm	$\mu\text{Ci}/\text{M}^2$ /50
5 cm	$\mu\text{Ci}/\text{M}^2$ /100

TABLE 10.7A

## AIR FILTER ISOTOPIC ACTIVITY

ZONE	TOTAL PARTICULATE FILTER ACTIVITY $\mu\text{Ci/cc}$	I-131 $\mu\text{Ci/cc}$	I-132 $\mu\text{Ci/cc}$	I-133 $\mu\text{Ci/cc}$	I-134 $\mu\text{Ci/cc}$	I-135 $\mu\text{Ci/cc}$	Rb-88 $\mu\text{Ci/cc}$	Cs-134 $\mu\text{Ci/cc}$	Cs-137 $\mu\text{Ci/cc}$
A	9.06E-05	1.44E-08	3.81E-09	4.88E-08	1.15E-10	2.33E-08	5.85E-05	2.39E-10	1.10E-10
B	3.86E-05	6.15E-09	1.62E-09	2.08E-08	4.90E-11	9.92E-09	2.49E-05	1.02E-10	4.70E-11
C	1.56E-05	2.48E-09	6.56E-10	8.40E-09	1.98E-11	4.00E-09	1.01E-05	4.11E-11	1.90E-11
D	6.62E-06	1.06E-09	2.79E-10	3.57E-09	8.41E-12	1.70E-09	4.28E-06	1.74E-11	8.07E-12
E	3.82E-06	6.10E-10	1.61E-10	2.06E-09	4.85E-12	9.83E-10	2.47E-06	1.01E-11	4.66E-12
F	2.34E-06	3.73E-10	9.83E-11	1.26E-09	2.97E-12	6.01E-10	1.51E-06	6.16E-12	2.85E-12
G	1.38E-06	2.20E-10	5.79E-11	7.43E-10	1.75E-12	3.54E-10	8.90E-07	3.63E-12	1.68E-12
H	9.24E-07	1.47E-10	3.89E-11	4.98E-10	1.17E-12	2.38E-10	5.97E-07	2.43E-12	1.13E-12
I	6.98E-07	1.11E-10	2.93E-11	3.76E-10	8.85E-13	1.79E-10	4.51E-07	1.84E-12	8.50E-13

TABLE 10.7B

## IODINE CARTRIDGE ISOTOPIC ACTIVITY

ZONE	TOTAL IODINE CARTRIDGE ACTIVITY $\mu\text{Ci/cc}$	I-131 $\mu\text{Ci/cc}$	I-132 $\mu\text{Ci/cc}$	I-133 $\mu\text{Ci/cc}$	I-134 $\mu\text{Ci/cc}$	I-135 $\mu\text{Ci/cc}$
A	3.21E-05	6.88E-06	3.47E-06	1.25E-05	5.75E-07	8.62E-06
B	1.37E-05	2.93E-06	1.48E-06	5.34E-06	2.45E-07	3.67E-06
C	5.52E-06	1.18E-06	5.96E-07	2.15E-06	9.89E-08	1.48E-06
D	2.34E-06	5.03E-07	2.53E-07	9.16E-07	4.20E-08	6.30E-07
E	1.35E-06	2.90E-07	1.46E-07	5.29E-07	2.43E-08	3.64E-07
F	8.27E-07	1.77E-07	8.94E-08	3.23E-07	1.48E-08	2.22E-07
G	4.87E-07	1.05E-07	5.27E-08	1.90E-07	8.74E-09	1.31E-07
H	3.27E-07	7.02E-08	3.53E-08	1.28E-07	5.86E-09	8.80E-08
I	2.47E-07	5.30E-08	2.67E-08	9.64E-08	4.43E-09	6.64E-08

