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# PART I

# GENERAL INFORMATION

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# THE ROCHESTER GAS AND ELECTRIC CORPORATION

## GINNA STATION

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## EMERGENCY PREPAREDNESS EXERCISE MANUAL

## 1987 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

AND

ADDENDUM FOR NEW YORK STATE INGESTION PATHWAY EXERCISE

OCTOBER 1987

Prepared by:

Rochester Gas and Electric Corporation

CONTROLLED COPY NO.



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## ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

## 1987 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

AND

## ADDENDUM FOR THE NEW YORK STATE INGESTION PATHWAY 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 October 1987, unannounced, off-hours Plume Exposure Emergency Preparedness Exercise, and also the Addendum which will be used to conduct the subsequent New York State Ingestion Pathway Exercise.



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## THE ROCHESTER GAS AND ELECTRIC CORPORATION, GINNA STATION

## 1987 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE AND THE

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## NEW YORK STATE INGESTION PATHWAY EXERCISE

## INTRODUCTION

## PLUME EXPOSURE EXERCISE

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 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.

### INGESTION PATHWAY EXERCISE

The New York State Ingestion Pathway Emergency Response Plan describes the emergency response capabilities and responsibilities for a radiological emergency affecting the State, including support from Federal, State, and local government agencies and private organizations. The State Ingestion Pathway Emergency Response Plan provides for continuous emergency preparedness, including a Federally-evaluated exercise to be conducted at a minimum 6-year frequency.

The purpose of the Exercise is to activate and evaluate major portions of the emergency response capabilities and other aspects of the New York State Ingestion Pathway Emergency Response Plan and associated Implementing Procedures, in accordance with Nuclear Regulatory Commission (NRC) Regulation -10CFR50.47(b) and Appendix E, NUREG-0654 and Federal Emergency Management Agency (FEMA) Draft Guidance Memorandum IN-1. This exercise will be with the participation of State of New York, selected counties within a 50-mile radius of the R.E. Ginna Nuclear Power Plant, the Department of Energy and the Rochester Gas and Electric Corporation in order to assess overall State emergency capabilities in response to a postulated event affecting the Ingestion Pathway.







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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. <u>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.</u> 5

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 Addendum will contain information for the subsequent New York State Ingestion Pathway Exercise. The Exercise Manual is subject to a limited, controlled distribution.





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## 1987 PLUME EXPOSURE EMERGENCY PREPAREDNESS EXERCISE

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INGESTION PATHWAY EXERCISE

## SCENARIO DEVELOPMENT COMMITTEE

Wes Backus Dave Burke Robert Eliasz Gene Eng Richard Sullivan Richard Watts James Baranski Lawrence Czech Robert Bores

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SECTION 1.0

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# SCOPE AND OBJECTIVES





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## 1.0 SCOPE AND ON-SITE OBJECTIVES - PLUME EXPOSURE PATHWAY

## 1.1 Scope

The 1987 Full Scale Emergency Preparedness Plume Exposure Pathway Exercise, to be conducted in October during off hours and unannounced, will simulate accident events culminating in a radiological accident with resultant off-site releases from the Ginna Station (GS), located in Ontario, Wayne County, New York. The Exercise will involve events that test the effectiveness of the Ginna Station Emergency Preparedness Program and the integrated capabilities of the emergency organizations of the State of New York, and the Counties of Wayne and Monroe. The Exercise will include the limited mobilization of state and local resources adequate to verify their capability to respond to an accident.

In addition to evaluating on-site activities, the U.S. Nuclear Regulatory Commission will participate in the Exercise co-locating personnel in the various licensee Emergency Response Facilities. The Federal Emergency Management Agency will evaluate off-site activities.

The exercise objectives are provided as separate sections, divided into the objectives for the Plant` (Section 1.2) and those of each state/local agency (Section 1.3). A summary of proposed activities is delineated in Section 1.4, following the attachments.

Preliminary On-Site Objectives for the 1987 Ginna Evaluated Plume Exposure Pathway Exercise

The major objective of the exercise is to demonstrate the response capabilities of the Rochester Gas and Electric Emergency Response 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.



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- 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 appropriate equipment and procedures for measurement of airborne radioiodine concentrations as low as 1.0 E-7 uCi/cc in the presence of noble gases.
- 1.2.9 Demonstrate the 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 Protective Action Guidelines, available shelter, evacuation time estimates, expected release duration, and other appropriate factors.
- 1.2.11 Demonstrate the ability to notify off-site officials and agencies within 15 minutes of declaration of an emergency.
- 1.2.12 Demonstrate the ability to periodically update off-site officials and agencies of the status of the emergency based on data available at GS.
- 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 on-site 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 protected area.

1.2.17 Demonstrate the organizational ability and resources necessary to manage an orderly evacuation of protected area personnel.







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- 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 advance 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 analysis.
- 1.2.25 Demonstrate the ability to develop proposed short term and long term actions to support plant recovery.
- 1.2.26 Demonstrate the adequacy of Fire-Fighting practices and procedures.
- 1.2.27 Demonstrate the adequacy of corrective measures taken to remedy the areas identified for improvement at the conclusion of previous exercise (Inspection No.50-244/-86-13).
  - 1.3 Summary of Proposed Activities

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

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# TABLE 1.1

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RG&E

Notification of Agencies	Actual
Call up of Personnel	Actual
Activate Organization	Actual
Maintain Security	Actual
Conduct Dose Assessment	Actual
PAG Recommendation	Actual
Operate Joint News Center	Actual
EPZ Siren Activation	N/A
Route Alerting	N/A
EBS Message Broadcast	N/A
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







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Simulations

- o Respiratory protection and protective clothing will be simulated by onsite/offsite survey teams. Inplant teams will don such protection at the Controller's discretion.
- o Call out of offsite fire companies will be simulated.
- o Acceleragraph film retrieved and development will be simulated. Notification of offsite film processor will be made.



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# 2.0 SCOPE AND ON-SITE OBJECTIVES - INGESTION PATHWAY

2.1

In addition to the Plume Exposure Pathway Exercise, an Ingestion Pathway Exercise will be conducted during normal working hours on the second day following the Plume Exposure Pathway Exercise.

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New York State Radiological Emergency Preparedness Group will have the lead in coordinating the activation of local, State, and Federal agencies as appropriate to demonstrate the effectiveness of the New York State Emergency Preparedness Program.

All such activities will be evaluated by the Federal Emergency Management Agency.

- 2.2 <u>Preliminary On-Site Objectives (EOF)</u>
- 2.2.1 Demonstrate ability to deploy and coordinate environmental sampling teams (0-10 miles). <u>Teams will be</u> <u>simulated.</u>
- 2.2.2 Demonstrate ability to evaluate laboratory data and/or field measurements and provide appropriate PAR'S and interface to New York State.
- 2.2.3 Provide interface with New York State Post-Accident Assessment and in Public Information functions as needed.
- 3.0 OFFSITE OBJECTIVES AND PROPOSED ACTIVITIES
- 3.1 The off-site agencies' objectives and Proposed Activities are found as follows:

Agency	Attachment
State of New York	А
Monroe County	A
Wayne County .	А

The off-site exercise objectives are written in reference to the FEMA Example Exercise Objectives.





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## . Summary of Proposed Activities

Attachment A also lists a summary of proposed activities for the 1987 Ginna Emergency Preparedness Exercise. The listing describes, by organization, if an activity is to actually be accomplished or is to be simulated. A blank space denotes that the activity does not apply that particular agency.



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ATTACHMENT A

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STATE OF NEW YORK

MONROE COUNTY AND WAYNE COUNTY

FINAL OBJECTIVES

OCTOBER, 1987





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## PROPOSED EXERCISE OBJECTIVES FOR THE 1987 GINNA EXERCISE Rev. 8/26/87

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New York State

## State Emergency Operations Center (SEOC)

SEOC -1 Demonstrate the ability to communicate with all (CO. -5) appropriate locations, organizations, and field support.

> <u>Guidelines</u>: State, counties and the utility should establish appropriate communication links. Systems include RECS line, executive hot-line and commercial lines, RACES, radios and telefax. The RECS line will be used as the primary system to receive information from the licensee. Also, the ability to receive and verify the initial and follow-up emergency notification from the licensee will be observed. (No simulated failures are to be evaluated. Back-up systems are to be used in the event of actual failure of the primary systems.

SEOC -2 Demonstrate the ability to mobilize staff and activate (CO -1) the State EOC in a timely manner.

<u>Guidelines:</u> Proper use of call-up procedures, and timely arrival of staff and setting up of EOC.

SEOC -3 Demonstrate the adequacy of facilities and displays to (CO -4) support emergency operations.

<u>Guidelines:</u> Ensure measures are in place to control access to EOC areas; identification badges are verified; ingress and egress logs are maintained. Messages are transmitted in an accurate and timely manner, messages are to be properly logged, status boards are accurately maintained and updated, appropriate briefings are held and incoming personnel are briefed. Sufficient equipment (e.g., furniture, space, lighting, telephones and status boards) should be available.



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SEOC -4 Demonstrate the ability to make decisions and to (CO -3) coordinate emergency activities.

<u>Guidelines:</u> Individual acting in command & control for decision making must be clearly in charge, taking into account all critical parameter (e.g., evacuation time estimates, available resources, met data, etc.).

SEOC -5 Demonstrate the ability to fully staff facilities and (CO -2) maintain staffing around the clock.

<u>Guidelines:</u> An actual shift change involving all key staff must be observed. The shift change must show 24 hour coverage. Agencies that have demonstrated 24 hour coverage in previous exercises will be given credit for meeting this objective.

SEOC -6 Demonstrate the ability to identify the need for, (CO -32) request and obtain Federal assistance.

<u>Guidelines:</u> This issue will be evaluated as a command and control function. The decision maker will be asked about the circumstance under which he would request Federal assistance.

SEOC -7 Demonstrate the ability to project dosage to the public (CO -10) via the plume exposure, based on plant and field data, and to determine appropriate protective actions based on PAG's, available shelter, evacuation time estimates, and all other appropriate factors.

> <u>Guidelines:</u> Dose assessment and accident evaluation personnel will provide recommendations to the decision maker based upon utility recommendations, independent recommendations from accident assessment group and off-site factors. Command and control will make decision based on inputs from the various sources. all factors will be carefully analyzed before a decision is made.

SEOC -8 Demonstrate the ability to provide advance (CO -25) coordination of information released.

<u>Guidelines:</u> Coordinate among NYS and 2 counties for the decision to simulate the activation of the sirens and the subsequent activation of the EBS.





SEOC -4



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SEOC -9 Demonstrate the ability to supply and administer KI, if (CO -22) the decision has been made to do so.

> The decision making process for KI will Guidelines: discussed after the release occurs. In the event the scenario <u>does not</u> yield a significant iodine release that warrants KI usage, emergency workers should know who will direct them to take KI.

SEOC Demonstrate the ability to make decisions and to ING -1 coordinate emergency activities within the ingestion (CO - 3)pathway exposure emergency planning zone.

> Command and control decisions based on Guidelines: inputs from various sources. all factors will be carefully analyzed before a decision is made.

SEOC Demonstrate the ability to communicate with all

ING -2 (CO -5)

appropriate locations, organizations, and field personnel; special emphasis will be on communications between field monitoring and sampling teams and their control points.

> Guidelines: Communications include radio, telefax and commercial lines.

SEOC Demonstrate the ability to project dosage to the ING -3 public via ingestion pathway exposure, based on utility (CO -11) and field data and to determine appropriate protective actions, based on the PAG's and other relevant factors

> Guidelines: Dose assessment and accident evaluation personnel will provide these recommendations to decision makers

Demonstrate the ability to implement preventive and SEOC ING -4 emergency protective actions for the ingestion (CO -12) exposure pathway hazards.

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Command and Control will Guidelines: analyze situation including staff input and issue a decision to the respective agencies for implementation.





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SEOC ING -5 (CO. -6) Demonstrate the ability to mobilize and deploy sample collection teams in an timely fashion.

<u>Guidelines:</u> 5 State ingestion team members will be notified during the inhalation portion of the exercise and then pre-positioned at one of the appropriate SEMO district office at the beginning of the ingestion phase. Equipment checkout, team briefings and the current status and dispatching to field monitoring sample points will be conducted.

The 5 teams will actually be deployed in the 50 mile EPZ. Dose assessment will be done solely with State input. Other State agency teams may simulate activity. Brookhaven National Laboratory/DOE will assist per the Federal Monitoring and Assessment Plan.

SEOC ING -6

Demonstrate appropriate equipment and procedures for laboratory measurement and analysis of approporiate radioisotope deposition in food and environmental samples.

<u>Guidelines:</u> Selected field samples will be delivered to the DOH labs, Albany. The lab techniques will not be evaluated. Data for the samples will be provided by a controller to the appropriate exercise participants. Upon arrival at the lab, sorting, diluting and labeling of samples, procedures for preventing laboratory contamination and cross contamination and some sample preparation will be evaluated. Laboratory analytical capabilities will be documented by the NRC and provided to FEMA.

Demonstrate the ability to estimate total population exposure.

<u>Guidelines:</u> The methodology and consultative processes used to determine total population exposure will be evaluated. Actual calculations for determining population exposures will not be evaluated.

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SEOC ING-7 (CO-34)

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SEOC ING-8 JNC-1 (CO-14)

Demonstrate the ability to formulate and distribute appropriate instructions to the public in a timely manner.

<u>Guideline:</u> The only portion of information that will be operational will be the State function responsible for the distribution of information to the public. This objective will be demonstrated out of the SEOC for the purpose of this exercise. No rumor control, media response nor issuance of EBS will be evaluated, however, the capability for these will be observed.

## Western District Emergency Operating Center (WDEOC)

WDEOC-1 Demonstrate the ability to mobilize staff and activate (CO-1) the WDEOC in a timely manner.

<u>Guideline:</u> Proper use of the call-up procedures and timely arrival of staff and setting-up of EOC.

WDEOC-2 Demonstrate the adequacy of facilities and displays (CO -4) to support emergency operations.

<u>Guidelines:</u> Ensure measures are in place to control access to EOC areas; identification badges are verified; ingress and egress logs are maintained. Messages are transmitted in an accurate and timely manner, messages are properly logged, status boards are accurately maintained and updated, appropriate briefings are held and incoming personnel are briefed. Sufficient equipment (e.g., furniture, space, lighting, telephones and status boards) should be available.

WDEOC-3 Demonstrate the ability to make decisions and to (CO-3) coordinate emergency activities.

<u>Guideline:</u> Individual acting in & control for assisiting in implementing State EOC activities must be in charge.

WDEOC-4 Demonstrate the ability to communicate with all (CO-5) appropriate locations, organizations, and field personnel.

> <u>Guideline:</u> Communications include RECS line, and commercial lines. (Note: No simulated failures are to be evaluated. Back-up systems are to be used in the event actual failure of the primary system).

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WDEOC-5 Demonstrate the ability to fully staff facilities (CO-2) and maintain staffing around the clock.

<u>Guideline:</u> Same as SEOC-5, (CO-2).

Lake District Emergency Operating Center LDEOC

LDEOC-1 Demonstrate the ability to mobilize staff and activate (CO-1) the LDEOC in a timely manner.

<u>Guideline:</u> Proper use of the call-up procedures and timely arrival of staff and setting-up of EOC. 25

LDEOC-2 Demonstrate the adequacy of facilities and displays (CO-4) to support emergency operations.

<u>Guidelines:</u> Ensure measures are in place to control access to EOC areas; identification badges are verified; ingress and egress logs are maintained. Messages are transmitted in an accurate and timely manner, messages are properly logged, status boards are accurately maintained and updated, appropriate briefings are held and incoming personnel are briefed. Sufficient equipment (e.g., furniture, space, lighting, telephones and status boards) should be available.

LDEOC-3 Demonstrate the ability to make decisions and to (CO-3) coordinate emergency activities.

<u>Guideline:</u>See WDEOC-3, (CO-4).

LDEOC-4 Demonstrate the ability to communicate with all (CO-5) appropriate locations, organizations, and field personnel.

> <u>Guideline:</u> Communications include RECS line, executive command line, and commercial lines. (Note: No simulated failures are to be evaluated. Back-up systems are to be used in the event of actual failure of primary systems). If appropriate, capability for receiving field measurement data from sampling teams will be evaluated.

LDEOC ING-2 (CO-5)

Demonstrate the ability to communicate with all
appropriate locations, organizations and field
personnel.

<u>Guideline:</u> Communication with field sampling team will be by use of radio.



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LDEOC-5 Demonstrate the ability to mobilize and deploy sample ING -5 collection teams in a timely fashion. (CO -6)

> <u>Guidelines:</u> 5 State ingestion team members will be notified and pre-positioned at the district office. Equipment checkout, team briefing and the current status and dispatching to field monitoring sample points will be conducted.

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LDEOC-6 Demonstrate the ability to fully staff facilities (CO-2) and maintain staffing around the clock.

<u>Guideline:</u> Same as SEOC -5, (CO-2)

LDFA-1 Demonstrate appropriate equipment including personal (CO-9) dosimetry and procedures for the collection and ING transport of samples of soils, vegetation, snow, water and milk.

> <u>Guideline:</u> Selected samples will be delivered to DOH lab, Albany, from the area of potential impact. protective clothing will not be worn for the duration of the ingestion pathway exercise. supplies of protective clothing, including hand and foot covering can be worn for evaluation, then removed.

Emergency Operating Facility (EOF)

EOF-1 Demonstrate the ability to mobilize staff and activate (CO-1) State functions at the EOF in a timely manner.

- <u>Guideline:</u> The State representative <u>will</u> <u>not</u> be prepositioned. State representative will demonstrate an appropriate arrival time, at the Alert ECL. Local State EOF repesentative will activate in accordance with procedures.
- EOF-2 Demonstrate the ability to communicate with all (CO-5) appropriate locations, organizations, and field personnel.
  - <u>Guideline:</u> Communications include RECS line, RACES, radios, telefax, and commercial lines. (Note: No simulated failures are to be evaluated. Back-up systems are to be used in the event of actual failure of the primary systems). Commercial telephone lines will be the primary system



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EOF-3 Demonstrate the adequacy of facilities and displays to (CO-4) support emergency operations

<u>Guidelines:</u> Same as SEOC -3, (CO-4).

EOF-4 (CO-2)

Demonstrate the ability to fully staff facilities and ) and maintain staffing around the clock.

<u>Guideline:</u> 24 hour capability will be shown by roster.

## Monroe County

Emergency Operating Center (EOC)

MEOC-1 Demonstrate the ability to communicate with all (CO\_5) appropriate locations, organizations, and field personnel.

> <u>Guidelines:</u> Communications include RECS line, executive command line, Races, radios,telefax and commercial lines. The RECS line will be used to receive information from the licensee. The commercial telephone will be used as a backup. The County will also communicate with the U.S. Coast Guard and the Ontario-Midland Railroad. (Note: no simulated failures are to be evaluated).

MEOC-2 Demonstrate the ability to mobilize staff and activate (CO-1) facilities promptly.

<u>Guidelines:</u> Proper use of call-up procedures, and timely arrival of staff and setting up of the EOC. Albany based staff will arrive at the Alert ECL.

MEOC-3 Demonstrate the adequacy of facilities and displays to (CO-4) support emergency operations

<u>Guidelines:</u> Ensure measures are in place to control access to EOC areas; identification badges are verified; ingress and egress logs are maintained. Messages are transmitted in an accurate and timely manner, messages are properly logged, status boards are accurately maintained and updated, appropriate briefings are held and incoming personnel are briefed. Sufficient equipment (e.g., furniture, space, lighting, telephones and status boards) should be available.

MEOC-4 Demonstrate the ability to make decisions and to (CO-3) coordinate emergency activities.

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Individual acting in command and control Guidelines: for decision making must be clearly in charge taking into account all critical parameters (e.g., evacuation time estimates, available resources, met data, etc.).

Demonstrate the ability to fully staff the facility MEOC-5 and maintain staffing around the clock. (CO-2)

> Guideline: 24 hour capability can be shown by roster

MEOC-6

Demonstrate the ability to project radiation dosage to the public via plume exposure, based on plant data and (CO-10)and field data, and to determine appropriate protective measures, based on PAGs available shelter, evacuation time estimates, and other appropriate factors.

> Guideline: Dose assessment and accident evaluation personnel will provide these recommendations to decision makers.

Demonstrate the ability to alert the public within the MEOC-7 (CO-13)10-mile EPZ, and disseminate an instructional message, within 15 minutes.

> <u>Guidelines:</u> Coordination of public alerting and the prompt alert notification system with Wayne County and New York State. The EBS will be activated and each County will simulate activation of the sirens.

MEOC-8 Demonstrate the organizational ability and resources (CO - 15)necessary to manage an orderly evacuation of all or part of the 10 mile EPZ.

> <u>Guideline:</u> Command and Control will analyze the situation including staff input and issue a decision to the respective agencies for implementation.

MEOC-9 (CO-16)

Demonstrate the organizational ability to deal with impediments to evacuation, such as inclement weather or traffic obstruction. Resources will actually be deployed.

> <u>Guideline:</u> Command and Control will analyze situation including staff input and issue a decision to the respective agencies for implementation.

Demonstrate the organizational ability necessary to MEOC-10 (CO-17) control access to an evacuated area.

<u>Guideline:</u> No resources will be deployed.







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MEOC-11 Demonstrate the ability to identify the need for, (CO-32) request and obtain State assistance(if warranted).

<u>Guideline:</u> This ability will be demonstrated if the County should determine that this ac tion is necessary.

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FIELD ACTIVITY

MCFA-1 Demonstrate the ability to continuously monitor and (CO-20) control emergency worker exposure

<u>Guidelines:</u> Emergency workers should have high range and low range dosimeters, TLD's, know reporting exposure limits to supervisors and the proper use of dosimeters. Emergency workers are knowledgeable on procedures and systems for obtaining permission to exceed limits as defined by respective county plans. This guideline will also include State emergency workers.

MCFA-2 Demonstrate the ability to mobilize and deploy field (CO-6) monitoring teams in a timely manner.

> <u>Guideline:</u> Proper use of the call out system, equipment checkout, team briefing on current status and dispatching to radiological field monitoring sample points.

MCFA-3 Demonstrate appropriate equipment and procedures for (CO-7) determining ambient radiation levels.

<u>Guidelines:</u> Teams members shall set-up and operate the instruments correctly including recording of data and reporting of data to the EOC.

MCFA-4 Demonstrate appropriate equipment and procedures for (CO-8) measurement of airborne radioiodine concentrations as low as 10-7 uCi/CC in the presence of noble gas.

> <u>Guidelines:</u> Teams shall set-up equipment and collect an air sample, read the sample and record the data, and transmit the data to the EOC.

MCFA-5 Demonstrate the ability to provide backup public (CO-13) alerting procedures, If necessary, in the event of partial siren system failure.

<u>Guidelines:</u> This activity is to simulated. The police will be notified but not deployed. Dioscussion will take place at the EOC





MCFA-6 Demonstrate that information on emergency actions has (CO-14) has been provided to permanent and transient population within the 10 mile EPZ.

> <u>Guidelines:</u> Brochure distribution documentation from NYS to FEMA will meet this objective. Additionally, the annual certification will serve to verify that information has been distributed.

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MCFA-7 (CO-17) Demonstrate the organizational ability and resources necessary to estasblish a traffic control point.

<u>Guidelines:</u> Traffic control point will be set up and observed.

MCFA-8 Demonstrate the ability to supply and administer KI, (CO-21) if the decision has been made to do so.

> <u>Guidelines:</u> The decision making process for KI usage will be discussed after the release occurs. Emergency workers should know who will direct them to take KI.

MCFA-9 Demonstrate the organizational ability and resources (CO-15) necessary to manage an orderly evacuation of all or part of the plume EPZ.

> <u>Guidelines:</u> Messages will be inserted at the County EOC to the Command and Control. Information will be passed to the appropriate agency for action and dispatching of one (1) bus run.

MCFA-10 Demonstrate a sample of resources necessary to deal (CO-16) with impediments to evacuation, as inclement weather or traffic obstruction.

<u>Guidelines:</u> Appropriate resources are dispatched to scene.

MCFA-11 Demonstrate the adequacy of procedures for registration (CO-27) and radiological monitoring of evacuees over a 24 hour period.

> <u>Guidelines:</u> Within a twelve (12) hour period, there should be enough personnel and equipment capable of monitoring <u>all</u> residents and transients in the plume exposure EPZ arriving at the reception center. A center not utilized in previous exercises should be used for this exercise. This will be set up out of sequence with the exercise.



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MCFA-12 Demonstrate the adequacy of facilities for mass care of (CO-28) evacuees.

<u>Guidelines:</u> At least three ARC staff will arrive and function as shelter managers, registrar and staff members. Once the ARC is told how many people to expect, they should have access to personnel to cover the initial 24 hour operation, explain support agreement and have floor plans for set up of the center. This will be set up out of sequence with the exercise.

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MCFA-13 Demonstrate adequate procedure and equipment for disposal of contaminated waste (e.g., clothing).

MCFA-14 Demonstrate the organizational ability and resources (CO-19) necessary to effect an orderly evacuation of schoos within the plume EPZ.

> Observer will go to the bus garage, contact dispatcher, ride bus (van) to the school and then to school reception center. Bus drivers knowledge of dosimetry will be observed.

Wayne County

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Emergency Operating Center (EOC)

WEOC-1 Demonstrate the ability to communicate with all (CO-5) appropriate locations, organizations, and field personnel.

<u>Guidelines:</u> See MEOC-1, (CO-5)

WEOC-2 Demonstrate the ability to mobilize staff and activate (CO-1) facilities promptly.

<u>Guidelines:</u> See MEOC-2, (CO-1)

WEOC-3 Demonstrate the adequacy of facilities and displays to (CO-4) support emergency operations.

<u>Guidelines:</u> See MEOC-3, (CO-4)

WEOC-4 Demonstrate the ability to make decisions and to (CO-3) coordinate emergency activities.

<u>Guidelines:</u> See MEOC-4, (CO-3)

WEOC-5 Demonstrate the ability to fully staff the facility (CO-2) and maintain staffing around the clock.

<u>Guideline:</u> See MEOC-5, (CO-2)



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WEOC-6 Demonstrate the ability to project radiation dosage to the public via the plume exposure, based on plant (CO-10)data and field data, and to determine appropriate protective measures, based on PAGs, available shelter, evacuation time estimates, and other appropriate factors.

Guideline: See MEOC-6, (CO-10)

WEOC-7 Demonstrate the ability to alert the public within the 10-mile EPZ , and disseminate an instructional message (CO-13 within 15 minutes.

> Guideline: Coordination of the public alerting and the prompt alert notification system with Monroe County and The EBS will be activated and each New York State. County will simulate activation of the sirens.

WEOC-8 Demonstrate the organizational ability and resources (CO - 15)necessary to manage an orderly evacuation of all or part of the 10-mile EPZ.

<u>Guideline:</u> See MEOC-8, (CO-15)

WEOC-9 Demonstrate the organizational ability to deal with (CO - 16)impediments to evacuation, such as inclement weather or traffic obstruction.

Guideline: This activity will be simulated.

WEOC-10 Demonstrate the organizational ability necessary to control access to an evacuated area. (CO - 17)

Guideline: See WEOC-9

WEOC-11 Demonstrate the ability to identify the need for, (CO-32)request and obtain State assistance (if warranted).

Guideline: See MEOC-12, (CO-32)

Demonstrate the ability to effect an orderly evacuation WEOC-12 (CO-23)of onsite personnel.

> <u>Guidelines:</u> Coordination with NFO of evacuees, per the plan, is to be observed.

FIELD ACTIVITY

WCFA-1 Demonstrate the ability to continuously monitor and (CO-20)control emergency worker exposure.

> See MCFA-1, (CO-20) <u>Guidelines:</u>





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<u>Guidelines:</u> See MCFA-2, (CO-6)

WCFA-3 Demonstrate appropriate equipment and procedures for (CO-7) determining ambient radiation levels.

Guidelines: See MCFA-3, (CO-7)

WCFA-4 Demonstrate appropriate equipment and procedures for (CO-8) measurement of airborne radioiodine concentrations as low as 10-7 uCi/CC in the presence of noble gas.

<u>Guidelines:</u> See MCFA-4, (CO-8)

WCFA-5 Demonstrate the ability to provide backup public (CO-13) alerting procedures, if necessary, in the event of a partial siren system failure.

> Guideline: The route alert drivers; members of the Ontario Fire Department, will be interviewed at their point of route deployment about alerting Updated maps will procedures. be observed, adequacy of the number of vehicles KI and also knowledge of procedures and exposure control will be ascertained.

WCFA-6 Demonstrate the ability to formulate and distribute (CO-14) appropriate instructions to the public in a timely fashion.

<u>Guidelines:</u> See MCFA-6, (CO-14)

WCFA-7 Demonstrate the organizational ability and resources (CO-17) necessary to control access to an evacuated area.

<u>Guidelines:</u> This is to be simulated.

WCFA-8 Demonstrate the ability to supply and administer KI, (CO-21) if the decision has been made to do so.

<u>Guideline:</u> See MCFA-8, (CO-21)

WCFA-9 Demonstrate the organizational ability and resources (CO-15) necessary to manage an orderly evacuation of all or part of the plume EPZ.

<u>Guideline:</u> See MCFA-9, (CO-15)



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WCFA-10 Demonstrate a sample of resources necessary to deal (CO-16) with impediments to evacuation, as inclement weather or traffic obstruction. 34

Guideline: This activity will be simulated.

- WCFA-11 Demonstrate the adequacy of procedures for registration (CO-27) and radiological monitoring of evacuees over a 24 hour period.
  - Guidelines: See MCFA-11, (CO-27)

WCFA-12 Demonstrate the adequacy of facilities for mass care of (CO-28) evacuees.

<u>Guidelines:</u> See MCFA-12, (CO-12)

- WCFA-13 Demonstrate adequate procedure and equipment for disposal of contaminated waste (e.g., clothing).
- WCFA-14 Demonstrate adequate equipment and procedures for (CO-29) decontamination of emergency workers, equipment and vehicles.

<u>Guidelines:</u> Procedures for disposal of liquid waste should be demonstrated.

WCFA-15 Demonstrate the organizational ability and resources (CO-19) necessary to effect an orderly evacuation of schools within the plume EPZ.

<u>Guidelines:</u> See MCFA 14

Joint News Center

JNC-1 Demonstrate the ability to mobilize staff and activate (CO-1) the facility promptly.

<u>Guidelines:</u> The County staff will respond in accordance with their notification procedures. The State PIO will demonstrate an appropriate arrival time, at the Alert ECL.

JNC-2 Demonstrate the ability to brief the media in a clear, (CO-24) accurate, and timely manner.

> <u>Guideline:</u> Assure that all necessary information is presented to the media in press releases in a timely manner. All required personnel will be present at the briefings unless EBS messages or news release preparation is determined by respective PIO to take priority.



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JNC-3 Demonstrate the ability to communicate with all (CO-5) appropriate locations, organizations and field personnel.

> <u>Guidelines:</u> Coordination among personnel to ensure information for release is known to all Counties, State and participating licensee (i.e., "sign off procedures").

JNC-4 Demonstrate the ability to establish and operate (CO-26) rumor control in a coordinated fashion.

<u>Guideline:</u> The State, Counties, and licensee will respond accurately to incoming calls based on scenario information.

JNC-5 Demonstrate the ability to fully staff facilities (CO-2) and maintain staffing around the clock.

> <u>Guideline:</u> 24 hour staffing is to be provided via shift change. NYS will demonstrate 24 hour coverage via roster.

JNC-6 Demonstrate the adequacy of facilities and displays (CO-4) to support emergency operations.

<u>Guideline:</u> This activity will be part of the utility's evaluation and will not appear in the off.site evaluation

JNC-7 Demonstrate the ability to alert the public within the (CO-13) 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.

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<u>Guidelines:</u> The initial simulated alert signal and the (test) instructional message issued via the Emergency Broadcast System must be <u>aired</u> within 15 minutes after the authorized public officials reach a decision which requires activating the alert and notification system. Subsequent messages must be read in 15 minutes after the decision to do so has been made (i.e., this will have been met if the first two words of the message are read into the telephone at the JNC prior to the end of the 15 minutes. (i.e. the first two words have been read into the telephone at the JNC.



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JNC-8

Demonstrate the ability to formulate and distribute appropriate instruction to the public in a timely manner.

<u>Guideline</u>: Information and recommendations shall be prepared and provided to the public in a manner consistent with the needs for public response. This may be accomplished through EBS messages, news releases, newspapers ,telephone and/or radio and television.



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# TABLE 1.1

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# <u>1987 GINNA STATION EMERGENCY PREPAREDNESS EXERCISE</u> PROPOSED ACTIVITIES

NRC	RG&E	NYS	MONROE WAYNE COUNTY COUNTY
<u></u>			
Notification of Agencies	Actual	Actual	Actual Actual
Call up of Personnel	Actual	Actual	Actual Actual
Activate Organization	Actual	Actual	Actual Actual
Maintain Security	Actual	Actual	Actual Actual
Conduct Dose Assessment	Actual	Actual	Actual Actual
PAG Recommendation	Actual	Actual	Actual Actual
Operate Joint News Center	Actual	Actual	Actual Actual
EPZ Siren Activation Simulate**	N/A	Simulate**	Simulate**
Route Alerting Actual(1)	N/A	N/A	Actual(1)
EBS Message Broadcast Simulate**	N/A	Simulate**	Simulate**
Dispatch Field Survey Teams Actual(2)	Actual-S	N/A	Actual(2)
Exchange of Field Data	Actual	Actual	Actual Actual
Reception Center Setup Actual(1)*	N/A	N/A	Actual(1)*
Congregate Care Center Actual(1)*	N/A	N/A	Actual(1)*
School Bus Run Simulate	N/A	N/A	Simulate
General Population Actual(1)+	N/A	N/A	Simulate(1)
Traffic Control Points Simulate	N/A	N/A	Actual(1)
Road Impediments Simulate	N/A	N/A	Actual(1)



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SECTION 2.0

# EXERCISE INFORMATION

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#### 2.0 EXERCISE INFORMATION

#### 2.1 Exercise Participants

The participants in the Exercise will include the following:

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- 2.1.1 The Rochester Gas and Electric Corporation
  - 1. Facilities Management and Support Personnel
    - a. Control Room
    - b. Technical Support Center (TSC)
    - c. Operations Support Center (OSC)
    - d. Emergency Survey Center
    - e. Emergency Operations Facility (EOF)
    - f. Joint Emergency News Center (JENC)
    - g. Engineering Support Center (ESC)
  - 2. Emergency Response Teams
    - a. Radiation Survey Teams (RSTs)
    - b. First Aid Team (if necessary)
    - c. Emergency OSC Teams
    - d. Security Force
    - e. Post Accident Sampling System (PASS) Team
    - f. Chemistry/Health Physics Support
    - g. Fire Brigade (if necessary)

#### 2.1.2 Off-Site Agencies/Organizations

Limited participation of the following Agencies/ Organizations is expected:

- 1. Federal
  - a. Nuclear Regulatory Commission (NRC)
  - b. United States Coast Guard (USCG)
  - c. Federal Emergency Management Agency (FEMA)
- 2. State
  - a. New York State Emergency Management Offices
  - b. New York State Radiological Emergency Preparedness Group
- 3. Local
  - a. Wayne County
  - b. Monroe County



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#### 2.2 Exercise Organization

The organization for this Exercise will consist of the Exercise Coordinator, the Controllers, the Players, and the Observers, as follows: 40

#### 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

<u>Controllers</u> are qualified personnel selected to perform functions as follows:

- 1. 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.
- 2. The Controllers will deliver "Exercise Messages" to 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.





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3. 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 and 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. 11

<u>Controllers will be identified by wearing green arm</u> bands with white lettering stating "Controller."

- 2.2.3 <u>Players</u> 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 off-site organizations and agencies (county, State, and private industry) are participants in the Exercise as described in their respective Emergency Plans and Standard Operating Procedures.
- 2.2.4 <u>Observers</u> from The Rochester Gas and Electric Corporation and other organizations may be assigned to participate in the Exercise solely for the purpose of observing/evaluating Exercise activity. They will be provided with orientation information and appropriate exercise publications.

Observers will be identified by wearing maroon arm bands with white lettering. Federal agency observers will be identified by wearing blue arm bands with white lettering stating "NRC".

<u>Visitors</u> 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. <u>Visitors</u> will be identified by wearing white arm bands with black lettering stating "Visitor". They will be provided with orientation information and appropriate exercise publications.



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

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#### 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:

#### 1. Control Room

The Ginna Station 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 Superintendent or alternate. The Control Room is located off the Turbine Building on the Operating floor.

#### 2. 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 (see Figure 2.2). The Plant Superintendent 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 off-site agencies, and will perform other functions of the EOF until the EOF is activated.







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# 3. Operations Support Center (OSC)

The OSC, 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. 43

### 4. Emergency Operations Facility (EOF)

The EOF, 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 Emergency Coordinator reports to the EOF/Recovery Manager. The EOF is the command post for coordination of response measures with off-site 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.

## 5. Joint Emergency News Center (JENC)

The JENC 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 a Site Area Emergency or General Emergency (optional for the Alert status).

#### 2.4 Exercise Conduct

#### 2.4.1 <u>Overview</u>

The Exercise will simulate an abnormal radiological incident at the 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 off-site emergency response organizations/ agencies. The Exercise will also simulate an off-site radiological release which will require deployment of Ginna Station, and Wayne and Monroe County radiological survey teams for off-site monitoring.



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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. The Recovery Phase will be initiated, and the Exercise will then be terminated.

### 2.4.2 <u>Actions</u>

Emergency response actions during the simulated emergency will include: recognition and classification of emergency conditions; assessment of on-site/ off-site 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 <u>Communications</u>

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.

#### 2.4.4 <u>Controllers</u>

Lead Controllers will be stationed in the <u>Control</u> <u>Room</u>, <u>OSC</u>, <u>TSC</u>, <u>EOF</u>, <u>JENC</u>, and <u>County</u> <u>EOCs</u>. Only Lead Controllers can modify exercise messages or initiate free play messages.

1. The 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 Control Room operators using plant data and status sheets. 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 messages as written. If corrective actions



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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 off-site agencies will be made in accordance with the Emergency Plan Implementing Procedures.

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The TSC will be the coordination point for on-site emergency response activities. TSC personnel will also coordinate off-site 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 off-site organizations are to be exercised, it may be necessary to postulate noncredible situations. This is done to ensure that various aspects of the on-site and off-site emergency response organizations are tested. TSC and EOF personnel will accept exercise messages as written. 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 Controllers.

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 off-site agencies should be made in accordance with the Emergency Plan Implementing Procedures. The Scenario is designed to activate on-site and off-site emergency response capabilities.

The Lead Controllers 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

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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. 46

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 acci-Additionally, the Exercise is a training vehicle dent. 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.

#### 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. <u>Should at any time during the course of the conduct of</u> <u>this exercise, an actual emergency situation arise, all</u> <u>activities and communications related to the Exercise</u> <u>will be suspended.</u> 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.



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- 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 them 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 <u>exercise.</u>" 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 including posted speed limits, stop lights/signs, one way streets, etc.
- H. Should any on-site 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.



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- 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.

#### 2.6 <u>Evaluation and Critique</u>

The Exercise will be evaluated by Controllers/Observers who have expertise in, or qualification 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, the 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.



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SECTION 3.0

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TRAVEL INFORMATION



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### 3.0 TRAVEL INFORMATION

This section of the 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 exercise.

Permission for Visitors to observe the Exercise must be obtained from the Corporate Emergency Planner, Rochester Gas and Electric Corporation, 89 East Avenue, Rochester, New York 14649-0001.

### 3.1 <u>Directions to the Ginna Nuclear Station</u>

The 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 <u>Air</u>

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

- 3.1.2 Car
  - 1. Several car rental agencies are available at the Rochester-Monroe County International Airport to provide rental vehicles for ground transportation to the Ginna Station.
  - 2. Persons traveling from the Rochester-Monroe County International Airport via auto should take State Highway 204 East to Interstate 390 South. Interstate 390 becomes Interstate 590 as one proceeds around the outer loop. Follow I-590 to State Highway 590 to State Highway 104 East. Follow State Highway 104 to State Highway 350 (Ontario-Center Road). Turn left (North) and proceed to the Ginna Station. Total distance is approximately 40 miles.

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

#### 3.2.1 <u>Air</u>

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.



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# 3.2.2 <u>Car</u>

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

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

### 3.3 Accommodations

Hotel/motel accomodations 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





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SECTION 4.0

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# REFERENCES/ABBREVIATIONS - ACRONYMS



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4.1 REFERENCES

4.1.1 10CFR 50.47, 50.54, Appendix E

**4.1.2** 44CFR 350.9

4.1.3 NUREG-0654/FEMA-REP-1, Rev. 1, <u>Criteria for Preparation and</u> <u>Evaluation of Radiological Emergency Response Plans and Pre-</u> paredness in <u>Support of Nuclear Power Plants</u>

- 4.1.4 RG&E Nuclear Emergency Response Plan and Implementing Procedures, Rev. 5 (5/87)
- 4.1.5 GS Radiation Emergency Plan Implementing Procedures (SC)
- 4.1.6 GS License and Technical Specifications.
- 4.1.7 GS Piping and Instrumentation Drawings
- 4.1.8 New York State Radiological Emergency Response Plan (10/84)
- 4.1.9 Monroe County Emergency Preparedness Plan (5/87)
- 4.1.10 Wayne County Radiological Response Plan (10/86)



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#### 4.2 ABBREVIATIONS - ACRONYMS



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# SECTION 5.0

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# CONTROLLER AND EVALUATOR INFORMATION



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#### 5.0 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 Lead Control Room Exercise Controller as part of the communications testing.
- 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 on-site Controller will have copies of time-related plant data sheets. Data sheets will be distributed only in the Control Room. Radiological and meteorological data will also be provided at locations where it is normally available.
- 5.1.7 Controllers will <u>not</u> provide information to the Players regarding scenario development or resolution of problem areas encountered in the course of the simulated emergency.

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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.

#### 5.2 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:

<u>Good</u> - Personnel and equipment generally performed better then expected. Any errors or problems were minor and easily correctable.

<u>Satisfactory</u> - Personnel and equipment generally performed as expected. Any errors noted were not severe and could be corrected without undue labor or expense.

<u>Unsatisfactory</u> - 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.





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NA - Not applicable to the situation or not observed.

Controller/evaluator comments should consider the demonstration of the following facility and team evaluation elements: 61

## 5.2.1 Facility

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

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Team

- Timely notification and activation.
- o Adequacy of staffing.
- Familiarity with appropriate emergency procedures, duties and responsibilities.
- o Availability and utilization of proper equipment.
- Performance of contamination/decontamination control.
- o Proper interface with emergency support personnel.
- Utilization of correct communications instructions and techniques.
- Availability of reference documents to team members.
- Utilization of proper radiological control practices (i.e., access control, protective clothing, shielding, stay time).
- o Performance of radiological surveys.
- Timely and proper performance of damage assessment.
- o Properly maintained survey records and maps.
- Adequacy of briefing sessions prior to dispatch.
- o Direction and control by team leaders.
- o Timely requests for off-site assistance.
- o Coordination and interface between emergency response team members.
- o Proper interface 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.



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## 5.3 PERSONNEL ASSIGNMENTS

Table 5.1 lists the Personnel assignments for the On-Site Controller organization;

Table 5.2 lists the Personnel Assignments for the Off-Site Controller Organization.

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### 5.4 EVALUATION PACKAGES

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

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



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### TABLE 5.1

#### **1987 GINNA EXERCISE**

### Controller Organization

### Control Room

Frank Maciuska 🚽 Rex Smith Bob Hynes

(Lead)

(Start)

#### Technical Support Center

Dick Marchionda Bob Hynes Bob Eliasz Bob Wood Al Salemi MaryAnn Chaubard Art<sup>¯</sup>Zaremba Mark Prairie

(Lead) **Operations** Assessment Technical Assessment Security Dose Assessment (Ni Mo) Health Physics (NYPA) (0)Communications/General (NYPA) (0) General (NYPA (0)

### Operations Support Center

Gene Eng Dick Biedenbach Gregg Joss -Mike Leach Bob Popp Jim Bement Bob Dangler

(Lead) Mechanical/Fire Operation/Testing I&C Health Physic Techs Operations

#### Emergency Survey Center

Barb Butler (Lead) Team Jim Knorr Kathy' Hart Team Frank Pavia Team Frank Schwind Team Bryan Methe! Team Pat Phelan Team



(O) Indicates Observer Only



# October 14, 1987

## Emergency Operations Facility

Dave Burke	(Exercise Coordinator)	,
Wes Backus	(Lead Operations)	
Rick Watts	(Lead Dose Assessment)	
Diane Dreikorn	Dose Assessment (LILCO)	
-Rich-Rossin Rick Strickhart	Communications (LILCO)	(0)
Steve Meister	Survey Team	
George Lawler	Survey Team	
Mike Peckham	General (NYPA)	<b>(\)</b>

# Emergency Joint News Center

Dick Sullivan	(Lead)	
Ed Kaish	(Ni Mo)	(0)
Todd Forte		(0)

## Engineering Support Center

Charles Anderson (Lead)



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# (O) Indicates Observer Only .

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## TABLE 5.2

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# 1987 - R.E. GINNA UNANNOUNCED/OFFHOURS EXERCISE OBSERVER/EVALUATOR ASSIGNMENTS

×	Monroe County	Wayne County
EOC	Roberta Fox Marvin Silverman	John Gibb
Dose Assessment	Robert Alibozek	Barbara Ignatz
Field Monitoring	George Brozowski Bob Theesfeld	Dave Bell Bill Wigley
RC/CC High School	Ken Bergmann (6:00 PM)	Bill Campbell (7:00 PM)
EW/PMC	N/A .	Tom Coulthard (interview only at facility)
School Bus Run	Kevin Kraus (between 9:00 AM & 12:00)	Tom Coulthard ` (after 9:00 AM)
General Pop. Bus Run	Kevin Kraus	Bill Campbell
Traffic Control Point	Fred Bera	N/A
Road Impediment	Fred Bera	N/A
Route Alert	N/A	Tom Coulthard (interview only at facility)

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### GINNA NUCLEAR STATION 1987 EVALUATED EXERCISE

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### 5.5 <u>PUBLIC INFORMATION AND RUMOR CONTROL</u> <u>QUESTIONS FOR THE</u> <u>EVALUATED EXERCISE</u>

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 Emergency Response Organization is prepared to deal with the media during an incident at the Ginna Station, the exercise provides certain elements that test Public Information activities. During the course of this exercise, the Rochester Gas and Electric Joint Emergency News Center (JENC) will be activated and exercised.

Special 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, 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) not located in 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 adjustements will be necessary. Space is provided for controllers to make notes on the response. Controllers need not use the questions herein; indeed, free play is encouraged. However, controllers must not get carried away with unusual questions.

When calling in questions, <u>always precede questions with</u> <u>"This is an exercise."</u> 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, background on Ginna





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Station, radiation, state/county/utility interface, protective actions, etc.

Questions and relevant telephone numbers will be distributed at the special Pre-Exercise Controllers Briefing.

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Attachment 1 lists Public Information questions generally for RG&E; Attachment 2 lists County Rumor Control Questions.







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GINNA STATION

1987 EVALUATED EXERCISE <u>PUBLIC</u> <u>INFORMATION</u> <u>QUESTIONS</u> TIME

- 04000 This is \_\_\_\_\_\_ from Radio Station WSMR. We understand that there is an emergency at the Ginna Nuclear Plant. What is happening?
- 04300 My husband's a volunteer fire fighter. He said he's heard that there's a fire at the nuclear plant. I'm worried. What is happening there?
- 05000 This is \_\_\_\_\_\_ from the Albany Post. I understand that you have a leak at the Ginna Station. What's going on up there?
  - o How big is the leak?
  - o Where is the leak?
  - o What are you doing to fix it?
  - o How dangerous is the leak?
  - o How radioactive is it in there?
  - o Is this leak similar to the accident you had in 1982?
  - o What's the status of the plant?
  - o Any Radiation exposures?
  - o Whom have you notified?
- 05300 This is \_\_\_\_\_\_ from Radio Station WPJG. I hear you have a fire at the Ginna Station. Would you tell our listeners the story?
  - o Was the damage done by the fire similar to the Browns Ferry Fire?
  - o Has any radiation been release? How do you know?
  - o Why didn't you call in the Wayne County Fire Department?
  - o Any injuries? Any radioactive contamination?
  - o Has the Nuclear Regulatory Commission been notified?
  - o Did you declare an emergency?
  - o How serious was the fire?
  - o Was the fire near the reactor?
  - o Did you evacuate the site? Why not?
  - o Is the reactor shutdown?
  - o How much is this going to cost us ratepayers?

### 06000 What is happening at the plant? Any injuries?

- o Has the NRC been notified?
- o Have State and local officials been notified?
- o How high are the radiation levels? Are they dangerous? Has anyone been over-exposed to radiation?
- o Are any of those problems related to the accident you had in 1982?
- o What are you doing to fix the problem?
- o Are you evacuating the site?
- o Is the reactor shutdown?
- o Did you declare an emergency?
- o What is the significance of an ALERT?





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06300 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	I've heard you declared a Site Area Emergency. What's that? What happened? Why don't you just shut the reactor down? How big is the leak? Where is it coming from? Where is the electricity going to? Can't you just shut a valve or turn a switch or something? Has anyone been killed? Any injuries? I work at Beebee Station. What's going on at Ginna? How is the reactor being cooled? Is any radiation going into the lake? When will the NRC be taking over the plant? What's the plant doing now? How much radiation is being released? Where is the wind blowing? Have State and local officials been notified? How serious is the accident? What is RG&E doing?
	I have heard that you declared a General Emergency. Is this true? Why? Has anyone been killed? Has the State of New York been informed? Has the NRC been informed? How are you going to fix the reactor? Can't you just shut a valve or something? Is this accident similar to the one at Three Mile Island? When will the NRC take over the plant? What are electric rates going to be? Where are you going to get power if Ginna is out of service? Why won't the reactor shutdown? Should I sell my RG&E stock? How much of this was caused by the poor management? In Layman's terms, what caused this disaster?
0730o o o	What effect will this have on RG&E stock? What do you think the Securities Exchange Commission will do? I've heard that you are going to use RG&E pension funds to pay for the Ginna accident. Is this true? What was your stock selling for this morning? What is your stock selling for now?
08000 0 0 0 0 0 0 0	How much radiation is being released? How is the radiation filtered? How dangerous is it? Who is in charge of the emergency? When will the next press briefing be held? When will reactor be shutdown? Where is the radiation heading? What protective actions have been recommended? Whom should I call for further information concerning Wayne (Monroe) County?

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TIME

- o I'm calling from the high school care center. I want you to help me find my brother; we both evacuated, but I don't know where he's gone.
- o I heard the accident at the Ginna Station is over. When are we gonna be allowed to go home? Why haven't you made the announcement on TV?
  - o What is the Governor doing?
  - o What is the status of the fire that occurred this morning?
  - o I've heard that the reactor has , a hole in it. Is this true?
  - o Do you have insurance? Who will pay for this? My homeowner's insurance states that I am not covered for nuclear accidents!

1000 Note to Controllers: The Exercise is terminated.







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TIME

- 07300 What's this I here about an explosion at Ginna? Is that what caused the plant to send everybody home? How many got hurt and who's gonna run the plant now?
  - o Has the aftershock caused more damage?
- 08000 (Note: This caller is under the mistaken impression that Ginna has been abandoned and is now being operated remotely from the County EOC.)
  - o My wife is concerned because she doesn't think you county disaster people know what you're doing? I told here not to worry because the County Executive (Monroe) or the Chairman of the Board of Supervisors (Wayne) 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?
  - I don't trust the power plant people; they'd lie to save their own skins. Do you have anybody checking on them?
  - o Should I close my business due to the disaster? Who will pay for the lost income?

(The business is Bill Gray's Restaurant on Route 104.)

08300 What are we supposed to do? Where do I go?

- o I heard nobody at Ginna knows what the hell is going on! Is it true that Federal people are coming to take over? Are they gonna fix it?
- o I heard the siren but nobody said which way to go. Charlie, my neighbor, says the siren doesn't mean to go; you is supposed to hide! What is it?
- 09000 I hear that nursing homes will evacuate their patients. My mother is in the Hill Haven nursing home. Where will she be when it's over so I can go make sure she's okay?
  - o I'm leaving now? Where can I pick my son up? He goes to Wayne Central Middle School.
  - o I'm evacuating now. Where can I pick up my son? He goes to (Later).
  - o I am supposed to leave but don't have a place to stay. Which school can I stay at? How do I get there? Who's going to pay my expenses? Wo do I call to get a check for my expenses?
- 09300 Is it true that the milk is now poison? What shall I feed my baby?
  - o We don't have no money. Is the government going to give us some so we can get away from the radiation?







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### RUMOR CONTROL MESSAGES FOR WAYNE AND MONROE COUNTY

TIME

- 03300 I was just knocked out of bed. I called the 911 emergency number. They said we had an earthquake by the nuke plant and to call RG&E for more information. What should I do? I didn't hear the sirens, why not? Is the plant coming apart? What in hell is Morin/Decker doing about it?
  - o This earthquake scared hell out of my family? How bad is it? I've got a lot of broken dishes. How does it compare to the L.A. quake? What is it on the Ricter scale? Are we going to get aftershocks? How do you know/Why don't you know? (Is there anyone there that knows anything?) I want to talk to Lou Morin/Marv Decker. Why Not? Where is he hiding?
  - o Is October earthquake month First in L.A., then in Kentucky, earlier in the Adirondacks and in 1983 here. Can't you close the plant shut - it'll be one less thing to worry about.
- 04000 I hear there's an earthquake emergency at the nuclear power plant.
  - o How will I know when to evacuate?
- 04300 I'm Roberta Gibson of Radio Station WSFC. Can you tell our listeners what's happening at the Ginna Nuclear plant? o How much damage did the earthquake do to the plant?
- 05000 Has any radiation been released yet? o How can you be sure?
  - O How can I find out when there is a release?
- 05300 Wayne County

This is a drill. My daughter goes to the Freewill Elementary School. Where can I go to pick her up? Where can I pick her up once the kids are evacuated?

o <u>Monroe</u> <u>County</u> This is a drill. My daughter goes to the Klem Road South Elementary School. Where can I go to pick her up? Where can I pick here up once the kids are evacuated?

- 06000 We've lost our emergency information handbook and need one right away. Will one of the emergency people you have deliver one to us?
- 06300 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?
- 07000 I wanna talk to the (County) Commissioner. (Reason?) I wanna know if this here accident is gonna cost us taxpayers . or will the Electric Company pay for it?
  - o I live near the plant and don't want that nuclear electricity into my house. Change it now or I'll call the Public Service Commission! Do you hear me?!









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### TIME

08300 Is the reactor shutdown? How did it happen?

- o Is this plant similar to Shoreham?
- o What is the reactor building doing now? Is the hole fixed? o How much radiation was released off-site?
- o What protective actions are in effect for Wayne (Monroe) County?
- o How many people live in Wayne (Monroe) County?

o What are you going to do to fix the situation?

o When is the next press briefing?

o How many media are at the News Center?

o What agencies are at the News Center?

o Where is the wind going?

o Who's in charge of the emergency?

09000 I'm John Smith from Livingston County. My neighbor said they expect the radiation to blow all the way down here. What should I do about my farm? I'm in the middle of harvesting hay. Who's going to pay me for my losses?

10000 NOTE TO CONTROLLERS: The Exercise is terminated.









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# SECTION 6:0

### 1987 GINNA FULL SCALE PLUME EXPOSURE PATHWAY EXERCISE

AND

### NEW YORK STATE INGESTION PATHWAY EXERCISE

SCHEDULE OF EVENTS .





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## SECTION 6.0



### <u>1987 GINNA FULL SCALE PLUME EXPOSURE PATHWAY EXERCISE</u> <u>AND</u> <u>NEW YORK STATE INGESTION PATHWAY EXERCISE</u>

### SCHEDULE OF EVENTS

10/2	:1	0900	OFFSITE PLAYER BRIEFING	EOF	
		1330	ONSITE PLAYER BRIEFING	TRAINING C	CTR
10/2	2	0900	CONTROLLER BRIEFING	TRAINING C	CTR
WEEF	VEEK OF 10/25 BEGINNING AT 0001 HOURS			-	
DAY	1	OFF HOURS UNANNOUNCED	PLUME EXPOSURE PATHWAY EXERCISE	ALL	
DAY	1	AFTER EXERCISE TERMINATION AND BREAK	INGESTION PATHWAY BRIEFING (REDUCED STAFF)	EOF .	
DAY	2	0900	STATE FIELD MONITORING/SAMPLING ACTIVITIES (NO GINNA PARTICIPATION)	IPZ	
DAY	3	0830	INGESTION PATHWAY UPDATE BRIEFING	ALBANY/EOD	F
		1000	INGESTION PATHWAY TABLETOP DRILL (START OF PLAY)	ALBANY	
			REDUCED STAFF PARTICIPATION	EOF	
DAY	4	0800	GINNA CRITIQUE	TRAINING (	CTR
		1000	NRC CRITIQUE	TRAINING (	CTR
		TBD	FEMA NEWS CONFERENCE	EJNC	





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SECTION 7.0

EXERCISE SCENARIO





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### GINNA STATION 1987 EMERGENCY PREPAREDNESS EVALUATED EXERCISE INITIAL CONDITIONS

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- 1. The R.E. Ginna Station is operating at 100% rated thermal power and has been operating continuously for 145 days.
- 2. The turbine drive Auxiliary Feedwater pump is out for replacement of the pump thrust bearing and thrust bearing cooler. All parts are available.
- 3. The Reactor Core is in cycle 16 near end of life. Boron concentration in the Reactor coolant system is 20 PPM.
- 4. Containment spray pump 1A is inoperable due to seized pump bearings since noon yesterday. Replacement parts are on order and expected to arrive this morning. Bearing replacement should then require about 1 day of actual work. Required surveillances are complete and satisfactory for today.
- 5. At 1600 hours yesterday, safety injection pump suction valve from the Boric Acid storage tanks, MOV 826B failed to open during performance of the quarterly safeguard valve operation periodic test (PT-2.3). Subsequent investigation revealed a grounded motor. The grounded motor has been removed and sent to the Motor Shop for repair. The motor is expected to be returned to the Station tomorrow at 0900 hours. Installation and testing is expected to be complete by 1400 hours tomorrow. All valves in the system that provide the duplicate function have been tested satisfactory for operability.
- 6. At 2130 hours last night, Reactor Coolant System total leak rate increased from 0.75 GPM to 1.5 GPM. Identified leak rate is approximately 0.25 GPM. Containment activity has increased significantly. The shift is continuing to investigate the cause of the leakage. A containment entry is planned as soon as the paperwork is complete.

CONTROLLERS NOTE:

E: Operators should start performing procedures S-12.2 and AP-RCS.1 for leakage trouble shooting.

7. VCT level is decreasing approximately 1% every 8 minutes. Containment sump "A" pump starts automatically approximately every 54 minutes.





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### GINNA STATION 1987 EMERGENCY PREPAREDNESS EVALUATED EXERCISE ON-SITE SEQUENCE OF EVENTS

APPROPRIATE TIME	SCENARIO TIME	EVENT DESCRIPTION
0045	-00/15	Initial Conditions established.
0100	00/00	Commence Exercise.
0130 UNUSUAL EVENT	00/30	An UNUSUAL EVENT should be declared in accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Reactor

Coolant Leakage; primary system leakage greater than Technical Specification Limits (greater than 1 GPM unidentified for more than 4 hours). The 4 hour time limit

If UNUSUAL EVENT not declared in  $\geq$  15 minutes, a contingency message should be given out to declare it.

expired at 0130 hours.

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APPROPRIATE	SCENARIO
TIME	TIME
0145	00/45

### EVENT DESCRIPTION

The Station experiences a large tremor from an earthquake. Control Room personnel start performing the actions of SC-5 (Earthquake Emergency Plan). Operations checks the accelerograph and a red target is indicated on the action indicator at the bottom of the case. Update UNUSUAL EVENT notifications may be made due to earthquake at plant of greater than .01g as indicated by red target on action indicator at bottom of accelerograph.

The "A" Emergency Diesel Generator is started per SC-5. Operations touring plant per SC-5. When PT-1 (Rod Control System) Operability Test is simulated, 2 control rods will not move.

<u>IF</u> in approximately 15 minutes, the Shift Supervisor or his designee do not notify I&C to remove the film from the accelerograph and send it to the Photo Lab, a contingency message should be given out to do so.

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APPROPRIATE TIME	SCENARIO TIME	EVENT DESCRIPTION
0200	01/00	Containment Recirculation Fan Cooler Condensate Collectors begin requiring dumping more frequently due to the earthquake cracking a weld on the "A" S/G Steam Line as it exits the S/G.

Plant commences an orderly shutdown to hot shutdown within six hours per Technical Specification 3.10.4.4 (i.e. with two or more rods inoperable, be in hot shutdown within six hours).



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APPROPRIATE	SCENARIO	EVENT DESCRIPTION
0210	01/10	Fire Zone S-03 (Auxiliary Building Intermediate Floor Center - Bus 16 Area) first alarm is received in the Control Room. The Fire Brigade is activated and responds.
0220	01/20	The Fire Brigade arrives at the scene. Fire Brigade Captain

The fire Brigade arrives at the scene. Fire Brigade Captain reports to Control Room that the Bus #16 transformer is smoking with no flaming fire.

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NOTE: Off-site fire fighting assistance is not participating. If assistance is requested, Controllers will intercede to prevent off-site fire department response.



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APPROPRIATE TIME	SCENARIO <u>TIME</u>	EVENT DESCRIPTION
0225 ALERT	01/25	The 480 volt Bus #16 normal feed trips out due to #16SS transformer fault. The 1B Emergency Diesel Generator starts and Loads on to 480 volt Bus #16. Operations restores equipment lost when Bus #16 tripped out.
	.×.	An ALERT should be declared in

accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Fire; Fire potentially. affecting safety systems as determined by the Shift Supervisor.

If ALERT not declared in  $\sim$  15 minutes, a contingency message should be given out to declare it.

The fire in the 480 volt Bus #16 transformer is extinguished.

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APPROPRIATE	SCENARIO TIME	EVENT DESCRIPTION
0345 .	02/45	The TSC, OCS, and the Survey Center are nearing operational status.
		TSC should send a repair team out to investigate 480 volt Bus #16 transformer damage.
0400	03/00	<pre>1B Emergency Diesel Generator Trips out on Low Bearing oil pressure. 480 volt Bus #16 Emergency Diesel Generator Tie breaker trips. There is no voltage on Bus #16, MCC-1D, MCC-1J, and MCC-1M. The following major</pre>

breaker trips. There is no voltage on Bus #16, MCC-1D, MCC-1J, and MCC-1M. The following major equipment is lost: IBMDAFWP, charging pump 1B and 1C, CCW pump 1B, CV recirculation fans 1B and 1C, CV spray pump 1B, RHR pump 1B, SI pump 1B and Standby Auxiliary Feedwater Pump 1D.



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# APPROPRIATE SCENARIO

### EVENT DESCRIPTION

0415 03/15 SITE EMERGENCY Reactor shutdown continues.

If the TSC decides to cross-tie buses 14-16, one of the two tie breakers will not close due to mechanical problems.

A SITE EMERGENCY should be declared in accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Fire; Fire causing loss of safety system including redundant components as determined by the Shift Supervisor; (i.e. Loss of both containment spray pumps), or EAL: Events in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public.

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# APPROPRIATE SCENARIO

### EVENT DESCRIPTION

0430 03/30 • SITE EMERGENCY Results from the developing of the accelerograph film indicates that an earthquake of .24g has occurred.

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A SITE EMERGENCY should be declared if not already done in accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Natural Phenomenom being Experienced; Plant not in Cold Shutdown and earthquake greater than .2g as determined by developing accelerograph film.

TSC sends Repair Team out to check out and repair the 1B Emergency Diesel Generator.

TSC may send Repair Team out to finish maintenance on the Turbine Driven Auxiliary Feedwater Pump.

TSC working on the leakage problem in containment.

TSC may send Repair Team out to check out and repair tie breakers between 14-16 Buses.



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APPROPRIATE	SCENARIO	EVENT DESCRIPTION
		If SITE EMERGENCY not declared in $\sim$ 15 minutes, a contingency message should be given out to declare it.
0515	04/15	The EOF, JENC, and Engineering Support Center should be nearing Operational Status.
		Peactor chutdown continues

Containment Recirculation Fan Cooler Condensate collectors dumping frequency continues to increase indicating the "A" S/G weld crack is worsening.

Repair Team sent out to check the 1B Emergency Diesel Generator reports to the TSC that the lube oil pump on the Diesel Engine has a cracked casing and it will take approximately four hours to repair.



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APPROPRIATE 	SCENARIO TIME	Ē
0530	04/30	т

### EVENT DESCRIPTION

he "A" S/G Steam Line severes where it exits the S/G. Containand temperature ment Pressure increases rapidly. Safety injeccontainment spray are tion and Ū Two automatically. actuated Control Rods remain fully withdrawn. (These Control Rod pressure housings were the source of the "Initial Condition" unidentified RCS leak). The core returns to power and a large amount of the fuels, gap and fuel pellet activity, is released due to cladding failure and fuel pellet overheating. Containment Radiation levels start to increase rapidly.

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Containment Spray does not initiate because 1B Containment Spray Pump inoperable due to Bus #16 outage, (1A spray pump inoperable as an initial condition).

There is no 12% Boric Acid injection to the core because MOV 826D inoperable due to Bus #16 outage, (MOV 826B inoperable as an initial condition).



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APPROPRIATE TIME	SCENARIO TIME	EV
0535 General Emergency	04/35	A de SC

### EVENT DESCRIPTION

EMERGENCY should be GENERAL in accordance clared with :-100, "Ginna Station Event Classification," Evaluation and Loss of Engineered Safety EAL: Features; Inability to Shutdown the reactor which results in core , damage whith indications of containment pressure increasing rapidly and reactor remains at power after reactor trip initiated, (i.e. power range indication) or EAL: Containment systems; failed fuel indicated by sampling of containment atmosphere and containment pressure 30 psig and increasing or shift supervisors opinion containment may be breached.

An immediate protective action recommendation will be made in accordance with SC-240, "Protective Action Recommendations."

Operations stabalizes the plant using Emergency Operating Procedures.

If GENERAL EMERGENCY not declared in  $\sim$  15 minutes, a contingency message should be given out to declare it.





APPROPRIATE TIME	SCENARIO TIME	EVENT DESCRIPTION
0630 .	05/30	The Station experiences a sev aftershock from the earthqu

The Station experiences a severe aftershock from the earthquake severing the two Control Rod pressure housings that have been leaking. Reactor Coolant system pressure rapidly decreases followed by Containment Pressure and radiation levels increasing. Safety injection SHOULD BE INITI-ATED AGAIN.

There is no offsite radiation release at this time.



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### APPROPRIATE SCENARIO TIME

0645

TIME

05/45

### EVENT DESCRIPTION

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The B RHR pump suction line from containment sump "B" ruptures due to the earthquake, the earthquake aftershock and containment pres-The Auxiliary Building sump sure. Hi level alarm annunciates in the Control Room.

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"A" Auxiliary Building sump pump indicates it has tripped and will not restart.

Plant vent monitors show, rapid increases in radiation levels. Α major release to the environment begins.

Release path: Containment through "B" RHR suction line out the plant vent.



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	APPROPRIATE TIME	SCENARIO TIME	EVENT DESCRIPTION
,	0700 0800	06/00 07/00	Efforts are underway to track the plume, terminate the release and implement/coordinate PAR's.
	0800	07/00	The release is terminated due to the repair of the 1B Emergency Diesel Generator with restoration of power to 480 volt Bus #16 and MCC-1D and the closing of MOV-851B.
	0800 0900	07/00 08/00 .	Plume tracking continues.
	0900	08/00	Off-site radiation levels have significantly decreased due to Plume Passage. Down grade discus- sions are in progress. Recovery/- Re-entry discussions commence.
	1000	09/00	The Plume Exercise is Terminated. Begin Ingestion Pathway phase.



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## SECTION 8.0

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## MESSAGE FORMS AND PLANT DATA SHEETS

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Time: 0045

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Message: I.C.

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

### Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

### FOR CONTROLLER USE ONLY

### Controller Notes:

- 1) Review initial conditions and plant status sheets with the operating crew.
- Review exercise precautions/limitations and any exercise activities that are not normal (pre-staging, simulated notifications, extent of participation of off-site agencies, etc.).
- 3) Ensure that the operating crew understands that the exercise is not to interfere with safe plant operation.
- 4) Explain that the abbreviation "OOS" means "out of service", i.e. repairs must be made before the equipment can be used.

### Actions Expected:

Participants should review initial conditions and plant data sheets.



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### GINNA STATION 1987 EMERGENCY PREPAREDNESS EVALUATED EXERCISE INITIAL CONDITIONS

- 1. The R.E. Ginna Station is operating at 100% rated thermal power and has been operating continuously for 145 days.
- 2. The turbine driven auxiliary feedwater pump is out for replacement of the pump thrust bearing and thrust bearing cooler. All parts are available.
- 3. The Reactor Core is in cycle 16 near end of life. Boron concentation in the Reactor coolant system is 20 ppm.
- 4. Containment spray pump 1A is inoperable due to seized pump bearings since noon yesterday. Replacement parts are on order and expected to arrive this morning. Bearing replacement should then require about 1 day of actual work. Required surveillances are complete and satisfactory for today.
- 5. At 1600 hours yesterday, safety injection pump suction valve from the Boric Acid storage tanks, MOV 826B failed to open during performance of the quarterly safeguard valve operation periodic test (PT-2.3). Subsequent investigation revealed a grounded motor. The grounded motor has been removed and sent to the Motor Shop for repair. The motor is expected to be returned to the Station tomorrow. Installation and testing is expected to be complete by 1400 hours tomorrow. All valves in the system that provide the duplicate function have been tested satisfactory for operability.
- 6. At 2130 hours last night, Reactor coolant system total leak rate increased from 0.75 GPM to 1.5 GPM. Identified leak rate is approximatley 0.25 GPM. Containment activity has increased significantly. The shift is continuing to investigate the cause of the leakage. A containment entry is planned as soon as the paperwork is complete.
- 7. VCT level is decreasing approximately 1% every 8 minutes. Containment sump "A" pump starts automatically approximately every 54 minutes.





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1987 EVALUATED EXERCISE Time: 0045

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### MAJOR PARAMETERS

### ENGINEERED SAFEGUARDS

Reactor Power Level Reactor Shutdown NIS N-41/00 NIS N-42/00 RCS Pressure RCS Temperature TAVA	$\frac{508 \text{ MWE}/1520 \text{ MWT}}{\underline{\text{Yes/NO}}}$ $\frac{3}{26} \text{ N-43}/00\% \text{ N-44}/00\% \text{ N-44}/00\% \text{ Solution}$ $\frac{2235}{573} \text{ psig}$	High HeadS.I.PumpsFI-924OGPMFI-925OGPM1A.Inserv/STBY/00S1B.Inserv/STBY/00S1C.Inserv/STBY/00SBAST Level =55	ક
CHG. (FI-128) Pressurizer Level LTN. (FI-134) Containment Pressure 1A S/G Level 1B S/G Level PVLIS	$     \begin{array}{c}             27 & GPM \\             50 & \$ \\             4/ & GPM \\             0 & psig \\             52 & \$ \\             51 & \$ \\             4/00 & \$             \\             51 & \$ \\             4/00 & \$             \\             51 & \$ \\             4/00 & \$             \\             51 & \$ \\             4/00 & \$             \\             51 & \$ \\            51 & \$ \\            51 & \$ \\             51 & \r \\            51 & \r \\            51 & \r \\            51 & \r \\            51 & \r \\            51 & \r \\      $	Low Head S. I. Pumps FI-626 O GPM 1A. InServ/STBY/00S 1B. InServ/STBY/00S	-
IA S/G Pressure IB S/G Pressure *CET Sump A Level Sump B Level A RCP B RCP	750 psig 760 psig 602 oF 1.8 feet 0 inches Running/Stopped Running/Stopped	RWST Level =95Containment Spray PumpsFI-931AOGPMFI-931BOGPMIA.Inserv/STBY/OOS1B.Inserv/STBY/OOSNaOH Tank Level =93	_* *
Containment Isolation <u>ELECTRICAL PC</u> 34.5 KV Bus 4 KV Buses Ener	Yes/No WER gized/Deenergized	Containment Recirc Fans1A.Inserv/STBY/OOS1B.Inserv/STBY/OOS1C.Inserv/STBY/OOS1D.Inserv/STBY/OOSPostAccident DampersOpen/(	losed
480 V Buses Turbine Generator Ener <u>DIESEL GENERA</u> A. <u>Running/Unloaded/</u> B. <u>Running/Unloaded/</u> TSC <u>Running/Unloaded/</u> Security <u>Running/Unloaded/</u> <u>ENGINEERED SA</u> <u>Aux. Feedwate</u>	gized Deenergized Gized Deenergized TORS STBY/OOS STBY/OOS STBY/OOS ded STBY/OOS AFEGUARDS FFGUARDS FF Pumps	Service Water Pumps 1A. (Inserv/STBY/OOS 1B. (Inserv/STBY/OOS 1C. Inserv/STBY/OOS 1D. Inserv/STBY/OOS A&B Header Pressure <u>55</u> Component Cooling Water Pu 1A. (Inserv/STBY/OOS 1B. Inserv/STBY/OOS	_psig imps
1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> Turb. Driven CST Level	Inserv/STBY 005	Surge Tank Level = <u>52</u> <u>Standby Aux. Feedwater Pum</u> 1C. <u>Inserv/STBY</u> OOS 1D. <u>Inserv/STBY</u> OOS	<u>zqı</u> 8

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES AVERAGE

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### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

			5	TIME:	0045
POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE		ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD		ND / U
R02	AREA 2-CONTAINHENT	2.0E+1	GOOD		NP/H ·
R 0 3	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD		MP/H
R04	AREA 4-CHARGING PUMP ROOM	1.6E+1	GOOD		MP/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD		MP/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD		NP/H
R07	AREA 7-INCORE INSTRUMENTATION	2.4E+1	GOOD		MP/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD		NR/H
R09	AREA 9-LETDOWN LINE	4.7E+1	GOOD		MP/H
R10A	CONTAINMENT IODINE MONITOR R10A	8.5E+3	6000		C P N
R10B	PLANT VENT IODINE MONITOR R10B	2.1E+2	GOOD		CPN
R11	CONTAINHENT AIR PARTICULATE	6.4E+5	HALM		CPN
R12	CONTAINMENT GAS MONITOR	1.1E+5	HALM		CPN
R13	AUX BLDG EXHAUST AIR PARTICULATE	8.2E+1	GOOD		* CPM
R14	AUX BLDG EXHAUST GAS MONITOR	7.1E+1	6000		CPM
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD		CPM
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	,	CPM
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD		CPM
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3 -	GOOD		CPM
R19	STEAM GENERATOR BLOWDOWN DRAIN	· 2.0E+3	GOOD		CPN
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD		СРМ
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD		R/HR
R30	AREA 30-CONTAINNENT HIGH RANGE	9.0E-1	GOOD		R/HR
R 3 3	AREA 33-HOT INTERNEDIATE BLDG	1.0E+0	GOOD		ND/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD		MR/H
R35 `	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD		HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD		CPH
R 3 7	CONTROL ROON PARTICULATE HONITOR	3.3E+0	GOOD	•	СРИ
R38	CONTROL ROOM IODINE NONITOR	1.2E+0	GOOD		CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD		PPM
HVAC2	CONTROL ROOM ANNONIA ANALYZER	0.7763	6000		PPH
WT250	250 FOOT LEVEL TEMPERATURE	69.0	GOOD		DEGE
WT033	33 FOOT LEVEL TEMPERATURE	65.0	GOOD		DEGE
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	331	GOOD		DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	335	GOOD		DEG.
W\$250	250 FOOT LEVEL WIND SPEED	3.0	GOOD		MPH
WS033	33 FOOT LEVEL WIND SPEED	3.1 *	6000		NPH

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SPING MONITOR SHEETS

			•	Time: <u>004</u>	5
	-		(R-12A)	(R-14A)	(R-15A) ·
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current</u> <u>Rea</u> <u>PLANT</u> <u>VENT</u>	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	+3.84E-04	N/A
2	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A
3	I-131	uCi	STANDBY	+5.42E-05	N/A
4	Bkg I	CPM	STANDBY	<u>+3.47E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	-5.0E-06	<u>3.70E-06</u>
6	Area Monitor	MR/H	1.00E-01	-3.13E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	-5.0E-06	-1.00-06
8	Gamma Bkg	CPM	STANDBY	-3.98E-02	1.00E+01
9	Noble Gas-High	uCi/cc	STANDBY	<u>-1.3E-03</u>	<u>-1.40E-03</u>
1	Part - Beta	uCi/cc*	STANDBY	+9.0E-11	<u> </u>
3	1-131	uCi/cc*	STANDBY	<u>+2.5E-10</u>	
* SPING CC STEAM LINE	NSOLE PLACED IN "J	INTERPRETE	D MODE"		
	(R-31): "A" Steam	n Line Rad	l Monitor	+1.00E-02	mR/hr
	(R-32): "B" Stear	n Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr



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Time: 0055

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### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room Shift Supervisor

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

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

"Attention, attention all personnel. The Ginna Nuclear Station is now starting its 1987 Emergency Preparedness Evaluated Exercise. All exercise messages must be started and ended with 'This is an exercise'." (Announce twice).

FOR CONTROLLER USE ONLY

Controller Notes:

Ensure that the PA announcement is made.

Actions Expected:





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## Time: 01:00

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## 'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77									_ <del>7</del> ไ
NAME	AVGE	ST. DEV	MIN.	MAX.	I				
WS 33A	0031	00900	0011	0050	00				•
WS 33B	0032	00910	0012	0052	00				-
WS150A	0040	01000	0022	0060	00				
WS150B	0042	01100	0023	0061	02				
WS 250	0030	01000	0010	0055	• 00				
NAME	AVGE	ST. DEV	MIN.	MAX.	MNDF	R AVRN	CNT	I	· <b></b> *
WD 33A	0330	03000	0320	0340	0072	0020	0064	00	• •
WD 33B	0330	03010	0320	0340	0071	. 0021	0063	00	-^ <sub>2</sub>
WD150A	0331	03100	0321	0341	0045	5 0022	0062	00	•••
WD150B	0352	03000	0321	0341	0035	0023	0060	02	
WD 250	0333	03000	0330	0343	0055	0025	0061.	00	•
NAME	AVGE	I	NAME	AVGE	I	NAME	AVGE	I	*
TER33A	0650	00	TER33B	0650	00	TE150A	0670		
E150B.	0671	00	TE250A	0690	00	TE250B	0690		
DT150A	0000	00	DT150B	0000	00	DT250A	0040		
DT250B	0040	00	*						• • •
DEW 33	0436		TEG 33	0602	00				_
RATN	0056								-

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Time: \_\_\_\_0115\_\_\_\_

Message: 2

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

<u>Message for</u>: Control Room <u>Simulated Plant Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*

Indications in the Control Room include: VCT level decreasing approximately 1% every 8 minutes.



### FOR CONTROLLER USE ONLY

Controller Notes:

1) The RCS unidentified leak rate is stable at 1.25 gpm.

Actions Expected:



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## 1987 EVALUATED EXERCISE

Time: 0115

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## MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

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	Reactor Power Level Reactor Shutdown	<u>508 MWE/1520 MWT</u> <u>Yes/No</u> )	High Head S. I. Pumps FI-924 O GPM	
•	NIS N-41 100 NIS N-42 100 RCS Pressure RCS Temperature TAVA CHGa (FT-128)	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	IA.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00SBAST Level = $53$ *	
	Pressurizer Level LTN. (FI-134) Containment Pressure	<u> </u>	Low Head S. I. Pumps FI-626 O GPM	
	1A S/G Level 1B S/G Level RVLIS	$\frac{52}{51}$	1A.InServ (STBY) 00S1B.InServ (STBY) 00S	
	1A S/G Pressure 1B S/G Pressure *CET Sump A Level Sump B Level A RCP B RCP	750 psig 760 psig 602 oF 2.2 feet 0 inches Running/Stopped Running/Stopped	RWST Level =95%Containment Spray PumpsFI-931AOGPMFI-931BOGPMIA.InServ/STBY/OOS1B.InServ/STBY/OOSNaOH Tank Level =93	8
•	Containment Isolation	Yes	Containment Recirc Fans 1A. (InServySTBY/OOS	
	ELECTRICAL PO 34.5 KV Bus Ener 4 KV Buses Ener	WER gized Deenergized gized Deenergized	1B.       Inserv/STBY/00S         1C.       Inserv/STBY/00S         1D.       Inserv/STBY/00S         PostAccident DampersOpen/Close	
<b>, * -</b>	480 V Buses Ener Turbine Generator Ener DIESEL GENERA A. Running/Unloaded/ B. Running/Unloaded/ TSC Running/Unloaded/ Security Running/Unloa ENGINEERED SA Aux. Feedwate	gized/Deenergized gized/Deenergized TORS STBY/OOS STBY/OOS STBY/OOS ded STBY/OOS fEGUARDS r Pumps	ServiceWater Pumps1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSA&B Header Pressure55 ps:Component Cooling Water Pumps1A.InServ/STBY/OOS1B.InServ/STBY/OOS	ig
	1A. InServ/STBY/00S 1B. InServ/STBY/00S Turb. Driven CST Level	InServ/STBY 005	Surge Tank Level = 52 % Standby Aux. Feedwater Pumps 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS	
	*CET = PREDETERMINED C	ORE EXIT THERMOCOU	PLES AVERAGE	



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# TIME: QUALITY CODE

ENĞR UNITS

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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R02	AREA 2-CONTAINHENT	2.1E+1	GOOD	MR/H '
R03	AREA 3-RADIO CHEN LAB	1.9E-1	GOOD	HR/H
R04	AREA 4-CHARGING PUHP ROOM	1.6E+1	GOOD	MR7H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	HR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	HR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.4E+1	GOOD ,	HR/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD	HR/H
R 0 9	AREA 9-LETDOWN LINE	4.7E+1	GOOD	HR/H
R10A	CONTAINMENT IODINE MONITOR RIDA	1.2E+4	GOOD	СРМ
R10B	PLANT VENT IODINE MONITOR R10B	2.1E+2	GOOD	CPM
R11 ·	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM	СРМ
R12	CONTAINMENT GAS MONITOR	1.4E+5 ·	HALH	CPH
R13	AUX BLDG EXHAUST AIR PARTICULATE	8.2E+1	GOOD	СРН
R14	AUX BLDG EXHAUST GAS HONITOR	7.1E+1	GOOD	СРН
R15	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	СРИ
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	СРМ
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	СРИ
R 18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3 ·	GOOD	СРИ
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R 2 9	AREA 29-CONTAINHENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	HR/H
R 3 4	AREA 34-AUX BLDG CV SPRAY PUMP	1.0E+1	GOOD	HR/H
R35	AREA 35•PASS SAMPLE PANEL	1.0E-1	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	СРМ
R 3 7	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPH
R 3 8	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM ANNONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	69.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	66.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	332	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	333	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	3.2	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	3.3	GOOD	M P H

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SPING MONITOR SHEETS

				Time: <u>011</u>	5
			(R-12A)	' (R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT</u> <u>VENT</u>	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	+4.20E-04	N/A
2	Part - Alpha	CPM	STANDBY	<u>-1.90E+01</u>	N/A
3	I-131	uCi	STANDBY	+2.30E-04	N/A
4	Bkg I	CPM	STANDBY	+3.48E+01	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	-5.0E-06	<u>3.70E-06</u>
6	Area Monitor	MR/H	1.00E-01	-3.99E-02	<u>1.00E-03</u>
7	Noble Gas-Mid	uCi/cc	STANDBY	-5.1E-06	<u>-1.00E-06</u>
8	Gamma Bkg	CPM	STANDBY	+3.98E-02	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	<u>-1.40E-03</u>
$(\mathbf{D})$	<b>*</b>				
1	Part - Beta	uCi/cc*	STANDBY	<u>+9.00E-11</u>	
3	I-131	uCi/cc*	STANDBY	+2.40E-10	
* SPING CO	NSOLE PLACED IN "I	NTERPRETE	D MODE"		
STEAM LINE	MONITORS:				1
	(R-31): "A" Steam	Line Rad	l Monitor	<u>+1.00E-02</u>	mR/hr
	(R-32): "B" Steam	Line Rad	l Monitor	+1.00E-02	mR/hr





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Time: 01:15

'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77								
NAME	AVGE	ST. DEV	MIN.	MAX.	I			
WS 33A	0031	00900	0011	0050	00			
WS 33B	0032	<sup>.</sup> 00910	0012	0052	00			
WS150A	0040	01000	0022	0060	00			
WS150B	0042	01100	0023	0061	02			
WS 250	0030	01000	0010	0055	00			
NAME	AVGE	ST. DEV	MIN.	MAX.	. MNDR	AVRN	CNT	I
WD 33A	0331	03000	0321	0341	0072	0020	0064	00
WD 33B	0331	03010	0320	0340	0071	0021	0063	00
WD150A	0332	03100	0320	0345	0045	0022	0062	00
WD150B	0332	03000	0315	0341	0035	0023	0060	02
WD 250	0333	03000	0321	0345	0055	0025	0061	00
NAME	AVGE	I	NAME AV	VGE	. I NAN	ie av	/GE	I
<b>TER33A</b>	0650	° 00	TER33B	0650	00 TEI	L50A 06	561	
🔍 TE150B	0661	00	TE250A	0690	00 TE2	250B 06	590	
DT150A .	0011	00	DT150B	0011	- 00 DT2	250A 00	040	
DT250B ·	0040	4						
DEW 33	0436		TEG 33	0602	00			
RATN	0056							

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Time: \_\_0130\_\_\_

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Message:

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Indications in the Control Room include:

VCT level decreasing approximately 1% every 8 minutes.

### FOR CONTROLLER USE ONLY

Controller Notes:

1) The RCS unidentified leak rate is stable at 1.25 GPM.

### Actions Expected:

- An UNUSUAL EVENT should be declared in accordance with SC-100, "Ginna Station Event Evaluation and Classification", EAL: Reactor Coolant Leakage; Primary system leakage greather than Tech. Spec. limits (greater than 1 gpm unidentified for more than 4 hours).
- 2) Implement SC-201, "UNUSUAL EVENT'.
  - a) Make notifications.
  - b) Assess and monitor plant conditions. Update offsite agencies at least hourly and whenever there are significant changes in plant status.
- 3) Implement Procedure No. AP-RCS.1 "Reactor Coolant Leak".

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1987 EVALUATED EXERCISE Time: 0130

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### MAJOR PARAMETERS

### ENGINEERED SAFEGUARDS

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	Reactor Power Level <u>508 MWE//520MWT</u> Reactor Shutdown <u>Yes(No</u> )	High Head S. I. Pumps FI-924 O GPM
	NIS N-41/00% N-43/00% NIS N-42/00% N-43/00% RCS Pressure $22.35$ psi RCS Temperature Taug $573$ oF CHG. (FI-128) 27 GPM	IA.     InServ/STBY/00S       1B.     InServ/STBY/00S       1G     IC.       INServ/STBY/00S       BAST Level =     55 *
	Pressurizer Level <u>49</u> % LTN. (FI-134) <u>44</u> GPM	Low Head S. I. Pumps FI-626 GPM
	Concariment Fressure0psi1A S/G Level52%1B S/G Level5/%RVLIS/00%	1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u>
	1A S/G Pressure750psi1B S/G Pressure760psi*CET602oFSump A Level1.6feeSump B Level0incheA RCPRunning/StoppedPunning/Stopped	g RWST Level = <u>95</u> % g <u>Containment Spray Pumps</u> FI-931A O GPM et FI-931B O GPM es 1A. <u>InServ/STBY/OOS</u> 1B. <u>InServ/STBY/OOS</u> NaOH Tank Level = <u>93</u> %
·	Containment Isolation Yes/NO <u>ELECTRICAL POWER</u> 34.5 KV Bus <u>Energized Deenergize</u>	<u>Containment Recirc Fans</u> <u>1A.</u> <u>(InServ/STBY/OOS</u> ) <u>1B.</u> <u>(InServ/STBY/OOS</u> ) <u>1C.</u> <u>(InServ/STBY/OOS</u> ) <u>1C.</u> <u>(InServ/STBY/OOS</u> ) <u>1D.</u> <u>[InServ/STBY/OOS</u> ]
	4 KV Buses (Energized Deenergize 480 V Buses (Energized Deenergize Turbine Generator Energized Deenergize DIESEL GENERATORS A. Running/Unloaded (STBY) 00S B. Running/Unloaded (STBY) 00S TSC Running/Unloaded (STBY) 00S Security Running/Unloaded (STBY) 00S ENGINEERED SAFEGUARDS	A PostAccident Dampers <u>Open/Closed</u> A Service Water Pumps A 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS A&B Header Pressure <u>55</u> psig <u>Component Cooling Water Pumps</u> 1A. (InServ/STBY/OOS
	Aux. Feedwater Pumps1A. InServ/STBY/00S1B. InServ/STBY/00STurb. DrivenCST Level21	1B.InServ STBY/00SSurge Tank Level =52 *Standby Aux.Feedwater PumpsIC.InServ/STBY/00SID.InServ STBY/00S
	*CET = PREDETERMINED CORE EXIT THERMOO	COUPLES AVERAGE



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AREA RADIOLOGICAL AND METEORICAL DATA

TIME:



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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E.1	GOOD	MR/H
R 0 2	AREA 2-CONTAINMENT	2.1E+1	GOOD	MR/H
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	MR/H
R 0 4	AREA 4-CHARGING PUNP ROOM	1.6E+1	GOOD	MR/H
R05	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	MR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H T
R07	AREA 7-INCORE INSTRUMENTATION	2.5E+1	GOOD	NR/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD	MR/H
R 0 9	AREA 9-LETDOWN LINE -	4.7E+1	GOOD	NR/H
R10A	CONTAINMENT IODINE MONITOR R10A	1.3E+4	GOOD	CPN
R10B	PLANT VENT IODINE MONITOR R10B	2.1E+2	GOOD	CPM
R11	CONTAINNENT AIR PARTICULATE	6.4E+5	HALM	CPN
R12	CONTAINMENT GAS MONITOR	1.7E+5	HALM	CPN
R13	AUX BLDG EXHAUST AIR PARTICULATE	8.2E+1	GOOD	_ CPN
R14	AUX BLDG EXHAUST GAS MONITOR	· 7.1E+1	GOOD	CPN
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	CPH
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPH
R17	CONPONENT COOLING PUMP SUCT HDR	9.0E+2	G000	_ CPN
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPH
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPH
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPN
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.0E+1	GOOD	NR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E·1	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPN
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPN
R 3 8	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPN
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPN
WT250	250 FOOT LEVEL TEMPERATURE	69.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	<u>~ 66.0</u>	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	330	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	327	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	3.5	GOOD	NPH
WS033	33 FOOT LEVEL WIND SPEED	3.5	GOOD	NPH





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SPING MONITOR SHEETS

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				Time: <u>013</u>	<u>0</u>		
60	•		(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	ding AIR EJECTOR		
1	Part - Beta	uCi	STANDBY	+4.40E-04	N/A		
2 ^	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A		
3	I-131	uCi	STANDBY	<u>+3.70E-04</u>	N/A		
4	Bkg I	CPM	STANDBY	<u>+3.47E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	-5.1E-06	3.70E-06		
6	Area Monitor	MR/H	<u>1.00E-01</u>	<u>-3.98E-02</u>	1.00E-03		
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+5.1E-06</u>	-1.00E-06		
8	Gamma Bkg	CPM	STANDBY	<u>+4.00E-02</u>	1.00E+01		
9	Noble Gas-High	uCi/cc	STANDBY	+1.30-03	<u>-1.40E-03</u>		
			•				
1	Part - Beta	uCi/cc*	STANDBY	<u>+9.00E-11</u>	<u> </u>		
3	I-131	uCi/cc*	STANDBY	<u>+2.50E-10</u>			
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:							
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr		
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr		
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Time: 1:30

104

'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77								
NAME	AVGE	ST. DEV	MIN	i.	MAX.	I		
WS 33A	0031	00900	001	.1	0050	00		
WS 33B	0032	00910	001	.2	0052	00		
WS150A	0040	01000	002	2	0060	00		
WS150B	0042	01100	002	3	0061	02		
WS 250	0030	01000	- 001	.0	0055	00		
NAME	AVGE	ST. DEV	MIN	r.	MAX.	· MNDR	AVRN	CNT
WD 33A	0331	03000	032	1	0351	0072	0020	0064
WD 33B	0330	03010	032	2	0340	0071	0021	0063
WD150A	0330	03100	032	1	0345	0045	0022	0062
WD150B	0331	03000	032	:1	0340	0035	. 0023	0060
WD 250	0332	03000	031	.0	0350	0055	0025	0061
NAME	AVGE	I	NAME	AVGE		I	NAME	AVGE
TER33A	0650	00	TER33B	0650		00	<b>TE150A</b>	0660
TE150B	0660	00	TE250A	0690		00	TE250B	0690
DT150A -	0010	00	DT150B	0010			DT250A	0040
DT250B	0040					,		
DEW 33	0436		TEG 33	0602		00		
RAIN	0056							





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Time: 0145

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Message:

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room Shift Supervisor

### Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Declare an UNUSUAL EVENT in accordance with SC-100, "Ginna Station Event Evaluation and Classification", EAL: Reactor Coolant Leakage; Primary system leakage greater than Tech. Spec. limits (greater than 1 gpm unidentified for more than 4 hours).

### FOR CONTROLLER USE ONLY

Controller Notes:

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 Deliver if an UNUSUAL EVENT has not yet been declared. Do not deliver if emergency classification discussions are in progress.

Actions Expected:





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Time: 0145

Message: <u>5</u>

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The Station experiences a large tremor from an earthquake.

### FOR CONTROLLER USE ONLY Controller Notes:

- 1) When Control Room decides to check the accelerograph, question the Operator to be sent as to where he is going and what he is looking for. After he answers, have him simulate finding a red target.
- 2) When Control Room personnel simulate PT-1 on Control Rods, inform them that Control Rods <u>I-7</u> and <u>G-9</u> will not move.
- 3) When Control Room checks turbine supervisory, inform them all conditions are normal.

### Actions Expected:

- Control Room personnel should start performing the actions of SC-5 (Earthquake Emergency Plan) including:
  - a) Checking the Station accelerograph.
  - b) After being told of the red target indicated, may update on Unusual Event notification due to earthquake at plant of greater than .01g as indicated by red target on action indicator at bottom of accelerograph.
  - c) Simulate starting the "A" emergency diesel generator.
  - d) Notify I&C personnel to remove the film from the accelerograph and send it to the photo lab.
  - e) Tour the plant for unusual conditions.
  - f) Simulate performing PT-1 (Rod Control System) operability test.





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1987 EVALUATED EXERCISE Time: 0145

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### MAJOR PARAMETERS

### ENGINEERED SAFEGUARDS

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	Reactor Power Level <u>508</u> Reactor Shutdown	MWE/1520 MWT Yes/No	High Head S. I. Pumps FI-924 O GPM
	NIS N-41 /00% NIS N-42 /00%	N-43 /00 % N-44 /00%	FI-925   O GPM     1A.   InServ/STBV/00S     1B.   InServ/STBV/00S
	RCS Pressure RCS Temperature Tavg CHG. (FI-128)	<u>2235</u> p51g <u>573</u> of 27 GPM	BAST Level = $55$
	Pressurizer Level LTN.(FI-134)	<u>49</u> <u>41</u> GPM	Low Head S. I. Pumps FI-626 GPM
	Containment Pressure   1A S/G Level   1B S/G Level	<u> </u>	1A. InServ/STBY/OOS 1B. InServ/STBY/OOS
	RVLIS 1A S/G Pressure 1B S/G Pressure	<u>760</u> * <u>750</u> psig <u>760</u> psig	RWST Level = <u>95</u> Containment Spray Pumps
	*CET Sump A Level Sump B Level	<u>602</u> oF <u>68</u> feet O inches	FI-931A O GPM FI-931B O GPM 1A. INServ/STBY/OOS
	A RCP B RCP Runn	ing/Stopped ing/Stopped	1B. <u>InServ/STBY/OOS</u> NaOH Tank Level = <u>93</u> %
•	Containment Isolation	Yes/NO	Containment Recirc Fans 1A. (Inserv/STBY/OOS
	ELECTRICAL POWER 34.5 KV Bus <u>Energize</u>	dy Deenergized	1C. Inserv/STBY/OOS 1D. Inserv/STBY/OOS
	4 KV Buses Energize	dy Deenergized	PostAccident DampersOpen Closed
	480 V Buses Energize	d/Deenergized	Service Water Pumps
	DIESEL GENERATORS	dy Deenergized	1B. Unserv/STBY/OOS
	A. Running/Unloaded/STBY	<u>/005</u>	1C. InServ/STBY/OOS
	B. Running/Unicaded/STBY	<u>2005</u>	A&B Header Pressure 55 psig
	Security Running/Unloaded	STBY/OOS	Component Cooling Water Pumps
	ENGINEERED SAFEGU Aux. Feedwater Pu	ARDS mps	1A.Inserv/STBY/OOS1B.Inserv/STBD/OOS
	1A. InServ/STBY/OOS 1B. InServ/STBY/OOS Turb. Driven InSe	rv/STBY/005	Surge Tank Level = $5/$ % <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ(STBY)00S</u> 1D. <u>InServ(STBY)00S</u>
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\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES AVERAGE



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### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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TIME: 0145

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	1.0E-1	GOOD	HR/H
R02	AREA 2-CONTAINMENT	2.1E+1	GOOD	MR/H
R03	AREA 3-RADIO CHEN LAB	1.9E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUMP ROOM	1.6E+1	GOOD	MR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	HR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	HR/H
R07	AREA-7-INCORE INSTRUMENTATION	2.5E+1	GOOD	HR/H
R 0 8	AREA 8-DRUNMING STATION	3.1E+0	GOOD	HR/H
R09	AREA 9-LETDOWN LINE	4.7E+1	GOOD	MR/H
R10A	CONTAINMENT IODINE MONITOR R10A	1.5E+4	GOOD	СРМ
R 1 0 B	PLANT VENT IODINE MONITOR R10B	2.1E+2	GOOD	CPH
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM	CPH
R12	CONTAINMENT GAS MONITOR	1.9E+5	HALM	CPH
R13	AUX BLDG EXHAUST AIR PARTICULATE	8.2E+1	GOOD	CPH
R14	AUX BLDG EXHAUST GAS MONITOR	7.1E+1	GOOD	CPM
R15	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	CPH
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPM
R17	COMPONENT COOLING PUNP SUCT HDR	9.0E+2	GOOD	CPH
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPH
R19	STEAH GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPH
R20	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	СРН
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPH
R38	CONTROL ROOM IODINE MONITOR	- 1.2E+O	GOOD	CPN
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPM
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPM
WT 250	250 FOOT LEVEL TEMPERATURE	70.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	67.0	GOOD	DEGF
WD 250	250 FOOT LEVEL WIND DIRECTION	. 330	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	330	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	4.1	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED .	4.2	GOOD	MPH



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SPING MONITOR SHEETS

				Time: <u>014</u>	5		
	·		(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Read</u> <u>PLANT VENT</u>	ding AIR EJECTOR		
1	Part - Beta	uCi	STANDBY	<u>+4.60E-04</u>	N/A		
2	Part - Alpha	-CPM	STANDBY	<u>-1.90E+01</u>	N/A		
3	I-131	uCi	STANDBY	+3.70E-04	N/A		
4	Bkg I	CPM	STANDBY	+3.48E+01	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	-5.20E-06	3.70E-06		
6	Area Monitor	MR/H	<u>1.00E-01</u>	-3.99E-02	1.00E-03		
7.	Noble Gas-Mid	uCi/cc	STANDBY	<u>-5.21E-06</u>	<u>-1.00E-06</u>		
8	Gamma Bkg	CPM	STANDBY	-4.00E-02	1.00E+01		
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	-1.40E-03		
1	Part - Beta	uCi/cc*	STANDBY	+9.00E-11			
3	I-131	uCi/cc*	STANDBY	<u>+2.50E-10</u>			
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:							
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr		
	(R-32): "B" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr		



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Time: 01:45

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'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	M	EN.	MAX.	I			
WS 33A	0033	00800	00	011	0050	00			
WS 33B	0032	00910	00	012	0052	00			
WS150A	0042	01000	00	022	0060	00			
WS150B	0043	01100	00	023	0061	02			
WS 250	0032	01000	00	010	0055	00			
NAME	AVGE	ST. DEV	M	EN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0330	03100	03	320	0350	0072	0020	0064	00
WD 33B	0330	03020	03	320	0340	0071	0021	0063	00
WD150A	0332	03100	03	320	0340	0045	0022	0062	00
WD150B	0333	03000	0:	321	0341	0035	0023	0060	02
WD 250	0331	03000	03	320	0342	0055	· 0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NAM	e av	'GE	I
TER33A	0670	00	TER33B	0670		00 TEL	50A 06	91	
TE150B	0691	00	TE250A	0700		00 TE2	50B 07	00	
DT150A	0021	00	DT150B	0021		00 DT2	50A 00	30	
DT250B	0030					,			
DEW 33	0436		TEG 33	0602		00			
RAIN	0056								



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Time: <u>0200</u>

Message: <u>6X</u>

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

### Message for: Control Room

### Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Notify I&C to remove the film from the accelerograph and send it to the photo lab.

FOR CONTROLLER USE ONLY

Controller Notes:

1) Deliver if Control Room personnel have not requested I&C to remove film.

Actions Expected:





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Time: <u>0200</u>

Message: <u>7</u>

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Indications' in the Control Room include:

 Containment recirculation fan cooler condensate collectors begin requiring dumping more frequently.

ALARMS Received in the Control Room:

E-31 (Containment Recirc. fan condensate Hi-Hi level)

### FOR CONTROLLER USE ONLY

### Controller Notes:

1) This is the beginning of the earthquake induced crack on the "A" S/G steam line weld as it exits the S/G.

### Actions Expected:

- 1) Control Room should try and determine if this new leak is from the primary or secondary side.
- 2) Shift Supervisor should initiate a containment entry to check for leakage.
- 3) Shift Supervisor orders the plant to hot shutdown in 6 hours per Technical Specification 3.10.4.4 (i.e. with two or more full length rods inoperable, be in hot shutdown within 6 hours).







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1987 EVALUATED EXERCISE Time: 0200

### MAJOR PARAMETERS

### ENGINEERED SAFEGUARDS

Reactor Power Level Reactor Shutdown	508 MWE/1520 MWT Yes/No	High Head S. I. Pumps FI-924 O GPM
NIS N-41 /0 NIS N-42 /0 RCS Pressure RCS Temperature Thug CHG. (FI-128)	02. N-43 /002. 02. N-44 /002. 22.35 psig 572.5 oF 27 GPM	IA.     InServ/STBY/00S       1B.     InServ/STBY/00S       1C.     InServ/STBY/00S       BAST Level =     55 %
Pressurizer Level LTN. (FI-134) Containment Pressure	<u> </u>	Low Head S. I. Pumps FI-626 GPM
lA S/G Level lB S/G Level RVLIS	<u> </u>	1A.InServ (STBY) 00S1B.InServ (STBY) 00S
lA S/G Pressure 1B S/G Pressure *CET	<u>750</u> psig <u>760</u> psig 602 oF	RWST Level = <u>95</u> <u>Containment Spray Pumps</u> FI-931A O GPM
Sump A Level Sump B Level A RCP	<u>2.0</u> feet <u>0</u> inches <u>Running</u> /Stopped	FI-931B O GPM 1A. <u>InServ/STBY/OOS</u> 1B. <u>InServ/STBY/OOS</u>
B RCP	Running/Stopped	NaOH Tank Level = $93$
Containment Isolatior	Yes No	Containment Recirc Fans 1A. (InServy/STBY/OOS
ELECTRICAL I	POWER	1B. <u>CINSERV/STBY/00S</u> 1C. <u>CINSERV/STBY/00S</u> 1D. <u>TRSERV/STBY/00S</u>
4 KV Buses Ene	ergized Deenergized	PostAccident DampersOpen/Closed
480 V Buses Ene Turbine Generator Ene	rgized/Deenergized	Service Water Pumps
DIESEL GENER	ATORS	1B. InServ/STBY/00S
B. Running/Unloaded	INSTBY/OOS	1D. Inserv/STBy/OOS
Security <u>Running/Unlc</u>	baded STBY/005	Component Cooling Water Pumps
ENGINEERED S Aux. Feedwat	SAFEGUARDS er Pumps	1A.InservystBY/00s1B.Inserv/STB9/00s
1A. <u>InServ/STBV/00S</u> 1B. <u>InServ/STBV/00S</u> Turb. Driven CST Level	InServ/STBY 005	Surge Tank Level = <u>52</u> * <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ(STBY/00S</u> 1D. <u>InServ(STBY/00S</u>
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\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES AVERAGE



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### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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0200

TIME:

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOH	1.0E-1 <sup>*</sup>	GOOD	HR/H
R02	AREA 2-CONTAINHENT	2.2E+1	GOOD	HR/H -
R03	AREA 3-RADIO CHEN LAB	1.9E-1	GOOD	HR/H
R04	AREA 4-CHARGING PUNP ROON	1.6E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	HR/H
R06	AREA 6-NUCLEAR SANPLE ROOH	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.6E+1	GOOD	HR/H
R08	AREA 8-DRUMMING STATION	3.1E+0	GOOD	MR/H
R 0 9	AREA 9-LETDOWN LINE	4.7E+1	GOOD	HR/H
RICA	CONTAINMENT IODINE MONITOR R10A	1.6E+4	GOOD	CPN /
R 1 0 B	PLANT VENT IODINE MONITOR R10B	2.1E+2	GOOD	CPH
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALH	CPM
R12	CONTAINMENT GAS MONITOR	2.2E+5	HALM	CPH
R13	AUX BLDG EXHAUST AIR PARTICULATE	8.2E+1	GOOD	CPH
R14	AUX BLDG EXHAUST GAS HONITOR	7.1E+1	GOOD	CPH
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	CPN .
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPN
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPM
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPN
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	- GOOD	CPH
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R / HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERNEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.0E+1	GOOD	HR/H
.R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS HONITOR	1.7E+0	GOOD	CPN
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	СРИ
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPM
HVAC1	CONTROL ROON CHLORINE ANALYZER	0.0075	GOOD	PPM
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPN
WT250	250 FOOT LEVEL TENPERATURE	70.0	GOOD	DEGF
WT 033	33 FOOT LEVEL TEMPERATURE	67.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	. 330	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	330	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	4.5	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED . ^	4.4	GOOD	мрн

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			SPING MONITOR SH	EETS			
<i>a</i> .			·	Time: <u>020</u>	<u>o</u>		
		د 	(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR		
l	Part - Beta	uCi	STANDBY	+4.80E-04	N/A		
2	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A		
3	I-131	uCi	STANDBY	+3.70E-04	N/A		
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY ·	-5.30E-06	3.70E-06		
6	Area Monitor	MR/H	1.00E-01	-4.00E-02	<u>1.00E-03</u>		
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>-5.22E-06</u>	<u>-1.00E-06</u>		
8	Gamma Bkg	CPM	STANDBY	-4.00E-02	1.00E+01		
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	-1.40E-03		
l	Part - Beta	uCi/cc*	STANDBY	<u>+9.90E-11</u>			
3	I-131	uCi/cc*	STANDBY	+3.00E-10			
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:							
×	(R-31): "A" Steam	Line Rad	Monitor ·	+1.00E-02	mR/hr		
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr		

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Time: 02:00

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### 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	M	IN.	MAX.	I			
WS 33A	0042	00800	0	011	0050	00			
WS 33B	0042	00810	0	012	0052	00			
WS150A	0050	01000	0	022	0060	00			
WS150B	0052	01100	0	023	0061	02			
WS 250	0040	01000	0	010	0055	00			
NAME	AVGE	ST. DEV	M	IN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0320	03000	0	310	0330	0072	0020	0064	00
WD 33B	0320	03010	0	315	0335	0071	0021	0063	00
WD150A	0330	03100	0	320	0340	0045	0022	0062	00
WD150B	0330	03000	0	320	0340	0035	0023	0060	02
WD 250	0330	03000	0	320	0345	0055	· 0025	0061	00
NAME	AVGE	I	NAME	AVGE		I	NAME	AVGE	I
<b>TER33A</b>	0670	00	TER33B	0670		. 00	TE150A	0690	
TE150B	0690	00	TE250A	0700		00	TE250B	0700	
DT150A	0020	00	DT150B	0020		00	DT250A	0030	
DT250B	0030	00				_			
DEW 33	0436		TEG 33	0602		00			
RATN	0056								





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Time: 0210

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Message:

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in the Control Room:

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Fire zone S-03 (Auxiliary Building Intermediate Floor Center - Bus 16 Area) first alarm.

### FOR CONTROLLER USE ONLY

Controller Notes:

1) This is the beginning of a fire in the #16 Bus transformer due to earthquake damage to the windings.

### Actions Expected:

1) Control Room sounds the fire alarm and activates the Fire Brigade.



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Time:	0215

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Message:

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level



### FOR CONTROLLER USE ONLY

Controller Notes:

1) Data reflects the "A" diesel generator running.

2) Data reflects a controlled shutdown of the plant.

Actions Expected:



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1987 EVALUATED EXERCISE Time: 02/5

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# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

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Reactor Power Level	503 MWE/1504MWT Yes/NO	High Head S. I. Pumps FI-924 O GPM FI-925 O GPM	
NIS N-41 99% NIS N-42 99% RCS Pressure RCS Temperature TAV9 -	n-43 992 n-44 792 2240 psig 572.5 oF 07 GPM	IA.InServ (STBY) (OOS)IB.InServ (STBY) (OOS)IC.InServ (STBY) (OOS)BAST Level =55	
Pressurizer Level LTN.(FI-134)	<u>48</u> <u>47</u> <u>6</u> <u>47</u> <u>6</u> <u>8</u> <u>47</u> <u>6</u> <u>8</u> <u>8</u> <u>47</u> <u>8</u> <u>8</u> <u>8</u> <u>47</u> <u>8</u> <u>8</u> <u>48</u> <u>8</u> <u>8</u> <u>47</u> <u>8</u> <u>8</u> <u>47</u> <u>8</u> <u>8</u> <u>47</u> <u>8</u> <u>47</u> <u>8</u> <u>47</u> <u>8</u> <u>47</u> <u>8</u> <u>47</u> <u>8</u> <u>47</u> <u>57</u> <u>57</u> <u>57</u> <u>57</u> <u>57</u> <u>57</u> <u>57</u> <u>5</u>	Low Head S. I. Pumps FI-626 O GPM	
IA S/G Level	52 $3$ $51$ $3$ $100$ $3$	1A.InServ (STBY)00S1B.InServ (STBY)00S	
IA S/G Pressure IB S/G Pressure *CET Sump A Level Sump B Level A RCP B RCP	755 psig 765 psig 601 oF 2.2 feet 0 inches unning/Stopped unning/Stopped	RWST Level = <u>95</u> <u>Containment Spray Pumps</u> FI-931A <u>O</u> GPM IA. <u>InServ/STBY/OOS</u> IB. <u>InServ/STBY/OOS</u> NaOH Tank Level = <u>93</u>	; ₹
Containment Isolation <u>ELECTRICAL POW</u> 34.5 KV Bus <u>Energ</u> 4 KV Buses <u>Energ</u>	Yes No ER ized Deenergized ized Deenergized	Containment Recirc Fans 1A. <u>(nServ/STBY/OOS</u> ) 1B. <u>(nServ/STBY/OOS</u> ) 1C. <u>(InServ/STBY/OOS</u> ) 1D. <u>InServ/STBY/OOS</u> PostAccident Dampers <u>Open/Clc</u>	osed
480 V Buses Turbine Generator Energ DIESEL GENERAT A. Running/Unloaded/S B. Running/Unloaded/S Security Running/Unload ENGINEERED SAF Aux. Feedwater	ized Deenergized ized Deenergized ORS TBY/OOS TBY/OOS TBY/OOS ed (STBY/OOS EGUARDS Pumps	Service Water Pumps 1A. <u>InServ/STBY/OOS</u> 1B. <u>InServ/STBY/OOS</u> 1C. <u>InServ/STBY/OOS</u> 1D. <u>InServ/STBY/OOS</u> A&B Header Pressure <u>55</u> r <u>Component Cooling Water Pump</u> 1A. <u>InServ/STBY/OOS</u> 1B. <u>InServ/STBY/OOS</u>	)sig
1A.Inserv STBY OOS1B.Inserv STBY OOSTurb.DrivenICST Level	nServ/STBY 005 21.5 feet	Surge Tank Level = 52Standby Aux. Feedwater Pumps1C. Inserv/STBY/00S1D. Inserv/STBY/00S	 
*CET = PREDETERMINED CO	RE EXIT THERMOCOU	PLES AVERAGE	

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0215

TIME:

#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R02	AREA 2-CONTAINMENT	2.3E+1	GOOD	MR/H '
R 0 3	AREA 3-RADIO CHEH LAB	1.9E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUNP ROOH	1.6E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	MR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	HR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.7E+1	GOOD	HR/H
R 0 8	AREA 8-DRUMHING STATION	3.1E+0	GOOD	NR/H
R09 ·	AREA 9-LETDOWN LINE	5.2E+1	GOOD	MR/H
R 10A	CONTAINMENT IODINE HONITOR R10A	1.9E+4	GOOD	CPN
R10B	PLANT VENT IODINE MONITOR R10B	2.3E+2	GOOD	СРИ
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM '	CPN
R12 ·	CONTAINMENT GAS MONITOR	2.5E+5	HALH	CPN
R 1 3	AUX BLDG EXHAUST AIR PARTICULATE	8,2E+1	GOOD	CPN
R14	AUX BLDG EXHAUST GAS MONITOR	1.4E+2	GOOD	CPH
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	СРН
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	СРМ
R 18	LIQUID WASTE DISPOSAL HONITOR	2.8E+3	GOOD	СРН
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	СРК
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R29	AREA 29-CONTAINHENT HIGH RANGE	8.0E-1	GOOD	RIHR
R30	AREA 30-CONTAINHENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD	NR/H .
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
_R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	СРН
R37	CONTROL ROOM PARTICULATE HONITOR	3.3E+0	GOOD	CPN
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	СРН
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	ррн
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	70.1	GOOD	DEGF
WT 033	33 FOOT LEVEL TEMPERATURE	67.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	` 330	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	331	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	4.3	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED . '	4.2	GOOD	MPH



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SPING MONITOR SHEETS

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				Time: <u>021</u>	5	
		, <u>, , , , , , , , , , , , , , , ,</u>	(R-12A)	(R-14A)	(R-15A)	
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read	ling AIR EJECTOR	
l	Part - Beta	uCi	STANDBY	+4.80E-04	N/A	
<b>2</b> ·	Part - Alpha	CPM	STANDBY	<u>-1.90E+01</u>	N/A	
3	I-131	uCi	STANDBY	+3.90E-04	N/A	
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A	
5	Noble Gas-Low	uCi/cc	STANDBY .	-8.00E-06	3.70E-06	
6	Area Monitor	MR/H	1.00E-01	-4.01E-02	1.00E-03	
7	Noble Gas-Mid	uCi/cc	<u>STANDBY</u>	<u>-7.99E-06</u>	<u>-1.00E-06</u>	
8	Gamma Bkg	CPM	STANDBY	-4.10E-02	1.00E+01	
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	-1.40E-03	
			`			
1	Part - Beta	uCi/cc*	STANDBY	<u>+1.50E-10</u>	<u></u>	
3	I-131 ·	uCi/cc*	STANDBY	<u>+3.00E-10</u>		
* SPING CONSOLE PLACED IN "INTERPRETED MODE"						
STEAM LINE	MONITORS:				,	
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr	
	(R-32): "B" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr	





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Time: 02:15

'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77							
NAME	AVGE	ST. DEV	MIN.	MAX.	I		
WS 33A	0041	00900	0011	0050	- 00		
WS 33B	0034	00910	0012	0052	00		
WS150A	0046	01000	0022	0060	00		
WS150B	0045	01100	0023	0061	02		
WS 250	0050	01000	0010	0055	00		
NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR AV	VRN CNT	I
WD 33A	0330	03000	0320	0340、	0072 00	0064	00
WD 33B	0331	03010	0321	0345	0071 00	0063	00
WD150A	0330	03100	0315	0345	0045 00	0062	00
WD150B	0331	03000	0316	0341	0035 00	0060	02
WD 250	0332	03000	0317	0340	0055 00	0061	00
NAME	AVGE	I	NAME	AVGE	I NAME	AVGE	I
TER33A	0670	00	TER33B	0670	00 TE150A	0691	
TE150B	0690	00	TE250A	0702	00 TE250B	0701	
DT150A	0200	00	DT150B	0020	00 DT250A	0032	
DT250B	0031						
DEW 33	0436		TEG 33	0602	00		
RAIN	0056						



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# Time: \_\_\_0220\_\_\_\_

Message: 10X

# GINNA STATION

#### 1987 EVALUATED EXERCISE

# MESSAGE FORM

Message for: Fire Brigade Captain

# Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

480 volt Bus #16 transformer is smoking, but no flames are visible.

# FOR CONTROLLER USE ONLY

Controller Notes:

- 1) If off-site Fire Fighting assistance is requested, Controllers will intercede to prevent off-site Fire Department response.
- 2) See attached map for details of fire. Provide information verbally when the appropriate investigations are made by the Fire Brigade (when it arrives).

#### Actions Expected:

1) When notified, the Shift Supervisor should direct the Fire Brigade to respond via the plant PA System.



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Time: <u>0220</u> Message: 10X

# GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Fire Brigade Captain

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

480 volt Bus #16 transformer is smoking, but no flames are visible.

#### FOR CONTROLLER USE ONLY

Controller Notes:

- If off-site Fire Fighting assistance is requested, Controllers will intercede to prevent off-site Fire Department response.
- 2) See attached map for details of fire. Provide information verbally when the appropriate investigations are made by the Fire Brigade (when it arrives).

Actions Expected:

- 1) Fire Brigade Captain to direct proper fire fighting activities on Bus #16 transformer fire.
- 2) Fire Brigade Captain should keep Control Room advised of fire fighting progress.





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Time: 0225

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Message:

# GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

ALARMS received in the Control Room:

L-7 (Bus 16 under voltage safeguards) J-29 (480V transformer breaker trip) 0

0

J-7 (480V main or tie breaker trip) 0

Indications in the Control Room include:

- 1B Emergency Diesel Generator voltage meter indicates 480 volts.
- 1B Emergency Diesel Generator Bus 16 tie breaker closed.
- 1B Emergency Diesel Generator KW meter indicates ~ 200 KW.

FOR CONTROLLER USE ONLY

Controller Notes:

480 volt Bus 16 tripped out because of a fault on the 1) transformer due to the earthquake and subsequent fire.

#### Actions Expected:

- 1) After 1B Emergency Diesel Generator starts and ties onto Bus 16, Operations should restore equipment lost when Bus 16, tripped out.
- An ALERT should be declared in accordance with SC-100, 2) "Ginna Station Event Evaluation and Classification," EAL: Fire; Fire potentially affecting safety systems as determined by the Shift Supervisor.
- Implement SC-202, "ALERT": 3)
  - Make notifications. a)
  - Assess and monitor plant conditions. Update off-site agencies at least every 30 minutes and whenever there are significant changes in plant status. b)
  - Activate the TSC, OSC, SC. C)





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Time: <u>0230</u>

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Message:

# GINNA STATION

# 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

<u>Simulated Plant</u> <u>Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in Control Room:

o E-31 (Containment Recirc. Fan condensate Hi-Hi level)

# FOR CONTROLLER USE ONLY

Controller Notes:

1) Fire Brigade fighting Bus #16 transformer fire.

2) Data reflects a controlled shutdown of the plant.

Actions Expected:





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# 1987 EVALUATED EXERCISE Time: 0230

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# MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

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	Reactor Power Level <u>477 MWE/1428MWT</u> Reactor Shutdown <u>Yes/No</u>	High Head S. I. Pumps FI-924 O GPM
	NTS N-41 949, N-43 949.	1A There Astronomy
	NIS $N-42$ 942 $N-44$ 942	1B. InServ/STBV/00S
	RCS Pressure 7.2.3.5 psig	1C. InServ (STBY)/005
	RCS Temperature Taun 571.5 OF	BAST Level = $55$ %
	$\frac{1}{27} GPM$	
	Pressurizer Level 4/0 %	Low Head S. I. Pumps
	LTN. $(FI-134)$ $H/$ GPM	FI-626 O GPM
	Containment Pressure O psig	
	1A S/G Level 52 8	1A. InServ/STBY/00S
	1B S/G Level $5/$	1B. InServ/STBV/00S
	RVLIS /00 *	
	1A S/G Pressure 770 psig	RWST Level = $95$ %
6	1B S/G Pressure ' 780 psig	Containment Spray Pumps
	*CET 598 OF	FI-931A O GPM
	Sump A Level /. 6 feet	FI-931B O GPM
-	Sump B Level O inches	1A. InServ/STBY (OOS)
	A RCP Running/Stopped	1B. InServ/STBV/00S
	B RCP (Running/Stopped	NaOH Tank Level = 93 %
	Containment Isolation Yes No	Containment Recirc Fans
		1A. InServySTBY/OOS
		1B. InServy STBY/OOS
	ELECTRICAL POWER	1C. Inserv/STBY/00S
	34.5 KV Bus Energized Deenergized	1D. InServ/STBY/00S
	4 KV Buses Energized Deenergized	PostAccident DampersOpen(Closed)
	480 V Buses Energized Deenergized	Service Water Pumps
	Turbine Generator Energized Deenergized	IA. InservystBy/00s
	DIESEL GENERATORS	1B. Inserv STBY/00S
	A. Running/Unioaded/STBY/00S	1C. (Inserv) STBY/00S
	B. Running/Unioaded/STBY/005	ID. Inservisibly 005
	TSC Running/Unioaded(SiBy/00S	Component Cooling Water Bumps
	ENGINEEPED SAFEGUARDS	11 CINSONN/STRV/00S
	Aux, Feedwater Pumps	1B. InServ/STBV/00S
	RUR. I CEUWUCCI I UMPS	
	1A. Inserv (STBY) 005	Surge Tank Level = 52 %
	1B. InServ/STBY/00S	Standby Aux. Feedwater Pumps
	Turb. Driven InServ/STBY (005)	1C. InServ/STBY/00S
ş	CST Level 21 feet	1D. InServ/STBY/00S
*		and the second sec
	*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES AVERAGE



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# AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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TIME: 0230

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
ROI	AREA 1-CONTROL ROOM	1.0E·1	GOOD	HR/H
R 0 2	AREA 2-CONTAINMENT	2.3E+1	GOOD	. MR/H
R 0 3	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	MR/H
R 0 4	AREA 4-CHARGING PUHP ROOM	1.7E+1	GOOD	MR/H
R 0 5	AREA 5.SPENT FUEL PIT	5.0E+0	GOOD	MR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.8E+1	GOOD	MR/H
R08 .	AREA 8-DRUMMING STATION	3.1E+0	GOOD	MR/H
R09	AREA 9-LETDOWN LINE	5.2E+1	GOOD	MR/H
R10A	CONTAINMENT IODINE MONITOR R10A	2.2E+4	GOOD	СРН
R10B	PLANT VENT IODINE HONITOR R10B	3.0E+2	GOOD	СРМ
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	" HALH	CPN
R12	CONTAINHENT GAS MONITOR	2.7E+5	HALM	CPN -
R13	AUX BLDG EXHAUST AIR PARTICULATE	3.6E+2	GOOD	СРН
R14	AUX BLDG EXHAUST GAS MONITOR	1.5E+2	GOOD	СРН
R 15	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	CPH
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	СРН
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPH CPH
R18	LIQUID WASTE DISPOSAL NONITOR	2.8E+3	GOOD	CPH
R19	STEAM, GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R 2 9	AREA 29-CONTAINNENT HIGH RANGE	8.0E·1	GOOD	R / H R
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERNEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.0E+1 -	GOOD	HR/H
R35	AREA 35-PASS SAHPLE PANEL	1.0E-1	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPH
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPH
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	71.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	67.1	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	331	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	332	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	2.4	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	2.1	GOOD	MPH

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# SPING MONITOR SHEETS

1				Time: 023	<u>0</u>	
			(R-12A)	(R-14A)	(R-15A)	
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	ding AIR EJECTOR	
1	Part - Beta	uCi	STANDBY	+5.00E-04	N/A	
2	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A	
3′	I-131 .	uCi	STANDBY	+3.90E-04	N/A	
4	Bkg I	CPM	<u>STANDBY</u>	<u>+3.48E+01</u>	N/A	
5	Noble Gas-Low	uCi/cc	STANDBY	-8.00E-06	3.70E-06	
6	Area Monitor	MR/H	1.00E-01	-4.00E-02	1.00E-03	
7	Noble Gas-Mid	uCi/cc	STANDBY	-8.00E-06	-1.00E-06	
8	Gamma Bkg	CPM	STANDBY	-4.10E-02	<u>1.00E+01</u> '	
9	Noble Gas-High	uCi/cc	<u>STANDBY</u>	+1.30E-03	-1.40E-03	
٦,	Part - Beta	uCi/cc*	STANDBY	+4.00E-10		
3	I-131	uCi/cc*	STANDBY	<u>+3.00E-10</u>		
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:						
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr	
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr	





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Time: 02:30

'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	M	EN.	MAX.	I			
WS 33A	0021	00900	· 00	012	0040	00	•		
WS 33B	0022	00910	00	012	0052	00			•
WS150A ·	0030	01000	00	022	0060	00			
WS150B	0032	01100	00	023	0061	02			
WS 250	0040	01000	00	010	0055	00			
NAME	AVGE	ST. DEV	M3	EN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0330	03000	03	325	0345	0072	0020	0064	00
WD 33B	0330	03010	03	315	0340	0071	0021	0063	00
WD150A	0330	03100	03	320	0341	0045	0022	0062	00
WD150B	0330	03000	03	321	0338	0035	0023	0060	02
WD 250	0335	03000	03	325	0340	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NA	ME	AVGE	I
TER33A	0671	00	TER33B	0671		00 TE	150A	0691	
TE150B	0691	00	TE250A	0710		00 TE	250B	0710	
DT150A	0020	00	DT150B	0020		00 DT	250A	0040	
DT250B	0040								
`DEW 33	0436		TEG 33	0602		00			
RAIN	0056				•				



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Time:	0240		
Message:	<u>13X</u>		

132

# GINNA STATION

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# 1987 EVALUATED EXERCISE

# MESSAGE FORM

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Message for: Fire Brigade Captain

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The fire is extinguished.



# FOR CONTROLLER USE ONLY

Controller Notes:

1) Deliver when all objectives for the fire have been demonstrated. Deliver before 0255 at the latest.

# Actions Expected:

- 1) Notify the Control Room/TSC.
- 2) Re-stow all gear.





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Time: 0240

Message: <u>14X</u>

# GINNA STATION

# 1987 EVALUATED EXERCISE

# MESSAGE FORM

Message for: Control Room Shift Supervisor

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Declare and ALERT in accordance with SC-100 "Ginna Station Event Evaluation and Classification," EAL: Fire; Fire potentially affecting safety systems as determined by the Shift Supervisor.

#### FOR CONTROLLER USE ONLY

Controller Notes:

 Deliver only if an ALERT has not yet been declared. Do not deliver if Emergency Classification discussions are in progress.

Actions Expected:







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Time:	0245
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Message: <u>15</u>

# GINNA STATION

# 1987 EVALUATED EXERCISE

# MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in Control Room:



o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)

FOR CONTROLLER USE ONLY

Controller Notes:

1) Data reflects a controlled shutdown of the plant.

Actions Expected:







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1987 EVALUATED EXERCISE Time: 0245

# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

Reactor Power Level $\frac{452}{Yes/NO}$ Reactor ShutdownYes/NONISN-41NISN-42872N-43RCS Pressure22.45RCS Temperature TAVg570OFCHG (FT-128)	High Head S. I. Pumps FI-924 O GPM FI-925 O GPM IA. InServ/STBY/00S IB. InServ/STBY/00S IC. InServ/STBY/00S BAST Level =55 %
Charles (11 120) $4/$ GrmPressurizer Level $4/5$ $4/$ LTN. (FI-134) $4/$ GPMContainment Pressure $0$ psig1A S/G Level $52$ $8$ 1B S/G Level $5/$ $8$ PVLIS $000$ $8$	Low Head S. I. Pumps FI-626 GPM 1A. InServ/STBY/00S 1B. InServ/STBY/00S
IA S/G Pressure783psigIB S/G Pressure790psig*CET595oFSump A Level1.88feetSump B Level0inchesA RCPRunning/StoppedRunning/Stopped	RWST Level =95Containment Spray PumpsFI-931AOGPMFI-931BOGPMIA.InServ/STBY/OOSIB.InServ/STBY/OOSNaOH Tank Level =93
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized	Containment Recirc Fans 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S PostAccident DampersOpen/Closed
480 V Buses Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded (STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	ServiceWater Pumps1A.(InServ/STBY/00S)1B.(InServ/STBY/00S)1C.(InServ/STBY/00S)1D.InServ/STBY/00S)A&B Header Pressure52 psigComponent Cooling Water Pumps1A.(InServ/STBY/00S)1B.InServ/STBY/00S)
1A.InServ/STBY/00S1B.InServ/STBY/00STurb.DrivenCST Level	Surge Tank Level = <u>52</u> <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u>

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES AVERAGE



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TIME: 0245

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD	HR/H
R02	AREA 2-CONTAINHENT	2.4E+1	GOOD	* HR/H
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	HR/H
R04	AREA 4-CHARGING PUMP ROOM	1.7E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	HR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.8E+1	GOOD	HR/H
R08	AREA 8-DRUMMING STATION	3.1E+0	GOOD	MR/H
R09	AREA 9-LETDOWN LINE	5.2E+1	GOOD	HR/H
RIDA	CONTAINMENT IODINE NONITOR RIGA	2.5E+4	GOOD	CPN
R108	PLANT VENT IODINE MONITOR R10B	3.5E+2	GOOD	СРН
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM	CPM
R12	CONTAINMENT GAS MONITOR	2.9E+5	HALH	CPH
R13	AUX BLDG EXHAUST AIR PARTICULATE	2.9E+2	GOOD	, CPH
R14	AUX BLDG EXHAUST GAS MONITOR	3.0E+2	GOOD	СРМ
R15	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	СРМ
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPM
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	СРН
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	G00D, .	CPM
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	СРН
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR ·
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	HR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD	HR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPM
R37	CONTROL ROOM PARTICULATE HONITOR	3.3E+0	GOOD	CPH
R 3 8	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPN
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPM
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPH
WT250 '	250 FOOT LEVEL TEMPERATURE	70.5	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	68.0	GOOD	DEGF
WD 250	250 FOOT LEVEL WIND DIRECTION	332 -	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	333	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	3.5	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	3.6	GOOD	MPH



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SPING MONITOR SHEETS

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				Time: <u>024</u> 5	5
	•		(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Read</u> <u>PLANT VENT</u>	ling AIR EJECTOR
l	Part - Beta	uCi	STANDBY	<u>+5.20E-04</u>	N/A
2	Part - Alpha	CPM	STANDBY	<u>-1.90E+01</u>	N/A
3	I-131	uCi	STANDBY	+3.90E-04	N/A
4 .	Bkg I	CPM	<u>STANDBY</u>	3.48E+01	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	<u>+8.00E-06</u>	<u>3.70E-06</u>
6	Area Monitor	MR/H	<u>1.0E-01</u>	-4.00E-02	<u>1.00E-03</u>
7	Noble Gas-Mid	uCi/cc	<u>STANDBY</u>	<u>-8.00E-06</u>	-1.00E-06
8	Gamma Bkg	СРМ	STANDBY	<u>-4.10E-02</u>	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.30E-03</u>	<u>-1.40E-03</u>
l	Part - Beta	uCi/cc*	STANDBY	<u>+5.00E-10</u>	
3	I-131	uCi/cc*	STANDBY	<u>+3.20E-10</u>	
* SPING CON	NSOLE PLACED IN "IN	NTERPRETE	D MODE"		
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr



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Time: 02:45

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'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AVGE	ST. DEV	MIN.	MAX.	I			
0031	00900	0011	0050	00			
0032	00910	0012	0052	00			
0040	01000	0022	0060	00			
0042	01100	0023	0061	02			•
0030	01000	0010	0055	00			
AVGE	ST. DEV	MIN.	MÁX.	MNDR	AVRN	CNT	I
0331	03000	0310	0340	0072	0020	0064	00
0332	03010	0320	0340	0071	0021	0063	00
0330	03100	0320	0340	0045	0022	0062	00
0310	03000	0300	0320	0035	0023	0060	02
0315	03000	0305	0325	0055	0025	0061	00
AVGE	I	NAME	AVGE	I NAME	3	AVGE	I
0680	00	TER33B	0680 '	00 TE15	SOA	0700	
0700	00	TE250A	0705	00 TE25	50B	0705	
0200	00	DT150B	0020	00 DT25	50A	0025	
0025		н					
0436		TEG 33	0602	00			
0056						٠	
	AVGE 0031 0040 0042 0030 AVGE 0331 0332 0330 0310 0315 AVGE 0680 0700 0200 025 0436 0056	AVGEST. DEV003100900003200910004001000004201100003001000AVGEST. DEV033103000033203010033003100031503000AVGEI06800007000002000000250436005600	AVGEST. DEVMIN.00310090000110032009100012004001000002300420110000230030010000010AVGEST. DEVMIN.03310300003100332030100320033003100032003100300003000315030000305AVGEINAME068000TER33B070000DT150B00250436TEG 330056TEG 33	AVGEST. DEVMIN.MAX.0031009000011005000320091000120052004001000002200600042011000023006100300100000100055AVGEST. DEVMIN.MAX.03310300003100340033203010032003400330031000320034003100300003050325AVGEINAMEAVGE068000TER33B0680070000DT150B002000250436TEG 330602	AVGE         ST. DEV         MIN.         MAX.         I           0031         00900         0011         0050         00           0032         00910         0012         0052         00           0040         01000         0022         0060         00           0042         01100         0023         0061         02           0030         01000         0010         0055         00           AVGE         ST. DEV         MIN.         MAX.         MNDR           0331         03000         0310         0340         0072           0332         03010         0320         0340         0071           0330         03100         0320         0340         0045           0310         03000         0300         0325         0055           AVGE         I         NAME         AVGE         I         NAME           0680         00         TER33B         0680         00         TE25           0200         00         DT150B         0020         00         DT25           0205         TEG         33         0602         00         00	AVGE       ST. DEV       MIN.       MAX.       I         0031       00900       0011       0050       00         0032       00910       0012       0052       00         0040       01000       0022       0060       00         0030       01000       0010       0055       00         0030       01000       0010       0055       00         AVGE       ST. DEV       MIN.       MAX.       MNDR       AVRN         0331       03000       0310       0340       0072       0020         0332       03010       0320       0340       0071       0021         0330       03100       0320       0340       0045       0022         0310       03000       0300       0320       0035       0023         0315       03000       0305       0325       0055       0023         0315       03000       0305       0325       0055       0023         0436       I       NAME       AVGE       I       NAME         0680       00       TEG 33       0602       00       00         0025       00       DT150B	AVGE         ST. DEV         MIN.         MAX.         I           0031         00900         0011         0050         00           0032         00910         0012         0052         00           0040         01000         0022         0060         00           0042         01100         0023         0061         02           0030         01000         0010         0055         00           AVGE         ST. DEV         MIN.         MAX.         MNDR         AVRN         CNT           0331         03000         0310         0340         0072         0020         0064           0332         03010         0320         0340         0071         0021         0063           0330         03100         0320         0340         0045         0022         0062           0310         03000         0300         0320         0340         0045         0022         0062           0310         03000         0305         0325         0023         0060           0315         03000         0305         0325         0025         0025         0025           0436         I





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Time: 0300

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Message:

## GINNA STATION

1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)



FOR CONTROLLER USE ONLY

Controller Notes:

1) Data reflects a controlled shutdown to hot shutdown.

Actions Expected:



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# 1987 EVALUATED EXERCISE Time: <u>0300</u>

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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level Reactor Shutdown $\frac{427}{\text{WE}/277 \text{MWT}}$ $\frac{\text{Yes/NO}}$ NISN-41 $\frac{842}{7}$ N-43 $\frac{842}{7}$ N-43NISN-42 $\frac{842}{7}$ N-44 $\frac{842}{7}$ N-44RCS Pressure RCS Temperature TAVA CHG. (FI-128) $2240$ STemperature TAVA STAVA $569$ OF OF OF CHG. (FI-134)Pressurizer Level UTN. (FI-134) $41$ STAVA $951$ STAVAN. (FI-134) Containment Pressure $0.1$ Sig	High Head S. I. Pumps FI-924 O GPM FI-925 O GPM IA. InServ STBY/00S IB. InServ STBY/00S BAST Level =
$\begin{array}{c} 1B \text{ S/G Level} \\ \hline \\ RVLIS \\ 1A \text{ S/G Processor} \\ \hline \\ $	1B. InServ STBY/00S
IA S/G Pressure795psig1B S/G Pressure800psig*CET593oFSump A Level2.0feetSump B Level0inchesA RCPRunning/StoppedRunning/Stopped	RWST Level = $95$ $\$$ Containment Spray PumpsFI-931AOGPMFI-931BOGPMIA.InServ/STBY/OOSIB.InServ/STBY/OOSNaOH Tank Level = $93$
Containment Isolation Yes No	Containment Recirc Fans1A.InServ/STBY/00S1B.InServ/STBY/00S
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized	1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> PostAccident Dampers <u>Open</u> Closed
480 V Buses Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded(STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	ServiceWater Pumps1A.Inserv/STBY/00S1B.Inserv/STBY/00S1C.Inserv/STBY/00S1D.Inserv/STBY/00SA&B Header Pressure52 psigComponent Cooling Water Pumps1A.Inserv/STBY/00S1B.Inserv/STBY/00S1B.Inserv/STBY/00S
1A.InServ/STBY/00S1B.InServ/STBY/00STurb.DrivenCST LevelInServ/STBY/00S2.1feet	Surge Tank Level =52.Standby Aux. Feedwater Pumps1C.Inserv/STBY/00S1D.Inserv/STBY/00S

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES AVERAGE



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#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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TIME: 0300

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R02	AREA 2-CONTAINMENT	2.4E+1	GOOD	. HR/H '
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	HR/H
R04	AREA 4-CHARGING PUHP ROOH	1.7E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	HR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.8E+1	GOOD	HR/H
R08	AREA 8-DRUMMING STATION	3.1E+0	GOOD	MR/H
R09	AREA 9-LETDOWN LINE	5.2E+1	GOOD	HR/H
R10A	CONTAINMENT IODINE MONITOR RIDA	2.8E+4	GOOD	CPM
R 1 0 B	PLANT VENT IODINE MONITOR R10B	4.0E+2	GOOD	CPH
R11	CONTAINMENT AIR PARTICULATE	6.5E+5	HALM	CPH
R12	CONTAINMENT GAS MONITOR	3.3E+5	HALM	CPH
R 1 3	AUX BLDG EXHAUST AIR PARTICULATE	5.5E+2	GOOD	CPH
R14	AUX BLDG EXHAUST GAS MONITOR	4.3E+2	GOOD	CPH
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.0E+1	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPN
R 1 7	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	, CPH
R 1 8	LIQUID WASTE DISPOSAL HONITOR	2.8E+3	GOOD	CPH
R 1 9	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3 .	GOOD	CPN
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPH
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R / HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R 3 3	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1 -	GOOD	MR/H
R 3 5	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0 <sup>°</sup>	GOOD	CPH
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPM
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM ANMONIA ANALYZER	0.7763	GOOD	PPM
WT250	250 FOOT LEVEL TEMPERATURE	72.1	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	69.1	GOOD	DEGF
WD 250	250 FOOT LEVEL WIND DIRECTION	335	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	- 335	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	3.7	6000	мрн
WS033	33 FOOT LEVEL WIND SPEED	3.8	GOOD	нрн



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#### SPING MONITOR SHEETS

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0		,	(R-12A)	(R-14A)	(R-15A)
CHANNEL #	` TYPE	UNITS	CONTAINMENT	Current Rea PLANT VENT	ding AIR EJECTOR
1.	Part - Beta	uCi	STANDBY	+5.40E-04	N/A
2	Part - Alpha	CPM	STANDBY	<u>-1.90E+01</u>	N/A
3	I-131	uCi	STANDBY	+3.90E-04	N/A
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	+8.00E-06	3.70E-06
6	Area Monitor	MR/H	<u>1.00E-01</u>	-4.00E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+8.00E-06</u>	1.50E-06
8	Gamma Bkg	CPM ·	STANDBY	<u>-4.10E-02</u>	1.00E+01
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	<u>-1.40E-03</u>
		·			
l	Part - Beta	uCi/cc*	STANDBY	+6.00E-10	. <u> </u>
3	I-131	uCi/cc*	STANDBY	<u>+3.2E-10</u>	<u> </u>
* SPING CO STEAM LINE	NSOLE PLACED IN "I MONITORS:	NTERPRETE.	D MODE"		
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr



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Time: 03:00

'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77								
NAME	AVGE	ST. DEV	MIN.	MAX.	I			
WS 33A	0038	00700	0015	0058	00	1		
WS 33B	0039	00910	0012	0052	00			•
WS150A	0047	01000	0022	0060	00			
WS150B	0048	01100	0023	0061	02			
WS 250	0056	01000	0010	0055	00			
NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0335	06000	0325	0345	0072	0020	0064	00
WD 33B	0335	03010	0325	0345	0071	0021	0063	00
WD150A	0334	03100	0324	0344	0045	0022	0062	00
WD150B	0333	03000	0323	0343	0035	0023	0.060	02
WD 250	0335	02000	0325	0345	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE	I NAME	;	AVGE	I
TER33A	0691	00	TER33B	0691	00 TE15	ÓA	0701	
TE150B	0701	00	TE250A	0712	00 TE25	OB	0712	
DT150A	0200	00	DT150B	0200	00 DT25	AO	0020	
DT250B	0020							
DEW 33	0436		TEG 33	06 <u>0</u> 2	00			
RATN	0056				•			





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Time: <u>0315</u> Message: <u>17</u> 144

### GINNA STATION

1987 EVALUATED EXERCISE

## MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in the Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)



### FOR CONTROLLER USE ONLY

Controller Notes:

1) Data reflects a controlled shutdown to hot shutdown.

Actions Expected:





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1987 EVALUATED EXERCISE Time: 03/5

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## MAJOR PARAMETERS

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## ENGINEERED SAFEGUARDS

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•	Reactor Power Level <u>40 / MWE/1200</u> Reactor Shutdown <u>Yes No</u>	MWT	High Head S. I. Pumps FI-924 O GPM FI-925 O GPM
	NIS N-41 79% N-43 74	970	1A. InServ (STBY) 00S
	NIS N-42 799. N-44 7	970	1B. InServ/STBY/OOS
	RCS Pressure 2240	psig	1C. InServ STBY OOS
	RCS Temperature TAvy 567	ōF	BAST Level = 55 %
	CHG. (FI-128) 27	GPM	
	Pressurizer Level 43	Å	Low Head S. I. Pumps
	LTN. (FI-134)	GPM	FI-626 O GPM
	Containment Pressure 0.1	psig	
	1A S/G Level 52	<b>Å</b> .	1A. InServ/STBY/00S
	1B S/G Level 5/	ક	1B. InServ STBY/OOS
	RVLIS /00	ક્ષ	
	1A S/G Pressure 805	psig	RWST Level = 95 %
	1B S/G Pressure 810	psig	Containment Spray Pumps
	*CET 590	OF	FI-931A O GPM
	Sump A Level 2.2	feet	FI-931B O GPM
	Sump B Level O i	nches	1A. InServ/STBY OOS
	A RCP (Running)Stop	ped	1B. InServ/STBY/00S
	B RCP Running/Stop	ped	NaOH Tank Level = 93 %
	Containment Isolation Yes No		Containment Recirc Fans
			1A. (InServySTBY/00S
			.B. InServySTBY/00S
	ELECTRICAL POWER		LC. InServYSTBY/00S
	34.5 KV Bus Gnergized Deener	gized	1D. InServ/STBY/00S
	4 KV Buses (Energized) Deener	gized	PostAccident DampersOpen Closed)
	480 V Buses (Energized) Deener	gized	Service Water Pumps
	Turbine Generator Energized Deener	gized	1A. InServySTBY/00S
	DIESEL GENERATORS		1B. (InServySTBY/00S
	A. Running/Unloaded/STBY/00S		1C. CInServySTBY/00S
	B. (Running/Unloaded/STBY/OOS		1D. InServ/STBY/OOS
	TSC Running/Unloaded/STBY/OOS		A&B Header Pressure <u>52</u> psig
	Security <u>Running/Unloaded</u> STBY/00S		Component Cooling Water Pumps
	ENGINEERED SAFEGUARDS		1A. Inserv/STBY/00S
	Aux. Feedwater Pumps		1B. InServ STBY OOS
	IA. Inserv/orby/005		Surge Talls Level = $3 - 5$
	1B. Inservastby/005	202	10 The and Compy toos
5	Turb. Driven Inserv/STBY		TO THE ANT CHEVICAS
r.	CST Level Ie	<b>et</b>	ID. INSELV STBL 005
	*CET = PREDETERMINED CORE EXIT THE	RMOCOU	IPLES AVERAGE



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#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

TIME: 0315

POINT ID	DESCRIPTION	- CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD	HR/H -
R02	AREA 2-CONTAINHENT	2.4E+1	GOOD	HR/H
R 0 3	AREA 3-RADIO CHEN LAB	1.9E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUHP ROON	1.7E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	HR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.8E+1	GOOÐ	HR/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD	NR/H
R 0 9	AREA 9-LETDOWN LINE	5.2E+1	GOOD	HR/H
R10A	CONTAINMENT IODINE HONITOR R10A	3.3E+4	HALM	CPN
R 1 0 B	PLANT VENT IODINE NONITOR R10B	4.5E+2	GOOD	CPN
R11	CONTAINMENT AIR PARTICULATE	6.5E+5	HALH	CPH
R12	CONTAINMENT GAS MONITOR	3.5E+5	HALM	CPN
R13	AUX BLDG EXHAUST AIR PARTICULATE	6.4E+2	GOOD	Срн
R14	AUX BLDG EXHAUST GAS MONITOR	4.3E+2	GOOD	СРН
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPH
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	СРМ
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	СРН
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPM
R19	STEAH GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	° СРМ
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	СРН
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	MR/H
R 3 4	AREA 34-AUX BLDG CV SPRAY PUNP	1.0E+1	GOOD	MR/H
R35 *	AREA 35-PASS SAHPLE PANEL	1.0E-1	GOOD	MR/H /
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPM
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	СРИ
R38	CONTROL ROOM IDDINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	72.3	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	69.5	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	335	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	335	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	4.1	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	4.5	GOOD	HPH



SPING MONITOR SHEETS

~	x			Time: <u>031</u>	.5
			(R-12A)	(R-14A)	(R-15A)
CHANNEL #	( TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR
l	Part - Beta	uCi	STANDBY	+5.60E-04	N/A
2	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A
3	I-131	uCi	STANDBY	+3.90E-04	N/A
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A
5	Noble Gas-Low	uCi/cc '	STANDBY	<u>+8.00E-06</u>	<u>3.70E-06</u>
6	Area Monitor	MR/H	<u>1.00E-01</u>	-4.00E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	+8.00E-06	-1.00E-06
8	Gamma Bkg	CPM	<u>STANDBY</u>	-4.10E-02	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY .	+1.30E-03	-1.40E-03
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l	Part - Beta	uCi/cc*	STANDBY	<u>+7.00E-10</u>	
3	. I-131	uCi/cc*	STANDBY	<u>+3.50E-10</u>	
* SPING CO STEAM LINE	DNSOLE PLACED IN "I MONITORS:	NTERPRETE	D MODE"	•	
,	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr

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Time: 03:15

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'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77								
NAME	AVGE	ST. DEV	MIN.	MAX.	I			
WS 33A	0051	00900	0011	0050	00			
WS 33B	0052	00910	0012	0052	00			
WS150A	0040	01000	0022	0060	00			
WS150B	0042	01100	0023	0061	02			
WS 250	0050	01000	0010	0055	00			
NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0335	03000	0325	0345	0072	0020	0064	00
WD 33B	0335	03010	0325	0344	0071	0021	0063	00
WD150A	0334	03100	0324	• 0345	0045	0022	0062	00
WD150B	0333	03000	0323	0342	0035	0023	0060	02
WD 250	0335	03000	0325	0342	0055	0025	0061	00
NAME	AVGE	Ľ	NAME	AVGE	I NAM	E	AVGE	I
TER33A	0700	00	TER33B	0700	00 TEL	50A	0715	
TE150B	0715	00	TE250A	0725	00 TE2	50B	0725	
<b>DT150A</b>	0015	00	DT150B	0015	00 DT2	50A	0025	
DT250B	0025							
DEW 33	0456		TEG 33	0602	00			
RATN	0056							





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. Time: <u>0330</u>

Message: <u>18</u>

#### GINNA STATION

## 1987 EVALUATED EXERCISE

## MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)



Controller Notes:

1) Data reflects a controlled shutdown to hot shutdown.

Actions Expected:



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## 1987 EVALUATED EXERCISE Time: 0330

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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level <u>376 MWE///25 MWT</u> Reactor Shutdown <u>Yes/NO</u>	High Head S. I. Pumps FI-924 GPM
NIS N-41 74% N-43 74%	
NIS $N-42$ 749 $N-44$ 749	IR. Inserv/STBY/00S
RCS Pressure	1C Inserv/STBY/005
RCS Temperature TAVA 5/0(0 OF	BAST LOVOL
CHG. (FI-128) 27 GPM	DV21 TEAST =22 %
Pressurizer Level 4/ *	Low Head S T Dumps
LTN. (FI-134) H/ GPM	FT=626 $O$ $GPM$
Containment Pressure O./ psig	12 000 <u> </u>
1A S/G Level	1A. InServ (STRV) (OOS
1B S/G Level 5/ %	1B. InServ (STBY)/00S
RVLIS /00 %	<u>1.0017/0101/000</u>
1A S/G Pressure 820 psig	RWST Level = 9.5 %
1B S/G Pressure 825 psig	Containment Spray Pumps
*CET 5-87 OF	FI-931A O GPM
Sump A Level /16 feet	FI-931B O GPM
Sump B Level O inches	1A. InServ/STBY (OOS)
A RCP Running Stopped	1B. InServ/STBY/00S
B RCP. (Running)Stopped	NaOH Tank Level = 93 8
Containment Isolation Vos AD	
tes mo	Containment Recirc Fans
	Containment Recirc Fans1A.InservySTBY/00S
	Containment Recirc Fans1A.InservySTBY/00S1B.InservySTBY/00S
ELECTRICAL POWER	Containment Recirc Fans1A.Inserv/STBY/00S1B.Inserv/STBY/00S1C.Inserv/STBY/00S
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized	Containment Recirc Fans1A.Inserv/STBY/00S1B.Inserv/STBY/00S1C.Inserv/STBY/00S1D.Inserv/STBY/00S
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen Closed
ELECTRICAL POWER 34.5 KV Bus 4 KV Buses 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized	Containment Recirc Fans 1A. (InServ) STBY/OOS 1B. (InServ) STBY/OOS 1C. (InServ) STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen(Closed) Service Water Pumps 1A. (InServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus 4 KV Buses 4 KV Buses 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS	Containment Recirc Fans         1A.       InServ/STBY/00S         1B.       InServ/STBY/00S         1C.       InServ/STBY/00S         1D.       InServ/STBY/00S         PostAccident DampersOpen/Closed         Service       Water Pumps         1A.       InServ/STBY/00S         IB.       Unserv/STBY/00S         PostAccident DampersOpen/Closed         Service       Water Pumps         1A.       InServ/STBY/00S         1B.       Unserv/STBY/00S
ELECTRICAL POWER 34.5 KV Bus 4 KV Buses 4 KV Buses 480 V Buses 5 Energized Deenergized 5 Energized Deenergized Deenergized 5 Energized Deenergized Deenergized 5 Energized Deenergized Deenergized Deenergized Deenergized Deenergized Dienergized Dienergized Dienergized Dienergized Dienergized Dienergized Deenergized Dienergized	Containment Recirc Fans         1A.       InServ/STBY/00S         1B.       InServ/STBY/00S         1C.       InServ/STBY/00S         1D.       InServ/STBY/00S         PostAccident DampersOpen/Closed         Service       Water Pumps         1A.       InServ/STBY/00S         1B.       InServ/STBY/00S         1B.       InServ/STBY/00S         1B.       InServ/STBY/00S         1B.       InServ/STBY/00S         1B.       InServ/STBY/00S         1C.       (InServ/STBY/00S)
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS	Containment Recirc Fans1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedServiceWater Pumps1A.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1C.InServ/STBY/OOS1D.ThServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded (STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 52 psig Component Cooling Water Pumps
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 52 psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 52 psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	Containment Recirc Fans 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure <u>52</u> psig Component Cooling Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. InServ/STBY/OOS	Containment Recirc Fans 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 52 psig Component Cooling Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. InServ/STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 52 psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS Surge Tank Level = 52 % Standby Aux. Feedwater Pumps
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. Inserv/STBY/OOS B. Inserv/STBY/OOS Turb. Driven InServ/STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 52 psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS Surge Tank Level = 52 % Standby Aux. Feedwater Pumps 1C. InServ/STBY/OOS
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/00S B. Running/Unloaded/STBY/00S Security Running/Unloaded STBY/00S Security Running/Unloaded STBY/00S Security Running/Unloaded STBY/00S ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. InServ/STBY/00S B. InServ/STBY/00S Turb. Driven InServ/STBY/00S 2/.5 feet	Containment Recirc Fans 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 52 psig Component Cooling Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 10. InServ/STBY/OOS

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES AVERAGE

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TIME: 0330

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	1.0E-1	GOOD	HR/H
R02	AREA 2-CONTAINMENT	2.4E+1	GOOD	HR/H .
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	HR/H
R04	AREA 4-CHARGING PUHP ROOH	1.7E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	HR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	HR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.9E+1	GOOD	HR/H
R08	AREA 8-DRUMMING STATION	3.1E+0	GOOD	HR/H
R09	AREA 9-LETDOWH LINE	5.2E+1	GOOD	HRTH
R10A	CONTAINMENT IODINE MONITOR R10A	3.8E+4	HALM	СРИ
R10B	PLANT VENT IODINE MONITOR R10B	5.0E+2	GOOD	СРН -
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM	CPN
R12	CONTAINMENT GAS MONITOR	3.8E+5	HALM	, CPH
R13	AUX BLDG EXHAUST AIR PÅRTICULATE '	7.3E+2	GOOD	СРИ
R14	AUX BLDG EXHAUST GAS HONITOR	4.3E+2	GOOD	CPH
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	СРИ
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPN
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	СРМ
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3 *	GOOD	СРИ
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R20	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR·
R30	AREA 30-CONTAINHENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33 N	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	HR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	1.0E+1	GOOD	HR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	- MR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD .	CPH
R37	CONTROL ROOM PARTICULATE HONITOR	3.3E+0	GOOD	СРН
R 3 8	CONTROL ROOM IODINE MONITOR	1.2E+0	G00D ,	CPH
'HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM ANNONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	72.5 .	GOOD	DEGF
WT033	33 FOOT LEVEL TENPERATURE	69.5	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	337	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	335	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	4.6	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	4.7	GOOD	H P H

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SPING MONITOR SHEETS

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				Time: 033	<u>,</u>
		•	(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	<u>ling</u> AIR EJECTOR
1	Part - Beta	uCi	STANDBY	+5.80E-04	N/A
2	Part - Alpha	СРМ	STANDBY	<u>-1.90E+01</u>	N/A
3.	I-131	uCi	STANDBY	+3.90E-04	N/A
4 .	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	+1.00E-06	3.70E-06
6	Area Monitor	MR/H	<u>1.00E-01</u>	-4.00E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	-1.00E-06	-1.00E-06
8	Gamma Bkg	CPM	STANDBY	-4.10E-02	1.00E+01
9	Noble Gas-High	uCi/cc	<u>STANDBY</u>	<u>+1.30E-03</u>	<u>-1.40E-03</u>
1	Part - Beta	uCi/cc*	STANDBY	<u>+9.00E-10</u>	
3	I-131	uCi/cc*	STANDBY	<u>+3.70E-10</u>	
* SPING CO	NSOLE PLACED IN "I	NTERPRETE	D MODE"		
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr



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Time: 03:30.

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'SILENT 700' COMPUTER

METEOROLOGICAL DATA

	AV77								
	NAME	AVGE	ST. DEV	MIN.	MAX.	I			
	WS 33A	0046	00900	0015	0050	00			
	WS 33B	0045	00810	0016	0052	00			
	WS150A	0041	01000	0022	0060	00			
	WS150B	0042	01100	0023	0061	02			
	WS 250	0060	01000	0010	0055	00			
	NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR	AVRN	CNT	I
	WD 33A	0337	02000	0327	0347	0072	0020	0064	00
	WD 33B	0336	03010	0326	0346	0071	0021	0063	00
	WD150A	0332	03100	0323	0343	0045	0022	0062	00
	WD150B	0337	03000	0327	0347	0035	0023	0060	02
	WD 250	0338	03000	0328	0348	0055	0025	0061	00
	NAME	AVGE	I	NAME	AVGE	. I NAM	IE	AVGE	I
_	TER33A	0695	00	TER33B	0695	00 TE1	.50A	0715	
U	TE150B	0715	00	TE250A	0725	00 TE2	50B	0725	
_	DT150A,	0200	00	DT150B	0200	· 00 DT2	50A	0030	
	DT250B	0030 <sup>,</sup>					6		
	DEW 33	0460		TEG 33	0602	00			
	RAIN	0056							



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Message: <u>19</u>

### GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in Control Room:

E-31 (Containment Recirc. Fan Condensate Hi-Hi Level) 0

#### FOR CONTROLLER USE ONLY

Controller Notes:

- 1) The TSC, OSC and Emergency Survey Center should be nearing operational status.
- 2) Data reflects a controlled shutdown to hot shutdown.

#### Actions Expected:

1) TSC, when operational should send a repair team out to investigate 480 volt Bus #16 transformer damage.

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# MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level <u>350 MWE//048 MWT</u> Reactor Shutdown <u>Yes/No</u>	High Head S. I. Pumps FI-924 O GPM
NISN-41 $692$ N-43 $692$ NISN-42 $692$ N-44 $692$ RCS Pressure2235psigRCS Temperature TAvg565oFCHG. (FI-128)27GPM	IA.    InServ (STBY/00S)      1B.    InServ (STBY/00S)      1C.    InServ (STBY/00S)      BAST Level =    55 %
Pressurizer Level 40 % LTN. (FI-134) 4/ GPM Containment Pressure 0./ psig	Low Head S. I. Pumps FI-626 O GPM
IR S/G LevelJZ1B S/G Level52RVLIS/001A S/G Pressure830psig	IA.Inserv(SIBL/005)1B.Inserv(STB2/005)RWST Level = $95$ %
1B S/G Pressure835psig*CET585oFSump A Level1.8feetSump B Level0inches	<u>Containment Spray Pumps</u> FI-931A O GPM FI-931B O GPM 1A. InServ/STBY/OOS
A RCP B RCP B RCP Control and Toolation	1B. <u>InServ/STBV/00S</u> NaOH Tank Level = <u>93</u> %
ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed
480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	ServiceWater Pumps1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S1D.InServ/STBY/00SA&B Header Pressure62 psigComponent Cooling Water Pumps1A.InServ/STBY/00S1B.InServ/STBY/00S1B.InServ/STBY/00S
1A.InServ/STBY/00S1B.InServ/STBY/00STurb.DrivenCST Level21.5	Surge Tank Level = <u>52</u> <sup>\$</sup> Standby Aux. Feedwater Pumps 1C. <u>InServ/STBY/OOS</u> 1D. <u>InServ/STBY/OOS</u>

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES AVERAGE



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<u>0345</u>

TIME:

#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R 0 2	AREA 2-CONTAINMENT	2.4E+1	GOOD	MR/H T
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUHP ROOM	1.7E+1	GOOD	MR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	MR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.9E+1	GOOD	MR/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD	HR/H
R 0 9	AREA 9-LETDOWN LINE	5.2E+1	GOOD	MR/H
R10A	CONTAINMENT IODINE MONITOR R10A	4.2E+4	HALM	CPH
R10B	PLANT VENT IODINE MONITOR R10B	5.5E+2	GOOD	CPM
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM	CPN
R12	CONTAINMENT GAS MONITOR	4.1E+5	HALM	CPH
R13	AUX BLDG EXHAUST AIR PARTICULATE	8.2E+2	GOOD	CPM
R14	AUX BLDG EXHAUST GAS MONITOR	4.3E+2	GOOD	СРН
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPM
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPM
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	' GOOD	CPM
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPH
R 1 9	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R 3 0	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERNEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD	HR/H
R 3 5	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPN
R37	CONTROL ROON PARTICULATE MONITOR	3.3E+0	GOOD	CPN
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPN ·
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPN
WT250	250 FOOT LEVEL TEMPERATURE <sup>7</sup>	72.6	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	69.7	GOOD	⇒ DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	• 339	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	337	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	5.1	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	5.2	GOOD	MPH

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SPING MONITOR SHEETS

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1				Time: <u>0345</u>	5		
			(R-12A)	(R-14A)	(R-15A) ·		
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read	ling AIR EJECTOR		
1	Part - Beta	uCi	STANDBY	+6.00E-04	N/A		
2	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A		
3	I-131 ·	uCi	STANDBY	+3.90E-04	N/A		
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	+1.00E-06	3.70E-05		
6	Area Monitor	MR/H	1.00E-01	-4.00E-02	1.00E-03		
7	Noble Gas-Mid	uCi/cc	STANDBY	-1.00E-06	<u>-1.00E-06</u>		
8	Gamma Bkg	CPM	STANDBY	-4.10E-02	1.00E+01		
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.30E-03</u>	-1.40E-03		
l	Part - Beta	uCi/cc*	STANDBY	<u>+1.00E-09</u>			
3	I-131	uCi/cc*	STANDBY	<u>+3.70E-10</u>	<u></u>		
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:							
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr		
	(R-32): "B" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr		



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Time: 03:45

159

## 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

	AV77								
	NAME	AVGE	ST. DEV	MIN.	MAX.	I			
	WS 33A	0031	00900	0011	0050	00			
	WS 33B	0032	00910	0012	0052	00			
	WS150A	0040	01000	0022	0060	00			
	WS150B	0042	01100	0023	0061	02			
	WS 250	0030	01000	0010	0055	00		48	
	NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR	AVRN	CNT	I
	WD 33A	0339	03000	0329	0349	0072	0020	0064	00
	WD 33B	0338	03010	0328	0348	0071	0021	0063	00
	WD150A	0336	03100	0326	0346	0045	0022	0062	00
	WD150B	0335	03000	0325	0345	0035	0023	0060	02
	WD 250	0337	03000	0327	0347	0055	0025	0061	00
	NAME	AVGE	I	NAME	AVGE	I NAME		AVGE	I
_	TER33A	0697	00	TER33B	0698	00 TE150	)A (	0707	
n	TE150B	0707	00	TE250A	0718	00 TE250	)B	0718	
Ú	DT150A	0010	00	DT150B	0010	00 DT250	)A	0021	
	DT250B	0021	00			*			
	DEW 33	0460		TEG 33	0602	00			
	RAIN	0056							





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Time: 0400

Message: 20

## GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

ALARMS received in the Control Room:

- o J-9 (Safeguard breaker trip)
- o J-32 (Emergency Diesel Generator 1B panel)
- 0 L-7 (Bus 16 under voltage safeguards)

Indications' in the Control Room include: '

- IB Emergency Diesel Generator Bus tie to 16 shows a green light.
- No voltage or KW's on 1B Emergency Diesel Generator.
  Equipment off of 480 volt Bus 16 not running.

FOR CONTROLLER USE ONLY

Controller Notes:

- Local "B" Emergency Diesel Generator Panel indicates Diesel tripped on low bearing oil pressure.
- 2) Major equipment lost with loss of Bus #16 MCC-1D, MCC-1J, MCC-1M, 1BMDAFWP, 1B & 1C charging pumps, 1B CCW pump, 1B & 1C CV recirculation fans, 1B CV spray pump, 1B RHR pump, 1B SI pump and 1D standby auxiliary feedwater pump.
- 3) TSC should send repair team out to check out 1B Emergency Diesel Generator Actions Expected:
- 1) Operators should switch over to excess letdown because of only one charging pump available.
- 2) TSC should send repair team out to check out 1B Emergency Diesel Generator.





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# 1987 EVALUATED EXERCISE Time: 0400

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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

	Reactor Power Level	325 MWE/973 MWT	High Head S. I. Pumps
	Reactor Shutdown	Yes No	FI-924 O GPM
	×		FI-925 C GPM
	NTS N-41 64	120 N-43 6490	1A. InServ (STBV)00S
	NTS N-42 /1	12 N-44 6420	1B. InServ/STBV (OOS)
	PCS Pressure	77.75 neig	
	RCS FIESSULE	<u></u>	
	RCS TEMPETACUTE TAVA	OF	DASI TEASI
		GPM	
	Pressurizer Level	<u> </u>	Low Head S. I. Pumps
	LTN.(FI-134)	GPM	F1-626GPM
	Containment Pressure	<u> </u>	
	<b>1A S/G Level</b>	<u>52</u> *	1A. InServ/STBy/OOS
	<b>1B S/G Level</b>	53*	1B. InServ/STBY OOS
	RVLIS	/00 %	
	1A S/G Pressure	845 psig	RWST Level = 95 %
	1B S/G Pressure	850 psig	Containment Spray Pumps
	*CET	<u>58/</u> of	FI-931A O GPM
	Sump A Level	2.0 feet	FI-931B O GPM
	Sump B Level	O inches	1A. InServ/STBY (005)
	ARCP	RunningyStopped	1B. InServ/STBY/00S)
	BRCP	Running/Stopped	NaOH Tank Level = $93$ %
	2		
	Containment Isolation	Ves	Containment Recirc Fans
	concarinaene reoracion	res/tro	12 (Incomiverey (005
			18. There / STBI/ COS
	FI.FOUDTONT. D	OWED	10. Inserv/SIBIA005
	24 5 KU PUC	rai and Dooporgiand	
	A VI Bucog	rgized/Deenergized	ID. INSELVASIBI/005
	4 KV Buses Ene.	rgized Deenergized	PostAccident Dampersopenaciosed
	(13)(H)	15,17,18	Commiss Notion Durns
	480 V Buses Ene.	rgized Deenergized	Service water Pumps
	Turbine Generator Cine	rgized Deenergized	IA. <u>Inserv StB1/005</u>
	DIESEL GENERA	ATORS .	IB. CINSERV STBY/005
	A. Running Unloaded	/STBY/00S	IC. <u>Unserv/STBY/00S</u>
	B. Running/Unloaded	STBY OOS	1D. Inserv/STBy/OOS
	TSC <u>Running/Unloaded</u> ,	STBY/OOS	A&B Header Pressure <u>52</u> ps1g
	Security <u>Running/Unloa</u>	aded STBY/00S	Component Cooling Water Pumps
	ENGINEERED SA	AFEGUARDS	1A. InservystBy/00s
	Aux. Feedwate	er Pumps	1B. InServ/STBY/005
_			
	1A. InServ/STBY/OOS		Surge Tank Level = 52
	1B. InServ/STBY/OOS	$\sim$	Standby Aux. Feedwater Pumps
6	Turb. Driven	InServ/STBY OOS	1C. InServ/STBY/00S
ર	CST Level		1D. InServ/STBY/005
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	*CET = PREDETERMINED	CORE EXIT THERMOCOU	PLES AVERAGE

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#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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TINE: 0400

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	1.0E-1	GOOD	HR/H
R 0 2	AREA 2-CONTAINMENT	2.4E+1	GOOD	* MR/H
R 0 3	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	HR/H
R 0 4	AREA 4-CHARGING PUMP ROOM	1.7E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	MR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.9E+1	GOOD	HR/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD	HR/H
R09	AREA 9-LETDOWN LINE	5.2E+1	GOOD	HR/H
R10A	CONTAINMENT IODINE MONITOR R10A	4.7E+4	HALM	CPH
R 1 0 B	PLANT VENT IODINE HONITOR R10B	6.0E+2	GOOD	CPH
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM -	CPH
R12	CONTAINMENT GAS MONITOR	4.4E+5	HALN	Срн
R13	AUX BLDG EXHAUST AIR PARTICULATE	9.1E+2	GOOD	Срн
R14	AUX BLDG EXHAUST GAS HONITOR	4.3E+2	GOOD	CPH
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPH
R16	CV COOLING HX SERVICE WATER OUT	7.5E+2	GOOD	CPH
R17	COMPONENT COOLING PUNP SUCT HDR	9.0E+2	GOOD	CPH
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	Срн
R19	STEAN GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	СРМ
R20	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	СРН
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	RIHR
R30	AREA 30-CONTAINNENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERNEDIATE BLDG	1.0E+0	GOOD	HR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R 3 6	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	СРИ
R37	CONTROL ROOH PARTICULATE HONITOR	3.3E+0	GOOD	CPH
R38	CONTROL ROOH IODINE MONITOR	1.2E+0	GOOD	CPM
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM ANNONIA ANALYZER	0.7763	GOOD	PPH
WT 250	250 FOOT LEVEL TEMPERATURE	73.0	GOOD	DEGF
WT 033	33 FOOT LEVEL TEMPERATURE	70.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	340	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	340	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	5.2	GOOD .	мрн
WS033	33 FOOT LEVEL WIND SPEED	5.5	GOOD	MPH



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SPING MONITOR SHEETS

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				Time: 0400	<u>)</u>
	•		(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	ling AIR EJECTOR
1	Part - Beta	uCi	STANDBY	+6.20E-04	N/A
2	Part - Alpha	CPM	STANDBY	<u>-1.90E+01</u>	N/A
3	I-131	uCi	STANDBY	+3.90E-04	N/A
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A
,5	Noble Gas-Low	uCi/cc	<u>STANDBY</u>	+2.00E-06	3.70E-06
6	Area Monitor	MR/H	1.00E-01	-4.00E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	-2.00E-06	-1.50E-06
8	Gamma Bkg	CPM	<u>STANDBY</u>	-4.10E-02	1.00E+01
9	Noble Gas-High	uCi/cc	<u>STANDBY</u>	+1.30E-03	<u>-1.45E-03</u>
			· ·		
1	Part - Beta	uCi/cc*	STANDBY	<u>+1.00E-09</u>	
3	I-131	uCi/cc*	STANDBY	<u>+3.80E-10</u>	
* SPING CO	NSOLE PLACED IN "I	NTERPRETE	D MODE"		, ,
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
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# Time: 04:00

# 'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77			1					
NAME	AVGE	ST. DEV	MIN.	MAX.	I			
WS 33A	0055	00700	0015	0050	00			
WS 33B	0052	00910	0012	0052	00			
WS150A	0055	01000	0022	0060	00			·
WS150B	0056	01100	0023	0061	02			
WS 250	0052	01000	0010	0055	00			
NAME	AVGE	ST. DEV	MIN.	MAX.	. MNDR	AVRN	CNT	I
WD 33A	0340	02000	0330	0350	0072	0020	0064	00
WD 33B	0340	03010	0330	0350	0071	0021	0063	00
WD150A	0341	03100	0331	0351	0045	0022	0062	00
WD150B	0342	03000	0332	0352	0035	0023	0060	02
WD 250	0340	03000	0330	0350	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE	IJ	NAME	AVGE	I
<b>TER33A</b>	0700	00	TER33B	0700	00	TE150A	0720	
TE150B	0720	00	TE250A	0730	00	FE250B	0730	
DT150A	0200	00	DT150B	0020	00 1	DT250A	0030	
DT250B	0030							
DEW 33	0470		TEG 33	0602	. 00			
DATM	0057							

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Time: <u>0400</u> Message: 21X

## GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

<u>Message</u> <u>for</u>: OSC Team Investigating Loss of #16 Station Service Transformer

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The transformer has phase to phase grounds and must be replaced.



#### FOR CONTROLLER USE ONLY

Controller Notes:

1) Deliver verbally when the team has made appropriate investigations.

## Actions Expected:

1) Notify Control Room/OSC and estimate repair effort.





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Message:

## GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: JENC Manager

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Radio Station WZZZ called to report this news bulletin received from the Associated Press:

"The U.S. Geological Survey Office in Golden, Colorado this morning reported an earthquake in Upstate New York that occurred at approximately 1:45 a.m. EST. The earthquake registered 5.0 on the Richter Scale. The earthquake's epicenter was located approximately 30 miles east of Rochester, New York.

Preliminary reports from local police and governmental agencies indicate light to moderate damage to residential and commercial structures in the affected area. Roadways and bridges are reported passable. No major injuries or fatalities have been reported at this time."

FOR CONTROLLER USE ONLY

Controller Notes:

ACTIONS EXPECTED:







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Time: 0415

Message:

#### GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets .

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in the Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)

#### FOR CONTROLLER USE ONLY Controller Notes:

1) If the TSC decides to cross-tie Buses 14-16, inform them that the breaker tie on Bus 16 will not close.

ACTIONS EXPECTED:

- 1) A SITE EMERGENCY should be declared in accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Fire causing loss of safety systems including redundant components as determined by the Shift Supervisor; (i.e. Loss of both containment spray pumps), or EAL: Events in progress or have occurred which involves actual or likely major failures of plant functions needed for protection of the public.
- 2) Implement SC-203, "SITE EMERGENCY":
  - A. Make notifications
  - B. Assess and monitor plant conditions. Update offsite agencies at least every 30 minutes and whenever there are significant changes in plant status.
  - C. Activate the EOF, JENC, and Engineering Support Center.
- 3) Implement SC-212 "Site Evacuation", and SC-213 "Accountability."
- 4) TSC may send a repair team out to checkout and repair the breaker between the 14 16 Buses.
- 5) TSC should be working on leakage problem in containment.
- 6) Operations takes out normal letdown and puts in excess letdown because of only one charging pump operating due to Bus 16 outage.



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1987 EVALUATED EXERCISE Time: 04/5

# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

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Reactor Power Level Reactor Shutdown $300 \text{ MWE}/896 \text{ MWT}$ Yes NoNISN-41 59% N-43 59% NISN-43 59% N-44 59% N-44 59%NISN-42 59% S9% N-44 59%N-44 59% S9% N-44 59%RCS Pressure RCS Temperature TAVg CHG. (FI-128) $22 Ho$ S622 oF O GPM S17 % NV Service GPM O Containment Pressure IA S/G Level $37$ % S2 S18IA S/G Level IB S/G Level $52$ % S16 S0% $376$ % S16 S17 % S17 %IA S/G Pressure IB S/G Pressure $352$ % S16 S17 % S17 %IA S/G Pressure S2 % $355$ psig S16 S17 %IB S/G Pressure S100 % $3655$ psig S16 S100 %A S/G Pressure S100 % $3660$ psig S16 S100 %A S/G Pressure S100 % $3600$ psig S10 %A S/G Pressure S100 % $379$ oF S100 %Sump A Level A BCP $579$ oF S100 %	High Head S. I. Pumps      FI-924    O    GPM      FI-925    O    GPM      IA.    InServ/STBY/OOS      IB.    InServ/STBY/OOS      IC.    InServ/STBY/OOS      BAST Level =    55      IA.    InServ/STBY/OOS      BAST Level =    55      IA.    InServ/STBY/OOS      BAST Level =    6PM      IA.    InServ/STBY/OOS      IB.    InServ/STBY/OOS      RWST Level =    75      FI-931A    O      GPM      IA.    InServ/STBY/OOS      IB.    InServ/STBY/OOS      IB.    InServ/STBY/OOS      IB.    O      GPM    GPM      IA.    InServ/STBY/OOS      IB.    US      INSERV/STBY/OOS      IB.    InServ/STBY/OOS
B RCP Running/Stopped	NaOH Tank Level = $\frac{93}{8}$
Containment Isolation Yes No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized	Containment Recirc Fans 1A. <u>(InServ)STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>(InServ)STBY/00S</u> PostAccident Dampers <u>Open/Closed</u>
480 V Buses Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	ServiceWaterPumps1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S1D.InServ/STBY/00SA&B Header Pressure5.5Component Cooling Water Pumps1A.InServ/STBY/00S1B.InServ/STBY/00S
1A.InServ/STBY/OOS1B.InServ/STBY/OOSTurb.DrivenCST Level1000 feet	Surge Tank Level = <u>52</u> * <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ/STBY/OOS</u> 1D. <u>InServ/STBY/OOS</u>

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (AVERAGE)

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#### AREA RADIOLOGICAL AND NETEOROLOGICAL DATA

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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOH	1.0E-1	GOOD	HR/H
R02	AREA 2-CONTAINMENT	2.5E+1	GOOD	MR/H
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	HR/H
R04	AREA 4-CHARGING PUHP ROOM	1.8E+1	GOOD	MR/H
R 0 5	- AREA 5-SPENT FUEL PIT	5.0E+O	GOOD	HR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R 0 7	AREA 7-INCORE INSTRUMENTATION	2.9E+1	GOOD	MR/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD	HR/H
R 0 9	AREA 9-LETDOWN LINE	5.2E+1	GOOD	HR/H
R10A	CONTAINMENT IODINE HONITOR R10A	5.3E+4	HALM	CPH
R 1 0 B	PLANT VENT IODINE NONITOR R10B	6.6E+2	GOOD	CPN
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALH	CPM
R12 .	CONTAINMENT GAS MONITOR	4.7E+5	HALM	СРМ
R13	AUX BLDG EXHAUST AIR PARTICULATE	9.1E+2	GOOD	CPH
R14	AUX BLDG EXHAUST GAS HONITOR	4.6E+2	GOOD	CPM
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPM
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPH
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPM
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPH
R19	STEAN GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	' GOOD	CPM
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1.	GOOD	R/HR
R 3 0	AREA 30-CONTAINNENT HIGH RANGE	9.0E-1	GOOD .	R/HR
R 3 3	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPH
R37	CONTROL ROON PARTICULATE MONITOR	3.3E+0	GOOD	CPN
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	СРН
HVAC1	CONTROL ROON CHLORINE ANALYZER	0.0075	GOOD	, PPH
HVAC2	CONTROL ROOM ANHONIA ANALYZER	0.7763	GOOD	PPH
WT 250	250 FOOT LEVEL TEMPERATURE	73.0	GOOD	ÐEGF
WT033	33 FOOT LEVEL TEMPERATURE	70.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	- 341	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	340	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	5.5	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED . "	5.0	GOOD	MPH

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	•			Time: <u>041</u>	5				
	•		(R-12A)	(R-14A)	(R-15A)				
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR				
1	Part - Beta	uCi	STANDBY	+6.40E-04	N/A				
2	Part - Alpha	CPM	STANDBY	<u>-1.90E+01</u>	N/A				
3	I-131	uCi	STANDBY	+3.90E-04	N/A				
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A				
5	Noble Gas-Low	uCi/cc	STANDBY .	+3.00E-06	<u>3.70E-06</u>				
6	Area Monitor	MR/H	1.00E-01	<u>-4.00E-02</u>	1.00E-03				
7	Noble Gas-Mid	uCi/cc	STANDBY	-2.00E-06	<u>-3.00E-06</u>				
8	Gamma Bkg	CPM	STANDBY	-4.10E-02	1.00E+01				
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	1.45E-03				
		-	<b>`</b>						
l	Part - Beta	uCi/cc*	STANDBY	<u>+1.20E-09</u>	<u> </u>				
3	I-131	uCi/cc*	STANDBY	<u>+3.80E-10</u>					
* SPING CC	* SPING CONSOLE PLACED IN "INTERPRETED MODE"								
STEAM LINE	MONTTORS:		•						

SPING MONITOR SHEETS

(R-31):	"A"	Steam	Line	Rad	Monitor	•	<u>+1.00E-02</u>	mR/hr
(R-32):	"B"	Steam	Line	Rad	Monitor		+1.00E-02	mR/hr





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Time: 04:15

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# SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77								
NAME	AVGE	ST. DEV	MIN.	MAX.	I		r	
WS 33A	0051	00900	0011	0050	00			
WS 33B	0050	00910	0012	0052	00			
WS150A	0055	01000	0022	0060	00			
WS150B	0056	01100	0023	0061	02			
WS 250	0055	01000	0010	0055	00			
NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0340	02100	0330	0350	0072	0020	0064	00
WD 33B	0341	03010	0331	0351	0071	0021	0063	00
WD150A	0340	03100	0330	0350	0045	0022	0062	00
WD150B	0341	03000	0331	0351	0035	0023	0060	02
WD 250	0342	02000	0331	0351	0055 ·	0025	0061	00
NAME	AVGE	I	NAME	AVGE	I NAME		AVGE	I
TER33A	0700	00	TER33B	0700	00 TE15	OA	0722	
TE150B	0722	00	TE250A	0733	00 TE25	OB	0733	
DT150A	0022	00	DT150B	0022	00 DT25	OA	0033	
DT250B	0033				•			
DEW 33	0470		TEG 33	0602	00	٢		
RAIN	0057							



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Time:	0430	to	~
<u>c</u>	530		
Message:	23X		

#### GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

<u>Message for</u>: OSC Team Investigating Loss of 1B Emergency Diesel Generator

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The 1B Emergency Diesel Generator Lube Oil Pump has a cracked casing. Spare is available.

#### FOR CONTROLLER USE ONLY

Controller Notes:

- 1) Deliver verbally when the Team has made appropriate investigations.
- 2) Repairs cannot be successful until 0800 hours.

#### Actions Expected:

1) Notify Control Room/OSC and continue repair efforts.





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Time: 0430

Message: 24

#### GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Technical Support Center

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Results from developing of the accelerograph film indicates an earthquake of .24g has occurred.

Alarms received in Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)

#### FOR CONTROLLER USE ONLY

Controller Notes:

Actions Expected:

- If not already declared, a SITE AREA EMERGENCY should be declared in accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Natural Phenomenon Being Experienced; Plant not in cold shutdown and earthquake greater than .2g as determined by developing accelograph film.
- 2) Implement SC-203, "SITE AREA EMERGENCY"
  - A. Make notifications.
  - B. Assess and monitor plant conditions. Update off-site agencies at least every 30 minutes and whenever there are significant changes in plant status.
  - C. Activate the EOF, JENC, and Engineering Support Center.
- 3) Implement SC-212, "Site Evacuation" and SC-213, "Accountability."
- 4) . TSC should be evaluating leakage problem in containment.



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# 1987 EVALUATED EXERCISE Time: 0430

# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

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Reactor Power Level Reactor Shutdown $274'$ MWE/820 MWT Yes/NONISN-41NISN-41 $54/2$ N-43NISN-42 $54/2$ N-44RCS Pressure RCS Temperature TAV9 $2240$ psig	High Head S. I. Pumps FI-924 O GPM FI-925 O GPM 1A. Inserv/STBY/00S 1B. Inserv/STBY/00S 1C. Inserv/STBY/00S BAST Level = 55 %
CHG. (FI-128)OGPMPressurizer Level35%LTN. (FI-134)excess LTON./NServiceContainment Pressure0.25psig1A S/G Level53%1B S/G Level52%RVLIS/00%	Low Head S. I. Pumps FI-626 GPM 1A. InServ/CTBY/00S 1B. InServ/STBY/00S
IA S/G Pressure870psigIB S/G Pressure875psig*CET576oFSump A LevelSump B LevelA RCPRunning/StoppedB RCPRunning/Stopped	RWST Level =95%Containment Spray PumpsFI-931AOGPMFI-931BOGPM1A.Inserv/STBY/0031B.Inserv/STBY/003NaOH Tank Level =93
Containment Isolation Yes No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized	Containment Recirc Fans1A.Inserv/STBY/00S1B.Inserv/STBY/00S1C.Inserv/STBY/00S1D.Inserv/STBY/00SPostAccident DampersOpen/Closed
480 V Buses Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	ServiceWater Pumps1A.Inserv/STBY/00S1B.Inserv/STBY/00S1C.Inserv/STBY/00S1D.Inserv/STBY/00SA&B Header Pressure5.5 psigComponent Cooling Water Pumps1A.Inserv/STBY/00S1B.Inserv/STBY/00S
1A.InServ/STBY/00S1B.InServ/STBY/00STurb.DrivenCST Level1.5feet	Surge Tank Level = <u>52</u> <sup>8</sup> Standby <u>Aux. Feedwater Pumps</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u>
*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES, (AVERAGE)





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<u>0430</u>

TIME:

#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	` 1.0E•1	GOOD	MR/H
R02	AREA 2-CONTAINMENT	2.5E+1	GOOD	MR/H '
R 0 3	AREA 3-RADIO CHEM LAB	1.9E-1	G00D -	HR/H
R 0 4	AREA 4-CHARGING PUHP ROOH	1.8E+1	GOOD	MR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+O	GOOD	MR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	3.0E+1	GOOD	HR/H
R 0 8	AREA 8-DRUMMING STATION	3.1E+0	GOOD	HR/H
R 0 9	AREA 9-LETDOWN LINE	5.2E+1	GOOD	HR/H
R10A	CONTAINMENT IODINE MONITOR R10A	5.8E+4	HALM	СРН
R10B	PLANT VENT IODINE MONITOR R10B	7.4E+2	GOOD	СРН
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM	CPH
R12	CONTAINMENT GAS MONITOR	5.0E+5	HALM	СРН
R13	AUX BLDG EXHAUST AIR PARTICULATE	1.1E+3	GOOD	CPH
R14	AUX BLDG EXHAUST GAS HONITOR	4.7E+2	GOOD	СРМ
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPM
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPH
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3 '	GOOD	CPH
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPN
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPN
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	1.0E+1	GOOD	HR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	СРН
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPH
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPM
WT250	250 FOOT LEVEL TEMPERATURE	73.1	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	70.1	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	• 342	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	340	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	5.7	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED .	5.2	GOOD	MPH



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SPING MONITOR SHEETS

				Time: 0430	<u>0</u>
Ô	•		(R-12A)	(R-14A)	(R-15A)
CHANNEL #	ТҮРЕ	UNITS	CONTAINMENT	Current Read PLANT VENT	ling AIR EJECTOR
1	Part - Beta	uCi	STANDBY	+6.60E-04	N/A
2	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A
3	I-131	uCi	STANDBY	+3.90E-04	N/A
4	Bkg I	CPM	STANDBY	+3.50E+01 ·	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	+3.00E-06	3.70E-06
6	Area Monitor	MR/H	1.00E-01	-4.00E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	+3.00E-06	-1.50E-06
8	Gamma Bkg	CPM	STANDBY	<u>-4.10E-02</u>	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	-1.50E-03
D			,		
1	Part - Beta	uCi/cc*	STANDBY .	+1.20E-09	•
3	I-131	uCi/cc*	STANDBY	+4.00E-10	
* SPING CO	NSOLE PLACED IN "I	NTERPRETE	d mode"		
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
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'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77	-							
NAME	AVGE	ST. DEV	MIN.	MAX.	I			
WS 33A	0051	00900	0011	0050	00			
WS 33B	0056	00910	0012	0052	´ 00			
WS150A	0050	01000	0022	0060	00			
WS150B	0052	01100	0023	0061	02			
WS 250	0060	01000	0010	0055	00			
NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0342	03000	0332	0352	0072	0020	0064	00
WD 33B	0341	03010	0331	0351	0071	0021	0063	00
WD150A	0341	03100	0331	0352	0045	0022	0062	00
WD150B	0341	03000	0331	0354	0035	0023	0060	02
WD 250	0342	03000	0332	0355	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE	I NAME	2	AVGE	I
TER33A	0701	00	TER33B	0701	00 TELS	50A	0711	1
TE150B	0712	00	TE250A	0731	00 TE25	50B	0731	
DT150A	0011	00	DT150B	0011	00 DT25	AO	0030	
DT250B	0030				*	i.		
DEW 33	0475		TEG 33	0602	00			
RAIN	0058					**		



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Time: 0445

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Message:

## GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Emergency Coordinator

#### Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Declare a SITE AREA EMERGENCY in accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Natural Phenomenom being Experienced; plant not in Cold Shutdown and earthquake greater than .2g as determined by developing accelograph film.

#### FOR CONTROLLER USE ONLY

Controller Notes:

 Deliver if a SITE AREA EMERGENCY has not been declared. Do not deliver if emergency classification discussions are in progress.

Actions Expected:





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Time: \_\_\_\_0445\_\_\_\_\_

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Message:

GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in the Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)

#### FOR CONTROLLER USE ONLY

Controller Notes:

1) Data reflects unit in a Controlled Shutdown.

#### Actions Expected:

1) TSC may send a Repair Team out to finish maintenance on the turbine driven auxiliary feedwater pump.



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# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

Reactor Power Level <u>249 MWE/745 MWT</u> Reactor Shutdown <u>Yes/NO</u>	High Head S. I. Pumps FI-924 O GPM
NIS N-41 $\frac{49\%}{19\%}$ N-43 $\frac{49\%}{19\%}$ NIS N-42 $\frac{49\%}{19\%}$ N-44 $\frac{49\%}{19\%}$ RCS Pressure 2.2.35 psig RCS Temperature Tay 560 oF CHG. (FI-128) 0 GPM	IA.   InServ/STBY/00S     1B.   InServ/STBY/00S     1C.   InServ/STBY/00S     BAST Level =   55 %
Pressurizer Level 34 % LTN. (FI-134)excess LTDN. Containment Pressure 0.3 psig 1A S/G Level 53 %	Low Head S. I. Pumps FI-626 O GPM
ID 5/6 Level32RVLIS/001A S/G Pressure\$801B S/G Pressure\$85*CET574Sump & Lovel574	RWST Level = <u>95</u> % <u>Containment Spray Pumps</u> FI-931A <u>O</u> GPM
Sump A Level 2.0 feet   Sump B Level 0 inches   A RCP Running/Stopped Running/Stopped   B RCP Running/Stopped	FI-931B O GPM 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS NaOH Tank Level = <u>93</u> %
Containment Isolation Yes No	Containment Recirc Fans     1A.   Inserv/STBY/OOS     1B.   Inserv/STBY/OOS     1C.   Inserv/STBY/OOS
34.5 KV BusEnergized / Deenergized4 KV BusesEnergized / Deenergized	1D. <u>InServ/STBY/005</u> PostAccident Dampers <u>Open/Closed</u>
480 V Buses Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS	Service Water Pumps 1A. ( <u>InServ/STBY/OOS</u> 1B. ( <u>InServ/STBY/OOS</u> 1C. ( <u>InServ/STBY/OOS</u> 1D. <u>InServ/STBY/OOS</u> A&B Header Pressure <u>55</u> psig <u>Component Cooling Water Pumps</u>
Aux. Feedwater Pumps	IA.Inserv/STBY/00S1B.Inserv/STBY/00SSurge Tank Level = $52$ %
1B.InServ/STBY/00STurb.DrivenCST Level	StandbyAux.FeedwaterPumps1C.InServ/STBY/00S1D.InServ/STBY/00S

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (AVERAGE)



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AREA RADIOLOGICAL AND METEOR

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POINT ID	DESCRIPTION	CURRENT VALUE .	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R02	, AREA 2-CONTAINNENT	2.5E+1	GOOD	• MR/H
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUNP ROON	1.8E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	NR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	NR/H .
R07	AREA 7-INCORE INSTRUMENTATION	3.0E+1	GOOD	HR/H .
R08	AREA 8-DRUMNING STATION	3.1E+0	GOOD	NR/H
R 0 9	AREA 9-LETDOWN LINE	5.2E+1	GOOD	1 MR/H
R10A	CONTAINMENT JODINE MONITOR R10A	6.5E+4	HALM	CPN
R10B	PLANT VENT IODINE MONITOR R10B	8.1E+2	GOOD	CPM
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALH	CPN
R12	CONTAINMENT GAS MONITOR	5.3E+5	HALM	CPM
R13	AUX BLDG EXHAUST AIR PARTICULATE	1.4E+3	GOOD	CPM
R14	AUX BLDG EXHAUST GAS MONITOR	4.9E+2	GOOD	CPH
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPN
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPN
R 1 8	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPM
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPN
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R 3 0	AREA 30-CONTAINNENT HIGH RANGE	9.0E-1	GOOD	R/HR
R 3 3	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	NR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPN
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPM
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPM
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPN
47250	250 FOOT LEVEL TEMPERATURE	73.2	GOOD	DEGF
¥T033	33 FOOT LEVEL TEMPERATURE	70.2 *	GOOD	DEGF
40250	250 FOOT LEVEL WIND DIRECTION	345	GOOD	DEG.
40033	33 FOOT LEVEL WIND DIRECTION	345	GOOD	DEG.
48250	250 FOOT LEVEL WIND SPEED	6.1	GOOD	KPH
45033	33 FOOT LEVEL WIND SPEED	6.2	GOOD	MPH

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SPING MONITOR SHEETS

				Time: 0445	<u>,</u>
	•		(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read	ling AIR EJECTOR
1	Part - Beta	uCi	STANDBY	+6.80E-04	N/A
2 .	Part - Alpha	CPM	<u>STANDBY</u>	-1.90E+01	N/A
3	I-131	uCi	STANDBY	+3.90E-04	N/A
4	Bkg I	CPM	STANDBY	<u>+3.50E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	+3.40E-06	3.70E-06
6	Area Monitor	MR/H	1.00E-01	-5.00E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+3.40E-06</u>	<u>-1.50E-06</u>
8	Gamma Bkg	CPM	STANDBY	-4.20E-02	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.30E-03</u>	-1.50E-03
			,		
1	Part - Beta	uCi/cc*	STANDBY	+2.00E-09	<u></u>
3	I-131	uCi/cc*	STANDBY	+4.20E-10	
* SPING CO	NSOLE PLACED IN "I MONITORS:	NTERPRETE	D MODE"		
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr



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# Time: 04:45

# 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77								
NAME	AVGE	ST. DEV	MIN.	MAX.	I			
WS 33A	0031	00900	0011	0050	00			
WS 33B	0032	00910	0012	0052	00			
WS150A	0040	01000	0022	0060	00			
WS150B	0042	01100	<sup>*</sup> 0023	0061	02			
WS 250	0030	01000	0010	0055	00			
NAME	AVGE	ST. DEV	MIN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0345	03000	0341	0350	. 0072	0020	0064	00
WD 33B	0342	03010	0330	0350	0071	0021	0063	00
WD150A	0341	03100	0331	0351	0045	0022	0062	00
WD150B	0344	03000	0340	0350	0035	0023	0060	02
WD 250	0346	03000	0330	0351	0055 ·	0025	0061	00
NAME	AVGE	I	NAME	AVGE	I NAME		AVGE	I
TER33A	0702	00	TER33B	0702	00 TE15	DA	0722	
TE150B	0722	00	TE250A	0725	00 TE25	0B	0725	
DT150A	0020	00	DT150B	0020	00 DT25	OA	0023	
DT250B	0023				,			
DEW 33	0475		TEG 33	0602	00			
RAIN	0059			•				





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Time: 0445

184

Message: <u>27x</u>

#### GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: OSC Team investigating Bus 14-16 Tie Breaker on Bus 16 failure to close.

# Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The Tie Breaker indicated physical damage and must be changed out.



Controller Notes:

- 1) Deliver verbally when the team has made appropriate investigations.
- 2) Repairs cannot be successful until after 1130 hours.

#### Actions Expected:

1) Notify Control Room/OSC and continue repair efforts.



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Time: 0445-0515

Message: <u>27.5x</u>

#### GINNA STATION

1987 EVALUATED EXERCISE

## MESSAGE FORM

Message for: Emergency Coordinator

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

#### FOR CONTROLLER USE ONLY

When accountability of site personnel is complete and nonessential people have been identified, the Emergency Coordinator should call the Wayne County EOC stating that \_\_\_\_\_ persons are to be evacuated from the site. He should request information on road conditions or traffic impediments and the acceptable routes. If transportation is required, he should request it at this time.

Deliver this message verbally if the Emergency Coordinator has not made this call within approximately 30 minutes of accountability.

#### Controller Notes:

TSC Controller should ensure that this call is completed even in the event that no personnel are to be evacuated.



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Time: 0500

186

Message: <u>28X</u>

#### GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

<u>Message for</u>: OSC Team sent out to finish maintenance on turbine driven auxiliary feedwater pump

#### Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The thrust bearing and thrust bearing cooler need to be installed plus line-up and coupling of pump and turbine.

FOR CONTROLLER USE ONLY

Controller Notes:

- Deliver verbally when team has made appropriate investigations.
- 2) Repairs cannot be successful until after 1600 hours.

#### Actions Expected:

1) Notify Control Room/OSC and continue repair efforts if it is decided to do so.



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Time: \_\_\_\_\_\_0500\_\_\_\_\_

Message: <u>29</u>

#### GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

<u>Message for</u>: Control Room <u>Simulated Plant Conditions</u>: See attached sheets Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Alarms received in the Control Room:

o E-31 (Containment Recirc. Fan Condensate Hi-Hi Level)



FOR CONTROLLER USE ONLY

Controller Notes:

1) Data sheets reflect continuing reactor shutdown.

Actions Expected:





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1987 EVALUATED EXERCISE Time: 0500

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# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

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Reactor Power Level Reactor Shutdown	224 <u>MWE/668 MWT</u> Yes NO	High Head S. I. Pumps FI-924 O GPM	,
	3 N=43 443		
$\begin{array}{ccc} NTS & N-41 & -77 \\ NTS & N-42 & 44 \end{array}$	$\frac{70}{2} \qquad N = AA \qquad HH2$	1B TRServ/STBV (005)	
RCS Pressure	$22 \mu^2$	1C. InServ /STBI/005	
RCS Temperature Tava	<u> </u>	BAST Level = $5.5$ %	
CHG. (FI-128)	GPM GPM	<i>D.D.T. DCVC2</i>	
Pressurizer Level	33 8	Low Head S. I. Pumps	
LTN. (FI-134) excess LTDM	IN Service GPM	FI-626 O GPM	
Containment Pressure	0.3 psig		
1A S/G Level	53 *	1A. InServ/STBY/00S	
1B S/G Level	52 8	1B. InServ/STBY/005	
RVLIS	/00 %		
1A S/G Pressure	<u>895</u> psig	RWST Level = <u>75</u> *	
1B S/G Pressure	<u>900</u> psig	Containment Spray Pumps	
*CET	<u>572</u> OF	FI-931A O GPM	
Sump A Level	<u></u>	FI-931B O GPM	
Sump B Level	<u> </u>	1A. InServ/STBY/QOS	
A RCP	Running Stopped	1B. <u>InServ/STBY/00S</u>	
B RCP	Running/Stopped	NaOH Tank Level = $-93$	
Containment Isolation	Yes	Containment Recirc Fans	
	•	1A. InServySTBY/00S	
		1B. InServ/STBY/00S	
ELECTRICAL PO	WER	1C. Inserv/stby/00s	
34.5 KV Bus CEner	gizedy Deenergized	ID. <u>InservySTBY/00S</u>	3
4 KV Buses Ener	gized Deenergized	PostAccident DampersOpen/Closed	<b>9</b>
(18,14), K	5,17,18 16		
		Sorvice Water Dumps	
Turbing Generator Fner	dized Deenergized	Service Water Pumps	
Turbine Generator Ener	gized Deenergized	Service Water Pumps   1A. Inserv/stby/oos   1B. Inserv/stby/oos	
Turbine Generator Ener DIESEL GENERA	gized Deenergized gized Deenergized TORS STBY/00S	ServiceWater Pumps1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S	
Turbine Generator Ener DIESEL GENERA A. Running/Unloaded/ B. Running/Unloaded/	gized Deenergized gized Deenergized TORS STBY/OOS STBY/OOS	ServiceWater Pumps1A.Inserv/STBY/00S1B.Inserv/STBY/00S1C.Inserv/STBY/00S1D.Inserv/STBY/00S	
Turbine Generator Ener DIESEL GENERA A. (Running)Unloaded/ B. Running/Unloaded/ TSC Running/Unloaded/	gized Deenergized gized Deenergized TORS STBY/OOS STBY/OOS STBY/OOS	Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 55 psice	q
Turbine Generator Ener DIESEL GENERA A. <u>Running/Unloaded/</u> B. <u>Running/Unloaded/</u> TSC <u>Running/Unloaded/</u> Security Running/Unloaded/	gized Deenergized gized Deenergized TORS STBY/OOS STBY/OOS STBY/OOS STBY/OOS ded STBY/OOS	Service Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S A&B Header Pressure 55 psic Component Cooling Water Pumps	a
Turbine Generator Ener DIESEL GENERA A. (Running)Unloaded/ B. Running/Unloaded/ TSC Running/Unloaded/ Security Running/Unloa ENGINEERED SA	gized Deenergized gized Deenergized TORS STBY/OOS STBY/OOS STBY/OOS ded STBY/OOS ded STBY/OOS FEGUARDS	ServiceWater Pumps1A.InSerV/STBY/00S1B.InSerV/STBY/00S1C.InSerV/STBY/00S1D.InSerV/STBY/00SA&B Header Pressure55 psicComponentCooling Water Pumps1A.InSerV/STBY/00S	a
Turbine Generator Ener DIESEL GENERA A. (Running)Unloaded/ B. Running/Unloaded/ TSC Running/Unloaded/ Security Running/Unloaded/ ENGINEERED SA Aux. Feedwate	gized Deenergized gized Deenergized TORS STBY/OOS STBY/OOS STBY/OOS ded STBY/OOS FEGUARDS r Pumps	ServiceWater Pumps1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S1D.InServ/STBY/00SA&B Header Pressure55 psicComponent Cooling Water Pumps1A.InServ/STBY/00S1B.InServ/STBY/00S	g
Turbine Generator Ener DIESEL GENERA A. Running/Unloaded/ B. Running/Unloaded/ TSC Running/Unloaded/ Security Running/Unloa ENGINEERED SA Aux. Feedwate	gized Deenergized gized Deenergized TORS STBY/OOS STBY/OOS ded STBY/OOS ded STBY/OOS FEGUARDS r Pumps	Service Water Pumps 1A. (InSerV/STBY/00S) 1B. (InSerV/STBY/00S) 1C. (InSerV/STBY/00S) 1D. InSerV/STBY/00S) A&B Header Pressure 55 psic Component Cooling Water Pumps 1A. (InSerV/STBY/00S) 1B. InSerV/STBY/00S) Surge Tank Level = 52	đ
Turbine Generator Ener     DIESEL GENERA     A. Running/Unloaded//     B. Running/Unloaded//     TSC Running/Unloaded//     Security Running/Unloaded//     Security Running/Unloaded//     Aux. Feedwate     1A. Inserv/STBY/00S     1B. Inserv/STBY/00S	gized Deenergized gized Deenergized TORS STBY/OOS STBY/OOS STBY/OOS ded STBY/OOS FEGUARDS r Pumps	Service Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S A&B Header Pressure <u>55</u> psic Component Cooling Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S Surge Tank Level = <u>52</u> Standby Aux. Feedwater Pumps	đ
Turbine Generator Ener     DIESEL GENERA     A. Running/Unloaded//     B. Running/Unloaded//     TSC Running/Unloaded//     Security Running/Unloaded//     Security Running/Unloaded//     A. InServ/STB2/00S     IB. InServ/STB2/00S     Turb. Driven	12ed Deenergized gized Deenergized TORS STBY/OOS STBY/OOS ded STBY/OOS ded STBY/OOS FEGUARDS r Pumps InServ/STBY/OOS	Service Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S A&B Header Pressure <u>55</u> psic Component Cooling Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S Surge Tank Level = <u>52</u> Standby Aux. Feedwater Pumps 1C. InServ/STBY/00S	đ
Turbine Generator Ener     DIESEL GENERA     A. Running/Unloaded/A     B. Running/Unloaded/A     TSC Running/Unloaded/A     Security Running/Unloaded/A     Security Running/Unloaded/A     IA. InServ/STB2/00S     IB. InServ/STB2/00S     IB. InServ/STB2/00S     Turb. Driven     CST Level	12ed Deenergized gized Deenergized TORS STBY/00S STBY/00S STBY/00S ded STBY/00S FEGUARDS r Pumps InServ/STBY/00S 20 feet	Service Water Pumps 1A. InSerV/STBY/00S 1B. InSerV/STBY/00S 1C. InSerV/STBY/00S 1D. InSerV/STBY/00S A&B Header Pressure 55 psic Component Cooling Water Pumps 1A. InSerV/STBY/00S 1B. InSerV/STBY/00S Surge Tank Level = 52 Standby Aux. Feedwater Pumps 1C. InSerV/STBY/00S 1D. InSerV/STBY/00S	a

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (AVERAGE)



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AREA RADIOLOGICAL AND NETEO



POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.05.1	GOOD	MR/H
R02	AREA 2-CONTAINNENT	2.5E+1	GOOD	MR/H
R03	AREA 3-RADIO CHEM LAB	1.9E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUMP ROOH	1.8E+1	GOOD	HR/H
R 0 5	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	MR/H T
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	NR/H T
R07	AREA 7-INCORE INSTRUMENTATION	3.0E+1	GOOD	NR/H
R 0 8	AREA 8-DRUNNING STATION	3.1E+0	GOOD	NR/H
R09	AREA 9-LETDOWN LINE	5.2E+1	GOOD	MR/H
R10A	CONTAINMENT IODINE MONITOR R10A	7.1E+4	HALM	CPN
R10B	PLANT VENT IODINE NONITOR R10B	8.6E+2	GOOD	СРИ
R11	CONTAINMENT AIR PARTICULATE	6.4E+5	HALM	CPN
R12	CONTAINMENT GAS NONITOR	5.5E+5	HALM	CPN
R13	AUX BLDG EXHAUST AIR PARTICULATE	1.9E+3	GOOD	CPN
R14	AUX BLDG EXHAUST GAS MONITOR	5.0E+2	GOOD	CPN
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPM
R17	COMPONENT COOLING PUNP SUCT HDR	9.0E+2	GOOD	CPN
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPN
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R20	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GÖOD	CPH
R29	AREA 29 CONTAINHENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1	GOOD	, R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	· MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	1.0E+1	GOOD	MR/H
R35	AREA 35.PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R36 .	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	CPM
R37	CONTROL ROON PARTICULATE MONITOR	3.3E+0	GOOD	CPM
R38	CONTROL ROOM IODINE MONITOR	1:2E+0	GOOD	CPN
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN _
HVAC2	CONTROL ROOM AMMONIA ANALYZER	、 0.7763	GOOD	PPM
WT250	250 FOOT LEVEL TEMPERATURE	73.6·	GOOD	DEGF
WT033	<b>33 FOOT LEVEL TEMPERATURE</b>	70.5	GOOD	DEGF
WD 250	250 FOOT LEVEL WIND DIRECTION	350	GOOD	DEG.
WD 033	33 FOOT LEVEL WIND DIRECTION	350	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	6.5	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	6.5	GOOD	MPH

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SPING MONITOR SHEETS

		<b>'u</b>	,	Time: <u>050</u>	<u>o</u>
6			(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	<u>CONTAINMENT</u>	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	<u>-7.00E-04</u>	N/A
2	Part - Alpha	CPM	STANDBY	-1.90E+01	N/A
3	I-131	uCi	STANDBY	+3.90E-04	N/A
4	Bkg I	CPM	STANDBY	+3.50E+01	N/A
5	Noble Gas-Low	uCi/cc .	STANDBY	-3.40E-06	3.70E-06
6	Area Monitor	MR/H	<u>1.00E-01</u>	-5.00E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	+3.40E-06	<u>-1.50E-06</u>
8	Gamma Bkg	CPM	STANDBY	-4.20E-02	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY .	+1.30E-03	-1.50E-03
		、			
1	Part - Beta	uCi/cc*	STANDBY	+2.00E-09	·
3	I-131	uCi/cc*	STANDBY	<u>+4.20E-10</u>	•
* SPING CC	NSOLE PLACED IN "I	NTERPRETE	D MODE"		• ,
STEAM LINE	MONITORS:	,			
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr





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Time: 05:00



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# 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77	-				÷				
NAME	AVGE	ST. DEV	МІ	N.	MAX.	I			
WS 33A	0061	00800	00	)21	0050	00	τ		
WS 33B	0062	00910	00	)22	0052	00			
WS150A	0040	01000	° 00	22	0060	00			
WS150B	0042	01100	00	23	0061	02			
WS 250	0060	01000	00	)10	0075	00			
NAME	AVGE	ST. DEV	MI	IN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0350	03000	03	340	0359	0072	0020	0064	00
WD 33B	0351	03010	03	340	0359	0071	0021	0063	00
WD150A	0352	03100	03	340	0000	0045	0022	0062	00
WD150B	0352	03000	03	339 ·	0001	0035	0023	0060	02
WD 250	0353	,03000	03	343	0002	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		IN	IAME	AVGE	I
<b>TER33A</b>	0705	00	TER33B	0705		r 00	E150A	0725	
TE150B	0725	00	TE250A	0736		r 00	E250B	0736	
DT150A	0020	00	DT150B	0020		00 I	DT250A	0031	
DT250B	0031								
DEW 33	0480		<b>TEG 33</b>	0602		00			
RAIN	0059		Υ.						













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Time: 0515

Message:

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### GINNA STATION

#### **1987 EVALUATED EXERCISE**

#### MESSAGE FORM

Message for: Control Room Simulated Plant Conditions: See attached sheets Message: \*\*\*THIS IS AN EXERCISE\*\*\*

Indications in the Control Room:

The Containment Recirculation Fan Cooler condensate collecο tors on fans 1A and 1D are needing dumping more often.

Alarms received in the Control Room:

E-31 (Containment Recirc. Fran Condensate Hi-Hi Level) 0

FOR CONTROLLER USE ONLY

Controller Notes:

- The above message indicated that the "A" S/G weld crack is 1) worsening.
- The EOF, JENC, and Engineering Support Center should be 2) nearing operational status.
- Data sheets reflect continuing Reactor Shutdown. 3)

Actions Expected:







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# 1987 EVALUATED EXERCISE Time: 05/5

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# MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

	Reactor Power Level 198 MWE/2 Reactor Shutdown Yes/No	5 <b>93</b> MWT	High Head S. I. Pumps FI-924 O GPM
	NIS N-41 39% N-43 NIS N-42 39% N-44 RCS Pressure $2245$ RCS Temperature $7av_9$ $557$	392 392 	IA.    Inserv/STBY/00S      1B.    Inserv/STBY/00S      1C.    Inserv/STBY/00S      BAST Level =    55
	Cris. (FI-128) Pressurizer Level 3/ LTN. (FI-134) excess LTOM. IN Service Containment Pressure 0.35	& . e GPM psig	Low Head S. I. Pumps FI-626 O GPM
	1A S/G Level	*	1A.Inserv/STBY/00S1B.Inserv/STBY/00S
	RVLIS7001A S/G Pressure8951B S/G Pressure910*CET568Sump A Level20Sump B Level0A RCPRunning/StB RCPRunning/St	feet inches copped	RWST Level =95%Containment Spray PumpsFI-931AOGPMFI-931BOGPM1A.Inserv/STBY/OOS1B.Inserv/STBY/OOSNaOH Tank Level =93%
•	Containment Isolation Yes/No		Containment Recirc Fans 1A. QnServ/STBY/OOS
	ELECTRICAL POWER 34.5 KV Bus Energized Deer 4 KV Buses Energized Deer	nergized nergized	1B. Inserv/STBY/005 1C. Inserv/STBY/005 1D. Inserv/STBY/005 PostAccident DampersOpen/Closed
	480 V Buses Turbine Generator Energized Deen DIESEL GENERATORS	hergized hergized	Service Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS
	A. (Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/O ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	<u>, 505</u>	IC.InservystBY/00SID.Inserv/STBY/00SA&B Header Pressure55 psigComponent Cooling Water PumpsIA.Inserv/STBY/00SIB.Inserv/STBY/00S
	1A.InServ(STBY/00S)1B.InServ/STBY/00S)Turb.DrivenCST Level19.5	feet	Surge Tank Level = <u>52</u> % <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u>
	*CET = PREDETERMINED CORE EXIT !	THERMOCOU	PLES, (AVERAGE)

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AREA RADIOLOGICAL AND NETEOR



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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOH	- 1.0E·1	GOOD	MR/H
RÖZ	AREA 2-CONTAINMENT	2.5E+1	GDOD	MR/H
R03	AREA 3-RADIO CHEN LAB	/ 1.9E-1	GOOD	NR/H
R04	AREA 4-CHARGING PUMP ROOM	1.8E+1	GOOD	NR/H
R05	AREA 5-SPENT FUEL PIT	5.0E+0	GOOD	MR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1 ·	GOOD	NR/H ·
R07	AREA 7-INCORE INSTRUMENTATION	3.2E+1	GOOD	NR/H
R08	AREA 8-DRUNNING STATION	3.1E+0	GOOD	MR/H
R09	AREA 9-LETDOWN LINE	5.2E+1	GOOD	NR/H
R10A	CONTAINMENT IODINE MONITOR R10A	7.9E+4	HALM	CPN
R108	PLANT VENT IODINE MONITOR R10B	1.0E+3	. dood	CPN
R11	CONTAINNENT AIR PARTICULATE	6.4E+5	HALN	CPN
R12	CONTAINMENT GAS MONITOR	6.1E+5	HALN -	CPN
R13	AUX BLDG EXHAUST AIR PARTICULATE	2.3E+3	GOOD	CPN
R14	AUX BLDG EXHAUST GAS MONITOR	5.3E+2	GOOD	CPN
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPM
R17	CONPONENT COOLING PUNP SUCT HDR	9.0E+2	GOOD	ĊPN
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPN
R19	STEAN GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R20	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPN
R29	AREA 29-CONTAINMENT HIGH RANGE	8.0E-1	GOOD	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	9.0E-1 .	GOOD ·	R/HR
R33	AREA 33-HOT INTERNEDIATE BLDG	1.0E+0	GOOD	NR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.0E-1	GOOD	MR/H
R36	CONTROL ROON NOBLE GAS NONITOR	1.7E+0	GOOD	CPN
R37	CONTROL ROON PARTICULATE MONITOR	3.3E+0	GOOD	CPN
R38	CONTROL ROON IODINE MONITOR	1.2E+0	GOOD	CPN
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROON ANNONIA ANALYZER	0.7763	GOOD	PPN
WT250	250 FOOT LEVEL TEMPERATURE	74.7	GOOD	DEGF
WT033	<b>33 FOOT LEVEL TEMPERATURE</b>	71.6	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	<b>15</b>	GOOD	DEG.
WD033	33 FOOT LEVEL WIND DIRECTION	16 ·	GOOD	DEG.
W\$250	250 FOOT LEVEL WIND SPEED	6.3	GOOD	MPH
W\$033	33 FOOT LEVEL WIND SPEED	5.0	GOOD	MPH

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SPING MONITOR SHEETS

				Time: 051	5
0	•	I.	(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	-7.40E-04	N/A
2	Part - Alpha	CPM	<u>STANDBY</u>	-1.90E+01	N/A
3	I-131	uCi	<u>STANDBY</u>	+4.00E+01	N/A
4	Bkg I	CPM	STANDBY	<u>+3.60E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	-3.90E-06	<u>3.70E-06</u>
6	Area Monitor	MR/H	1.00E-01	-5.20E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	+4.00E-06	<u>-1.50E-06</u>
8	Gamma Bkg	CPM	STANDBY	-4.20E-02	1.00E+01
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	<u>-1.50E-03</u>
D					
1	Part - Beta	uCi/cc*	STANDBY	+2.50E-09	
3	I-131	uCi/cc*	STANDBY	<u>+4.70E-10</u>	
* SPING CON	NSOLE PLACED IN "I MONITORS:	NTERPRETE	D MODE"		
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr





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Time: 05:15

196

# 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	* M3	EN.	MAX.	I			
WS 33A	0042	00900	00	)11	0050	00		4	
WS 33B	0043	00910	- 00	)12	0052	00			
WS150A	0040	01000	. 00	)22	0060	00			
WS150B	0042	01100	00	23	0061	02			
WS 250	0042	01000	00	010	0055	00			
NAME	AVGE	ST. DEV	MI	IN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0350	03000	03	340	0000	0072	0020	0064	00
WD 33B	0349	03010	03	340	0001	0071	0021	0063	00
WD150A	0350	03100	03	341	0000	0045	0022	0062	00
WD150B	0350	03000	03	340	0002	0035	0023	0060	02
WD 250	0359	03000	03	340	0010	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NAMI	Ξ	AVGE	I
TER33A	0715	· 00	TER33B	0715		OO TELS	50A	0735	
TE150B	0735	00	TE250A	0745		00 TE25	50B	0745	
T150A	0200	00	DT150B	0200		. 00 DT25	50A	0030	
DT250B	0030								
DEW 33	0480	ų	TEG 33	0602		00			5
RAIN	0059								



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Time: 0530

Message: 31

### GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

ALARMS received in Control Room:

0	D-19	(Pressurizer	low	pressure	SI	1750	psig)	1
---	------	--------------	-----	----------	----	------	-------	---

- o D-21 (Steam Line Loop A Lo-Lo pressure 514 psi)
- o D-20 (Pressurizer low pressure trip 1873 psi)
- o D-28 (Containment pressure 4 psi)

Indications in the Control Room include:

- o Containment Isolation is normal
- 2 Control Rods indicate full out, all other Control Rods fully inserted

FOR CONTROLLER USE ONLY Controller Notes:

- 1) The "A" S/G steam line severs where it exits the S/G.
- 2) Containment spray initiates but there are no pumps available. (1A inoperable due to initial condition, 1B inoperable due to Bus #16 outage).
- 3) There is no 12% Boric Acid injection (MOV-826B inoperable due to initial condition, MOV-826D inoperable due to Bus #16 outage).
- 4) The core returns to power and a large amount of the fuels gap and fuel pellet activity is released.
- 5) The pressure housings on the Control Rods that are stuck out were the source of the initial condition unidentified RCS leak.
- 6) Containment Radiation levels increasing rapidly as shown by data sheets.

7) There is no offsite radiation release at this time.

Actions Expected:

1) Control Room operators take immediate actions in accordance with E-0.



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1987 EVALUATED EXERCISE . Time: 0530

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### MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

198

	Reactor Power Level O MWE Reactor Shutdown (Yes)	<u>/ O MWT</u> No	<u>High Head</u> FI-924	<u>i S. I. Pumps</u> O GPM	
		~ <b>^</b>	FI-925	O GPM	
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	IA. (	InservystBy/00s	
		4	18.	Inserv/STBY/00S	
	RCS FIESSULE 1100	D pard	DOC TOT	CINSERV/STBY/005	۵.
	$\frac{1}{2} CHG (FI-128) = 0$		DAST LEV	er =	₹
	Pressurizer Level	GPM	Low Hoad	S T Dumps	
	LTN. (FI-134)	Mqg	$\frac{100}{FT-626}$	200 GPM	
	Containment Pressure 20	psig		<u></u> GrM	
	1A S/G Level		1A. (	InServ/STBY/005	
	1B S/G Level		1B.	InServ/STBY (OOS)	
	RVLIS /00	8			,
	1A S/G Pressure 500	> psig	RWST Leve	el = 95	z
	1B S/G Pressure 960	psig	Containm	ent Spray Pumps	
	*CET 60	O OF	FI-931A	O GPM	
	Sump A Level 3.5	feet	FI-931B	<u>O</u> GPM	
	Sump B Level	inches	1A.	InServ/STBY (005)	
	A RCP Running	Stopped	1B.	InServ/STBY (005)	•
•	B RCP (Running)	Stopped	NaOH Tan	k Level = $-93$	<u> </u> 8
	Containment Isolation	No	Containm	ent Recirc Fans	I
			1 <b>A</b> .	InServ/STBY/00S	۰.
			1B.	InServ/STBY 005	•
	ELECTRICAL POWER		10.	InServ/STBY/OOS	
	A VV BUS Energized De	energized	ID.	Inserv/STBY/00S	
	4 KV Buses Energized De	energized	POSTACCIO	lent Dampersopen	Closed
•	480 V Buses (13,14,15,17,18)	energized	Somi co I	Vator Dumna	
	Turbine Generator Energized De	energized	JA.	The service of the se	
	DIESEL GENERATORS		18.	(Inservystby/005	
	A. Running/Unloaded/STBY/00S		10.	InServYSTBY/00S	
	B. Running/Unloaded/STBY/00S	>	1D.	InServySTBY/00S	
	TSC Running/Unloaded/STBD/00S	P	A&B Heade	er Pressure 50	psia
	Security Running/Unloaded STBY	<b>Y</b> oos	Component	t Cooling Water F	umps
	ENGINEERED SAFEGUARDS		1A.	InServySTBY/00S	
	Aux. Feedwater Pumps		18.	InServ/STBY/00S	
	1A. (InServ/STBY/OOS		Surge Tar	nk Level = 52	Ł
	1B. InServ/STBY (OOS)		Standby A	Aux. Feedwater Pu	mps
	Turb. Driven InServ/S	TBY OOS	1C.	InServ/STBY/00S	
ર્	CST Level	feet	1D.	InServ/STBY 005	
	•				

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE).



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#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

TIME: 0530

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL RODH	1.0E-1	GOOD	MR/H
R 0 2	AREA 2-CONTAINMENT	8.8E+3	HALM	HR/H '
R 0 3	AREA 3-RADIO CHEN LAB	2.5E-1	GOOD	MR/H
R 0 4	AREA 4-CHARGING PUMP ROOM	2.5E+2	HALM	MR/H
R05	AREA 5-SPENT FUEL PIT	9.0E+0	GOOD	HR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	1.1E+4	HALM	MR/H
R08	AREA 8-DRUMMING STATION	3.1E+0	GOOD	MR/H
R09	AREA 9-LETDOWN LINE	6.0E+2	HALM	- MR/H
R 1 0 A	CONTAINMENT IODINE MONITOR RIDA	1.0E+6	HALM	CPH
R10B	PLANT VENT IODINE MONITOR R10B	1.1E+3	GOOD	CPH
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CPN
R12	CONTAINMENT GAS MONITOR	1:0E+6	HALM	CPN
R13	AUX BLDG EXHAUST AIR PARTICULATE	3.0E+3	GOOD	CPN
R14	AUX BLDG EXHAUST GAS NONITOR	5.5E+2	GOOD	СРН
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPH
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPH
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2 ·	GOOD	CPH
R18	LIQUID WASTE DISPOSAL MONITOR	2.8E+3	GOOD	CPH
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPH
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPH
R29	AREA 29-CONTAINMENT HIGH RANGE	9.0E+0	HALM	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	1.0E+1	HALM	R/HR
R33	AREA 33-HOT INTERHEDIATE BLDG	1.0E+0	6000	HR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.5E·1	GOOD	HR/H
R36	CONTROL ROON NOBLE GAS MONITOR	1.7E+0	GOOD	, CPH
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPH
R38	CONTROL ROOM IDDINE MONITOR	1.2E+0	GOOD	СРН
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM ANMONIA ANALYZER	0.7763	GOOD	PPM
WT250	250 FOOT LEVEL TEHPERATURE	74.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	72.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	21.	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	22.	GOOD	DEG.
WS250	250 FOÓT LEVEL WIND SPEED	7.2	. GOOD	HPH
WS033	33 FOOT LEVEL WIND SPEED	5.9	GOOD	MPH



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				Time: <u>053</u>	<u>0</u>
		4	(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	-7.80E-04	N/A
2	Part - Alpha	CPM	STANDBY	<u>-2.00E+01</u>	N/A
3	I-131	uCi	STANDBY	<u>+4.00E-04</u>	N/A
4	Bkg I	CPM	STANDBY	<u>+3.60E+01</u>	N/A
5.	Noble Gas-Low	uCi/cc	STANDBY	<u>-3.90E-06</u>	<u>3.70E-06</u>
6	Area Monitor	MR/H	<u>1.00E-01</u>	<u>-5.20E-02</u>	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+4.20E-06</u>	<u>-1.60E-06</u>
8	Gamma Bkg	CPM	STANDBY	<u>-4.20E-02</u>	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.30E-03</u>	<u>-1.50E-03</u>
	•				
1	Part - Beta	uCi/cc*	STANDBY	<u>+3.50E-09</u>	
3	I-131	uCi/cc*	STANDBY	<u>+5.0E-10</u>	
* SPING CC STEAM LINE	NSOLE PLACED IN "I MONITORS:	NTERPRETE	D MODE"		
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr





























































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Time: 05:30

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# 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77								-	
NAME	AVGE	ST. DEV	M	IN.	MAX.	I			
WS 33A	0050	00900	0	110	0060	00			
WS 33B	0050	00910	0	012	0052	00			
WS150A	0040	01000	0	022	0060	00			
WS150B	0042	01100	<b>O</b> .(	023	0061	02			
WS 250	0063	01000	00	010	0070	00			
NAME	AVGE	ST. DEV	M	IN.	MAX.	MNDI	R AVRN	CNT	I
WD 33A	0015	03000	0(	005	0025	0072	2 0020	0064	00
WD 33B	0016	03010	00	005	0025	0073	1 0021	0063	00
WD150A	0017	03100	0	07	0027	0045	5 0022	0062	00
WD150B	0018	03000	0	208	0028	0035	5 0023	0060	02
WD 250	·0016	03000	00	006	0026	0055	5 0025	0061	00
NAME	AVGE	I	NAME	AVGE		Ι.	NAME	AVGE	I
TER33A	0716	00	TER33B	0716	•	00	TE150A	0736	
TE150B	0736	00	TE250A	0747	Ŧ	00	TE250B	0747	
DT150A	0020	00	DT150B	0020		00	DT250A	0031	
DT250B	0031				•				
DEW 33	0436		TEG 33	0602		00			
RATN	0060								

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Time: 0531

Message: \_\_\_\_31.5

### GINNA STATION

1987 EVALUATED EXERCISE

## MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

1) Data sheet indicates core uncovering and core exit thermocouples greater than 700 degrees F.

Actions Expected:



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1987 EVALUATED EXERCISE Ti

Time: <u>0531</u>

# MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

Reactor Power Lev Reactor Shutdown NIS N-4 NIS N-4 RCS Pressure RCS Temperature 7 CHG. (FI-128) Pressurizer Level LTN. (FI-134)	el <u>O MWE/988 MWT</u> <u>Yes/NO</u> 1 <u>652</u> N-43 <u>657</u> 2 <u>652</u> N-44 <u>652</u> <u>750</u> psig c <u>450</u> of <u>O</u> GPM <u>0</u> 8 O GPM	High Head S. I. Pumps FI-924 280 GPM FI-925 210 GPM 1A. Inserv/STBY/OOS 1B. Inserv/STBY/OOS 1C. Inserv/STBY/OOS BAST Level = 55 % Low Head S. I. Pumps FI-626 200 GPM
Containment Press 1A S/G Level 1B S/G Level RVLIS 1A S/G Pressure 1B S/G Pressure *CET Sump A Level Sump B Level A RCP B RCP	ure 43 psig 0 % 10 % 146 % 132 psig 800 psig 900 oF 5 feet 0 inches Running/Stopped Running/Stopped	1A.      InServ/STBY/OOS        1B.      InServ/STBY/OOS        RWST Level =      95 *        Containment Spray Pumps        FI-931A      O GPM        FI-931B      O GPM        1A.      InServ/STBY/OOS        1B.      InServ/STBY/OOS        NaOH Tank Level =      93 *
Containment Isola <u>ELECTRIC</u> 34.5 KV Bus 4 KV Buses 4 KV Buses 480 V Buses Turbine Generator <u>DIESEL G</u> A. <u>Running/Unlo</u> B. <u>Running/Unlo</u> TSC <u>Running/Unlo</u> Security Bunning/	AL POWER Cenergized/Deenergized Energized/Deenergized 13,14,15,11/8 /6 Energized/Deenergized Energized/Deenergized Energized/Deenergized ENERATORS aded/STBY/OOS aded/STBY/OOS Unloaded (STBY/OOS	Containment Recirc Fans 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/STBY/00S 1D. InServ/STBY/00S 1D. InSer
1A. <u>InServ/STBY/</u> 1B. <u>InServ/STBY/</u> Turb. Driven CST Level	OOS InServ/STBY OOS 19.5 feet	IA.      Inserv/stby/oos        1B.      Inserv/stby/oos        Surge Tank Level = 52 *        Standby Aux.      Feedwater Pumps        1C.      Inserv/Stby/oos        1D.      Inserv/stby/oos

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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Time: 0533

Message: 31.7

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## GINNA STATION

# 1987 EVALUATED EXERCISE

## MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

Actions Expected:





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# 1987 EVALUATED EXERCISE Time: 0533

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## MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

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Reactor Power Level O MWE/836 MWT Reactor Shutdown Yes/No	High Head S. I. Pumps FI-924 250 GPM
	F1-925 <u>200</u> GPM
NIS N-41 35% N-43 55%	1A. (InServ/STBY/OOS
NIS N-42 557 N-44 557	1B. InServ/STBY/OOS
RCS Pressure <u>1000</u> psig	1C. InServySTBY/OOS
RCS Temperature $T_c = \frac{\mu_7 \sigma}{\sigma}$ oF	BAST Level = $55$ %
CHG. (FI-128) GPM	
Pressurizer Level 5 %	Low Head S. I. Pumps
LTN. (FI-134) O GPM	FI-626 200 GPM
Containment Pressure 57 psig	
1A S/G Level	1A. (InServ/STBY/005
1B S/G Level	1B. InServ/STBV (OOS)
RVLTS 32 8	
11 S/G Pressure	DWSM Toxol - 'Q// 4
IB S/G Progenize	Containment Canada Durana
$\frac{100}{100}$ $\frac{070}{1200}$ psig	Et-021
	FI-93IA <u>C</u> GPM
	F1-931B O GPM
Sump B Level U Inches	IA. Inserv/STBY/00S/
A RCP Running/Stopped)	1B. InServ/STBY(00S)
B RCP Running Stopped	NaOH Tank Level = $93$ %
Containment Isolation (Yes) No	<u>Containment Recirc Fans</u>
	1A. InServ/STBY/OOS
4	1B. InServ/STBY OOS
ELECTRICAL POWER	1C. InServ/STBY OOS
34.5 KV Bus Energized Deenergized	1D. InServySTBY/OOS
4 KV Buses Energized Deenergized	PostAccident DampersOpen Closed
IS.N.IC.IT.ID IL	
480 V Buses Energized Deenergized	Service Water Pumps
Turbine Generator Energized Deenergized)	1A. (InServ/STBY/00S
DIESEL GENERATORS	1B. InServ/STBY/00S
A. Running/Unloaded/STBY/00S	1C. (InServy STBY/005
B. Running/Unloaded/STBY (OOS)	1D. InServySTBY/005
TSC Bunning/Unloaded/STB2/00S	A&B Header Pressure .Co psig
Security Punning/Unloaded (STBV)(005	Component Cooling Water Pumps
FUCTIVE FORD SAFECUADOS	1) Unsomit Substitution
ANY Foodustor Burns	1R. The sign of the second sec
Aux. reedwater Pumps	IB. INSELV/STBI/005
13 The and STRA 1005	Surgo Mank Lovol - K2 8
IR. (Inservy SIBI/005	Standbur hur Fooduator Dunna
The Inserv/STDI/UUS	Jo The Aux. Feedwaler Pumps
Turb. Driven <u>Inserv/STBY/005</u>	
CST LEVEL Ieet	ID. Inserv/STBY/005
*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES, (5 OR MORE)

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Time: 0535

Message: 32

#### GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheet

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

#### FOR CONTROLLER USE ONLY

Controller Notes:

1) See attached Emergency Operating procedures E-0 and FR-S.1 for Control Room conditions status information.

#### Actions Expected:

- 1) A GENERAL EMERGENCY should be declared in accordance with SC-100; "Ginna Station Event Evaluation and Classification," EAL: Loss of Engineered Safety Features; Inability to Shutdown the Reactor which results in core damage with indications of containment pressure increasing rapidly and reactor remains at power after reactor trip initiates, (i.e. power range indication) or EAL: Containment System; failed fuel indicated by sampling of containment atmosphere and containment pressure 30 psig and increasing or Shift Supervisors opinion containment may be breached.
- 2) Implement SC-204, "GENERAL EMERGENCY".
  - a. Make an immediate protective action. Recommendation in accordance with SC-240, "Protective Action Recommendations."
  - b. Make notifications.
- 3) Assess and monitor plant conditions. Update offsite agencies at least every 30 minutes and whenever there are significant changes to plant status.



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1987 EVALUATED EXERCISE , Time: 0535

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# MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

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Reactor Power Level O MWE/ O MWT	High Head S. I. Pumps
Reactor Shutdown (Yes) No	FI-924 O GPM
	FI-925 O GPM
NIS N-31: 0 N- 35 2.5 XIO AMPS	1A. (InServ/STBY/005
NIS N-32 0 N- 36 2.5 X10 Amos	1B. InServ/STBY/00S
RCS Pressure /700 psig	1C. InServySTBY/00S
RCS Temperature .500 OF	BAST Level = $55$ %
CHG. (FI-128) GPM	
Pressurizer Level 37 %	Low Head S. I. Pumps
LTN. (FI-134) O GPM	FI-626 200 GPM
Containment Pressure 55 psig	
1A S/G Level O %	1A. (InServ/STBY/00S
1B S/G Level 8	1B. InServ/STBY/00S)
RVLIS /00 %	
1A S/G Pressure 55 psig	RWST Level = 94 %
1B S/G Pressure 700 psig	Containment Spray Pumps
*CET 650 OF	FI-931A O GPM
Sump A Level 5.2 feet	FI-9'31B O GPM
Sump B Level O inches	1A. InServ/STBY/00S
A RCP Running/Stopped)	1B. InServ/STBY/OOS
B RCP Running Stopped)	NaOH Tank Level = 93 %
	•
Containment Isolation (Yes/No	Containment Recirc Fans
Containment Isolation Yes/No	Containment Recirc Fans
Containment Isolation Yes/No	<u>Containment Recirc Fans</u> 1A. <u>(InServ/STBY/OOS</u> 1B. InServ/STBY/OOS
Containment Isolation Yes/No ELECTRICAL POWER	Containment Recirc Fans1A.InServy STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus <u>Energized</u> /Deenergized	Containment Recirc Fans1A.(InServ/STBY/00S)1B.InServ/STBY/00S)1C.InServ/STBY/00S)1D.(InServ/STBY/00S)
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus <u>Energized</u> /Deenergized 4 KV Buses Energized/Deenergized	Containment Recirc Fans 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1C. InServ/STBY/OOS 1D. (InServ/STBY/OOS) PostAccident DampersOpen/Closed
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized/Deenergized</u> 13.4.5 KV Buses <u>Energized/Deenergized</u>	Containment Recirc Fans1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/Closed
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus 4 KV Buses Energized Deenergized 480 V Buses Isolation Yes/No	Containment Recirc Fans 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1C. InServ/STBY/OOS) 1D. (InServ/STBY/OOS) PostAccident DampersOpen/Closed Service Water Pumps
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized 4 KV Buses <u>Energized</u> Deenergized 480 V Buses <u>Energized</u> Deenergized Turbine Generator Energized Deenergized	Containment Recirc Fans 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1C. InServ/STBY/OOS) 1D. (InServ/STBY/OOS) PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS)
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus <u>Energized</u> Deenergized 4 KV Buses <u>Energized</u> Deenergized 480 V Buses <u>Is/H//5/17//P</u> /6 Energized Deenergized Turbine Generator <u>Energized</u> Deenergized DIESEL GENERATORS	Containment Recirc Fans1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedServiceWater Pumps1A.InServ/STBY/OOS1B.(InServ/STBY/OOS)
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized 4 KV Buses <u>Energized</u> Deenergized 480 V Buses <u>Energized</u> Deenergized Turbine Generator <u>Energized</u> Deenergized <u>DIESEL GENERATORS</u> A. Running/Unloaded/STBY/OOS	Containment Recirc Fans1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedServiceWater Pumps1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS	Containment Recirc Fans1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedServiceWater Pumps1A.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOS
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus <u>Energized/Deenergized</u> 4 KV Buses <u>Energized/Deenergized</u> 480 V Buses <u>Energized/Deenergized</u> Turbine Generator <u>Energized/Deenergized</u> <u>DIESEL GENERATORS</u> A. <u>Bunning/Unloaded/STBY/OOS</u> B. <u>Running/Unloaded/STBY/OOS</u> TSC Running/Unloaded/STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1C. InServ/STBY/OOS) 1D. (InServ/STBY/OOS) PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS) 1B. (InServ/STBY/OOS) 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. Serv/STBY/OOS 1D. Serv/STBY/STBY/OOS 1D. Serv/STBY/OOS 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/SE 1D. Serv/STBY/STBY/SE 1D. Serv/STBY/SE 1D. Serv/STBY/SE 1D. Serv/STBY/SE 1D. Serv/STBY/SE
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Bunning/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1C. InServ/STBY/OOS) 1D. (InServ/STBY/OOS) PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS) 1B. (InServ/STBY/OOS) 1C. (InServ/STBY/OOS) 1C. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) A&B Header Pressure 50 psig Component Cooling Water Pumps
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Bunning/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS	Containment Recirc Fans 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1C. InServ/STBY/OOS) 1D. (InServ/STBY/OOS) PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS) 1B. (InServ/STBY/OOS) 1C. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) A&B Header Pressure <u>50</u> psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS)
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Bunning/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	Containment Recirc Fans1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedService Water Pumps1A.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOS1D.InServ/STBY/OOS1D.InServ/STBY/OOS1D.InServ/STBY/OOS1A.InServ/STBY/OOS1A.InServ/STBY/OOS1B.InServ/STBY/OOS1A.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Bunning/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	Containment Recirc Fans1A.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedService Water Pumps1A.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOS1D.InServ/STBY/OOS1D.InServ/STBY/OOS1D.InServ/STBY/OOS1D.InServ/STBY/OOS1A.InServ/STBY/OOS1A.InServ/STBY/OOS1A.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS1B.InServ/STBY/OOS
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Bunning/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. InSery/STBY/OOS	Containment Recirc Fans 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1A. InServ/STBY/OOS 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. Insery/STBY/OOS	Containment Recirc Fans 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 50 psig Component Cooling Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS Surge Tank Level = 52 % Standby Aux. Feedwater Pumps
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Bunning/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS 1A. InSery/STBY/OOS 1B. InSery/STBY/OOS 1B. Insery/STBY/OOS	Containment Recirc Fans 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS A&B Header Pressure 50 psig Component Cooling Water Pumps 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS Surge Tank Level = 52 % Standby Aux. Feedwater Pumps 1C. InServ/STBY/OOS
Containment Isolation Yes/No ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized 480 V Buses Energized/Deenergized Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Bunning/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. Inserv/STBY/OOS 1B. Inserv/STBY/OOS 1B. Inserv/STBY/OOS CST Level 20 feet	Containment Recirc Fans 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1C. InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS) 1B. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) 1D. (InServ/STBY/OOS) A&B Header Pressure <u>50</u> psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS) 1B. InServ/STBY/OOS) 1B. InServ/STBY/OOS) Surge Tank Level = <u>52</u> * Standby Aux. Feedwater Pumps 1C. InServ/STBY/OOS) 1D. InServ/STBY/OOS)

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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Time: 0545\_\_\_\_

Message: 33

#### GINNA STATION

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1987 EVALUATED EXERCISE

#### MESSAGE FORM

<u>Message for</u>: Control Room <u>Simulated Plant Conditions</u>: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*



FOR CONTROLLER USE ONLY

Controller Notes:

Actions Expected:

- 1) Operations stabalizes the plant using Emergency Operating Procedures.
- 2) Operations transfers the flow from the "A" MDAFWP from the "A" S/G to the "B" S/G.





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1987 EVALUATED EXERCISE

Time: 0545

# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

	Reactor Power Level Reactor Shutdown	O MWE/ O MWT	High Head S. I. Pumps FI-924 O GPM	
		4	FI-925 GPM	
	NIS $N-31$ //	Cps N- 35 5X10 Augs	1A. <u>InServ</u> /STBY/005	<u> </u>
	NIS . $N-32_{10}$	TCPS N- 36 5×10 AMPS	1B. InServ/STBY/005	$\mathbf{P}$ .
	RCS Pressure	<u>2080</u> psig	1C. (InServy STBY/005	5
	RCS Temperature 7c	<u> </u>	BAST Level = 55	¥
	CHG. (FI-128)	<b>O</b> GPM		
	Pressurizer Level	50 *	Low Head S. I. Pumps	
	LTN. (F1-134)		FI-626 <u>200</u> GPM	
	Containment Pressure	<u>54'</u> psig		
	IA S/G Level	<u>0</u> \$	1A. <u>(InServySTBY/00</u>	<u>s</u> .
	1B S/G Level		1B. InServ/STBY/00:	5
•	RVLIS	%		
	1A S/G Pressure	<u> </u>	RWST Level = $94$	۶
	1B S/G Pressure	<u> </u>	Containment Spray Pumps	
	*CET	<u>530*</u> F0F	FI-931A GPM	
	Sump A Level	<u> </u>	FI-931B GPM	
	Sump B Level	<u> </u>	1A. InServ/STBY (00)	Ð
	A .RCP	Running Stopped	1B. InServ/STBY/00:	<b>S</b>
	B RCP.	Running Stopped	NaOH Tank Level =	73_8
	Containment Isolation Yes/No			•
			Containment Recirc Fans	_
			IA. <u>UnServ/STBY/00</u>	S
			1B. InServ/STBY/00	S
	ELECTRICAL PO	JWER	IC. Inserv/STBY/003	S)
	A VI Buson		ID. (InServySTBY/00)	S .
•	4 KV Buses (Ener	gized Deenergized	PostAccident DampersOpen	n/Closed
	(13,14)	15,17,18 16 16	Contino linton Dunna	
	Turbing Concretor Energized Deenergized		Service water Pumps	-
	DIEGEL CEVED	MODE	IR. Unserv/STBY/00	
	A (Pupping Up) orded	IB. Inserv/STBY/003	5	
	R. Running/Unicaded/	10. Inserv/STBI/003	ž	
	TSC Running/Unioaded/	SIBI/00S	ID. (Inservy STBI/00)	
	Socurity Bunning/Unioadeu/		Add Reduer Pressure 5	<u>O</u> psig
	ENGINEERED SAFEGUARDS		Component Cooring water	Pumps
			1R. Therefore the state of the	
	Aux. reeuwale		1B. <u>111561 V/51B1/003</u>	
	1A. InServySTBY/005		Surge Tank Level =	2 ¥
	1B. InServ/STBY (OOS)		Standby Aux, Feedwater	Pumps
	Turb. Driven	Inserv/STBV 1005	IC. InServ STBY YOOS	5
X	CST Level	/9.5 feet	1D. InServ/STBY (003	5
-				<b>S</b>
	*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)			

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### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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TIHE: 0545

PUINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MD / H
R 0 2	AREA 2-CONTAINMENT	1.1E+5	HALM	ND/U 's
R 0 3	AREA 3-RADIO CHEN LAB	2.5E-1	GOOD	MD/U
R 0 4	AREA 4-CHARGING PUMP ROOM	2.5E+2	HALM	MD/U
R 0 5	AREA 5-SPENT FUEL PIT	9.0E+0	GOOD	
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.0E+1	GOOD	MP/H
R07	AREA 7-INCORE INSTRUMENTATION	1.2E+5	HALM	MP/H
R08	AREA 8-DRUMNING STATION	5.0E+0	GOOD	MR/H
R09	AREA 9-LETDOWN LINE	6.0E+2	HALM	MR/H
R 1 0 A	CONTAINMENT IODINE HONITOR R10A	1.0E+6	HALM	срж
R 1 0 B	PLANT VENT IODINE MONITOR R10B	1.2E+3	GOOD	CPN
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CPŇ
R12	CONTAINMENT GAS MONITOR	1.0E+6	HALM	СРИ
R13	AUX BLDG EXHAUST AIR PARTICULATE	3.2E+3	GOOD	СРИ
R14	AUX BLDG EXHAUST GAS MONITOR	5.6E+2	GOOD	CPN
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1 <sup>*</sup>	GOOD	CPN
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPN
R18	LIQUID WASTE DISPOSAL MONITOR	3.2E+3	GOOD	СРИ
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPN
R29	AREA 29-CONTAINHENT HIGH RANGE	1.1E+2	HALN	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	1.2E+2	HALM	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.0E+0	GOOD	HR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.0E+1	GOOD	HR/H
R35	AREA 35-PASS SAMPLE PANEL	1.6E-1	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS HONITOR	1.7E+0	GOOD	CPN
R 3 7	CONTROL ROON PARTICULATE HONITOR	3.3E+0	GOOD	CPM
R 3 8	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPM
WT250	250 FOOT LEVEL TEMPERATURE	74.5	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE .	71.5	GOOD	DEGF
WD250	250 FOOT LEVEL WIND DIRECTION .	22.	GOOD	DEG.
WD033	33 FOOT LEVEL WIND DIRECTION	22.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	6.5	GOOD	мрн
W5033	33 FOOT LEVEL WIND SPEED '	6.0	GOOD	MPH

2/0



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<u>+1.00E-02</u> mR/hr

				Time: <u>054</u>	5
			(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR
1 .	Part - Beta	uCi	STANDBY	-8.00E-04	N/A
2.	Part - Alpha	CPM	STANDBY	<u>-2.00E+01</u>	N/A
3	I-131	uCi	STANDBY	<u>+4.50E-04</u>	N/A
4	Bkg I	CPM	STANDBY	<u>+3.60E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	<u>-5.00E-06</u>	<u>3.70E-06</u>
6	Area Monitor	MR/H	1.00E-01	<u>-5.20E-02</u>	<u>1.00E-03</u>
7	Noble Gas-Mid	uCi/cc	STANDBY	+5.00E-06	<u>-1.70E-06</u>
8	Gamma Bkg	CPM	<u>STANDBY</u>	<u>-4.20E-02</u>	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY .	<u>+1.30E-03</u>	<u>-1.70E-03</u>
			· ·		
1	Part - Beta	uCi/cc*	STANDBY	+3.50E-09	
3	I-131	uCi/cc*	STANDBY	<u>+5.10E-10</u>	•
* SPING CO	NSOLE PLACED IN "I	NTERPRETE	D MODE"		
STEAM LINE	MONITORS:				
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr

(R-32): "B" Steam Line Rad Monitor

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## Time: 05:45

METEOROLOGICAL DATA

AV77											
NAME	AVGE	ST. DEV	MI	N.	MAX.		I				
WS 33A	0071	00900	00	15	0080		00				
WS 33B	0062	00910	00	12	0072		00				
WS150A	0040	01000	00	22	0060		00				
WS150B	0042	01100	00	23	0061		02				
WS 250	0070	01000	00	10	0085		00			1	
NAME	AVGE	ST. DEV	MI	N.	MAX.		MNDF	ξ	AVRN	CNT	ÌI
WD 33A	0020	03000	00	10	0030		0072		0020	0064	00
WD 33B	0021	03010	00	11	0031		0073	-	0021	0063	00
WD150A	0020	03100	00	10	0030		0045	5	0022	0062	00
WD150B	0020	03000	00	10	0030		0035	5	0023	0060	02
WD 250	0019	03000	00	10	0032		0055	5.	0025	0061	00
NAME	AVGE	I	NAME	AVGE			I	NAME		AVGE	I
TER33A	0720	00	TER33B	0720			00	<b>TE150</b>	Α	0740	
TE150B	0741	00	TE250A	0755			00	<b>TE250</b>	В	0750	
DT150A	0020	00	DT150B	0020			00	DT250	Α	0035	
DT250B	0030										
DEW 33	0485		TEG 33	0602			00				
RAIN	0060										
	AV77 NAME WS 33A WS 33B WS150A WS150B WS 250 NAME WD 33A WD 33B WD150A WD150B WD 250 NAME TER33A TE150B DT150A DT150A DT250B DEW 33 RAIN	AV77NAMEAVGEWS 33A0071WS 33B0062WS150A0040WS150B0042WS 2500070NAMEAVGEWD 33A0020WD 33B0021WD150A0020WD150B0020WD 2500019NAMEAVGETER33A0720TE150B0741DT150A0020DT250B0030DEW 330485RAIN0060	AV77NAMEAVGEST. DEVWS 33A007100900WS 33B006200910WS150A004001000WS150B004201100WS 250007001000NAMEAVGEST. DEVWD 33A002003000WD 33B002103010WD150A002003000WD150B002003000WD 250001903000NAMEAVGEITER33A072000TE150B074100DT150A002000DT250B003000DEW 330485RAINRAIN0060	AV77         NAME       AVGE       ST. DEV       MI         WS 33A       0071       00900       00         WS 33B       0062       00910       00         WS 150A       0040       01000       00         WS150B       0042       01100       00         WS 250       0070       01000       00         NAME       AVGE       ST. DEV       MI         WD 33A       0020       03000       00         WD 33B       0021       03010       00         WD 33B       0020       03000       00         WD 150A       0020       03000       00         WD 250       0019       03000       00         WD 250       0019       03000       00         NAME       AVGE       I       NAME         TER33A       0720       00       TER33B         TE150B       0741       00       TE250A         DT150A       0020       00       DT150B         DT250B       0030       00       DT150B         DEW 33       0485       TEG 33         RAIN       0060       00	AV77           NAME         AVGE         ST. DEV         MIN.           WS 33A         0071         00900         0015           WS 33B         0062         00910         0012           WS150A         0040         01000         0022           WS150B         0042         01100         0023           WS 250         0070         01000         0010           NAME         AVGE         ST. DEV         MIN.           WD 33A         0020         03000         0010           WD 33B         0021         03010         0011           WD150A         0020         03000         0010           WD150B         0020         03000         0010           WD150B         0020         03000         0010           WD 250         0019         03000         0010           WD 250         0019         03000         0010           NAME         AVGE         I         NAME         AVGE           TER33A         0720         00         TER33B         0720           TE150B         0741         00         TE250A         0755           DT150A         0020         00	AV77         NAME       AVGE       ST. DEV       MIN.       MAX.         WS 33A       0071       00900       0015       0080         WS 33B       0062       00910       0012       0072         WS150A       0040       01000       0022       0060         WS150B       0042       01100       0023       0061         WS 250       0070       01000       0010       0085         NAME       AVGE       ST. DEV       MIN.       MAX.         WD 33A       0020       03000       0010       0030         WD 33B       0021       03010       0011       0031         WD150A       0020       03100       0010       0030         WD150B       0020       03000       0010       0030         WD150B       0020       03000       0010       0032         NAME       AVGE       I       NAME       AVGE         TER33A       0720       00       TER33B       0720         TE150B       0741       00       TE250A       0755         DT150A       0020       00       DT150B       0020         DT250B       0030	AV77         NAME       AVGE       ST. DEV       MIN.       MAX.         WS 33A       0071       00900       0015       0080         WS 33B       0062       00910       0012       0072         WS150A       0040       01000       0022       0060         WS150B       0042       01100       0023       0061         WS 250       0070       01000       0010       0085         NAME       AVGE       ST. DEV       MIN.       MAX.         WD 33A       0020       03000       0010       0030         WD 33B       0021       03010       0011       0031         WD150A       0020       03000       0010       0030         WD150B       0020       03000       0010       0032         NAME       AVGE       I       NAME       AVGE         TER33A       0720       00       TER33B       0720         TE150B       0741       00       TE250A       0755         DT150A       0020       00       DT150B       0020         DT250B       0030       D00       D010       RAIN         DEW 33       0485	AV77         NAME       AVGE       ST. DEV       MIN.       MAX.       I         WS 33A       0071       00900       0015       0080       00         WS 33B       0062       00910       0012       0072       00         WS150A       0040       01000       0022       0060       00         WS150B       0042       01100       0023       0061       02         WS 250       0070       01000       0010       0085       00         NAME       AVGE       ST. DEV       MIN.       MAX.       MNDF         WD 33A       0020       03000       0010       0030       0072         WD 33B       0021       03010       0011       0031       0071         WD150A       0020       03100       0010       0030       0045         WD150B       0020       03000       0010       0030       0035         WD 250       0019       03000       0010       0032       0055         NAME       AVGE       I       NAME       AVGE       I         TER33A       0720       00       TER33B       0720       00         DT150A	AV77       NAME       AVGE       ST. DEV       MIN.       MAX.       I         WS 33A       0071       00900       0015       0080       00         WS 33B       0062       00910       0012       0072       00         WS150A       0040       01000       0022       0060       00         WS150B       0042       01100       0023       0061       02         WS 250       0070       01000       0010       0085       00         NAME       AVGE       ST. DEV       MIN.       MAX.       MNDR         WD 33A       0020       03000       0010       0030       0072         WD 33B       0021       03010       0011       0031       0071         WD150A       0020       03000       0010       0030       0045         WD150B       0020       03000       0010       0032       0055         NAME       AVGE       I       NAME       AVGE       I       NAME         TER33A       0720       00       TER33B       0720       00       TE150         DT150A       0020       00       DT150B       0020       00       DT250	AV77         NAME       AVGE       ST. DEV       MIN.       MAX.       I         WS 33A       0071       00900       0015       0080       00         WS 33B       0062       00910       0012       0072       00         WS 33B       0062       00910       0012       0072       00         WS 350A       0040       01000       0022       0060       00         WS150B       0042       01100       0023       0061       02         WS 250       0070       01000       0010       0085       00         NAME       AVGE       ST. DEV       MIN.       MAX.       MNDR       AVRN         WD 33A       0020       03000       0010       0030       0072       0020         WD 33B       0021       03010       0011       0031       0071       0021         WD150A       0020       03000       0010       0030       0035       0022         WD150B       0020       03000       0010       0032       0055       0025         NAME       AVGE       I       NAME       AVGE       I       NAME         TEISOB       0741	AV77       NAME       AVGE       ST. DEV       MIN.       MAX.       I         WS 33A       0071       00900       0015       0080       00         WS 33B       0062       00910       0012       0072       00         WS150A       0040       01000       0022       0060       00         WS150B       0042       01100       0023       0061       02         WS 250       0070       01000       0010       0085       00         NAME       AVGE       ST. DEV       MIN.       MAX.       MNDR       AVRN       CNT         WD 33A       0020       03000       0010       0030       0072       0020       0664         WD 33B       0021       03010       0011       0031       0071       0021       063         WD150A       0020       03000       0010       0030       0035       0023       0060         WD 250       0019       03000       0010       0032       0055       0025       0061         NAME       AVGE       I       NAME       AVGE       I       NAME       AVGE         TER33A       0720       00       TER33B

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Time: 0550

34X

Message:

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: TSC or EOF

Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

A GENERAL EMERGENCY should be declared in accordance with SC-100, "Ginna Station Event Evaluation and Classification," EAL: Loss of engineered safety features; Inability to Shutdown the reactor which results in core damage with indications of containment pressure increasing rapidly and reactor remains at power after reactor trip initiated, (i.e. power range indication) or EAL: Containment Systems; failed fuel indicated by sampling of containment atmosphere and containment pressure 30 psig and increasing or Shift Supervisors opinion containment may be breached.

FOR CONTROLLER USE ONLY

Controller Notes:

 Deliver if a GENERAL EMERGENCY has not yet been declared. Do not deliver if Emergency Classifications discussions are in progress.

Actions Expected:





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Time: 0600

Message: 35

GINNA STATION

1987 EVALUATED EXERCISE

MESSAGE FORM

<u>Message</u> for: Control Room <u>Simulated Plant Conditions</u>: See attached sheets Message: \*\*\*THIS IS AN EXERCISE\*\*\*

### FOR CONTROLLER USE ONLY

Controller Notes:

1) The Plant is fairly stable from the steam break accident but containment pressure remains high due to no spray pumps operable and only two containment fan coolers operating.

### Actions Expected:

- 1) Operations continues to stabalize plant using Emergency Operating procedures.
- 2) Dose Assessment projecting doses and making recommendations as needed.





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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

	Reactor Power Level	O MWE/ O MWT	High Head S. I. Pumps	
	Reactor Shutdown	(Yes)No	FI-924 O GPM	
			FI-925 O GPM	
	NIS N-31: 3x/	COS N- 35 < 10 MMAS	1A. InServ/STBV/00S	_
	NIS . N-32 3Y/	2 COS N- 36 ( 10 1 ands	1B. InServ/STBV/005)	
	RCS Pressure			
	RCS Temperature To	<u> </u>	BIST Level =	٩
	CHG $(FT=128)$			_*
	Dregurizer Level		Tou Hand C T Dunne	
	TUN (FT-134)		Electric S. I. Fumps	
	DIN. (FI-134)		F1=0,20GPM	Þ
	Concathment Pressure	<u></u>		
	IA S/G Level	<del>8</del>	IA. Inserv/STBy/00S	
	IB S/G Level	<u> </u>	1B. <u>InServ/STBY/00S</u>	
	RVLIS	*		
	1A S/G Pressure	<u> </u>	RWST Level = $94$	_\$
	1B S/G Pressure	<u> </u>	Containment Spray Pumps	
	*CET	<u> </u>	FI-931A O GPM	
	Sump A Level	<u> </u>	FI-931B O GPM	
	Sump B Level	<u> </u>	1A. InServ/STBY (OOS)	
	A RCP	Running/Stopped)	1B. InServ/STBY(OOS)	
	B RCP	Running (Stopped)	NaOH Tank Level = 93	*
	•.		······································	
	Containment Isolation	(Yes) No	Containment Recirc Fans	
	•		1A. InServ/STBY/00S	
-			1B. InServ/STBY(005)	
	ELECTRICAL PO	OWER	1C. InServ/STBY/OOS)	
	34.5 KV Bus (Ener	gized Deenergized	1D. (InServy STBY/00S	
	4 KV Buses (Ener	gized Deenergized	PostAccident Dampersonen/C	losed
	480 V Buses (Ener	gized Deenergized	Service Water Pumps	
	Turbine Generator Ener	gized Deenergized	1A. (InServySTBy/005	
	DIESEL GENERA	TORS	1B. (InServYSTBV/005	
	A. Running/Unloaded	STRY /005	1C. (TRSerry STRY /OOS	
	B. Running/Unloaded	STRV (DOS)	1D. (TrSerry/STBY/005	
	TSC Running/Unloaded	KTRVX OOS	ALB Header Programs	ncia
	Security Pupping/Unlog	ded CTRV005	Component Cooling Water Du	bard
	ENCINEEDED CA	EECHARDS	Component Cooring Water Pu	mps
	And Engineered St	TEGUARDS	1R. There are a start of the st	
	Aux. reedwate	r Pumps	IB. INSERV/STBI,005	
	1) THEAT /SERV /000			٥.
	In. CHISELV STBI/00S		Surge Tank Level = <u>34</u>	
	IB. INSERVISIBLOUS		Scandby Aux. Feedwater Pun	ips
á	TURD. DRIVEN	Inserv/STBY (005)	IC. Inserv/STBy/00S	
Х,	CST Level	<u></u>	ID. Inserv/STBY/00S	
	*CET = PREDETERMINED C	ORE EXIT THERMOCOU	PLES, (5 OR MORE)	



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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R02	AREA 2-CONTAINNENT	2.2E+5	HALM	MR/H
R03	AREA 3-RADIO CHEN LAB	2.5E-1	GOOD	MR/H
R 0 4	AREA 4-CHARGING PUMP ROOM	2.5E+2	HALM	MR/H
R 0 5	AREA 5-SPENT FUEL PIT	9.0E+0	GOOD	MR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	1.2E+1	GOOD	MR/H
R 0 7	AREA 7-INCORE INSTRUMENTATION	2.6E+5	HALM	MR/H
R 0 8	AREA 8-DRUMMING STATION	5.0E+0	GOOD	HR/H
R 0 9	AREA 9-LETDOWN LINE	6.0E+2	HALM	MR/H
R10A	CONTAINMENT IODINE MONITOR R10A	1.0E+6	HALM	CPN
R10B	PLANT VENT IODINE MONITOR R10B	1.3E+3	GOOD	CPH
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CPH
R12	CONTAINMENT GAS MONITOR	1.0E+6	HALM	CPH
R13	AUX BLDG EXHAUST AIR PARTICULATE	3.4E+3	GOOD	CPM
R14	AUX BLDG EXHAUST GAS MONITOR	5.6E+2	GOOD	CPM
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPM
R 1 6	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	СРИ
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPM
R 18	LIQUID WASTE DISPOSAL MONITOR	3.3E+3	GOOD	СРН
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPN
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	СРМ
R29	AREA 29-CONTAINHENT HIGH RANGE	2.2E+2	HALM	R/HR
R 3 0	AREA 30-CONTAINMENT HIGH RANGE	2.4E+2	HALN	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.2E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.6E-1	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	1.7E+0	GOOD	СРИ
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	СРИ
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM ANNONIA ANALYZER	0.7763	GOOD	PPM
WT250	250 FOOT LEVEL TEMPERATURE	75.5	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	72.3	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	· 23.	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	23.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	5.1	GOOD	NPH
WS033	33 FOOT LEVEL WIND SPEED	4.2	GOOD	МРН



0600

TIME:

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SPING MONITOR SHEETS

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6	-		(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Read</u> <u>PLANT VENT</u>	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	-8.20E-04	N/A
2	Part - Alpha	CPM	STANDBY	-2.10E+01	N/A
3	I-131	uCi	<u>STANDBY</u>	+5.50E-04	N/A
4	Bkg I	CPM	STANDBY	<u>+3.70E+01</u>	N/A
5.	Noble Gas-Low	uCi/cc	STANDBY	<u>-6.00E-06</u>	3.70E-06
6	Area Monitor	MR/H	<u>1.00E-01</u>	-5.20E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	+6.00E-06	<u>-1.70E-06</u>
8	Gamma Bkg	CPM	STANDBY	-4.20E-02	1.00E+01
.9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	-1.65E-03
1	Part - Beta	uCi/cc*	STANDBY	+3.70E-09	`
3	I-131	uCi/cc*	STANDBY	<u>+5.10E-10</u>	
* SPING CON	NSOLE PLACED IN "I	NTERPRETE	D MODE"		
STEAM LINE N	MONITORS:				
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
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## Time: 06:00

# 'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77			•						
NAME	AVGE	ST. DEV	MI	IN.	MAX.	I			
WS 33A	0059	00700	00	)11	0070	00			
WS 33B	0060	00910	00	)12	0082	00			
WS150A	0049	01000	00	)22	0060	00			
WS150B	0044	01100	00	023	0061	02			
WS 250	0050	01000	00	010	0055	00			
NAME	AVGE	ST. DEV	MI	EN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0020	03000	00	010	0030	0072	0020	0064	00
WD 33B	0021	03010/	00	)11	0031	0071	0021	0063	00
WD150A	0022	03100	00	012	0032	0045	0022	0062	00
WD150B	0021	03000	00	010	0012	0035	0023	0060	02
WD 250	0023	03000	00	010	0012	. 0055 •	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NAM	E	AVGE	I
TER33A	0720	00	TER33B	0720		OO TEL	50A 👘	0745	
TE150B	0745	00	TE250A	0755		00 TE2	50B	0755	
DT150A	0025	00	DT150B	0025		00 DT2	50A	0035	
DT250B	0035								
DEW 33	0485		TEG 33	0602		00			
RAIN	0060								





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Time: 0615

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Message:

### GINNA STATION

# 1987 EVALUATED EXERCISE

### MESSAGE FORM

<u>Message for</u>: Control Room <u>Simulated Plant Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

Actions Expected:





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# 1987 EVALUATED EXERCISE Time: 06/5

# MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level OM	NE/OMWT	High Head S. I. Pumps
Reactor Shutdown (Yes	<u>5)No</u>	FI-924 O GPM
2		FI-925 O GPM
NIS N-31: <u>3×10 cps</u> No	- 35 210 Ames	1A. InServ/STBY/00S
NIS N-32 31/0 COS N	- 36 (10 Ames	1B. InServ/STBY/00S
RCS Pressure 7	00 psig	1C. InServ/STBD/005
RCS Temperature Tc .5	70 OF	BAST Level = 55 *
CHG. (FI-128) (	C GPM	
Pressurizer Level	*	Tow Head S. T. Pumps
L/TN. (FI-134)	A GPM	FT=626 O GDW
Containment Pressure	27 naia	11 020 <u> </u>
1A S/G Lovel		
	<u> </u>	IR. INSERVASTBY/005
		IB. INSERV/STBY/00S
	8	
IA S/G Pressure	<u>32 psig</u>	$RWST Level ={44}$
18 S/G Pressure	750 psig	Containment Spray Pumps
*CET	<u>30</u> of	FI-931AGPM
Sump A Level 5	<u>56</u> feet	FI-931B O GPM
Sump B Level	<u>O inches</u>	1A. InServ/STBY OOS
A RCP Runnin	g/Stopped)	1B. InServ/STBY (005)
B RCP Runnin	g/Stopped)	NaOH Tank Level = 93 %
		······································
Containment Isolation	S) NO	Containment Recirc Fans
		1A. (InServy STBY/00S
		1B. InServ/STBY/00S)
ELECTRICAL POWER		1C. InServ/STBV (OOS)
34.5 KV Bus (Energized)	Deenergized	1D. (DServySTBY/00S
4 KV Buses Energized	Deenergized	Postaccident Dampersoner Closed
The buses	Deenergreed	FORCACCIDENC Dampersopeny Closed
480 V Busen (13,14,15,17,18)	Doonorgi rod	Somico Water Durne
Turbing Convertor Energized	Deenergized	JA Green Pumps
TUIDING GENERALUI ENELGIZEUR	Deenergized	IR. Unserv StBI/005
DIESEL GENERATORS	~~	1B. Inserv/STBY/005
A. Running Unitoaded/STBY/O		ic. inserv/stby/oos
B. Running/Unioaded/STBY OC	<u>s</u>	1D. (Inservy STBY/00S
TSC Running/Unioaded/STBy/00	25	A&B Header Pressure <u>50</u> psig
Security <u>Running/Unloaded</u> ST	BY/OOS	Component Cooling Water Pumps
ENGINEERED SAFEGUARI	<u>DS</u>	1A. CINSERV/STBY/OOS
Aux. Feedwater Pumps	3	1B. InServ/STBY OOS
1A. (InServ/STBY/00S		Surge Tank Level = 52 %
1B. InServ/STBY (OOS)	-	Standby Aux. Feedwater Pumps
Turb. Driven InServ.	STBY KOOS	1C. InServ/STBY/00S
CST Level	feet	1D. InServ/STBY/OOS)
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\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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## AREA RADIOLOGICAL AND NÈTEOROLOGICAL DATA

TIME: 0615

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R02	AREA 2-CONTAINMENT	3.1E+5	HALM	HR/H
R03	AREA 3-RADIO CHEN LAB	2.5E.1	GOOD	HR/H
R 0 4	AREA 4-CHARGING PUMP ROOM	2.5E+2	HALM	NR/H
R 0 5	AREA 5-SPENT FUEL PIT	<b>9.0E+0</b>	GOOD	NR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	1.3E+1	GOOD	HR/H
R07	AREA 7-INCORE INSTRUMENTATION	3.7E+5	HALM	HR/H
R08	AREA 8-DRUNNING STATION	5.0E+0	GOOD	HR/H
R09	AREA 9-LETDOWN LINE	6.0E+2	HALM	. MR/H
RTOA	CONTAINMENT IODINE MONITOR R10A	1.0E+6	HALN	CPM
R108	PLANT VENT LODINE MONITOR R10B	1.4E+3	HALH	CPH
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CPM
R12	CONTAINMENT GAS MONITOR	1.0E+6	HALM	CPN
R13	AUX BLDG EXHAUST AIR PARTICULATE	3.6E+3	GOOD	CPM
R14	AUX BLDG EXHAUST GAS HONITOR	5.7E+2	GOOD	CPN
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPM
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPM
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPM
R 18	LIQUID WASTE DISPOSAL MONITOR	4.0E+3	GOOD	CPN
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	CPN
R20	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPM
R29	AREA 29-CONTAINMENT HIGH RANGE	3.1E+2	HALM	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	3.4E+2	HALM	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	1.3E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.0E+1	GOOD	MR/H
R35	AREA 35-PASS SAMPLE PANEL	1.7E-1	GOOD	HR/H
R36	CONTROL ROON NOBLE GAS MONITOR	1.7E+0	GOOD	CPH
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	CPN
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPN
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM ANMONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	76.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	73.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	22.	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	21. '	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	5.2	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	4.1	GOOD	НРН

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SPING MONITOR SHEETS

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				Time: 061	5
6	•		(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	-8.40E-04	N/A
2	Part - Alpha	CPM	STANDBY	<u>-2.10E+01</u>	N/A
3	I-131	uCi	STANDBY	+5.70E-04	N/A
. 4	Bkg I	CPM	STANDBY	<u>+3.70E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	-7.00E-06	3.70E-06
6	Area Monitor	MR/H	1.00E-01	-5.20E-02	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	+7.00E-06	<u>-1.70E-06</u>
8	Gamma Bkg	CPM	STANDBY	-4.20E-02	1.00E+01
9	Noble Gas-High	uCi/cc	STANDBY	+1.30E-03	-1.70E-03
1	Part - Beta	uCi/cc*	STANDBY	<u>+4.00E-09</u>	
3	I-131	uCi/cc*	STANDBY	<u>+5.30E-10</u>	
* SPING CO	NSOLE PLACED IN "I MONITORS:	NTERPRETE	D MODE"		
	(R-31): "A" Steam	Line Rad	Monitor	+1.00E-02	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr



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# Time: 06:15

# 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

	AV77										
	NAME	AVGE	ST. DEV	M	EN.	MAX.		I	•		
	WS 33A	0041	00900	00	)11	0050		00			
	WS 33B	0042	00910	00	012	0052		00			
	WS150A	0045	01000	00	)22	0060		00			
	WS150B	0043	01100	00	023	0061		02			
	WS 250	0050	01000	00	010	0055		00	•		
	NAME	AVGE	ST. DEV	M	EN.	MAX.		MND	R AVRN	I CNT.	I
	WD 33A	0022	03000	00	012	0032		007:	2 0020	0064	00
	WD 33B	0021	03010	00	010 °	0031		007	1 0023	0063	00
	WD150A	0020	03100	00	010	0030		004	5 0022	2 0062	00
	WD150B	0021	03000	00	009	0031		003	5 0023	0060	02
	WD 250	0022	03000	00	010	0032	I.	005	5 0025	5 0061	00
	NAME	AVGE	I	NAME	AVGE			I	NAME	AVGE	I
	TER33A	0730	00	TER33B	0730			00	<b>TE150A</b>	0750	
	TE150B	0750	00 `	TE250A	0760			00	<b>TE250B</b>	0760	
U	DT150A	0020	00	DT150B	0020			00	DT250A	0030	
	DT250B	0030									
	DEW 33	0486		TEG 33	0602			00	á		
	RAIN	0061									



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### GINNA STATION

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### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The Station experiences a severe aftershock from the earthquake.

Indications in the Control Room include:



 RCS pressure rapidly decreasing.
 Containment vessel pressure and radiation levels start increasing.

FOR CONTROLLER USE ONLY

Controller Notes:

- 1) There is no offsite radiation release at this point.
- 2) The Control Rod pressure housings that have been leaking sever causing a LOCA.

Actions Expected:



- 1) Safety injection should be initiated automatically or manually again.
- Operators take actions as described in Emergency Procedures E-0 and E-1.



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# 1987 EVALUATED EXERCISE Time: 0630

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# MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

Reactor Power Level _ O MWE/ O MWT	High Head S. I. Pumps
Reactor Shutdown (Yes) No	FI-924 2.25 GPM
	FI-925 200 GPM
NIS N-31: 3×10 cos N-35 < 10 Amps	1A. OnServ/STBY/00S
NIS N-32 3x102 COS N- 36 (15 Amps	1B. InServ/STBY/OOS
RCS Pressure 900 psig	1C. InServy STBY/00S
RCS Temperature Te 570 OF	BAST Level = $55$ %
CHG. (FI-128) O GPM	
Pressurizer Level O *	Low Head S. I. Pumps
LTN. (FI-134) O GPM	FI-626 200 GPM
Containment Pressure 33 psig	
1A S/G Level O %	1A. (InServ) STBY/00S
1B S/G Level	1B. InServ/STBY/00S)
RVLIS 100 %	
1A S/G Pressure 33 psig	RWST Level = 94 %
1B S/G Pressure 750 psig	Containment Spray Pumps
*CET 530 OF	FI-931A O GPM
Sump A Level // feet	FI-931B C GPM
Sump B Level O inches	1A. InServ/STBY (005)
A RCP Running (Stopped)	1B. InServ/STBY/00S
B RCP Running (Stopped)	NaOH Tank Level = 93 %
Containment Isolation (Yes) No	Containment Recirc Fans
	1A. (InServYSTBY/00S
	1B. InServ/STBY/00S
ELECTRICAL POWER	1C. InServ/STBY/00S)
34.5 KV Bus Energized Deenergized	1D. UnServySTBY/00S
4 KV Buses (Energized Deenergized	PostAccident DampersOpen/Closed
480 V Buses Energized Deenergized	Service Water Pumps
Turbine Generator Energized (Deenergized)	IA. (InServ/STBY/00S
DIESEL GENERATORS	1B. (InServ/STBY/005
A. Running/Unloaded/STBY/00S	1C. (InServ/STBY/005
B. Running/Unloaded/STBY/005	1D. (InServ/STBV/00S
TSC Bunning/Unloaded (STBY)005	ALB Header Pressure 570 nsig
Security Running/Unloaded STBY 005	Component Cooling Water Pumps
FNGINEERED SAFEGUARDS	12 InservYSTBY (005
Auv Foodwator Dumps	1B There STBL MOS
Adx. reedwater rumps	IB. IIISELV/SIBIAOOS
14 (Insert)/STRV/005	Surge Tank Lovel = $\sqrt{2}$ 9
1B Insany/STRV (OC)	Standby Any Foodwator Dumps
The THREE ALARD THE WAY (CUBY 100)	10 Incom Compy August
	Inserv/STBILOUS

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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<u>0630</u>

TIME:

### AREA RADIOLOGICAL AND NETEOROLOGICAL DATA

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R01	AREA 1-CONTROL ROOM	1.0E-1	GOOD	MR/H
R02	AREA 2-CONTAINMENT	4.4E+6	HALM	MR/H
R 0 3	AREA 3-RADIO CHEM LAB	3.0E-1	GOOD	HR/H
R04	AREA 4-CHARGING PUNP ROOM	2.5E+2 -	HALM	MR/H
R 0 5	AREA 5-SPENT FUEL PIT	3.5E+1 .	HALM	MR/H
R06	AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HALH	HR/H
R07	AREA 7-INCORE INSTRUMENTATION	5.3E+6	HALM	HR/H
R 0 8	AREA 8-DRUMMING STATION	5.0E+0	GOOD	MR/H
R 0 9	AREA 9-LETDOWN LINE	6.0E+2	HALM	HR/H
R10A	CONTAINMENT IODINE NONITOR R10A	1.0E+6	HALM	CPH
R10B	PLANT VENT IODINE MONITOR R10B	1.7E+3	HALM	CPH
R11	CONTAINHENT AIR PARTICULATE	1.0E+6	HALM	CPH
R12	CONTAINNENT GAS MONITOR	1.0E+6	HALM	СРН
R13	AUX BLDG EXHAUST AIR PARTICULATE	4.5E+3	GOOD .	CPH
R14	AUX BLDG EXHAUST GAS MONITOR	7.0E+2 `	GOOD	СРМ
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+1	GOOD	CPM
R16	CV COOLING HX SERVICE WATER OUT	7.5E+1	GOOD	CPH
R17	COMPONENT COOLING PUMP SUCT HDR	9.0E+2	GOOD	CPH
R18	LIQUID WASTE DISPOSAL MONITOR	4.7E+3	GOOD .	CPM
R19	STEAM GENERATOR BLOWDOWN DRAIN	2.0E+3	GOOD	СРН
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	4.0E+3	GOOD	CPH
R29	AREA 29-CONTAINMENT HIGH RANGE	4.4E+3	· HALM	R/HR
R30	AREA 30-CONTAINMENT HIGH RANGE	4.8E+3 *	HALM	R/HR
R33	AREA 33-HOT INTERNEDIATE BLDG	5.5E+O	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	1.5E+1	HALM	MR/H
R35	AREA 35-PASS SAMPLE PANEL	3.5E+0	GOOD	MR/H
R36	CONTROL ROOM NOBLE GAS NONITOR	1.7E+0	GOOD	CPM
R37	CONTROL ROOM PARTICULATE MONITOR	3.3E+0	GOOD	СРН
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	СРН
HVAC1	CONTROL ROON CHLORINE ANALYZER	0.0075	GOOD	ррм
HVAC2	CONTROL ROOH AHMONIA ANALYZER	0.7763	GOOD	PPM
WT250 `	250 FOOT LEVEL TENPERATURE	75.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	73.0	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	29.	GOOD	DEG.
WD033 '	33 FOOT LEVEL WIND DIRECTION	30.	GOOD	DEG.
W\$250	250 FOOT LEVEL WIND SPEED	5.9	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	6.1	GOOD	нрн

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SPING MONITOR SHEETS

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		Time: <u>0630</u>		<u>o</u>	
	ч 		(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR
1	Part - Beta	uCi	STANDBY	-9.20E-04	N/A
2	Part - Alpha	CPM	STANDBY	<u>-3.00E+01</u>	N/A
3	I-131	uCi	STANDBY	<u>+9.00E-04</u>	N/A
4	Bkg I	CPM	STANDBY	<u>+3.90E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	<u>-1.00E-05</u>	3.70E-06
6	Area Monitor	MR/H	1.00E-01	<u>-5.60E-02</u>	1.00E-03
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>-1.00E-05</u>	<u>-1.80E-06</u>
8	Gamma Bkg	CPM	STANDBY	<u>-4.90E-02</u>	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.30E-03</u>	<u>-1.80E-03</u>
ı ·	Part - Beta	uCi/cc*	STANDBY	<u>+5.00E-09</u>	
3	I-131	uCi/cc*	STANDBY	<u>+1.00E-09</u>	
* SPING CC STEAM LINE	NSOLE PLACED IN "I MONITORS:	NTERPRETE	D MODE"		
•	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr
	(R-32): "B" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr





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Time: 06:30

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## 'SILENT 700' COMPUTER

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## METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	MI	EN.	MAX.	I			
WS 33A	0059	00800	00	031	0080	00			
WS 33B	0060	00910	00	042	0082	00			
WS150A	0050	01000	00	)22	0060	00	ь	,	
WS150B	0052	01100	00	)23	0061	02			
WS 250	0060	01000	00	010	0075	00			
NAME	AVGE	ST. DEV	MJ	EN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0029	03000	00	)19	0039	0072	0020	0064	00
WD 33B	0030	03010	00	)20	0038	0071	0021	0063	00
WD150A	0031 (	03100	00	)21	0040	0045	0022	0062	00
WD150B	0030	03000	00	020	0040	0035	0023	0060	02
WD 250	0029	03000	00	)19	0040	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NA	ME	AVGE	I
<b>TER33A</b>	0730	00	TER33B	0730		00 TE	150A	0740	
TE150B	0740	00	TE250A	0750		00 TE	250B	0750	
DT150A	0010	00	DT150B	0010		00 DT	250A	0020	
DT250B	0022								
DEW 33	0486		<b>TEG 33</b>	0602		00			
RAIN	0062								



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Time: <u>0635</u> Message: 38

### GINNA STATION

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### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

# <u>Message</u> for: Control Room <u>Simulated Plant</u> <u>Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*



## FOR CONTROLLER USE ONLY

Controller Notes:

- 1) There is no offsite radiation release at this point.
- 2) Containment pressure and radiation levels building up.

#### Actions Expected:

1) Operations continue with Emergency Procedures to mitigate the LOCA.

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# 1987 EVALUATED EXERCISE Time: 0635

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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level <u>O MWE/ O MWT</u>	High Head S. I. Pumps
Reactor Shutdown (res/No	F1-924 <u>340</u> GPM
NTE N-21, 27, 000 N-25/10 muse	F1-925 <u>260</u> GPM
$NTS \qquad N=32 \times 10 \text{ AMps}$	IA. Unservystby/00s
DOS Drocouro	IB. Inserv/STBY/00S)
$\frac{300}{100}$	IC. InservystBy/005
$RCS TEMPERATURE T_c = 450  ext{ of } GVC (FT_1)20  ext{ of } GVC = 450  ext{ of } GVC = 450$	BAST Level = $55$
$\frac{O}{O} GPM$	
Pressurizer Level 0 7	Low Head S. I. Pumps
$\frac{O}{O} GPM$	F1-626 <u>200</u> GPM
l) C/C Level	
	IA. UnServySTBY/00S
	1B. InServ/STBY/00S/
RVLLS *	
1A S/G Pressure45 psig	$RWST Level = \frac{93}{8}$
18 S/G Pressure750psig	Containment Spray Pumps
*CET OF	FI-931A O GPM
Sump A Level feet	FI-931B O GPM
Sump B Level O inches	1A. InServ/STBY/OOS
A RCP Running Stopped	1B. InServ/STBY (005)
B RCP. Running Stopped	NaOH Tank Level = $93$ %
	· · · · · · · · · · · · · · · · · · ·
Containment Isolation (Vest No	Containment Recirc Fans
	1A. <u>InServ/STBY/00S</u>
	1B. InServ/STBY/00S
ELECTRICAL POWER	1C. InServ/STBY/QOS
34.5 KV Bus Energized Deenergized	1D. InServySTBY/00S
4 KV Buses (Energized Deenergized	PostAccident DampersOpen/Closed
(13, MU 15, 17, 18) 16	
480 v Buses Energized Deenergized	Service Water Pumps
Turbine Generator Energized Deenergized	A. InServ/STBY/00S
DIESEL GENERATORS	1B. <u>InServ/STBY/00S</u>
A. <u>Running/Unioaded/STBY/00S</u>	1C. InServ/STBY/00S
B. Running/Unioaded/STBY/005	1D. InServ/STBY/00S
TSC Running/Unloaded/STBY/00S	A&B Header Pressure <u>50</u> psig
Security Running/Unloaded STBY/00S	Component Cooling Water Pumps
ENGINEERED SAFEGUARDS	1A. (InServ/STBY/00S
Aux. Feedwater Pumps	1B. <u>InServ/STBY</u> (OOS)
IA. Unserv/STBY/00S	Surge Tank Level = <u>52</u>
18. Inserv/STBY/QUS	Standby Aux. Feedwater Pumps
Turb. Driven Inserv/STBY (005)	IC. Inserv(STBY/OOS
CST Levelfeet	ID. INSERV/STBY(005)
*CET = PREDETERMINED CORE EXIT THERMOCO	UPLES, (5 OR MORE)

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Time: \_\_\_\_0640\_\_\_\_

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Message: \_

## GINNA STATION

1987 EVALUATED EXERCISE

### MESSAGE FORM

<u>Message</u> for: Control Room <u>Simulated Plant Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*



#### FOR CONTROLLER USE ONLY

Controller Notes:

1) There is no offsite radiation release at this point.

Actions Expected:

1) Operations continue with Emerency Procedures to midigate the LOCA.



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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level ' O MWE/ O MWT	High Head S. I. Pumps
Reactor Shutdown (les)No	FI-924 400 GPM
2	FI-925 <u>300</u> GPM
NIS N-31: 10 Cps N-35 (10 AMPS	1A. (InServ/STBY/OOS
NIS N-32 102 cps N-36 < 10" Anos	1B. InServ/STBY OOS
RCS Pressure <u>245</u> psig	1C. InServySTBY/00S
RCS Temperature Tc 380 OF	BAST Level = $55$ %
CHG. (FI-128) GPM	
Pressurizer Level 8	Low Head S. I. Pumps
LTN. (FI-134) GPM	FI-626 <u>200</u> GPM
Containment Pressure <u>47</u> psig	
IA S/G Level	1A. (InServ/STBY/00S
1B S/G Level 28 8	1B. InServ/STBY OOS
RVLIS *	
IA S/G Pressure <u>47</u> psig	RWST Level = 72
18 S/G Pressure $720$ psig	Containment Spray Pumps
*CET $405$ OF	FI-931A O GPM
Sump A Level feet	FI-931B O GPM
Sump B Level O inches	IA. Inserv/STBY/OOS
A RCP Running Stopped	IB. <u>InServ/STBY(OOS</u> )
B RCP: Running Stopped	NAOH TANK Level = $93$
Containment Inclation (Var)No	Containment Desive Dans
containment isolation des No	Containment Recirc Fans
t •	IA. CINSERV/STBY/OOS
	1B. INSERV/STBY/005
24 E WI DUE	IC. Inserv/stby(00s)
A W Bus Chergized Deenergized	ID. <u>CINSERVYSTBY/00S</u>
4 KV Buses Energized Deenergized	PostAccident Dampersopen/Closed
ASO V BURGE (13,44,15,17,18) 16	Service Water Bunne
Turbing Congrator Energized Deenergized	1A (InServySTRY/00S
DIFSEL GENERATORS	1B Theory STBY/005
A. Running/Inloaded/STBY/005	1C (The Server Start Coos
B. Bunning/Unloaded/STBY/005	1D (Inserv/STBY/005
TSC Bunning/Unloaded/STB1/005	ALB Header Pressure An asia
Security Bunning/Unloaded (STBY/005	Component Cooling Water Bumps
ENGINEEDED SAEEGUADDS	12 · (nsome Strey (005
Aux Fooduator Bumps	1B TRSATU/STBY/005
Aux. reedwater Fumps	IB. INSELV/SIBIA005/
18 TISATTA STRY 1005	Surge Tank Level = $\sqrt{7}$
1B InCorry/STRY (00S)	Standby My Feedwater Dumps
Thish Driven Incom/CORV MOC	1C. There /STRV/005
	1D. There /STRY /OOS
*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES, (5 OR MORE)





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Time: 0645

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Message:

#### GINNA STATION

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#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

ALARMS received in Control Room: o L-10 (Aux. Building sump pump auto start) o L-9 (Aux. Building sump hi level) o J-9 (Safeguard breaker trip)

Indications in Control Room include:

- "A" RHR pump breaker indication shows white disagreement light lite
- o R-13 and R-14 on High Alarm.

#### FOR CONTROLLER USE ONLY

Controller Notes:

- 1) If Operators attempt to restart "A" RHR pump, it will not start at this time.
- 2) If Operators check the Auxiliary Building sump pump switches on back of board, both sump pumps indicate they have trip. If attempts are made to restart them, they will not start at this time.
- 3) Plant vent monitors (see attached sheet) indicate rapid increases of radiation levels.
- A major release to the Environment begins.
  Release path: Containment through "B" RHR suction line out the plant vent.

#### Actions Expected:

1) Efforts should be underway to track the plume, terminate the 'release, and implement/coordinate PARs.





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#### 1987 EVALUATED EXERCISE T

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## Time: 0645

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### MAJOR PARAMETERS

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## ENGINEERED SAFEGUARDS

	Reactor Power Level	O MWE/ O MWT	<u>High Head S. I. Pumps</u>
	Reactor Shutdown	(YesyNo	FI-924 <u>400</u> GPM
		1	FI-925 <u>300</u> GPM
	NIS N-31: 8x/0	CPS N- 35 ( 10 Aups	1A. (InServ/STBY/005
	NIS N-32 <u>8x/</u>	<u>y'cps N-36 &lt; 10"Ames</u>	1B. InServ/STBY/OOS
	RCS Pressure	<u>245</u> psig	1C. (InServ/STBY/OOS
	RCS Temperature Tc	<u> </u>	BAST Level =55{
	CHG. (FI-128)	GPM	
	Pressurizer Level	· <u> </u>	Low Head S. I. Pumps
	LTN. (FI-134)	GPM	FI-626 O GPM
	Containment Pressure	<u>     45  </u> psig	
	<b>1A S/G Level</b>	¥	1A. InServ/STBY/00S
	<b>1B S/G Level</b>	. 54 8	1B. InServ/STBY/00S
	RVLIS	/00 *	
	<b>1A S/G Pressure</b>	<u> </u>	RWST Level = $89$ %
	1B S/G Pressure	<u>540</u> psig	Containment Spray Pumps
	*CET	405 OF	FI-931A O GPM
	Sump A Level	feet	FI-931B O GPM
	Sump B Level	<u>O</u> inches	1A. InServ/STBY/00S
	A RCP	Running Stopped	1B. InServ/STBY(OOS)
	B RCP.	Running (Stopped)	NaOH Tank Level = 93 8
			······································
	Containment Isolation	(Yes/No	Containment Recirc Fans
			1A. (InServySTBY/OOS
			1B. InServ/STBY/OOS
	ELECTRICAL PO	OWER	1C. InServ/STBY/00S
	34.5 KV Bus . · Ener	rgized Deenergized	1D. InServy/STBY/OOS
	4 KV Buses Ener	gized Deenergized	PostAccident DampersOpen/Closed
	13,14	15,17,18 16	
	480 V Buses Ener	gized Deenergized	Service Water Pumps
	Turbine Generator Ener	gized Deenergized	1A. (InServy/STBY/OOS
	DIESEL GENERA	ATORS	1B. InServy/STBY/OOS
	A. Running/Unloaded/	STBY/OOS	1C. InServ/STBY/OOS
	B. Running/Unloaded/	STBY OOS	1D. InServ/STBY/OOS
	TSC Running/Unloaded/	STBY/005	A&B Header Pressure 50 psig
	Security Running/Unloa	ded STBY OOS	Component Cooling Water Pumps
	ENGINEERED SA	AFEGUARDS	1A. (InServ/STBY/OOS
	Aux. Feedwate	er Pumps	1B. InServ/STBY OOS
,	1A. (InServ) STBY/00S		Surge Tank Level = <u>52</u> %
	1B. InServ/STBY/OOS)		Standby Aux. Feedwater Pumps
	Turb. Driven.	InServ/STBY OOS	1C. InServ/STBY/00S
	CST Level	17 feet	1D. InServ/STBY/OOS
	*CET = PREDETERMINED C	CORE EXIT THERMOCOU	PLES, (5 OR MORE)
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#### AREA RADIOLOGICAL AND NETEOROLOGICAL DATA



0645

TIME:

POINT ID DESCRIPTION CURRENT VALUE QUALITY CODE ENGR UNITS R 0 1 AREA 1-CONTROL ROOM 2.0E-1 GOOD MR/H R 0 2 AREA 2-CONTAINMENT 4.4E+6 HALM HR/H R 0 3 AREA 3-RADIO CHEN LAB 3.0E-1 GOOD HR/H R04 6.0E+4 AREA 4-CHARGING PUNP ROOM HALM HR/H R 0 5 7.0E+4 AREA 5-SPENT FUEL PIT HALM MR/H R06 AREA 6-NUCLEAR SAMPLE ROOM 5.0E+1 HALM MR/H R 0 7 5.3E+6 AREA 7-INCORE INSTRUMENTATION HALM MR/H R08 AREA 8-DRUNHING STATION 3.0E+4 HALH HR/H R09 AREA 9-LETDOWN LINE 6.8E+4 HALM MR/H R10A CONTAINMENT IODINE MONITOR R10A 1.0E+6 HALM CPH R10B PLANT VENT IODINE NONITOR R10B 1.0E+6 HALH CPH R11 CONTAINMENT AIR PARTICULATE 1.0E+6 HALM CPM R12 CONTAINMENT GAS MONITOR 1.0E+6 HALM CPH R13 AUX BLDG EXHAUST AIR PARTICULATE" 1.0E+6 HALH CPM 1 R14 AUX BLDG EXHAUST GAS MONITOR 1.0E+6 HALM CPM R15 CONDENSER AIR EJECTOR EXHAUST 5.2E+2 GOOD CPM 7.5E+2 R16 CV COOLING HX SERVICE WATER OUT HALH CPN COMPONENT COOLING PUMP SUCT HDR R17 1.0E+6 HALH CPM R18 1.0E+6 CPH LIQUID WASTE DISPOSAL HONITOR HALM 5.0E+3 CPM R19 STEAM GENERATOR BLOWDOWN DRAIN GOOD R20 SPENT FUEL PIT HX SERV WATER OUT 1.0E+6 HALM CPM R29 AREA 29-CONTAINMENT HIGH RANGE 4.4E+3HALN R/HR R30 AREA 30-CONTAINMENT HIGH RANGE 4.8E+3 R/HR HALH R33 AREA 33-HOT INTERNEDIATE BLDG <sup>5</sup>.5E+0 HALM MR/H R34 AREA 34-AUX BLDG CV SPRAY PUHP 1.7E+5 HALM MR/H R35 MR/H AREA 35-PASS SAMPLE PANEL 3.5E+0 GOOD CPH R36 CONTROL ROOM NOBLE GAS MONITOR 3.0E+2 GOOD R37 CONTROL ROOM PARTICULATE MONITOR 1.0E+3 GOOD CPH 1.2E+0 CPH R38 CONTROL ROOM IDDINE MONITOR GOOD HVAC1 0.0075 GOOD PPN CONTROL ROOM CHLORINE ANALYZER 0.7763 PPH HVAC2 CONTROL ROOM AMMONIA ANALYZER GOOD WT250 75.2 **250 FOOT LEVEL TEMPERATURE** GOOD DEGF WT033 73.2 DEGF **33 FOOT LEVEL TEMPERATURE** GOOD WD250 DEG. 250 FOOT LEVEL WIND DIRECTION 29. GOOD DEG. WD033 **33 FOOT LEVEL WIND DIRECTION** 29. GOOD 6.0 MPH WS250 250 FOOT LEVEL WIND SPEED GOOD **MPH** WS033 33 FOOT LEVEL WIND SPEED 6.2 GOOD

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SPING MONITOR SHEETS

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-	:			Time: <u>0645</u>			
6			(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR		
1	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A		
2	Part - Alpha	CPM	STANDBY	<u>HIGH FAIL</u>	N/A		
3	I-131	uCi	STANDBY	HIGH FAIL	N/A		
4	Bkg I	CPM	STANDBY	<u>+3.47E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	HIGH FAIL	3.70E-06		
6	Area Monitor	MR/H	<u>+3.00E+02</u>	+3.00E+02	8.00E-02		
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+1.10E+01</u>	-4.00E-06		
8	Gamma Bkg	CPM	STANDBY	<u>+1.00E+03</u>	<u>1.00E+01</u>		
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.11E+01</u>	-1.80E-03		
	,						
l	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL			
3	I-131	uCi/cc*	STANDBY	HIGH FAIL			
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:							
	(R-31): "A" Stear	n Line Rad	l Monitor	+1.50E+00	mR/hr		
	(R-32): "B" Stear	n Line Rad	l Monitor	+8.00E-01	mR/hr		

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Time: 06:45

## 'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77		_							
NAME	AVGE	ST. DEV	M	IN.	MAX.	I			
WS 33A	0060	00900	. 00	019	0080	00			
WS 33B	0060	00910	00	012	0082	00	-		
WS150A	0048	01000	00	022	0060	00			
WS150B	0047	01100	00	023	0061	02			
WS 250	0060	01000	00	010	0055	00			
NAME	AVGE	ST. DEV	M	IN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0029	03000	00	019	0040	0072	0020	0064	00
WD 33B	0029	03010	00	020	0040	0071	0021	0063	00
WD150A	0028	03100	00	021	0039	0045	0022	0062	00
WD150B	0028	03000	0	022	0041 .	0035	0023	0060	02
WD 250	0029	03000	0	020	0042	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NAI	ME	AVGE	I
TER33A	0732	00	TER33B	0732	•	00 TE:	150A	0752	
TE150B	0752	00	TE250A	0762		00 TE:	250B	0762	
<b>T150A</b>	0020	00	DT150B	0020		. 00 DT:	250A	0030	
DT250B	0030								
DEW 33	0496		TEG 33	0602		00			
RAIN	0063								







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Time: <u>0700</u>

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Message:

#### GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

1) Release will continue until 0800 hours.

## Actions Expected:

- 1) Efforts are underway to track the plume, terminate the release and implement/coordinate PARs.
- 2) TSC and Control Room should decide to close MOV-851A in an attempt to isolate the leak from containment. It will close when they attempt it. MOV-851B will not close because it has no electrical power (Bus 16 and MCC-1D have no electrical power). All other lines, from containment, in the RHR sub-basement, isolated with containment isolation.













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## 1987 EVALUATED EXERCISE Time: 0700

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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level $\bigcirc$ MWE/ $\bigcirc$ MWTReactor ShutdownYes/NoNISN-31: $8 \times 10^{\circ} Cos$ NISN-32 $8 \times 10^{\circ} Cos$ NISN-32 $8 \times 10^{\circ} Cos$ RCS Pressure2.35RCS Temperature380	High Head S. I. Pumps FI-924 400 GPM FI-925 300 GPM 1A. Inserv/sTBY/00S 1B. Inserv/STBY/00S 1C. Inserv/STBY/00S BAST Level = 55 \$
CHG. (FI-128)OGPMPressurizer LevelO%LTN. (FI-134)OGPMContainment Pressure40psigIA S/G LevelO%IB S/G Level53%RVLIS100%	Low Head S. I. Pumps FI-626 GPM 1A INServ/STBY/COS 1B INServ/STBY/COS
1A S/G Pressure40psig1B S/G Pressure450psig*CET400oFSump A Level22.6feetSump B Level0inchesA RCPRunning/StoppedRunning/Stopped	RWST Level =87Containment Spray PumpsFI-931AOGPMFI-931BOGPM1A.Inserv/STBY/0051B.Inserv/STBY/005NaOH Tank Level =93
Containment Isolation Yes/No <u>ELECTRICAL POWER</u> 34.5 KV Bus <u>Energized</u> Deenergized 4 KV Buses <u>Energized</u> Deenergized	Containment Recirc Fans1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S1D.InServ/STBY/00SPostAccident DampersOpen/Closed
480 V Buses Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded(STBY/OOS Security Running/Unloaded (STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	Service Water Pumps 1A. ( <u>InServ/STBY/00S</u> ) 1B. ( <u>InServ/STBY/00S</u> ) 1C. ( <u>InServ/STBY/00S</u> ) 1D. ( <u>InServ/STBY/00S</u> ) A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A. ( <u>InServ/STBY/00S</u> ) 1B. <u>InServ/STBY/00S</u> )
1A. Inserv/STBY/00S 1B. Inserv/STBY/00S Turb. Driven CST Level <u>17.5</u> feet	Surge Tank Level = <u>52</u> * <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ(STBY/OOS</u> 1D. <u>InServ/STBY/OOS</u>

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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#### AREA RADIOLOGICAL AND NETEOROLOGICAL DATA

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TINE: 0700

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POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	2.0E-1	GOOD	MR/H
R 0 2	AREA 2-CONTAINMENT	3.8E+6	HALM	MR/H
R 0 3	AREA 3-RADIO CHEN LAB	3.0E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUMP ROOM	6.DE+4	HALM	MR/H
R 0 5	AREA 5-SPENT FUEL PIT	7.0E+4	HALM	HR/H
R06	AREA 6-HUCLEAR SAMPLE ROOM	5.0E+1	HALM	HR/H
R07	AREA 7-INCORE INSTRUMENTATION	4.6E+6	HALM	HR/H
R08	AREA 8-DRUMMING STATION	3.0E+4	HALM	MR/H
R09	AREA 9-LETDOWN LINE	6.8E+4	HALH	HR/H
R10A	CONTAINMENT IODINE MONITOR R10A	1.0E+6	HALM	CPH
R 1 0 B	PLANT VENT IODINE MONITOR R10B	1.0E+6	HALM	CPM
R11	CONTAINNENT AIR PARTICULATE	1.0E+6	HALH	CPN
R12	CONTAINNENT GAS MONITOR	1.0E+6	HALM	CPN
R 1 3	AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6	HALM	CPN
R14	AUX BLDG EXHAUST GAS MONITOR	1.0E+6	HALM	CPM
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+2	GOOD	CPH "
R 16	CV COOLING HX SERVICE WATER OUT	7.5E+2	HALM	CPH
R 1 7	COMPONENT COOLING PUMP SUCT HDR	1.0E+6	' HALM	CPM
R18	LIQUID WASTE DISPOSAL MONITOR	1.0E+6	HALM	CPH
R19	STEAN GENERATOR BLOWDOWN DRAIN	5.0E+3	GOOD	CPM
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	' HALM	CPM
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	3.8E+3	HALM	R / H R
R30	AREA 30-CONTAINMENT HIGH RANGE	4.2E+3	HALM	R / H R
R 3 3	AREA 33-HOT INTERMEDIATE BLDG	5.5E+0	HALM	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUHP	1.7E+5	HALM	MR/H
R35	AREA 35-PASS SAMPLE PANEL	3.5E+0	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	3.0E+2	GOOD	CPM
R 3 7	CONTROL ROOM PARTICULATE MONITOR	1.0E+3	GOOD	CPN
R38	CONTROL ROOM IODINE MONITOR	1.2E+0 -	GOOD	CPM
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPH
HVAC2	CONTROL ROOM ANNOHIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	76.0	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	73.3	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	30.	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	30.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	5.9	GOOD	мрн
WS033	33 FOOT LEVEL WIND SPEED	6.1	GOOD	мри



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SPING MONITOR SHEETS

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				Time: 0700	<u>&gt;</u>		
	•		(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	ling AIR EJECTOR		
1	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A		
2	Part - Alpha	CPM	STANDBY	HIGH FAIL	N/A		
3	I-131	uCi	STANDBY	<u>HIGH FAIL</u>	N/A		
4	Bkg I	CPM	STANDBY .	<u>+3.48E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	<u>HIGH FAIL</u>	3.70E-06		
6	Area Monitor	MR/H	<u>+3.00E+02</u>	<u>+3.00E+2</u>	8.00E-02		
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+1.10E+01</u>	+7.52E-06		
8	Gamma Bkg	CPM	STANDBY	+1.00E+03	<u>1.00E+01</u>		
.9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.11E+01</u>	<u>-1.41E-03</u>		
l	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL	<u> </u>		
3	I-131	uCi/cc*	STANDBY	HIGH FAIL	. <u></u>		
* SPING CONSOLE PLACED IN "INTERPRETED MODE"							
STEAM LINE I	MONITORS:						
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.50E+00</u>	mR/hr		
	(R-32): "B" Steam	Line Rad	Monitor	<u>+8.00E-01</u>	mR/hr		





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'SILENT 700' COMPUTER.

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METEOROLOGICAL DATA

	AV77					v				
	NAME	AVGE	ST. DEV	MI	N.	MAX.	I			
	WS 33A	0061	00900	00	)11	0070	00	*		
	WS 33B	0062	00910	00	)12	0072	00			
	WS150A	0060	01000	00	22	0060	00			
	WS150B	0052	01100	00	)23	0061	02			
	WS 250	0070	0.1000	00	010	0055	00			
	NAME	AVGE	ST. DEV	MI	IN.	MAX.	MNDE	R AVRN	I CNT	I
	WD 33A	0029	03000	00	20	0040	0072	2 0020	0064	00
	WD 33B	0029	03010	00	20	0040	0073	L 0021	. 0063	00
	WD150A	0028	03100	00	)21	0040	0045	5 0022	0062	00
	WD150B	0029	03000	00	22	0039	0035	5 0023	0060	02
	WD 250	0030	03000	00	)20	0038	0055	5 · 0025	5 006l	00
	NAME	AVGE	I	NAME	AVGE		I	NAME	AVGE	I
	TER33A	0733	00	TER33B	0733		00	TE150A	0753	
	TE150B	0753	00	TE250A	0764		00	TE250B	0764	
J	<b>DT150A</b>	0020	00	DT150B	0020		00	DT250A	0031	
	DT250B	0031								
	DEW 33	0496		TEG 33	0602		00			
	RAIN	0063								

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Time: <u>0715</u>

Message: <u>42</u>

### GINNA STATION

1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room .

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

1) Release will continue until 0800 hours.

Actions Expected:

- TSC and OSC should increase efforts to repair and return the "B" Emergency Diesel Generator to operation so they can close MOV-851B to terminate the release and start the "B" containment spray pump to reduce containment pressure.
- 2) Efforts are underway to track the plume, terminate the release and implement/coordinate PARs.









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# 1987 EVALUATED EXERCISE Time: 07/5

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## MAJOR PARAMETERS

## ENGINEERED SAFEGUARDS

Reactor Power Level O MWE/ O MWT	High Head S. I. Pumps
Reactor Shutdown (Yes) No	FI-924 400 GPM
	FI-925 300 GPM
NIS N-31:8×10 CRS N-35 (10"Anes	1A. (InServ/STBY/00S
NIS N-32 8x10 COS N-36 (15 Amos	1B. InServ/STBY OOS
RCS Pressure 2.30 psig	1C. (InServySTBY/00S)
RCS Temperature Te 380 OF	BAST Level = 55 %
CHG. (FI-128) () GPM	· · · · · · · · · · · · · · · · · · ·
Pressurizer Level 0 %	Low Head S. I. Pumps
LTN. (FI-134) 'O GPM	FI-626 C GPM
Containment Pressure 30 psig	
1A S/G Level	1A. InServ/STRY (005)
$\frac{111}{18} \frac{5}{6} \frac{1}{6} \frac$	1B. InServ/STBV (00S)
	1B. <u>111581 (73151)</u> (003)
$\frac{100}{100}$	
IR S/G Progrumo	Containment Sprau Dumps
+CEM 202 psty	ET-021
	$\mathbf{FI}_{\mathbf{F}} = \mathbf{FI}_{\mathbf{F}} = \mathbf{FI}_{\mathbf{F}}$
	IA. Inserv/STBY/005
A RCP Running Stopped	IB. INSERV/STBY/00S
B RCP. Running/Stopped	Nath Tank Level = $93$ 3
Contrainment Trajation (Tra)	Contrinuent Decime Dece
Containment Isolation (Yes No	Containment Recirc Fans
·	IA. (InservystBy/00s
	1B. Inserv/STBY/005
ELECTRICAL POWER	1C. Inserv/STBY/00S
34.5 KV Bus <u>Energized</u> Deenergized	1D. InServ/STBY/00S
4 KV Buses <u>Energized</u> Deenergized	PostAccident DampersOpen/Closed
13,14,15,17,18 16	
480 V Buses Energized Deenergized	Service Water Pumps
Turbine Generator Energized (Deenergized)	1A. <u>InServ/STBY/00S</u>
DIESEL GENERATORS	1B. InServ/STBY/OOS
A. Running/Unloaded/STBY/OOS	1C. InServ/STBY/OOS
B. Running/Unloaded/STBY/005)	1D. Inserv/STBY/OOS
TSC Running/Unloaded STBY/00S	A&B Header Pressure 50 psig
Security Running/Unloaded STBY/00S	Component Cooling Water Pumps
ENGINEERED SAFEGUARDS	1A. InServ/STBY/00S
Aux. Feedwater Pumps	1B. InServ/STBY/00S
1A. InServ/STBY/00S	Surge Tank Level = 52 *
1B. InServ/STBY/OOS)	Standby Aux. Feedwater Pumps
Turb. Driven InServ/STBY/00S)	1C. InServ/STBY/OOS
CST Level 17.5 feet	1D. InServ/STBY/OOS)
	,
*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES, (5 OR MORE)

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### AREA RADIOLOGICAL AND METEOROLOGICAL DATA



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<u>0715</u>

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TIME:

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
ROI	AREA 1-CONTROL ROOH	2.0E-1	6000	ND / U
R 0 2	AREA 2-CONTAINMENT	3.3E+6	HAIM	пк/п мр/ш
R 0 3	AREA 3-RADIO CHEN LAB	3.0E-1	GOOD	
R 0 4	AREA 4-CHARGING PUHP ROOM	6.0E+4	HALM	ND/H
R 0 5	AREA 5-SPENT FUEL PIT	7.0E+4	HALM	MD /H
R06	AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HALM	NR/H
R 0 7	AREA 7-INCORE INSTRUMENTATION	3.9E+6	HALN	MRZH
R 0 8	AREA 8-DRUNNING STATION	3.0E+4	HALM	HR/H
R 0 9	AREA 9-LETDOWN LINE	6.8E+4	HALH	HR/H
R 10A	CONTAINMENT IODINE MONITOR R10A	1.0E+6	HALM	CPM
R 1 0 B	PLANT VENT LODINE MONITOR R10B	1.0E+6	HALM	CPM
R 1 1	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CPM
R 1 2	CONTAINMENT GAS MONITOR	. 1.0E+6	HALM	СРМ
R 1 3	AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6	HALM	CPM
R14	AUX BLDG EXHAUST GAS HONITOR	1.0E+6	HALM	CPM
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.2E+2	GOOD	CPM
R 16	CV COOLING HX SERVICE WATER OUT	7.2E+2	HALM	СРМ
R17	COMPONENT COOLING PUMP SUCT HDR	1.0E+6	HALM	CPH
R 18	LIQUID WASTE DISPOSAL HONITOR	1.0E+6	HALM	СРН
R 1 9	STEAH GENERATOR BLOWDOWN DRAIN	5.0E+3	GOOD	СРН
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	' HALM	CPH
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	3.3E+3	HALM	R/HR
R 3 0	AREA 30-CONTAINMENT HIGH RANGE -	3.6E+3	HALM	R/HR
R 3 3	AREA 33-HOT INTERMEDIATE BLDG	5.5E+0	HALM	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.7E+5	HALM	HR/H
R 3 5	AREA 35-PASS SAMPLE PANEL	3.5E+1	HALM	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	3.0E+2	GOOD	CPH
R37	CONTROL ROOM PARTICULATE MONITOR	1.0E+3	GOOD	СРИ
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPM
HVAC1	CONTROL ROOH CHLORINE ANALYZER	· 0.0075	GOOD	PPM
HVAC2	CONTROL ROOM ANNONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	76.1	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	73.4	GOOD	DEGF
WD 250	250 FOOT LEVEL WIND DIRECTION	30.	GOOD	DEG.
WD033	33 FOOT LEVEL WIND DIRECTION	39.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	6.0	GOOD	MPH
W2033	33 FOOT LEVEL WIND SPEED	6.0	GOOD	MPH



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SPING MONITOR SHEETS

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				Time: 0715	<u>5</u>		
	•		(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read	ling AIR EJECTOR		
1	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A		
2	Part - Alpha	CPM	STANDBY	HIGH FAIL	N/A		
3	I-131	uCi	<u>STANDBY</u>	HIGH FAIL	N/A		
4	Bkg I	CPM	STANDBY	<u>+3.48E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	HIGH FAIL	3.70E-06		
6	Area Monitor	MR/H	<u>+3.00E+02</u>	<u>+3.00E+02</u>	8.00E-02		
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+1.10E+01</u>	+7.50E-06		
8	Gamma Bkg	CPM	STANDBY	+1.00E+03	<u>1.00E+01</u>		
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.11E+01</u>	<u>-1.41E-03</u>		
1	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL			
3	I-131	uCi/cc*	STANDBY	HIGH FAIL			
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* SPING CONSOLE PLACED IN "INTERPRETED MODE"							
STEAM LINE	MONITORS:				r		
	(R-31): "A" Steam	Line Rad	Monitor .	<u>+1.50E+00</u>	mR/hr		
	(R-32): "B" Steam	Line Rad	Monitor	<u>+8.00E-01</u>	mR/hr		



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Time: 07:15

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# 'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	M	EN.	MAX.	I			
WS 33A	0051	00900	00	211	0057	00			
WS 33B	0052	00910	00	012	0059	00	÷		
WS150A	0040	01000	00	022	0060	00			
WS150B	0042	01100	00	023	0061	02			
WS 250	0060	01000	00	010 🦾	0055	00			
NAME	AVGE	ST. DEV	M	EN.	MAX.	MNDR	AVRN	CNT	I
WD 33A.	0030	03000	00	020	0040	0072	0020	0064	00
WD 33B	0031	03010	00	021	0041	0071	0021	0063	00
WD150A	0029	03100	00	)22	0042	0045	0022	0062	00
WD150B	0030	03000	00	021	0041	0035	0023	0060	02
WD 250	0030	03000	. 00	020	0040	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NAM	E	AVGE	I
TER33A	0733	00	TER33B	0733		00 TEL	50A -	0754	
TE150B	0754	00	TE250A	0763		00 TE2	50B	0763	
DT150A	0021	00	DT150B	0021		00 DT2	50A	0033	
DT250B	0033					-			
DEW 33	0496		TEG 33	0602		· 00			
RAIN	0064								



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Time: 0730

Message: <u>43</u>

### GINNA STATION

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1987 EVALUATED EXERCISE

#### MESSAGE FORM

<u>Message</u> for: Control Room <u>Simulated Plant Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*



#### FOR CONTROLLER USE ONLY

Controller Notes:

1) Release will continue until 0800 hours.

Actions Expected:

- 1) Repair on "B" Emergency Diesel Generator is nearing completion.
- 2) Plume tracking, implementing and coordinating PARs and release termination efforts continue.



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## 1987 EVALUATED EXERCISE Time: 0730

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## MAJOR PARAMETERS

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### ENGINEERED SAFEGUARDS

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Reactor Power Level <u>O MWE/ O MWT</u>	High Head S. I. Pumps
Reactor Shutdown (Yes) No	FI-924 400 GPM
	FI-925 300 GPM
NIS N-31: 8x10'CPS N-35 (10 AMAS	1A. InServ/STBY/OOS
NIS N-32 <u>RXIO'CPS</u> N-36 CIO'AMPS	1B. InServ/STBY OOS
RCS Pressure <u>230</u> psig	1C. InServySTBY/OOS
RCS Temperature Tc 380 OF	BAST Level = 55 %
CHG. (FI-128) O GPM	
Pressurizer Level O *	Low Head S. I. Pumps
LTN. (FI-134)	FI-626 O GPM
Containment Pressure 25 psig	
IA S/G Level	1A. InServ/STBY OOS
1B S/G Level 57 %	1B. InServ/STBY (OOS)
RVLIS /00 %	,
1A S/G Pressure 25 psig	RWST Level = 82 %
1B S/G Pressure 450 psig	Containment Spray Pumps
*CET 398 OF	FI-931A O GPM
Sump A Level 3/ feet	FI-931B O GPM
Sump B Level 8 inches	1A. InServ/STBY (00S)
A RCP Running/Stopped	1B. InServ/STBY (OOS)
B RCP Running (Stopped)	NaOH Tank Level = 93 %
Containment Isolation (YesyNo	Containment Recirc Fans
	1A. (InServ/STBY/00S
	1B. InServ/STBY (005)
ELECTRICAL POWER	1C. InServ/STBY (OOS)
34.5 KV Bus (Energized) Deenergized	1D. InServySTBY/00S
34.5 KV Bus Energized/Deenergized   4 KV Buses Energized/Deenergized	1D. <u>InServySTBY/00S</u> PostAccident DampersOpen/Closed
34.5 KV BusEnergized/Deenergized4 KV BusesEnergized/Deenergized	1D. <u>InServySTBY/00S</u> PostAccident DampersOpen/Closed
34.5 KV BusEnergized/Deenergized4 KV BusesEnergized/Deenergized480 V Buses[3,14,15,17,18]480 V BusesEnergized/Deenergized	1D. <u>InServySTBY/00S</u> PostAccident DampersOpen/Closed Service Water Pumps
34.5 KV BusEnergized/Deenergized4 KV BusesEnergized/Deenergized480 V Buses13,14,15,17,18Turbine GeneratorEnergized/Deenergized	1D. <u>InServy/STBY/00S</u> PostAccident DampersOpen/Closed Service Water Pumps
34.5 KV BusEnergized/Deenergized4 KV BusesEnergized/Deenergized480 V Buses13,14,15,17,18Turbine GeneratorEnergized/DeenergizedDIESEL GENERATORS	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service</u> Water Pumps 1A. <u>InServ/STBY/00S</u> 1B. (InServ/STBY/00S
34.5 KV BusEnergized/Deenergized4 KV BusesEnergized/Deenergized480 V BusesI3,14,15,17,18Turbine GeneratorEnergized/DeenergizedDIESELGENERATORSA.Eunning/Unloaded/STBY/005	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service</u> Water Pumps 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u>
34.5 KV Bus Energized/Deenergized   4 KV Buses Energized/Deenergized   480 V Buses 13,14,15,17,18   Turbine Generator Energized/Deenergized   DIESEL GENERATORS   A. Running/Unloaded/STBY/OOS   B Bunning/Unloaded/STBY/OOS	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u>
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   13,14,15,17,18     Turbine Generator   Energized/Deenergized     DIESEL   GENERATORS     A.   Running/Unloaded/STBY/OOS     B.   Running/Unloaded/STBY/OOS     TSC   Bunning/Unloaded/STBY/OOS	1D.   InServ/STBY/00S     PostAccident DampersOpen/Closed     Service   Water Pumps     1A.   InServ/STBY/00S     1B.   InServ/STBY/00S     1C.   InServ/STBY/00S     1D.   InServ/STBY/00S     1D.   InServ/STBY/00S
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   I3,14,15,17,18   16     Turbine Generator   Energized/Deenergized   16     DIESEL   GENERATORS   GENERATORS     A.   Running/Unloaded/STBY/OOS   B.     Running/Unloaded/STBY/OOS   TSC   Running/Unloaded/STBY/OOS	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> A&B Header Pressure <u>50</u> psig
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   13,14,15,17,18     Turbine Generator   Energized/Deenergized     DIESEL   GENERATORS     A.   Running/Unloaded/STBY/OOS     B.   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   I3,14,15,17,18     480 V Buses   Energized/Deenergized     Turbine Generator   Energized/Deenergized     DIESEL   GENERATORS     A.   Running/Unloaded/STBY/OOS     B.   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     ENGINEERED   SAFEGUARDS	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u>
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   Energized/Deenergized     Turbine Generator Energized/Deenergized   13,14,15,17,18     1480 V Buses   Energized/Deenergized     Turbine Generator Energized/Deenergized   14     DIESEL GENERATORS   DIESEL GENERATORS     A.   Running/Unloaded/STBY/OOS     B.   Running/Unloaded/STBY/OOS     TSC   Running/Unloaded/STBY/OOS     Security Running/Unloaded STBY/OOS     ENGINEERED SAFEGUARDS     Aux. Feedwater Pumps	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u>
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   Energized/Deenergized     Turbine Generator Energized/Deenergized   13,14,15,17,18     DIESEL GENERATORS   DIESEL GENERATORS     A. Running/Unloaded/STBY/OOS   B. Running/Unloaded/STBY/OOS     TSC Running/Unloaded/STBY/OOS   Security Running/Unloaded (STBY/OOS)     Security Running/Unloaded (STBY/OOS)   Aux. Feedwater Pumps	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u>
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   Energized/Deenergized     Turbine Generator   Energized/Deenergized     DIESEL   GENERATORS     A.   Running/Unloaded/STBY/OOS     B.   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Aux.   Feedwater     Pumps   Aux.	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> Surge Tank Level = <u>52</u> *
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   Energized/Deenergized     Turbine Generator Energized/Deenergized   13,14,15,17,18     Turbine Generator Energized/Deenergized   14     DIESEL GENERATORS   DIESEL GENERATORS     A. Running/Unloaded/STBY/OOS   B. Running/Unloaded/STBY/OOS     Security Running/Unloaded/STBY/OOS   ENGINEERED SAFEGUARDS     Aux. Feedwater Pumps   1A. Inserv/STBY/OOS     B. Inserv/STBY/OOS   Defense (0000)	1D. InServ/STBY/00S PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S A&B Header Pressure <u>50</u> psig Component Cooling Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1B. InServ/STBY/00S Surge Tank Level = <u>52</u> * Standby Aux. Feedwater Pumps
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   Energized/Deenergized     Turbine Generator   Energized/Deenergized     DIESEL   GENERATORS     A.   Running/Unloaded/STBY/OOS     B.   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     IA.   InServ/STBY/OOS     IB.   InServ/STBY/OOS     ID   Inserv/STBY/OOS     IA.   Inserv/STBY/OOS     IA.   Inserv/STBY/OOS     IA.   Inserv/STBY/OOS     IA.   Inserv/STBY/OOS	1D. InServ/STBY/00S PostAccident DampersOpen/Closed Service Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S A&B Header Pressure <u>50</u> psig Component Cooling Water Pumps 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1B. InServ/STBY/00S Surge Tank Level = <u>52</u> * Standby Aux. Feedwater Pumps 1C. InServ/STBY/00S
34.5 KV Bus   Energized/Deenergized     4 KV Buses   Energized/Deenergized     480 V Buses   Energized/Deenergized     Turbine Generator   Energized/Deenergized     DIESEL   GENERATORS     A.   Running/Unloaded/STBY/OOS     B.   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     Security   Running/Unloaded/STBY/OOS     IA.   Inserv/STBY/OOS     IB.   Inserv/STBY/OOS     Turb.   Driven     INServ/STBY/OOS   Inserv/STBY/OOS     18.   Inserv/STBY/OOS     19.   Inserv/STBY/OOS	1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed <u>Service Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> 1B. <u>InServ/STBY/00S</u> Surge Tank Level = <u>52</u> * <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u>

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)



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### AREA RADIOLOGICAL AND NETEOROLOGICAL DATA

			TI	ME: <u>0730</u>
POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOH	2.0E-1	6000	ND / U
R 0 2	AREA 2-CONTAINMENT	2.7E+6	HAIN	
R 0 3	AREA 3-RADIO CHEN LAB	3.0E-1	6000	
R 0 4	AREA 4-CHARGING PUHP ROOH	6.0E+4	HAIM	NR/N NR/N
R 0 5	AREA 5-SPENT FUEL PIT	7.0E+4	HALM	11 K / 11 N D / 11
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HAIN	пк/ л мо/ч
R 0 7	AREA 7-INCORE INSTRUMENTATION	3.2E+6	НАТМ	
R 0 8	AREA 8-DRUMMING STATION	3.0E+4	RAIN	
R 0 9	AREA 9-LETDOWN LINE	6.8E+4	НАТИ	
R 1 0 A	CONTAINMENT IODINE MONITOR R10A	1.0E+6	KALM	nk/n
R10B	PLANT VENT IODINE MONITOR R10B	1.0E+6	NALM	CPH CDM
R 1 1	CONTAINNENT AIR PARTICULATE	1.0E+6	RAIM	CPM
R12	CONTAINMENT GAS MONITOR	1_0E+6		CPM CDM
R 1 3	AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6		CPH .
R 1 4	AUX BLDG EXHAUST GAS HONITOR	1.0E+6		CPH
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.3E+2	6000	CPA
R16	CV COOLING HX SERVICE WATER OUT	7.3E+2	NAL N	CPH
R17	CONPONENT COOLING PUMP SUCT HDR	1.05+6	11ACA 11A1 M	CPA
R18	LIQUID WASTE DISPOSAL MONITOR	1.05+6		CPH CDM
R19	STEAN GENERATOR BLOWDOWN DRAIN	5-0F+3	600D	CPM
R 20	SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	' HALM	СР М С Р М
29	AREA 29-CONTAINNENT HIGH RANGE	2.7E+3	HAIM	CFN D/UD
230	AREA 30-CONTAINMENT HIGH RANGE	3.2E+3		R/ AR
233	AREA 33-HOT INTERMEDIATE BLDG	5.55+0		
234	AREA 34-AUX BLDG CV SPRAY PUHP	1.7E+5		пк/п мр/ч
35	AREA 35-PASS SAMPLE PANEL	3.56+0	GOOD	
36	CONTROL ROOM NOBLE GAS MONITOR	3.0E+2	6000	- CDM
237	CONTROL ROOM PARTICULATE HONITOR	1.1E+3	6000	
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	6000	CPN
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	6000	
IVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	6000	
17250	250 FOOT LEVEL TEMPERATURE	76.2	6000	
1033	33 FOOT LEVEL TEMPERATURE	73.2	6000	
1D250	250 FOOT LEVEL WIND DIRECTION	29.	6000	
10033 .	33 FOOT LEVEL WIND DIRECTION	. 29.	6000	DEG
18250	250 FOOT LEVEL WIND SPEED	6.1	GOOD	MPH
15033	33 FOOT LEVEL WIND SPEED	6.1	GOOD	MPH

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### SPING MONITOR SHEETS

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	·····		(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	<u>Current Rea</u> <u>PLANT VENT</u>	ding AIR EJECTOR		
l	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A		
2	Part - Alpha	CPM	STANDBY	HIGH FAIL	N/A		
3	I-131	uCi	STANDBY	HIGH FAIL	N/A		
4	Bkg I	CPM	STANDBY	<u>+3.48E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	HIGH FAIL	<u>3.70E-06</u>		
6	Area Monitor	MR/H	<u>+3.00E+02</u>	<u>+3.00E+02</u>	8.00E-02		
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+1.10E+01</u>	+7.50E-06		
8	Gamma Bkg	CPM	STANDBY	<u>+1.00E+03</u>	<u>1.00E+01</u>		
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.11E+01</u>	<u>-1.41E-03</u>		
0							
ı <sup>,</sup>	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL			
3	I-131	uCi/cc*	STANDBY	HIGH FAIL			
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:							
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.50E+00</u>	mR/hr		
	(R-32): "B" Steam	Line Rad	Monitor	<u>+8.00E-01</u>	mR/hr		



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'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	M:	EN.	MAX.	I			
WS 33A	0049	00900	. 00	211	0050	00	)` '		
WS 33B	0049	00910	00	012	0052	<sup>*</sup> O C	) "		
WS150A	0040	01000	00	022	0060	00	)		
WS150B	0042	01100	00	023	0061	02	2		
WS 250	0050	01000	00	010	0055	• 00	)		
NAME	AVGE	ST. DEV	M	EN.	MAX.	MNI	DR AVRN	CNT	I
WD 33A	0029	03000	00	019	0040	007	0020	0064	00
WD 33B	0028	03010	00	018	0040	007	1 0021	0063	00
WD150A	0029	03100	00	020	0039	004	5 0022	0062	00
WD150B	0030	03000	00	020	0040 `	003	35 0023	0060	02
WD 250	0031	03000	00	020	0040	005	55 0025	0061	00
NAME	AVGE	I	NAME	AVGE		I	NAME	AVGE	I
<b>TER33A</b>	0733	00	TER33B	0733		00	TE150A	0753	
TE150B	0753	00	TE250A	0765		00	TE250B	0765	
DT150A	0020	00	DT150B	0020		00	DT250A	0032	
DT250B	0032								
DEW 33	0506		<b>TEG 33</b>	0602		00			
RAIN	0064								



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Time	:	 0	7	4	5		

Message: <u>44</u>

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### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

<u>Message</u> <u>for</u>: Control Room <u>Simulated Plant Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*



### FOR CONTROLLER USE ONLY

Controller Notes:

1) Release will continue until 0800 hours.

Actions Expected:

- Repair on "B" Emergency Diesel Generator is almost completed.
- 2) Plume tracking, implementing and coordinating PARs and release termination efforts continue.



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1987 EVALUATED EXERCISE Time: 0745

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### MAJOR PARAMETERS

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## ENGINEERED SAFEGUARDS

Reactor Power Level _ O MWE/ O MWT	High Head S. I. Pumps
Reactor Shutdown (Yes) No	FI-924 400 GPM
	FI-925 300 GPM
NIS N-31: 8x10 Cps N-35(10 Amps	1A. CINSERVYSTBY/005
NIS $N-32^{-}8 \times 10^{\circ} COS N-36 < 10^{\circ} Amos$	1B. InServ/STBY/OOS)
RCS Pressure 7.2.5 psig	1C. InServ/STBY/00S
RCS Temperature Tc 375 OF	BAST Level = 55 \$
CHG. (FI-128) GPM	
Pressurizer Level	Low Head S. T. Dumpe
$I_{\text{TTN}}$ (FT-134) C GPM	FI-626 C CPW
Containment Pressure 20 nsig	11-020 <u> </u>
1A S/G Level	13 TREAM / CORV (CC)
	IR. INSERV/STBICOS
	IB. INSERV/STBY/00S
$\frac{100}{5}$	
IR S/G Pressure 20 psig	RWST Level = <u>80</u> 8
18 S/G Pressure <u>445</u> psig	Containment Spray Pumps
*CET OF	FI-931A O GPM
Sump A Level feet	FI-931B O GPM
Sump B Level 6 inches	1A. InServ/STBY/00S)
A RCP Running Stopped	1B. <u>InServ/STBY</u> (OOS)
B RCP Running Stopped	NaOH Tank Level = <u>93</u> %
Containment Isolation (Yes) No	<u>Containment Recirc Fans</u>
	1A. InServySTBY/OOS
	1B. InServ/STBY (005)
ELECTRICAL POWER	1C. InServ/STBY (005)
34.5 KV Bus Energized Deenergized	1D. InServ/STBY/OOS
4 KV Buses Energized/Deenergized	PostAccident DampersOpen/Closed
18,114,15,17,18	
480 V Buses Energized Deenergized)	Service Water Pumps
Turbine Generator Energized Deenergized)	1A. InServySTBY/00S
DIESEL GENERATORS	1B. InServ/STBY/00S
A. Running/Unloaded/STBY/005	1C. (InServ/STBY/00S
B. Running/Unloaded/STBY (005)	1D. (InServ/STBY/OOS
TSC Running/Unloaded/STBV/00S	A&B Header Pressure 50 psig
Security Running/Unloaded STRY/005	Component Cooling Water Pumps
ENGINEERED SAFFGUARDS	1A (InServYSTBV/00S
Aur Feedwater Dumps	1B. InServ/STBV (OOS)
MAR. ICCURCEL LUMPS	1B. 111581 47 51 51 7 665
1A. InServ (STBV) 005	Surge Tank Level = $52$ 9
18 Inserv/STRV (OCS)	Standhy luy Foodwator Dumpe
Thinh Driven Theory (CORV AND	10 Theory ACTEV/000
	TO TUBELA DIPA COS
COL PRART IGEC	Th. TUPELA 21DI 002

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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TIME: 0745

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POINT ID	DESCRIPTION .	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	2.0E-1	GOOD	MR/H
R 0 2	AREA 2-CONTAINMENT	2.0E+6	HALM	, MR/H
R 0 3	AREA 3-RADIO CHEM LAB	3.0E-1	GOOD	MR/H
R 0 4	AREA 4-CHARGING PUMP ROOM	6.0E+4	HALM	MR/H
R 0 5	AREA 5-SPENT FUEL PIT	7.0E+4	HALM	MR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HALM	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.8E+6	HALM	MR/H
R08	AREA 8-DRUNNING STATION	3.0E+4	HALM	MR/H
R09	AREA 9-LETDOWN LINE	6.8E+4	HALH	MR/H
R10A	CONTAINMENT IODINE MONITOR R10A	1.0E+6	HALM	CPM
R10B	PLANT VENT IODINE MONITOR R10B	1.0E+6	HALM	CPN
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CPM
R12	CONTAINMENT GAS MONITOR	1.0E+6	HALM	CPM
R13	AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6	HALH	CPN
R14	AUX BLDG EXHAUST GAS MONITOR	1.0E+6	HALM	CPN
R15 '	CONDENSER AIR EJECTOR EXHAUST	5.2E+2	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	7.5E+2	HALM	CPM
R17	COMPONENT COOLING PUMP SUCT HDR	1.0E+6	HALH	CPN
R18	LIQUID WASTE DISPOSAL MONITOR	1.0E+6	HALM	CPM
R19	STEAN GENERATOR BLOWDOWN DRAIN	5.0E+3 ,	GOOD	CPH
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	"HALH .	CPH
R29	AREA 29-CONTAINMENT HIGH RANGE	2.0E+3	HALM	R / H R
R30	AREA 30-CONTAINMENT HIGH RANGE	2.8E+3	HALM	R/HR
R33	AREA 33-HOT INTERNEDIATE BLDG	5.5E+O	HALM	HR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.7E+5 -	HALM	MR/H
R35	AREA 35.PASS SAMPLE PANEL	3.5E+0	GOOD	HR/H
R36	CONTROL ROON NOBLE GAS MONITOR	3.2E+2	GOOD	CPN
R37	CONTROL ROOM PARTICULATE HONITOR	1.6E+3 *	GOOD	CPH
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPN
WT250	250 FOOT LEVEL TEMPERATURE	77.2	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	74.2	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	30.	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	29.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	6.0	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	5.9	GOOD	мрн





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SPING MONITOR SHEETS

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				Time: <u>074</u>	5
4.0			(R-12A)	(R-14A)	(R-15A)
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Rea PLANT VENT	ding AIR EJECTOR
1.	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A
2	Part - Alpha	CPM	STANDBY	HIGH FAIL	N/A
3	I-131	uCi	STANDBY	HIGH FAIL	N/A
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A
5	Noble Gas-Low	uCi/cc	STANDBY	HIGH FAIL	3.70E-06
6	Area Monitor	MR/H	<u>+3.00E+02</u>	+3.00E+02	8.00E-02
7	Noble Gas-Mid	uCi/cc	STANDBY	<u>+1.10E+01</u>	<u>+7.50E-06</u>
8	Gamma Bkg	CPM	STANDBY	<u>1.00E+03</u>	<u>1.00E+01</u>
9	Noble Gas-High	uCi/cc	STANDBY	+1.10E+01	<u>-1.41E-03</u>
1	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL	
3	I-131	uCi/cc*	STANDBY	<u>HIGH FAIL</u>	·
* SPING CC	DNSOLE PLACED IN "]	INTERPRETE	D MODE"		
STEAM LINE	MONITORS:				
	(R-31): "A" Steam	a Line Rad	Monitor .	<u>+1.50E+00</u>	mR/hr
	(R-32): "B" Steam	n Line Rad	Monitor	<u>+8.00E-01</u>	mR/hr



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Time: 07:45

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## SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	M	EN.	MAX.	I			
WS 33A	0059	00900	00	022	0070	00			
WS 33B	0059	00910	00	032	0052	00			
WS150A	0056	01000	00	022	0060	00			
WS150B	0052	01100	00	023	0061	02			
WS 250	0050	01000	00	010	0055	00	μ.		
NAME	AVGE	ST. DEV	M	IN.	MAX.	MND	r avrn	CNT	I
WD 33A	0030	03000	00	021	0041	007	2 0020	0064	00
WD 33B	0031	03010	00	020	0041	007	1 0021	0063	00
WD150A	0032	03100	00	021	0040	004	5 0022	0062	00
WD150B	0030	03000	00	020	0041	003	5 0023	0060	02
WD 250	0029	03000	00	020	0040	005	5 0025	0061	00
NAME	AVGE	I	NAME	AVGE		I	NAME	AVGE	I
TER33A	0742	00	TER33B	0742		00	TE150A	0753	
TE150B	0753	00	TE250A	0765		00	TE250B	0765	
DT150A	0011	00	DT150B	0011		00	DT250A	0033	
DT250B	0033								
DEW 33	0506		TEG 33	0602		00			
RAIN	0065								
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Time: 0750

Message: <u>45X</u>

#### GINNA STATION

#### 1987 EVALUATED. EXERCISE

#### MESSAGE FORM

Message for: OSC Team repairing 1B Emergency Diesel Generator

### Simulated Plant Conditions:

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

The 1B Emergency Diesel Generator lube oil pump replacement is complete and Diesel is ready to be lined up for operation.

#### FOR CONTROLLER USE ONLY

### Controller Notes:

- 1) Deliver verbally to OSC team.
- 2) 1B Diesel Generator to be tied to Bus 16 just before 0800 hours.
- 3) When MOV-851B is closed, the release to the environment is terminated.

#### Actions Expected:

- 1) Operations to tie 1B Emergency Diesel Generator to 480 volt Bus #16 energizing both Bus 16 an MCC-1D.
- 2) Operations to attempt to close MOV-851B. When attempt is made, MOV-851B will go closed.



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Time: 0800

Message:

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#### GINNA STATION

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#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

<u>Message</u> <u>for</u>: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*



#### FOR CONTROLLER USE ONLY

Controller Notes:

1) TSC and Control Room should talk about starting or not starting the 1B RHR pump due to the environmental problem in the RHR sub-basement area.

Actions Expected:

- 1) Operations should start needed equipment when Bus #16 returned to service (i.e. 1B containment spray pump, 1B, 1C containment fan coolers, 1B SI pump if needed, 1B auxiliary feedwater pump if needed, etc.).
- 2) Plume tracking, implementing and coordinating PARs continues.



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### MAJOR PARAMETERS

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### ENGINEERED SAFEGUARDS

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	Reactor Power LevelO MWE/ O MWTReactor Shutdown(Yes) No	<u>High Head S. I. Pumps</u> FI-924 <u>400</u> GPM
	NIS N-31-8x10 CPS N- 35 (10 AMPS	IA. Inservy/stby/oos
	NIS N-32 TXIO'COS N-36 (10" Amos	1B. InServ/STBY/OOS
	RCS Pressure 225 psig	1C. InServ/STBY/OOS
	RCS Temperature TC 375 OF	BAST Level = 55 %
	CHG. (FI-128) O GPM	
	Pressurizer Level O %	Low Head S. I. Pumps
	LTN, (FI-134) C GPM	FI-626 C GPM
	Containment Pressure 10 psig	
	1A S/G Level	1A. ThServ/STRV (DOS)
	1B S/G Level 51/ \$	1B. InServ/STBV/00S
	BVLIS /00 \$	10. <u>11.5614/5151/003</u>
	11 S/G Pressure	PWST [ovo] = 77
	18 S/G Pressure	Containment Contain During
Ð	$\frac{100}{200}$	Etrolly Pumps
	Sump $\lambda$ Level $\frac{347}{71}$ foot	
	Sump B Level	
	A DCD Burning (Storned)	IR. INSERV/STBY/OOS
	R RCP Running/Scopped	IB. INSERVASTBY/005
	B RCP Running/Scopped)	Nach Tank Tevet = $\frac{33}{32}$
	Containment Teolation (VorVNe	Contrainment Dealar Dana
	containment isolation (res/No	Containment Recirc Fans
		IA. <u>ChServySTBY/00S</u>
		1B. Inserv/STBY/OOS
	ELECTRICAL POWER	1C. Inserv/STBy/OOS
	34.5 KV Bus Chergized Deenergized	1D. Inserv/STBY/00S
	4 KV Buses (Energized Deenergized	PostAccident DampersOpen/Closed
	480 V Buses (Energized Deenergized	Service Water Pumps
	Turbine Generator Energized Deenergized	1A. CnServ/STBY/00S
	DIESEL GENERATORS	1B. CINSERV/STBY/OOS
	A. <u>Running/Unloaded/STBY/005</u>	1C. InServ/STBY/OOS
	B. (Running/Unloaded/STBY/005	1D. InServ/STBY/00S
	TSC Running/Unloaded/STBV/005	A&B Header Pressure <u>50</u> psig
	Security <u>Running/Unloaded STBY/005</u>	Component Cooling Water Pumps
	ENGINEERED SAFEGUARDS	1A. UnServ/STBY/OOS
	Aux. Feedwater Pumps	1B. InServ/STBY/OOS
	IA. InServ/STBY/00S	Surge Tank Level = <u>52</u> %
7	1B. InServ STBY/OOS	Standby Aux. Feedwater Pumps
	Turb. Driven <u>InServ/STBY</u> OOS	1C. InServ/STBV/00S
	CST Level /8.5 feet	1D. InServ STBY/00S
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	*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES, (5 OR MORE)

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33 FOOT LEVEL WIND SPEED

POINT ID

R 0 1

R02

R 0 3

R04

R 0 5

R06

R07

R08

R09

R10A

R10B

R11

R12

R13

R14

R15

R16

R17

R18

R19

R20

R29

R30

R33

R34

R35

R36

R37

R38

HVAC1

HVAC2

WT250

WT033

WD250

WD033

WS250

WS033



#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

			TIME: 0800
DESCRIPTION	CURRENT VALUE	QUALITY CODE	Engr units
AREA 1-CONTROL ROOM	2.0E-1	GOOD	MR/H
AREA 2.CONTAINMENT	1.5E+6	HALH	MR/H
AREA 3-RADIO CHEN LAB	3.0E-1	GOOD	NR/H
AREA 4-CHARGING PUHP ROOM	6.0E+4	HALM	MR/H
AREA 5-SPENT FUEL PIT	7.0E+4	HALH	MR/H
AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HALH	MRZH
AREA 7-INCORE INSTRUMENTATION	2.3E+6	HALH	MR/H
AREA 8-DRUNHING STATION	3.0E+4	HALN	MR/H
AREA 9-LETDOWN LINE	6.8E+4	HALH	MP/H
CONTAINMENT IODINE HONITOR R10A	1.0E+6	HALM	СРН
PLANT VENT IODINE MONITOR R10B	1.0E+6	HALH	СРМ
CONTAINMENT AIR PARTICULATE	1.0E+6	HALH	CPN
CONTAINMENT GAS MONITOR	1.0E+6	HALH	CDN
AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6	HALM	СРИ
AUX BLDG EXHAUST GAS MONITOR	1.0E+6	HALH	СРИ
CONDENSER AIR EJECTOR EXHAUST	5.2E+2	GOOD	СРИ
CV COOLING HX SERVICE WATER OUT	7.5E+2	HALM	CPN
COMPONENT COOLING PUMP SUCT HDR	1.0E+6	HALM	СРИ
LIQUID WASTE DISPOSAL HONITOR	1.0E+6	HALM	СРМ
STEAM GENERATOR BLOWDOWN DRAIN	5.0E+3	GOOD	СРМ
SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	HALM	СРИ
AREA 29-CONTAINHENT HIGH RANGE	1.5E+3	HALH	R/HR
AREA 30-CONTAINMENT HIGH RANGE	2.3E+3	HALH	R/HR
AREA 33-HOT INTERMEDIATE BLDG	5.5E+0	HALM	MR/H
AREA 34-AUX BLDG CV SPRAY PUMP	1.7E+5	HALM	MR/H
AREA 35-PASS SAMPLE PANEL	3.5E+0	GOOD	MR/H
CONTROL ROOM NOBLE GAS MONITOR	3.2E+2	GOOD	СРИ
CONTROL ROOM PARTICULATE MONITOR	1.6E+3	GOOD	СРИ
CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPM
CONTROL ROOM CHLORINE ANALYZER -	0.0075	GOOD	PPM
CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPM
250 FOOT LEVEL TEMPERATURE	77.3	GOOD	DEGF
33 FOOT LEVEL TEMPERATURE	74.3	GOOD	DEGE
250 FOOT LEVEL WIND DIRECTION	30.	GOOD	DEG.
33 FOOT LEVEL WIND DIRECTION	29.	GOOD	DEG.
250 FOOT LEVEL WIND SPEED	6.1	GOOD	мрн

GOOD

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SPING MONITOR SHEETS

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				Time: <u>0800</u>			
	,		(R-12A)	(R-14A)	(R-15A)		
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Rea PLANT VENT	ding AIR EJECTOR		
ŀ	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A		
2	Part - Alpha	CPM	STANDBY	<u>HIGH FAIL</u>	N/A		
3	I-131	uCi	STANDBY	<u>HIGH FAIL</u>	N/A		
4	Bkg I	CPM	STANDBY	<u>+3.49E+01</u>	N/A		
5	Noble Gas-Low	uCi/cc	STANDBY	<u>HIGH FAIL</u>	3.70E-06		
6	Area Monitor	MR/H	<u>+3.00E+02</u>	<u>+3.00E+02</u>	8.00E-02		
<b>7</b>	Noble Gas-Mid	uCi/cc	STANDBY	<u>+1.10E+01</u>	+7.50E-06		
8	Gamma Bkg	CPM	STANDBY	<u>+1.00E+03</u>	<u>1.00E+01</u>		
9	Noble Gas-High	uCi/cc	STANDBY	<u>+1.10E+01</u>	<u>-1.41E-03</u>		
1	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL	·		
3	I-131	uCi/cc*	STANDBY	HIGH FAIL	•		
* SPING CC	NSOLE PLACED IN "	INTERPRETE	D MODE"				
	(R-31) · "A" Stor	m Line Pad	Monitor	+1 FOE+00	<b>mD</b> /b w		

(	••	0 00um				11.301100	
(R-32):	"B"	Steam	Line	Rad	Monitor	+8.00E-01	mR/hr



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# Time: 08:00

## 'SILENT 700' COMPUTER

METEOROLOGICAL DATA

	AV/7									
	NAME	AVGE	ST. DEV	ł	AIN.	MAX.	I			
	WS 33A	0060	00900	C	0011	0080	00			
	WS 33B	0042	00910	(	0012	0082	00			
	WS150A	0040	01000	(	0022	0060	00			
	WS150B	0042	01100	(	0023	0061	02			
	WS 250	0030	01000	(	0010	0055	00			
	NAME	AVGE	ST. DEV	1	AIN.	MAX.	MNDR	AVRN	CNT	I
	WD 33A	0029	03000	(	0020	0039	0072	0020	0064	00
	WD 33B	0030	03010	(	0020	0040	0071	0021	0063	00
	WD150A	0031	03100	(	0020	0040	0045	0022	0062	00
	WD150B	0029	03000	(	0021	0041	0035	0023	0060	02
	WD 250	0029	03000	(	0022	0040	0055	0025	0061	00
	NAME	AVGE	* I	NAME	AVGE		I NAI	1E	AVGE	I
	TER33A	0743	00	TER33B	0743		00 TE:	150A	0753	
	TE150B	0753	00	TE250A	0773		00 TE:	250B	0773	
Ū	DT150A	0010	00	DT150B	0010		00 DT:	250A	0030	
	DT250B	0030								
	DEW 33	0436		TEG 33	0602		00			
	RAIN	0066						æ		



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Time: <u>0815</u>

Message: <u>47</u>

### GINNA STATION

### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*



### FOR CONTROLLER USE ONLY

Controller Notes:

1) The release is terminated.

Actions Expected:

- Plume tracking, implementing and coordinating PARs continues.
- 2) Plant continues to recover from the loss of coolant accident.



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# 1987 EVALUATED EXERCISE

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Time: 08/5

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# MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

Reactor Power LevelOReactor ShutdownNISNISN-32SY10'CPRCS PressureRCS Temperature TcCHG. (FI-128)	$\frac{O \text{ MWE} / O \text{ MWT}}{(Yes)No}$ $\frac{S \text{ N- } 35 \langle 10^{-11} \text{ Amps} \\ S \text{ N- } 36 \langle 10^{-1} \text{ Amps} \\ 22.5 \text{ psig} \\ 37.5 \text{ OF} \\ O \text{ GPM}$	High Head S. I. Pumps FI-924 400 GPM FI-925 300 GPM 1A. Inserv/STBY/00S 1B. Inserv/STBY/00S 1C. Inserv/STBY/00S BAST Level = 55 %
Pressurizer Level LTN.(FI-134) Containment Pressure 1A S/G Level 1B S/G Level	O         %           O         GPM           18         psig           0         %	Low Head S. I. Pumps FI-626 O GPM
RVLIS	/00         %           18         psig           440         psig           397         oF           31         feet           78         inches	RWST Level = 75 % <u>Containment Spray Pumps</u> FI-931A O GPM FI-931B O GPM 1A. InServ/STBY/00S
A RCP Rur B RCP Rur	ning/Stopped . ning/Stopped	1B. <u>InServySTBY/OOS</u> NaOH Tank Level = <u>92</u> %
Containment Isolation <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energiz</u>	YesyNo	Containment Recirc Fans 1A. InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed
480 V Buses Energiz Turbine Generator Energiz DIESEL GENERATOF	d Deenergized	Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS
A. Running/Unloaded/STE B. Running/Unloaded/STE TSC Running/Unloaded/STE Security Running/Unloaded ENGINEERED SAFEG Aux. Feedwater F	V/00S V/00S V/00S CTBV/00S VARDS VUMPS	1C. <u>Inserv/STBY/005</u> 1D. <u>Inserv/STBY/005</u> A&B Header Pressure <u>50</u> psig <u>Component Cooling Water Pumps</u> 1A. <u>Inserv/STBY/005</u> 1B. <u>Inserv/STBY/005</u>
IA.InServ/STBY/00S1B.InServ/STBY/00STurb.DrivenTurb.DrivenCST Level//	erv/STBY/005	Surge Tank Level = <u>52</u> * <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ/STBY/OOS</u> 1D. <u>InServ/STBY/OOS</u>

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)



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#### AREA RADIOLOGICAL AND METEOROLOGICAL DATA

POINT ID DESCRIPTION CURRENT VALUE QUALITY CODE ENGR UNITS R01 AREA 1-CONTROL ROOM 2.0E-1 GOOD MR/H R02 AREA 2-CONTAINMENT 1.5E+6 HALM MR/H R03 AREA 3-RADIO CHEH LAB 3.0E-1 GOOD MR/H R04 AREA 4-CHARGING PUMP ROOM 3.0E+3 HALM HR/H R05 AREA 5-SPENT FUEL PIT 3.5E+3 HALM MR/H R06 AREA 6-NUCLEAR SAMPLE ROOM 5.0E+1 HALM MR/H R07 AREA 7-INCORE INSTRUMENTATION 2.3E+6 HALM MR/H R08 AREA 8-DRUMMING STATION 2.0E+3 HALM HR/H R09 AREA 9-LETDOWN LINE 3.8E+3 HALM MR/H R10A CONTAINMENT IODINE MONITOR R10A 1.0E+6 HALM CPH R10B PLANT VENT IODINE MONITOR R10B 1.0E+6 HALH CPM R11 CONTAINMENT AIR PARTICULATE 1.0E+6 HALM CPH R12 CONTAINMENT GAS HONITOR 1.0E+6 HALM CPM R13 AUX BLDG EXHAUST AIR PARTICULATE 1.0E+6 BALM CPH R14 AUX BLDG EXHAUST GAS MONITOR 3.0E+3 HALH CPH R15 CONDENSER AIR EJECTOR EXHAUST 5.2E+2 GOOD CPM R16 CV COOLING HX SERVICE WATER OUT 2.0E+2 GOOD CPM R17 COMPONENT COOLING PUMP SUCT HDR 1.0E+6 HALM CPN R18 LIQUID WASTE DISPOSAL MONITOR 1.0E+6 HALH CPH R19 STEAM GENERATOR BLOWDOWN DRAIN 5.0E+3 GOOD CPH' R20 SPENT FUEL PIT HX SERV WATER OUT 1.0E+6 HALM CPM R29 AREA 29-CONTAINMENT HIGH RANGE 1.5E+3 HALM R/HR R30 AREA 30-CONTAINMENT HIGH RANGE 2.3E+3 HALM R/HR R33 AREA 33-HOT INTERMEDIATE BLDG 5.5E+0 HALM MR/H R34 AREA 34-AUX BLDG CV SPRAY PUHP 1.0E+4 HALH MR/H R35 AREA 35-PASS SAMPLE PANEL 3.4E+0 GOOD MR/H R36 CONTROL ROOM NOBLE GAS MONITOR 3.2E+2 GOOD CPM R37 CONTROL ROOM PARTICULATE MONITOR 1.6E+3 GOOD CPH R38 CONTROL ROOM IODINE MONITOR 1.2E+0 GOOD CPH HVAC1 CONTROL ROOM CHLORINE ANALYZER 0.0075 GOOD PPH HVAC2 CONTROL ROOM AMMONIA ANALYZER 0.7763 GOOD PPM WT250 **250 FOOT LEVEL TEMPERATURE** 77.4 GOOD DEGF WT033 **33 FOOT LEVEL TEMPERATURE** 73.6 GOOD DEGF WD250 250 FOOT LEVEL WIND DIRECTION 30. GOOD DEG. WD 033 **33 FOOT LEVEL WIND DIRECTION** 30. GOOD DEG. WS250 250 FOOT LEVEL WIND SPEED 6.3 MPH GOOD WS033 33 FOOT LEVEL WIND SPEED 6.0 GOOD MPH

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TIME:



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				Time: <u>081</u>	5			
	·	<b>,</b>	(R-12A)	(R-14A)	(R-15A)			
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Rea PLANT VENT	ding AIR EJECTOR			
1	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A			
2	Part - Alpha	CPM	STANDBY	HIGH FAIL	N/A			
3	I-131	uCi	STANDBY	HIGH FAIL	N/A			
4	Bkg I	CPM	STANDBY	<u>+3.48E+01</u>	N/A			
5	Noble Gas-Low	uCi/cc ·	STANDBY	<u>+5.50E-05</u>	<u>3.70E-06</u>			
6	Area Monitor	MR/H	+5.00E+01	+6.00E+01	1.00E-03			
7	Noble Gas-Mid	uCi/cc	STANDBY	+5.50E-05	+5.0E-06			
8	Gamma Bkg	CPM	STANDBY	+1.00E+02	<u>1.00E+01</u>			
9	Noble Gas-High	uCi/cc	STANDBY	+2.00E-03	-1.40E-03			
	- •							
l	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL	<u> </u>			
3 `	I-131	uCi/cc*	STANDBY	HIGH FAIL	, 			
* SPING CO	* SPING CONSOLE PLACED IN "INTERPRETED MODE"							

(R-31):	"A"	Steam	Line	Rad	Monitor	<u>+1.00E-02</u>	mR/hr
(R-32):	"B"	Steam	Line	Rad	Monitor	+1.00E-02	mR/hr





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# Time: 08:15

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'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

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	AV//									
	NAME	AVGE	ST. DEV	M	EN.	MAX.	I			
	WS 33A	0051	00900	00	211	0059	00			
	WS 33B	0042	00910	00	212	0052	00	i i		
	WS150A	0040	01000	00	022	0060	00			
	WS150B	0042	01100	00	023	0061	02			
	WS 250	0050	01000	00	010	0055	00		-	
	NAME	AVGE	ST. DEV	M	IN.	MAX.	MNDF	R AVRN	CNT	I
	WD 33A ·	0030	03000	00	020	0041	0072	2 0020	0064	00
	WD 33B	0030	03010	00	021	0042	0071	0021	0063	00
	WD150A	0030	03100	01	022	0043	0045	5 0022	0062	00
	WD150B	0029	03000	0(	020	0041	0035	5 0023	0060	02
	WD 250	0028	03000	0(	021	0040	0055	5 0025	0061	00
	NAME	AVGE	I	NAME	AVGE		I	NAME	AVGE	I
	TER33A	0736	00	TER33B	0736		00	TE150A	0756	
7	TE150B	0756	00	TE250A	0774		00	TE250B	0774	
)	DT150A	0020	00	DT150B	0020		00	DT250A	0038	
	DT250B	0038								
	DEW 33	0506		TEG 33	0602		00			
	RAIN	0066								



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Time: <u>0830</u> Message: <u>48</u>

#### GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

<u>Simulated</u> <u>Plant</u> <u>Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*

# FOR CONTROLLER USE ONLY

Controller Notes:

1) The release is terminated.

Actions Expected:

- 'l) Plume tracking, implementing and coordinating PARs continues.
  - 2) Plant continues to recover from the loss of coolant accident.





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# MAJOR PARAMETERS

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## ENGINEERED SAFEGUARDS

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	Reactor Power Level Reactor Shutdown	O MWE/ O MWT (Yes) No	<u>High Head S. I. Pumps</u> FI-924 <u>450</u> GPM
		land an and all	FI-925 <u>370</u> GPM
	NIS $N-31\cdot 82/6$	Cps N- 35 (10 Amps	1A. <u>UnServ/STBY/005</u>
	NIS $N-32 \frac{8 \times 10}{8}$	cps N- 36 (10" mps	1B. (InServ) STBY/00S
	RCS Pressure	<u></u>	1C. (InServ/STBY/00S
	RCS Temperature 72	<u>374</u> OF	BAST Level = $55$
	CHG. (FI-128)	GPM .	
	TUNI (PT_124)	· *	Low Head S. I. Pumps
	Containment Pressure		F1=626GPM
	12 S/G Level	psig	
•	IR S/G Level		IR. INSERV/STBY/005
	RVLIS		IB. INSERVISIBU/005
-	1A S/G Pressure		$PWST Lovel = \frac{1}{2}$
	1B S/G Pressure	<u> </u>	Containment Spray Dumps
	*CET -		FT-931A O GPW
	Sump A Level	<u>31</u> feet	FT-931B C GPM
	Sump B Level	//3 inches	1A. InServ/STBY (06S)
	A RCP	Running (Stopped)	1B. InServ/STBY/OOS
•	B RCP.	Running (Stopped)	NaOH Tank Level = 85 %
	• •		· · · · · · · · · · · · · · · · · · ·
Ł	Containment Isolation	(Yes)No	Containment_Recirc Fans
•			1A. (nServ/STBY/OOS
			1B. InServ/STBY/OOS
	ELECTRICAL PO	OWER	1C. Inserv/STBY/OOS
	34.5 KV Bus Ener	rgized/Deenergized	1D. InServ/STBY/OOS
	4 KV Buses (Ener	rgized Deenergized	PostAccident DampersOpen/Closed
	480 V Buses Une	gizedy Deenergized	Service Water Pumps
	Turbine Generator Ener	rgized Weenergized	IA. <u>(InservySTBY/00S</u> )
	DIESEL GENERA	ATORS	IB. <u>Unserv/STBY/00S</u>
	R. CRunningy Unitoaded	STB1/005	1C. CINSERV/STBY/00S
	B. Cuming Unioaded		10. (Inserv/STBY/005
	Security Bunning/Unicaded)	dod CTRY COS	Component Cooling Water Burns
	FUCTINE FUCTION	FEGUARDS	1A . (InSerrivSTBV/005
	Aux. Feedwate	ar Pumps	1B. There STBV OOS
	, <u>Aux. I Couvace</u>	<u></u>	110614/0100000
	1A. InServ STBY/005	<b>`</b> .	Surge Tank Level = $52$ *
	1B. InServ STBY/00S		Standby Aux. Feedwater Pumps
ş	Turb. Driven	InServ/STBY (005)	1C. InServ/STBY/00S
*	CST Level	19 feet	1D. InServ/STBY/OOS
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\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)



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# AREA RADIOLOGICAL AND METEOROLOGICAL DATA

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TIME: <u>0830</u>

POINT ID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ÉNGR UNITS
R01	AREA 1-CONTROL ROOM	2.0E.1	GOOD	MR/H
R 0 2	AREA 2-CONTAINNENT	1.5E+6	HALM	MR/H '
R03	AREA 3-RADIO CHEH LAB	3.0E-1	GOOD	HR/H
R 0 4	AREA 4-CHARGING PUMP ROOM	9.0E+1	GOOD	HR/H .
R 0 5	AREA 5-SPENT FUEL PIT	7.5E+1	HALM	MR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HALM	MR/H
R07	AREA 7-INCORE INSTRUMENTATION	2.3E+6	HALH	HR/H
R 0 8	AREA 8-DRUNMING STATION	4.5E+1	HALM	MR/H
R 0 9	AREA 9-LETDOWN LINE	1.0E+2	GOOD	HR/H
R 1 0 A	CONTAINMENT IODINE HONITOR R10A	1.0E+6	HALM	CPM
R10B	PLANT VENT IODINE MONITOR R10B	- 1.0E+6	HALM -	CPH
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CPM
R12	CONTAINMENT GAS MONITOR	1.0E+6	HALM	CPH
R13	AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6	HALM	CPH
R14	AUX BLDG EXHAUST GAS MONITOR	2.6E+3	HALM	CPM
R15	CONDENSER AIR EJECTOR EXHAUST	5.2E+2	GOOD	CPH
R16	CV COOLING HX SERVICE WATER OUT	2.0E+2	GOOD	CPN
R17	COMPONENT COOLING PUMP SUCT HDR	1.0E+6	HALM	CPH
R18	LIQUID WASTE DISPOSAL MONITOR	5.0E+5	HALM	CPH
R19	STEAM GENERATOR BLOWDOWN DRAIN	<b>5.0E+3</b>	GOOD	CPN
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	HALM	CPH -
R29	AREA 29-CONTAINMENT HIGH RANGE	1.5E+3	HALM	R/HR
R30	AREA 30 CONTAINMENT HIGH RANGE	2.2E+3	HALM	R/HR
R33	AREA 33-HOT INTERMEDIATE BLDG	4.0E+1	GOOD	HR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	2.5E+2	HALH	MR/H
R35	AREA 35-PASS SAMPLE PANEL	3.0E+0	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	3.2E+2	GOOD .	CPH
R37	CONTROL ROOM PARTICULATE HONITOR	1.6E+3	GOOD	CPH
R38 •	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	CPH
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763	GOOD	PPH
WT250	250 FOOT LEVEL TEMPERATURE	77.8 .	GOOD	DEGF
WT033	33 FOOT LEVEL TEMPERATURE	74.9	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	32.	αο΄ορ	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	31.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	6.2	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	6.1	6000	НРН



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SPING MONITOR SHEETS

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				Time: 0830	<u>D</u>			
	•		(R-12A)	(R-14A)	(R-15A)			
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Read PLANT VENT	ding AIR EJECTOR			
1	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A			
2	Part - Alpha	CPM	STANDBY	HIGH FAIL	N/A			
3	I-131	uCi	STANDBY	HIGH FAIL	N/A			
4	Bkg I	CPM	STANDBY	<u>+3.48E+01</u>	N/A			
5	Noble Gas-Low	uCi/cc	STANDBY	+5.10E-05	3.70E-06			
6	Area Monitor	MR/H	+4.00E+01	+5.00E+01	1.00E-03			
7	Noble Gas-Mid	uCi/cc	STANDBY	+5.10E-05	-7.52E-06			
8	Gamma Bkg	CPM	STANDBY	<u>+1.00E+02</u>	<u>1.00E+01</u>			
9	Noble Gas-High	uCi/cc	STANDBY	+2.00E-03	<u>-1.41E-03</u>			
				•				
1,	Part - Beta	uCi/cc*	STANDBY	HIGH FAIL				
3	I-131	uCi/cc*	STANDBY	HIGH FAIL				
* SPING CONSOLE PLACED IN "INTERPRETED MODE" STEAM LINE MONITORS:								
<u></u>	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr			
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr			



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Time: 08:30

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### 'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

	AV77									
	NAME	AVGE	ST. DEV	1	MIN.	MAX.	I			
	WS 33A	0051	00900	(	0011	0059	00			
	WS 33B	0052	00910	(	0012	0059	00			
	WS150A	0040	01000	(	0022	0060	00			
	WS150B	0042	01100	(	0023	0061	02			
	WS 250	0060	01000	(	0010	0067	00	_		
	NAME	AVGE	ST. DEV	1	MIN.	MAX.	MNDR	AVRN	CNT	I
	WD 33A	0031	03000		0020	0040	0072	0020	0064	00
	WD 33B	0032	03010		0020	0040	0071	0021	0063	00
	WD150A	0031	03100	1	0020	0040	0045	0022	0062	00
	WD150B	0031	03000		0020	0040	0035	0023	0060	02
	WD 250	0031	03000	1	0020	0041	0055	0025	0061	00
	NAME	AVGE	I	NAME	AVGE		I 'NAMI	3	AVGE	I
	TER33A	0749	00	TER33B	0749	•	00 TELS	50A	0769	
	TE150B	0769	00	TE250A	0779		00 TE25	50B	0779	
	DT150A	0020	00	DT150B	0020		00 DT25	50A	0030	
3	DT250B	0030				•				
	DEW 33	0506		TEG 33	0602		00			
	RAIN	0067								



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Time:	084	15

Message: <u>49</u>

#### GINNA STATION

#### 1987 EVALUATED EXERCISE

#### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*



#### FOR CONTROLLER USE ONLY

#### Controller Notes:

- 1) TSC and OSC should evaluate an attempt to start "A" RHR pumpagain as it is the only pump available for the recirculation mode.
- 2) If and when the TSC decides to try the "A" RHR pump, the pump starts and runs ok.

#### Actions Expected:

- 1) TSC have Control Room attempt to start "A" RHR pump.
- Plume tracking, implementing and coordinating PARs continues.
- 3) Plant continues to recover from loss of coolant accident.



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# 1987 EVALUATED EXERCISE Time: 0845

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### MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

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Reactor Power Level <u>O MWE/ O MWT</u>	High Head S. I. Pumps
Reactor Shutdown (Yes) No	FI-924 450 GPM
	FI-925 370 GPM
NIS N-31:8110 CPS N-35 (10 Amps	1A. (InServ) STBY/00S
NIS N-32 8410 CPS N-36 510 Amps	1B. InServ/STBY/00S
RCS Pressure 210 psig	1C. InServ/STBY/00S
RCS Temperature Te 364 OF	BAST Level = 55 %
CHG. (FI-128) (7) GPM	
Pressurizer Level	Low Head S. T. Dumps
LTN. (FI-134) O GPM	FT-626 C GDW
Containment Pressure 5 paig	11 020 <u>    0   </u> 3ffi
1A S/G Level	
$\frac{11}{18} \frac{5}{6} \frac{1}{18} \frac{1}{6} \frac{1}{6} \frac{1}{18} 1$	1R. INSELV/STBI/005
	IB. INSERV/STBYJUUS
IA S/G Pressure psig	RWST LEVEL = GO *
$\frac{18 \text{ S/G Pressure}}{430} \text{ psig}$	Containment Spray Pumps
*CET OF	FI-931A O GPM
Sump A Level feet	FI-931B O GPM
Sump B Level //3 inches	1A. InServ/STBY/00S
A RCP Running/Stopped	1B. CINSERV/STBY/OOS
B RCP Running Stopped	NaOH Tank Level = 80 %
Containment Isolation (Yes) No	Containment <u>Re</u> circ Fans
	1A. (InServy/STBY/OOS
	1B. InServySTBY/OOS
ELECTRICAL POWER	1C. InServ/STBY/OOS
34.5 KV Bus (Energized Deenergized	1D. InServ/STBY/00S
4 KV Buses (Energized Deenergized	PostAccident Dampersonen/Closed
	restrictions sumptiles bill citized
480 V Buses (Energized) Deenergized	Service Water Rumps
Turbing Generator Energized Deenergized	1A (InSemI/STRY/00S
DIESEL GENERATORS	1R (InServ/STBL/005
A RunningVIInlandod (SURV (005	
A. Guinning/Unioaded/SiBi/005	1C. CINSERVISTBI/005
B. Running Unioaded/STBY/005	ID. Inserv/STBY/005
TSC Running/Unioadea/STBV/00S	A&B Header Pressurepsig
Security Running/Unloaded STBY/00S	Component Cooling Water Pumps
ENGINEERED SAFEGUARDS	1A. <u>InServ/STBY/00S</u>
Aux. Feedwater Pumps	1B. InServ/STBY/OOS
1A. InServ/STBY/00S	Surge Tank Level = $52$ $\frac{3}{2}$
1 D TREAMY (STRV) OOS	
ID. INSELVASIBLY COS	Standby Aux. Feedwater Pumps
Turb. Driven InServ/STBY (005)	Standby Aux. Feedwater Pumps 1C. InServ/STBY/OOS
Turb. Driven InServ/STBY OOS CST Level 19 feet	Standby Aux.Feedwater Pumps1C.InServ/STBY/00S1D.InServ/STBY/00S
Turb. Driven InServ/STBY 005 CST Level 19 feet	Standby Aux.Feedwater Pumps1C.InServ/STBY/00S1D.InServ/STBY/00S

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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AREA RADIOLOGICAL AND HETEO



PUINTID	DESCRIPTION	CURRENT VALUE	QUALITY CODE	ENGR UNITS
R 0 1	AREA 1-CONTROL ROOM	2.0E-1	6000	
R 0 2	AREA 2-CONTAINHENT	1.5E+6	HALM	nkyn MD/U
R03	AREA 3-RADIO CHEN LAB	3.0E-1	6000	
R04	AREA 4-CHARGING PUMP ROOM	9.0E+1	GOOD	
R 0 5	AREA 5-SPENT FUEL PIT	6.5E+1	HALN	ND/U
R06	AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HALM	
R07	AREA 7-INCORE INSTRUMENTATION	2.3E+6	HALM	пк/а ~ мр/ч
R08	AREA 8-DRUMMING STATION	3.0E+1	HALM	11K/0 ND/11
R 0 9	AREA 9-LETDOWN LINE	1.0E+2	GOOD	
R10A	CONTAINMENT IODINE MONITOR R10A	1.0E+6	HALH	
R10B	PLANT VENT IODINE MONITOR R10B	1.0E+6	HALM	CCM
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	CTN CDW
R12	CONTAINMENT GAS MONITOR	1.0E+6	HALM	CDN
R 1 3	AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6	HALM	СГП Сри
R 1 4	AUX BLDG EXHAUST GAS HONITOR	2.4E+3	HALM	CPN
R 15	CONDENSER AIR EJECTOR EXHAUST	5.2E+2	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	2.0E+2	GOOD	CDN
R 1 7	COMPONENT COOLING PUMP SUCT HDR	1.0E+6	HALM	CPM
R 1 8	LIQUID WASTE DISPOSAL MONITOR	4.0E+5	HALM	CPM
R19	STEAM GENERATOR BLOWDOWN DRAIN	5.0E+3	GOOD	CPN
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	HALM	CPM
R29	AREA 29-CONTAINMENT HIGH RANGE	1.5E+3	HALM	87HP
R30	AREA 30-CONTAINMENT HIGH RANGE	2.2E+3	HALM	P/HP
R33	AREA 33-HOT INTERNEDIATE BLDG	4.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUNP	2.3E+2	HALM	* MR/H
R35	AREA 35-PASS SAMPLE PANEL	3.0E+0	GOOD	HR/H
R36	CONTROL ROOM NOBLE GAS MONITOR	3.2E+2	GOOD	СРЖ
R37	CONTROL ROOM PARTICULATE MONITOR	1.6E+3	GOOD	CPK
R38	CONTROL ROOM IODINE MONITOR	1.2E+0	GOOD	СРМ
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPN
HVAC2	CONTROL ROOM AMMONIA ANALYZER	0.7763 .	GOOD	PPN
WT250	250 FOOT LEVEL TEMPERATURE	77.9	GOOD	DEGE
WT033	33 FOOT LEVEL TEMPERATURE	75.2	GOOD	DEGE
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	30.	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	29.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	6.3	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	6.1	GOOD	NPH

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SPING MONITOR SHEETS

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				Time: <u>084</u>	5			
	•	··	(R-12A)	(R-14A)	(R-15A)			
CHANNEL #	TYPE	UNITS	CONTAINMENT	Current Rea PLANT VENT	ding AIR EJECTOR			
1	Part - Beta	uCi	STANDBY	HIGH FAIL	N/A			
2	Part - Alpha	CPM	<u>STANDBY</u>	HIGH FAIL	N/A			
3	I-131	uCi	STANDBY	HIGH FAIL	N/A			
4	Bkg I	CPM	<u>STANDBY</u>	+3.48E+01	N/A			
5	Noble Gas-Low	uCi/cc	STANDBY	<u>+5.00E-05</u>	3.70E-06			
6	Area Monitor	MR/H	<u>+4.00E+01</u>	<u>+5.00E+01</u>	1.00E-03			
7	Noble Gas-Mid	uCi/cc	STANDBY	+5.00E-05	<u>5.00E-06</u>			
8	Gamma Bkg	CPM	STANDBY	+1.00E+02	<u>1.00E+01</u>			
. 9	Noble Gas-High	uCi/cc	STANDBY	+2.00E-03	<u>-1.40E-03</u>			
1	Part - Beta	uCi/cc*	STANDBY	<u>HIGH FAIL</u>				
3	I-131	uCi/cc*	STANDBY	HIGH FAIL	·			
* SPING CONSOLE PLACED IN "INTERPRETED MODE" <u>STEAM LINE MONITORS:</u>								
	(R-31): "A" Steam	Line Rad	Monitor	<u>+1.00E-02</u>	mR/hr			
	(R-32): "B" Steam	Line Rad	Monitor	+1.00E-02	mR/hr			



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# 'SILENT 700' COMPUTER

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METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	MI	IN.	MAX.	I.			
WS 33A	0051	00900	00	110	0055	00	٠		
WS 33B	0049	00910	00	012	0052	00	e		
WS150A	0040	01000	00	022	0060	00			
WS150B	0046	01100	00	023	0061	02			
WS 250	0050	01000	00	010	0055	00			
NAME	AVGE	ST. DEV	MI	IN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0030	03000	00	020	0040	0072	0020	0064	00
WD 33B	0030	03010	00	020	0040	0071	0021	0063	00
WD150A	0031	03100	00	021	0042	0045	0022	0062	00
WD150B	0032	03000	00	021	0042	0035	0023	0060	02
WD 250	0033	03000	. 00	022	0043	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NAM	Έ	AVGE	I
TER33A	0753	00	TER33B	0753		00 TEL	50A	0774	
TE150B	0774	00	TE250A	0774	*	00 TE2	50B	0774	
DT150A	0021	00	DT150B	0021		00 DT2	50A	0021	
DT250B	0021					•			^
DEW 33	0516	•	TEG 33	0602		00			
RAIN	0068								



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Time: 0900

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Message:

#### <u>1987</u> <u>EVALUATED EXERCISE</u> <u>MESSAGE FORM</u>

<u>Message</u> for: Control Room <u>Simulated Plant Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

 Offsite radiation levels have significantly decreased due to plume passage. Downgrade discussions may commence. Recovery/re-entry discussions may commence.

Actions Expected:

- 1) The EOF and TSC should be discussing actions to cooldown and depressurize the Reactor coolant system. This could include the following:
  - A) use of the RHR system
  - B) continue with the injection mode and then switch over to recirculation mode when required.

These discussions could conclude that a large amount of radioactive water will be brought into the Auxiliary Building using either of the above methods.

These discussions could also conclude that it may be better to go on RHR as there are two RHR pumps available when on RHR but only one RHR pump available for the recirculation mode because of the break in the "B" RHR pump suction line from containment.

- 2) The EOF and TSC should be discussing bringing in and hooking up a spare transformer to place 480 volt Bus #16 back on offsite power to allow shuting down the "B" Emergency Diesel Generator.
- 3) The EOF and TSC should be discussing what inspections should be performed because of the earthquake, to ensure long term cooling of the core.
- 4) The Engineering Support Center should be calculating an estimate of the core damage involved.
- 5) As plant conditions improve the EOF and TSC should evaluate the possibility of reducing the classification per SC-110 (Ginna Station Event Evaluation for reducing the classification).
- 6) The EOF and TSC should be looking ahead to the long term recovery phase per step 3.16 of the Corporate Recovery Managers checklist.















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# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

Reactor Power Level O MWE/O MWT Reactor Shutdown Yes/No	High Head S. I. Pumps FI-924 450 GPM FI-925 370 GPM
NIS N-31: $8Y_{10}Cos$ N- $35 \langle 10' Amps$ NIS N-32 $8Y_{10}Cos$ N- $36 \langle 10' Amps$ RCS Pressure 200 psig	1A. <u>InSerVYSTBY/00S</u> 1B. <u>InSerV/STBY/00S</u> 1C. InSerV/STBY/00S
RCS Temperature Yc354OFCHG. (FI-128)OGPM	BAST Level = $55$
Pressurizer Level <u>5</u> % LTN. (FI-134) <u>C GPM</u>	Low Head S. I. Pumps FI-626 GPM
Containment Pressure3psig1A S/G Level0\$1B S/G Level50\$	1A. InServ/STBY/00S 1B. InServ/STBY/00S
RVLIS     /00       1A S/G Pressure     3       DB S/G Pressure     3	RWST Level = <u>52</u> %
*CET . $\frac{423}{5}$ psig	FI-931A O GPM
Sump B Level//3 inchesA RCPRunning/Stopped)	1A. Inserv/STBY/OOS 1B. Inserv/STBY/OOS
B RCP Running Stopped	NaOH Tank Level = 75 %
Containment Isolation (Yes/No	Containment Recirc Fans         1A.       (InServ) STBY/OOS         1B.       (The serve se
ELECTRICAL POWER	1C. (InServ/STBY/OOS 1D. (InServ/STBY/OOS
4 KV Buses Energized Deenergized	PostAccident DampersOpen/Closed
480 V Buses <u>Energized</u> /Deenergized Turbine Generator <u>Energized</u> /Deenergized	ServiceWater Pumps1A.Inservy STBY/00S
A. Running/Unloaded/STBY/OOS	1B. (InServ) STBY/OOS 1C. (InServ) STBY/OOS
B. <u>(Running/Unloaded/STBY/OOS</u> TSC Running/Unloaded/STBY/OOS	1D. <u>(InServ/STBY/OOS</u> A&B Header Pressure <u>50</u> psig
Security <u>Running/Unloaded</u> STBY/OOS ENGINEERED SAFEGUARDS	Component Cooling Water Pumps 1A. <u>UnServySTBY/OOS</u>
Aux. Feedwater Pumps	IB. Inserv/STBy/OOS
1B. InServ/STBY/00S Turb Driven InServ/STBV/00S	Standby Aux. Feedwater Pumps
CST Levelfeet	1D. InServ/STBY/OOS
*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES, (5 OR MORE)



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# AREA RADIOLOGICAL AND METEOR CICAL DATA



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TIME: 0900-1000

POINT ID	DESCRIPTION .	CURRENT VALUE	QUALITY CODE	· ENGR UNITS
R01	AREA 1-CONTROL ROOM	2.0E-1	6000	NR/H
R02 ,	AREA 2-CONTAINMENT	1.4E+6	HALN	NR/H
R 0 3	AREA 3-RADIO CHEN LAB	3.0E-1	GOOD	MR/H
R04	AREA 4-CHARGING PUNP ROOM	7.0E+1	GOOD	HR/H
R 0 5	AREA S-SPENT FUEL PIT	2.0E+1	GOOD	NR/H
R 0 6	AREA 6-NUCLEAR SAMPLE ROOM	5.0E+1	HALM	NR/H
R 0 7	AREA 7-INCORE INSTRUMENTATION	2.0E+6	HALM	NR/H -
R 0 8	AREA 8-DRUNNING STATION	1.0E+1	GOOD	NP/H
R 0 9	AREA 9-LETDOWN LINE	8.5E+1	GOOD	MR/H
R10A	CONTAINMENT IODINE MONITOR R10A	1.0E+6	HALM	СРИ
R 1 0 B	PLANT VENT IODINE MONITOR R10B	1.0E+6	HALM	CPN
R11	CONTAINMENT AIR PARTICULATE	1.0E+6	HALM	СРИ
R 1 2	CONTAINMENT GAS NONITOR	1.0E+6	HALM	CPN
R 1 3	AUX BLDG EXHAUST AIR PARTICULATE	1.0E+6	HALM	CPM
R 1 4	AUX BLDG EXHAUST GAS MONITOR	2.0E+3	GOOD	CPN
R 1 5	CONDENSER AIR EJECTOR EXHAUST	5.2E+2	GOOD	CPN
R16	CV COOLING HX SERVICE WATER OUT	2.0E+2	GOOD	CPN
R17	COMPONENT COOLING PUNP SUCT HDR	1.0E+6	HALM	CPN
R 1 8	LIQUID WASTE DISPOSAL HONITOR	2.0E+5	HALM	СРИ
R19	STEAM GENERATOR BLOWDOWN DRAIN	5.0E+3	GOOD	CPN
R 2 0	SPENT FUEL PIT HX SERV WATER OUT	1.0E+6	HALM	CPM
R 2 9	AREA 29-CONTAINMENT HIGH RANGE	1.5E+3	HALM	RZHR
R 3 0	AREA 30-CONTAINMENT HIGH RANGE	2.0E+3	HALM	R/HR
R 3 3	AREA 33-HOT INTERNEDIATE BLDG	4.0E+0	GOOD	MR/H
R34	AREA 34-AUX BLDG CV SPRAY PUMP	1.5E+2	HALM	MR/H
R 3 5	AREA 35-PASS SAMPLE PANEL	3.0E+1	GOOD	NR/H
R36	CONTROL ROON NOBLE GAS MONITOR	3.2E+2	GOOD	CPN
R37	CONTROL ROOM PARTICULATE MONITOR	1.6E+3	GOOD	CPM
R38	CONTROL ROOM IDDINE MONITOR	1.2E+0	GOOD	CPM
HVAC1	CONTROL ROOM CHLORINE ANALYZER	0.0075	GOOD	PPM
HVAC2	CONTROL ROON AMMONIA ANALYZER	0.7763	GOOD	PPN
WT250	250 FOOT LEVEL TEMPERATURE	76.0	GOOD	PEGF
WT 033	33 FOOT LEVEL TEMPERATURE	75.5	GOOD	DEGF
WD 2 5 0	250 FOOT LEVEL WIND DIRECTION	29.	GOOD	DEG.
WD 0 3 3	33 FOOT LEVEL WIND DIRECTION	28.	GOOD	DEG.
WS250	250 FOOT LEVEL WIND SPEED	6.0	GOOD	MPH
WS033	33 FOOT LEVEL WIND SPEED	5.9	GOOD	MPH .



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Time: 09:00 - 11:00

'SILENT 700' COMPUTER

METEOROLOGICAL DATA

AV77									
NAME	AVGE	ST. DEV	M:	IN.	MAX.	I			
WS 33A	0071	00900	0(	011	0090	00			
WS 33B	0062	00910	0	012	0082	00			
WS150A	0050	01000	Í 00	022	0060	00			
WS150B	0062	01100	00	023	0071	02			
WS 250	0060	01000	00	010	0075	00			
NAME	AVGE	ST. DEV	M	IN.	MAX.	MNDR	AVRN	CNT	I
WD 33A	0029	03000	00	019	0040	0072	0020	0064	00
WD 33B	0029	03010 ·	0(	019	0040	0071	0021	0063	00
WD150A	0028	03100	0(	018	0041	0045	0022	0062	00
WD150B	0028	03000	00	019	0042	0035	0023	0060	02
WD 250	0028	03000	00	020	0043	0055	0025	0061	00
NAME	AVGE	I	NAME	AVGE		I NAM	ΙE	AVGE	I
<b>TER33A</b>	0750	00	TER33B	0750		00 TE1	.50A	0750	
TE150B	0750	00	TE250A	0760		00 TE2	50B	0760	
DT150A	0000	00	DT150B	0000		00 DT2	50A	0010,	
DT250B	0010								
DEW 33	050		TEG 33	0602		00			
RAIN	0069								

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Time: 0915

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Message:

### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

1) Recovery/re-entry discussions continue.

Actions Expected:

- The EOF and TSC should be discussing actions to cooldown and depressurize the Reactor coolant system. This could include the following:
  - A) use of the RHR system
  - B) continue with the injection mode and then switch over to recirculation mode when required.

These discussions could conclude that a large amount of radioactive water will be brought into the Auxiliary Building using either of the above methods.

These discussions could also conclude that it may be better to go on RHR as there are two RHR pumps available when on RHR but only one RHR pump available for the recirculation mode because of the break in the "B" RHR pump suction line from containment.

- 2) The EOF and TSC should be discussing bringing in and hooking up a spare transformer to place 480 volt Bus #16 back on offsite power to allow shuting down the "B" Emergency Diesel Generator.
- 3) The EOF and TSC should be discussing what inspections should be performed because of the earthquake, to ensure long term cooling of the core.
- 4) The Engineering Support Center should be calculating an estimate of the core damage involved.
- 5) As plant conditions improve the EOF and TSC should evaluate the possibility of reducing the classification per SC-110 (Ginna Station Event Evaluation for reducing the classification).
- 6) The EOF and TSC should be looking ahead to the long term recovery phase per step 3.16 of the Corporate Recovery Managers checklist.

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## 1987 EVALUATED EXERCISE

Time: 0915

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# MAJOR PARAMETERS

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# ENGINEERED SAFEGUARDS

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Reactor Power Level <u>O MWE/ O MWT</u>	High Head S. I. Pumps
Reactor Shutdown (les)No	FI-924 450 GPM
	FI-925 <u>370</u> GPM
NIS N-31:810 COS N-35 < 10 Amos	1A. (InServ) STBY/OOS
NIS N-32 8 X10'COS N- 36 10" AMPS	1B. InServ/STBY/00S
RCS Pressure 200 psig	1C. (InServ/STBY/OOS
RCS Temperature Tc <u>344</u> OF	BAST Level = 55 %
CHG. (FI-128) O GPM	
Pressurizer Level 15 8	Low Head S. I. Pumps
LTN. (FI-134) GPM	FI-626 O GPM
Containment Pressure 2 psig	
1A S/G Level O 3	1A. InServ/STBY/OOS
1B S/G Level 50 *	1B. InServ/STBY/OOS
RVLIS /00. %	
1A S/G Pressure psig	RWST Level = 45 %
1B S/G Pressure 415 psig	Containment Spray Pumps
*CET <u>354</u> of	FI-931A O GPM
Sump A Level 3/ feet	FI-931B O GPM
Sump B Level //3 inches	1A. InServ/STBY/OOS
A RCP Running/Stopped	1B. InServ/STBY/005
B RCP Running (Stopped)	NaOH Tank Level = 70 %
•	
	•
Containment Isolation (Yes) No	Containment Recirc Fans
Containment Isolation (Yes) No	Containment Recirc Fans 1A. (InServySTBY/OOS
Containment Isolation (Yes) No	Containment Recirc Fans 1A. CINSERV/STBY/OOS 1B. INSERV/STBY/OOS
Containment Isolation Ves No ELECTRICAL POWER	Containment Recirc Fans1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S
Containment Isolation (Yes) No <u>ELECTRICAL POWER</u> 34.5 KV Bus Energized Deenergized	Containment Recirc Fans1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S1D.InServ/STBY/00S
Containment Isolation (Yes) No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized	Containment Recirc Fans 1A. InServ/STBY/00S 1B. InServ/STBY/00S 1C. InServ/STBY/00S 1D. InServ/STBY/00S PostAccident DampersOpen/Closed
Containment Isolation (Yes) No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized	Containment Recirc Fans 1A. <u>InServ/STBY/OOS</u> 1B. <u>InServ/STBY/OOS</u> 1C. <u>InServ/STBY/OOS</u> 1D. <u>InServ/STBY/OOS</u> PostAccident DampersOpen/Closed
Containment Isolation (Yes) No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized 480 V Buses <u>Energized</u> Deenergized	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS 1D. (InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps
Containment Isolation (Yes) No <u>ELECTRICAL POWER</u> 34.5 KV Bus 4 KV Buses <u>Energized</u> Deenergized 480 V Buses <u>Energized</u> Deenergized Turbine Generator Energized (Deenergized)	Containment Recirc Fans1A.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1C.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)PostAccident DampersOpen/ClosedService Water Pumps1A.(InServ/STBY/OOS)
Containment Isolation (Yes) No ELECTRICAL POWER 34.5 KV Bus 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS	Containment Recirc Fans1A.CINSERV/STBY/OOS1B.INSERV/STBY/OOS1C.INSERV/STBY/OOS1D.INSERV/STBY/OOSPostAccident DampersOpen/ClosedServiceWater Pumps1A.CINSERV/STBY/OOS1B.INSERV/STBY/OOS
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus 4 KV Buses Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/00S	Containment Recirc Fans1A.CnServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedService Water Pumps1A.CInServ/STBY/OOS1B.CInServ/STBY/OOS1B.CInServ/STBY/OOS1C.TnServ/STBY/OOS
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS	Containment Recirc Fans1A.CnServ/STBY/OOS1B.InServ/STBY/OOS1C.InServ/STBY/OOS1D.InServ/STBY/OOSPostAccident DampersOpen/ClosedService Water Pumps1A.CinServ/STBY/OOS1B.CinServ/STBY/OOS1B.CinServ/STBY/OOS1C.InServ/STBY/OOS1D.CinServ/STBY/OOS1D.CinServ/STBY/OOS1D.CinServ/STBY/OOS1D.CinServ/STBY/OOS
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded(STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. (InServ/STBY/OOS 1D. (InServ/STBY/OOS 1D. (InServ/STBY/OOS 1D. (InServ/STBY/OOS 1D. (InServ/STBY/OOS A&B Header Pressure _ 5 0 psig
Containment Isolation (YeS) No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded (STBY/OOS Security Running/Unloaded (STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. (InServ/STBY/OOS 1D. (InServ/STBY/OOS A&B Header Pressure SO psig Component Cooling Water Pumps
Containment Isolation (YeS) No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded/STBY/OOS Security Running/Unloaded (STBY/OOS ENGINEERED SAFEGUARDS	Containment Recirc Fans1A.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1C.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)PostAccident DampersOpen/ClosedService Water Pumps1A.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1C.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)A&B Header Pressure SO psigComponent Cooling Water Pumps1A.(InServ/STBY/OOS)
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	Containment Recirc Fans1A.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1C.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)PostAccident DampersOpen/ClosedService Water Pumps1A.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1C.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1A.(InServ/STBY/OOS)1A.(InServ/STBY/OOS)1B.InServ/STBY/OOS)1B.InServ/STBY/OOS)
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	Containment Recirc Fans1A.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1C.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)PostAccident DampersOpen/ClosedService Water Pumps1A.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1B.(InServ/STBY/OOS)1C.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)1D.(InServ/STBY/OOS)A&B Header Pressure opsigComponent Cooling Water Pumps1A.(InServ/STBY/OOS)1B.InServ/STBY/OOS1B.InServ/STBY/OOS
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. InServ(STBY/OOS	Containment Recirc Fans 1A. CINSERV/STBY/OOS 1B. INSERV/STBY/OOS 1C. INSERV/STBY/OOS 1D. INSERV/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. CINSERV/STBY/OOS 1B. CINSERV/STBY/OOS 1C. INSERV/STBY/OOS 1D. CINSERV/STBY/OOS 1D. CINSERV/STBY/OOS A&B Header Pressure SO psig Component Cooling Water Pumps 1A. CINSERV/STBY/OOS 1B. INSERV/STBY/OOS 1B. INSERV/STBY/OOS Surge Tank Level = 52 3
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. InServ/STBY/OOS	Containment Recirc Fans 1A. CINSERV/STBY/OOS 1B. INSERV/STBY/OOS 1C. INSERV/STBY/OOS 1D. INSERV/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. CINSERV/STBY/OOS 1B. CINSERV/STBY/OOS 1C. INSERV/STBY/OOS 1D. CINSERV/STBY/OOS 1D. CINSERV/STBY/OOS A&B Header Pressure SO psig Component Cooling Water Pumps 1A. CINSERV/STBY/OOS 1B. INSERV/STBY/OOS 1B. INSERV/STBY/OOS Surge Tank Level = 52 % Standby Aux. Feedwater Pumps
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. Inserv/STBY/OOS 1B. Inserv/STBY/OOS Turb. Driven Inserv/STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. (InServ/STBY/OOS A&B Header Pressure SO psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS Surge Tank Level = 52 % Standby Aux. Feedwater Pumps 1C. InServ/STBY/OOS
Containment Isolation Yes No ELECTRICAL POWER 34.5 KV Bus Energized Deenergized 4 KV Buses Energized Deenergized 480 V Buses Energized Deenergized Turbine Generator Energized Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS Security Running/Unloaded STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps 1A. Inserv/STBY/OOS 1B. Inserv/STBY/OOS Turb. Driven Inserv/STBY/OOS CST Level Inserv/STBY/OOS	Containment Recirc Fans 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1C. InServ/STBY/OOS 1D. InServ/STBY/OOS PostAccident DampersOpen/Closed Service Water Pumps 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1D. (InServ/STBY/OOS 1D. (InServ/STBY/OOS A&B Header Pressure SO psig Component Cooling Water Pumps 1A. (InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1B. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS 1D. InServ/STBY/OOS

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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Time: 0930

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Message:

### <u>1987</u> <u>EVALUATED EXERCISE</u> <u>MESSAGE FORM</u>

Message for: Control Room

Simulated Plant Conditions: See attached sheets,

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

1) Recovery/re-entry discussions continue.

Actions Expected:

- 1) The EOF and TSC should be discussing actions to cooldown and depressurize the reactor coolant system. This could involve the following:
  - A) use of the RHR system
  - B) continue with the injection mode and then switch over to recirculation mode when required.

These discussions could conclude that a large amount of radioactive water will be brought into the Auxiliary Building using either of the above methods.

These discussions could also conclude that it may be better to go on RHR as there are two RHR pumps available when on RHR but only one RHR pump available for the recirculation mode because of the break in the "B" RHR pump suction line from containment.

- 2) The EOF and TSC should be discussing bringing in and hooking up a spare transformer to place 480 volt Bus #16 back on offsite power to allow shuting down the "B" Emergency Diesel Generator.
- 3) The EOF and TSC should be discussing what inspections should be performed because of the earthquake, to ensure long term cooling of the core.
- 4) The Engineering Support Center should be calculating an estimate of the core damage involved.
- 5) As plant conditions improve the EOF and TSC should evaluate the possibility of reducing the classification per SC-110 (Ginna Station Event Evaluation for reducing the classification).
- 6) The EOF and TSC should be looking ahead to the long term recovery phase per step 3.16 of the Corporate Recovery Managers checklist.





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1987 EVALUATED EXERCISE Time: 0930

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# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

Reactor Power Level · O MWE/ O MWT	High Head S. I. Pumps
Reactor Shutdown VesyNo	FI-924 450 GPM
	FI-925 370 GPM
NIS N-31: 8×10 cos N-35<10 Amos	1A. InServySTBY/005
NIS N-32 8×10 COS N-36 < 15 AMOS	1B. InServySTBY/00S
RCS Pressure 2.00 psig	1C. (InServ/STBY/OOS
RCS Temperature Tc 334 OF	BAST Level = 55 8
CHG. (FI-128) O GPM	
Pressurizer Level 25 %	Low Head S. T. Pumps
LTN. (FI-134)	FI-626 O GPM
Containment Pressure / psig	.1 020 <u> </u>
	1A TOSOTIASTRA TOS
	1B InServ/STBD/003
	IB. INSELVASTBY 005
IN S/G Pressure psig	RWST LEVEL = 57 - 37
18 S/G Pressure 405 psig	Containment Spray Pumps
*CET <u>344</u> OF	FI-931A O GPM
Sump A Level 3/ feet	FI-931B O GPM
Sump B Level inches	IA. <u>InServ/STBY/005</u>
A RCP Running/Stopped	1B. (Inserv/STBY/OOS
B RCP Running Stopped)	NaOH Tank Level = 65 %
Containment Isolation (Yes) No	Containment Recirc Fans
	1A. (InServ)STBY/00S
	1B. InServ/STBY/OOS
ELECTRICAL POWER	1C. InServ/STBY/00S
34.5 KV Bus Energized Deenergized	1D. InServ/STBY/00S
4 KV Buses (Energized Deenergized	PostAccident DampersOpen/Closed
480 V Buses Energized Deenergized	Service Water Pumps
Turbine Generator Energized Deenergized	1A. (InServySTBY/00S
DIESEL GENERATORS	1B. (TDServySTBV/005
A Punning/Unloaded/STBV/005	1C (InServisTBV/005
Rupping/Unloaded/STB1/005	1D (ThServ STB1/005
B. Running Unicaded/SIBI/005	ALP Wooden Programs (7)
TSC Running/Unioaded/STB//005	Add Header Pressure <u>50</u> psig
Security Running/Unitoaded STBy/005	Component Cooling water Pumps
ENGINEERED SAFEGUARDS	IA. Unserv/STBY/00S
Aux. Feedwater Pumps	1B. InServ/STBY/00S
1A. InServ/STBY/00S	Surge Tank Level = $52$
1B. InServ/STBY/OOS	Standby Aux. Feedwater Pumps
Turb. Driven InServ/STBY (005)	1C. InServ/STBV/00S
CST Level 19.5 feet	1D. InServ/STBY/OOS
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*CET = PREDETERMINED CORE EXIT THERMOCOU	PLES, (5 OR MORE)

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Time: 0945

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Message:

GINNA STATION

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1987 EVALUATED EXERCISE

MESSAGE FORM

Message for: Control Room

Simulated Plant Conditions: See attached sheets

Message: \*\*\*THIS IS AN EXERCISE\*\*\*

FOR CONTROLLER USE ONLY

Controller Notes:

1) Recovery/re-entry discussions continue.

Actions Expected:

- The EOF and TSC should be discussing actions to cooldown and depressurize the Reactor coolant system. This could include the following:
  - A) use of the RHR system
  - B) continue with the injection mode and then switch over to recirculation made when required.

These discussions could conclude that a large amount of radioactive water will be brought into the Auxiliary Building using either of the above methods.

These discussions could also conclude that it may be better to go on RHR as there are two RHR pumps available when on RHR but only one RHR pump available for the recirculation mode because of the break in the "B" RHR pump suction line from containment.

- 2) The EOF and TSC should be discussing bringing in and hooking up a spare transformer to place 480 volt Bus #16 back on offsite power to allow shuting down the "B" Emergency Diesel Generator.
- 3) The EOF and TSC should be discussing what inspections should be performed because of the earthquake, to ensure long term cooling of the core.
- 4) The Engineering Support Center should be calculating an estimate of the core damage involved.
- 5) As plant conditions improve the EOF and TSC should evaluate the possibility of reducing the classification per SC-110 (Ginna Station Event Evaluation for reducing the classification).
- 6) The EOF and TSC should be looking ahead to the long term recovery phase per step 3.16 of the Corporate Recovery Managers checklist.





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# 1987 EVALUATED EXERCISE Time: 0945

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# MAJOR PARAMETERS

# ENGINEERED SAFEGUARDS

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Reactor Power Level Reactor Shutdown $O$ MWE/ $O$ MWT (Yes)NoNISN-31: $8 \times 10^{\circ} cps$ N-35N-35NISN-32: $8 \times 10^{\circ} cps$ N-36N-35RCS Pressure RCS Temperature Tc $250$ S2: $40^{\circ}$ psig CHG. (FI-128)D	High Head S. I. Pumps FI-924 450 GPM FI-925 370 GPM 1A. (InServ/STBY/OOS 1B. (InServ/STBY/OOS 1C. (InServ/STBY/OOS BAST Level =53 %
Pressurizer Level 5/ % LTN. (FI-134) O GPM Containment Pressure 0.5 psig IA S/G Level 0 %	Low Head S. I. Pumps FI-626 O GPM
RVLIS/00IA S/G Pressure0IB S/G Pressure395*CET334Sump A Level31JinchesA BCPBunning (Stopped)	RWST Level = <u>30</u> <u>Containment Spray Pumps</u> FI-931A <u>0</u> GPM FI-931B <u>0</u> GPM 1A. <u>InServ/STBY/00S</u> 1B. (InServ/STBY/00S)
B RCP. Running Stopped Containment Isolation Ves No	NaOH Tank Level = <u>60</u> * <u>Containment Recirc Fans</u> <u>1A. <u>CINSERV/STBY/00S</u> 1B. <u>(InSERV/STBY/00S</u>)</u>
ELECTRICAL POWER 34.5 KV Bus Energized/Deenergized 4 KV Buses Energized/Deenergized	1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u> PostAccident DampersOpen/Closed
480 V Buses Turbine Generator Energized/Deenergized DIESEL GENERATORS A. Running/Unloaded/STBY/OOS B. Running/Unloaded/STBY/OOS TSC Running/Unloaded(STBY/OOS Security Running/Unloaded(STBY/OOS ENGINEERED SAFEGUARDS Aux. Feedwater Pumps	ServiceWaterPumps1A.InServ/STBY/00S1B.InServ/STBY/00S1C.InServ/STBY/00S1D.InServ/STBY/00SA&B Header Pressure50 psigComponent Cooling Water Pumps1A.InServ/STBY/00S1B.InServ/STBY/00S1B.InServ/STBY/00S
1A.InServ/STBY/00S1B.InServ/STBY/00STurb.DrivenCST Level	Surge Tank Level = <u>52</u> * <u>Standby Aux. Feedwater Pumps</u> 1C. <u>InServ/STBY/00S</u> 1D. <u>InServ/STBY/00S</u>

\*CET = PREDETERMINED CORE EXIT THERMOCOUPLES, (5 OR MORE)

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Appro	Approximately			
Time:	1000			
Message:	<u> </u>			

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### GINNA STATION

### 1987 EVALUATED EXERCISE

### MESSAGE FORM

<u>Message for</u>: Emergency Coordinator and Recovery Manager <u>Simulated Plant Conditions</u>: See attached sheets <u>Message</u>: \*\*\*THIS IS AN 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 that the Plume Exposure Exercise is terminated.
- 2) Also announce that those participants who will be playing the Ingestion Pathway Exercise should remain.



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SECTION 9.0

# ONSITE RADIOLOGICAL AND CHEMISTRY DATA

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SECTION 9.1

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## RADIOLOGICAL SUMMARY



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### 9.1 Radiological Summary

### A. Source Term

The radiological source term assumed for this scenario was selected to include sufficient radioiodine to achieve offsite deposition levels which exceed derived FDA Preventive and Emergency Protective Action Guides (PAG's) for soil, pasture grass and cow's milk. The Emergency PAG's for the milk pathway are exceeded out to approximately 12 miles downwind from the Ginna Plant. The Preventive PAG's for the milk pathway are exceeded out to approximately 30 miles downwind. Deposition radioactivity diminishes to background levels at or beyond 50 miles from the plant.

In addition, the postulated reactor accident is assumed to result in the release of particulates which also will ultimately enter various food and water pathways.

Immediate protective action recommendations (e.g., sheltering, evacuation) may not be necessarily based upon projected child thyroid dose, due to the predominence of release noble gas quantities. (SEE FIGURE 9.1). The noble gas-to-radioiodine ratioassumed in this scenario is approximately 3300:1. An isotopic breakdown of assumed noble gas, radioiodine and particulate release quantities is provided in Table 9.1,

B. Integrated Offsite Doses Due to Plume Exposure

The downwind integrated doses from the 1.25-hour scenario release are as follows:

Whole Body Dose (at 5 miles) = 1.28 REM

Child Thyroid Dose (at 5 miles) = 0.48 REM



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### TABLE 9.1

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

NUCLIDE	CURIE	E/SEC	TOTAL CURIES R	ELEASED
Vm05	2 26	E-01	1 00 2403	
NI-05	2.20	E-01	1.02 5405	
	2.40	ETUL	1.08 ETUS	
	4.00	ETUI	1.80 2405	
KI-88	6.00		2.70 E+05	
Xe-131m	6.55	E-01	2.95 E+03	
Xe-133	2.04	E+02	9.18 E+05	
Xe-133m	3.20	E+01	1.44 E+05	
Xe-135	4.00	E+01	1.80 E+05	
Total				
Noble Gas	4.0	E+02	1.8 E+06	
I-131	1.80	E-02	8.10 E+01	
I-132	2.59	E-02	· 1.17 E+02	
I-133	3.60	E-02.	1.62 E+02	
I-134 .	8.10	E-03	3.65 E+01	
I-135	3.26	E-02	1.47 E+02	- - -
meter 1				
Total	÷ •	<b>~</b> ~ ~ ~		
Logines	1.2	E-01	5.4 E+02	
Rb-88	6.00	E+01	2.70 E+05	5
Cs-134	4.32	E-05	1.94 E-01	
Cs-137	1.98	E-05	8.91 E-02	1
Sr-89	4.68	E-08	·2.11 E-04	r
Sr-90	4.32	E-08	1.94 E-04	r
Ba-140	1.01	E-06	4.54 E-03	
La-140	1.01	E-06	4.54 E-03	
Total				
Long-Lived				
Darticulator	6 5	F-05	2 9 F-01	
rareteuraees	0.0		LU=11 - 11 - 11	•







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### FIGURE 9.1

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### TABLE 9.2

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### PLANT VENT SAMPLE ANALYSIS

(T = 0645 - 0800)

NUCLIDE \*\* CONCENTRATION \*\* (UCI/CC) KR-85 6.22 E-03 KR-85M 6.20 E-01 1.14 E+00 KR-87 KR-88 1.66 E+00 XE-131M · 1.80 E-02 XE-133 5.68 E+00 XE-133M 8.29 E-01 XE-135 1.09 E+00 XE-135M 5.00 E-04 TOTAL NOBLE GAS 1.10 E+01 I-131 5.03 E-04 7.23 E-04 I-132 I-133 1.01 E-03 I-134 2.26 E-04 I-135 9.11 E-04 TOTAL RADIOIODINE 3.37 E-03 RB-88 1.66 E+00 1.21 E-06 CS-134 5.53 E-07 CS-137 Ba-140 2.82 E-08 La-140 2.80 E-08 TOTAL LONG LIVED PARTICULATE 1.82 E-06

\*\* Data to be provided to HP/Chemistry and Dose Assessment personnel in accordance with Exercise ground rules.







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# IN-PLANT RADIOLOGICAL DATA MAPS

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## GINNA STATION

# . INTERMEDIATE BUILDING BASEMENT FLOOR

SURVEY MAP

= 0.05 MR/HR A B MR/HR 0.5





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#### GINNA STATION

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, INTERMEDIATE BUILDING BASEMENT FLOOR

SURVEY MAP

\* NO PASS OPERATION \*

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#### RGSE

### GINNA STATION

# INTERMEDIATE BUILDING BASEMENT FLOOR

### SURVEY MAP

\* NO PASS OPERATION \*







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GINNA STATION

INTERMEDIATE BUILDING BASEMENT FLOOR

SURVEY MAP

\*\* DURING PASS OPERATION \*\*

A = 5 MR/HR B = 30 MR/HR C = 200 MR/HR

|          |                        |                                       | 26                                |         |
|----------|------------------------|---------------------------------------|-----------------------------------|---------|
|          |                        |                                       |                                   | C<br>C  |
|          |                        | B 🖾                                   |                                   |         |
|          |                        |                                       |                                   |         |
|          |                        |                                       | Smears<br>DPM/100 cm <sup>2</sup> |         |
|          | DATE.                  | <u>DAYI</u><br>0531-1000              |                                   |         |
|          | BY:                    | · · · · · · · · · · · · · · · · · · · | AREA A :<br>500                   |         |
| A I      | SERIAL<br>SURVEY METER | *:                                    | AREAS B+C:<br>3000-5000           |         |
|          | SERIAL ALL READINGS    | TN MR/HR UNLESS                       | A (RBORNE (4G/cc)                 |         |
|          | A OTHERWISE NO         | TED                                   | AREA C :                          |         |
|          | • •                    |                                       | 10 DINE: 1E-7<br>PART: 2E-8       |         |
| P.A.S.S. | B                      |                                       |                                   | 4.<br>4 |
|          | C                      | Remarks :                             |                                   | 1       |
|          |                        |                                       |                                   |         |

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| A | 3 = 9<br>R.G.& E. CORPORATION<br>GINNA STATION<br>AUXILIARY BUILDING OPER.<br>FLOOR SURVEY MAP<br>All readings in MR/HR:<br>unless otherwise noted.<br>Date: <u>DAY 1</u> (0100-0530 HTR)<br>Instrument: $\frac{1}{2}$<br>Survey done by: $\frac{1}{2}$<br>(1)'s are SMEAR locations.<br>A = 3 M R/HR                                                                                                                                                                                                                                                                                                                                                                                         |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | SHEARS     #   DPM/100 cm²     ALL AMEAU     255 - 7000     ALL AMEAU     255 - 7000     AILL AMEAU     257 - 7000     AILL AMEAU     257 - 7000     AILL AMEAU     257 - 7000     AILL AMEAU     AILL AMEAU     257 - 7000     AILL AMEAU     IILL AMEAU |

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324 RG&E A = O.IMPHA GINNA STATION TURBINE BUILDING BASEMENT FLOOR B = 10 MR/HR SURVEY MAP

5 8 4 -

NORTH





# RG&E

GINNA STATION

TURBINE BUILDING BASEMENT FLOOR

SURVEY MAP

= 0.02 MR/HR Α

NORTH





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# SECTION 9.3

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# IN-PLANT AND POST-ACCIDENT SAMPLING RESULTS



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## TABLE 9.3

#### EQUILIBRIUM PRIMARY COOLANT ACTIVITY

(As of 0045 hr, DAY 1 )

| NU | CLI | DE |  |
|----|-----|----|--|
|    |     |    |  |

# CONCENTRATION (uCi/gm)

6.22 E-03

3.34 E-02 6.20 E-02

7.47 E-02

1.80 E-02

7.46 E-01

8.29 E-03

2.39 E-01

8.43 E-02

2.59 E-01

8.43 E-02

2.00 E-03

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KR-85 KR-85M KR-87 KR-88 XE-131M XE-133 XE-133M XE-135 XE-135M XE-138 AR-41

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| TOTAL NOBLE GAS  | 1.62 E+00<br>,  |
|--|---|
| I-131 .<br>I-132<br>I-133<br>I-134<br>I-135                    | 5.76 E-02<br>8.16 E-02<br>1.15 E-01<br>1.25 E-01<br>1.01 E-01                           |
| TOTAL RADIOIODINE  | 4.80 E-01   |
| I-131 DOSE EQUIVALENT  | 8.33 E-02   |
| CR-51<br>MN-54<br>CO-58<br>CO-60<br>CS-134<br>CS-137<br>BA-140 | 5.80 E-06<br>7.00 E-06<br>1.26 E-05<br>8.00 E-07<br>6.91 E-04<br>1.27 E-03<br>1.66 E-05 |









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#### TABLE 9.4-A

# PRIMARY COOLANT SYSTEM SAMPLE ACTIVITY

#### GAS COLLECTION BOMB

( Collection Between 0531 - 0630 hr, DAY 1 )

NUCLIDE

#### CONCENTRATION\* (UCI/GM)

| KR-85   | 1.11 E+   | 0] |
|---------|-----------|----|
| KR-85M  | 1.12 E+   | 03 |
| KR-87   | · 1.99 E+ | 03 |
| KR-88   | 2.93 E+   | 03 |
| XE-131M | 3.19 E+   | 03 |
| XE-133  | 1.02 E+   | 04 |
| XE-133M | 1.46 E+   | 03 |
| XE-135  | 1.91 E+   | 03 |
| XE-135M | 1.91 E+   | 03 |
| XE-138  | 1.15 E+   | 03 |
|         |           |    |
|         | •         |    |

TOTAL NOBLE GAS

2.0 E+04

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 140 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 160 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ CONTACT = 170 MR/HR

Concentrations corrected to time of reactor shutdown \* ( 0535 hr ).

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Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.



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# TABLE 9.4-B

#### PRIMARY COOLANT SYSTEM SAMPLE ACTIVITY

#### GAS COLLECTION BOMB

( Collection Between 0631 - 0800 hr, DAY 1 )

| NU | CLI | DE |
|----|-----|----|
|    |     |    |

#### CONCENTRATION\* (UCI/GM)

| KR-85   | 1.22 | E+01 |
|---------|------|------|
| KR-85M  | 1.23 | E+03 |
| KR-87   | 2.17 | E+03 |
| KR-88   | 3.35 | E+03 |
| XE-131M | 3.55 | E+01 |
| XE-133  | 1.12 | E+04 |
| XE-133M | 1.64 | E+03 |
| XE-135  | 2.17 | E+03 |
| XE-135M | 2.17 | E+01 |
| XE-138  | 5.11 | E+01 |
|         |      |      |

TOTAL NOBLE GAS

2.2 E+04

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 160 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 175 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ CONTACT = 190 MR/HR

Concentrations corrected to time of reactor shutdown \* ( 0535 hr ).

Data to be provided to HP/Chemistry personnel in accordance \*\* with Exercise ground rules.





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### TABLE 9.4-C

#### PRIMARY\_COOLANT\_SYSTEM SAMPLE ACTIVITY

#### GAS COLLECTION BOMB

( Collection Between 0801 - 1000 hr, DAY 1 )

NUCLIDE

#### CONCENTRATION\* (UCI/GM)

1.09 E+01

1.09 E+03

2.09 E+03

3.00 E+03

3.27 E+01

1.00 E+04

1.55 E+03

2.00 E+03

2.00 E+01

2.35 E+00

KR-85 KR-85M KR-87 KR-88 XE-131M XE-133 XE-133M XE-135 XE-135M XE-138

TOTAL NOBLE GAS

2.0 E+04

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 140 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 160 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ CONTACT = 180 MR/HR

Concentrations corrected to time of reactor shutdown (0535 hr.)

\*\* Data to be provided to HP/Chemistry personnel in acordance with Exercise ground rules.





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### TABLE 9.5-A

#### PRIMARY COOLANT SYSTEM SAMPLE ACTIVITY

#### DEGASSED ACTIVITY

( Collection Between 0531 - 0630 hr, DAY 1 )

| NUCLIDE                                   | CONCENTRATION* (UCI/GM)                                       |  |
|---|---|--|
| I-131<br>I-132<br>I-133<br>I-134<br>I-135 | 7.89 E+03<br>1.13 E+04<br>1.58 E+04<br>1.37 E+03<br>1:44 E+04 |  |
| CS-134                                    | 3.39 E+03   |  |
| BA-140                                    | 1.06 E+03<br>3.20 E+01  |  |
| LA-140                                    | 3.00 E+01   |  |
| TOTAL RADIOIODINE                         | 4.8 E+04  |  |
| I-131 DOSE EQUIVALENT                     | 1.1 E+04  |  |
| TOTAL DEGASSED ACTIVITY                   | 5.5 E+04  |  |
| UNDILUTED SAMPLE DOSE RATE @              | 1 METER = 400 MR/HR   |  |
| UNDILUTED SAMPLE DOSE RATE @              | CONTACT = 440 R/HR  |  |

DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR

DILUTED SAMPLE DOSE RATE @ 1 CONTACT = 490 MR/HR

Concentrations corrected to time of reactor shutdown
( 0535 hr ).

\*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.



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#### TABLE 9.5-B

#### PRIMARY COOLANT SYSTEM SAMPLE ACTIVITY

# DEGASSED ACTIVITY

( Collection Between 0631 - 0800 hr, DAY 1 )

NUCLIDE

#### CONCENTRATION\* (UCI/GM)

| I-131                   | 5.62 E+03 |
|-------------------------|-----------|
| I-132                   | 8.18 E+03 |
| I-133                   | 1.18 E+04 |
| I-134                   | 3.94 E+02 |
| I-135 /                 | 9.86 E+03 |
| CS-134                  | 6.06 E+03 |
| CS-137                  | 2.96 E+03 |
| BA-140                  | 9.47 E+01 |
| LA-140                  | 9.00 E+01 |
| TOTAL RADIOIODINE       | 3.6 E+04  |
| I-131 DOSE EQUIVALENT   | 8.2 E+02  |
| TOTAL DEGASSED ACTIVITY | 4.9 E+04  |

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 360 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 400 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ 1 CONTACT = 450 MR/HR

Concentrations corrected to time of reactor shutdown
( 0535 hr ).

\*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.



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### PRIMARY COOLANT SYSTEM SAMPLE ACTIVITY

### DEGASSED ACTIVITY

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( Collection Between 0801 - 1000 hr, DAY 1 )

| NUCLIDE                 | CONCENTRATION* | (UCI/GM) |
|-------------------------|----------------|----------|
| I-131                   | 5.04 E+03      |          |
| I-132                   | 7.79 E+03      |          |
| I-133                   | 1.05 E+04      |          |
| I-134                   | 1.83 E+03      |          |
| I-135                   | 9.62 E+03      |          |
| CS-134                  | 1.51 E+03      |          |
| CS-137                  | 6.88 E+02      |          |
| BA-140                  | 2.21 E+01      |          |
| LA-140                  | 2.00 E+01      |          |
| TOTAL RADIOIODINE       | 3.3 E+04       | ٠        |
| I-131 DOSE EQUIVALENT   | 7.8 E+03       |          |
| TOTAL DEGASSED ACTIVITY | 3.7 E+04       | , .      |
|                         |                |          |

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 270 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 300 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ 1 CONTACT = 330 MR/HR

- \* Concentrations corrected to time of reactor shutdown (0535 hr).
- \*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.



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### TABLE 9.6-A

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### CONTAINMENT SUMP SAMPLE

### DEGASSED ACTIVITY

### ( Collection Between 0531 - 0630 hr, DAY 1 )

### NUCLIDE

### CONCENTRATION\* (UCI/GM)

| I-131<br>I-132             | 5.99 E+03<br>9.25 E+03 |
|----------------------------|------------------------|
| I-133<br>I-134<br>I-135    | 2.17 E+03<br>1.14 E+04 |
| CS-134<br>CS-137<br>BD-140 | 1.79 E+03<br>8.17 E+02 |
| LA-140                     | 2.50 E+01<br>2.50 E+01 |
| TOTAL RADIOIODINE          | 3.9 E+04               |
| I-131 DOSE EQUIVALENT      | 9.3 E+03               |
| TOTAL DEGASSED ACTIVITY    | 4.4 E+04               |

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 320 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 350 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ 1 CONTACT = 390 MR/HR

- \* Concentrations corrected to time of reactor shutdown (0535 hr).
- \*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.





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### TABLE 9.6-B

### CONTAINMENT SUMP SAMPLE

### DEGASSED ACTIVITY

( Collection Between 0631 - 0800 hr, DAY 1 )

| NU | CLI | DE |
|----|-----|----|
|    |     |    |

### CONCENTRATION\* (UCI/GM)

| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>CS-134<br>CS-137<br>BA-140<br>LA-140 | 2.64 E+03<br>4.08 E+03<br>5.52 E+03<br>9.58 E+02<br>5.03 E+03<br>7.90 E+02<br>3.61 E+02<br>1.16 E+01<br>1.00 E+01 |
|---|---|
| TOTAL RADIOIODINE   | 1.7 E+04  |
| I-131 DOSE EQUIVALENT   | 4.1 E+03  |
| TOTAL DEGASSED ACTIVITY   | 2.0 E+04  |

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 140 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 160 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ 1 CONTACT = 170 MR/HR

- Concentrations corrected to time of reactor shutdown
  ( 0535 hr ).
- \*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.







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### TABLE 9.6-C

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### CONTAINMENT SUMP SAMPLE

### DEGASSED ACTIVITY

( Collection Between 0801 - 1000 hr, DAY 1 )

| NUCLIDE                 | CONCENTRATION | <u>(UCI/GM)</u> |
|-------------------------|---------------|-----------------|
| I-131                   | 1.90 E+03     | 3               |
| I-132                   | 2.93 E+03     | 3               |
| I-133                   | 3.96 E+03     | 3               |
| I-134                   | 6.88 E+02     | 2               |
| I-135                   | 3.61 E+03     | 3               |
| CS-134                  | 5.67 E+02     | 2               |
| CS-137                  | 2.59 E+02     | 2               |
| BA-140                  | 8.33 E+00     | )               |
| LA-140                  | 8.30 E+00     | )               |
| TOTAL RADIOIODINE       | 1.2 E+04      | 1               |
| I-131 DOSE EQUIVALENT   | 2.9 E+03      | 3               |
| TOTAL DEGASSED ACTIVITY | 1.3 E+04      | 1               |

UNDILUTED SAMPLE DOSE RATE @ 1 METER = 100 MR/HR UNDILUTED SAMPLE DOSE RATE @ CONTACT = 100 R/HR DILUTED SAMPLE DOSE RATE @ 1 METER = LESS THAN 1 MR/HR DILUTED SAMPLE DOSE RATE @ 1 CONTACT = 120 MR/HR

Concentrations corrected to time of reactor shutdown ( 0535 hr ).

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Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.



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### TABLE 9.7-A

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### CONTAINMENT AIR SAMPLE ACTIVITY

( Collection Between 0531 - 0630.hr, DAY 1 )

| NUCLIDE           | CONCENTRATION (UCI/CC) |
|-------------------|------------------------|
| ¥70_9 E           | F 36 F-03              |
| NR-05<br>VD-95M   | 5.20 E-02<br>5.26 E+00 |
|                   | 9.20 E+00              |
| NR-07             | 9.20 ETOU              |
| NK-00<br>NE-121M  | 1.30 ETUI              |
| XE-13IM           | 1.49 E-01              |
| XE-133            | 4.82 E+01              |
| XE-133M           | 6.57 E+00              |
| XE-135            | 9.16 E+00              |
| XE-135M           | 8.76 E-02              |
| XE-138            | 1.10 E+00              |
| TOTAL NOBLE GAS   | 9.2 E+01               |
| I-131             | 4.72 E-02              |
| I-132             | 6.95 E-02              |
| I-133             | 9.80 E-02              |
| I-134             | 1.11 E-03              |
| I-135             | 8.73 E-02              |
| TOTAL RADIOIODINE | 3.0 E-01               |
| CS-134            | 2.07 E-04              |
| CS-137            | 9.44 E-05              |
| BA-140            | 3.00 E-06              |
| LA-140            | 2.90 E-06              |
|                   |                        |

Concentrations corrected to time of reactor shutdown \* ( 0535 hr. ).

Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules. \*\*







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### TABLE 9.7-B

### CONTAINMENT AIR SAMPLE ACTIVITY

( Collection Between 0631 - 0645 hr, DAY 1 )

| NUCLID | E |
|--------|---|
|--------|---|

### CONCENTRATION (UCI/CC)

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| KR-85  | 5.73 E-02   |
|--|---|
| KR-85M   | 5.76 E+00   |
| KR-87  | 1.04 E+01   |
| KR-88  | 1.51 E+01   |
| XE-131M  | 1.65 E-01   |
| XE-133   | 5.10 E+01   |
| XE-133M  | 7.65 E+00   |
| XE-135   | 1.00 E+01   |
| XE-135M  | 1.07 E-01   |
| XE-138   | 5.08 E-01   |
| TOTAL NOBLE GAS  | 1.0 E+02  |
|  |   |
| I-131  | 5.15 E-02   |
| I-131<br>I-132   | 5.15 E-02<br>7.54 E-02  |
| I-131<br>I-132<br>I-133  | 5.15 E-02<br>7.54 E-02<br>1.07 E-01   |
| I-131<br>I-132<br>I-133<br>I-134   | 5.15 E-02<br>7.54 E-02<br>1.07 E-01<br>4.91 E-03  |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135  | 5.15 E-02<br>7.54 E-02<br>1.07 E-01<br>4.91 E-03<br>9.47 E-02   |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE   | 5.15 E-02<br>7.54 E-02<br>1.07 E-01<br>4.91 E-03<br>9.47 E-02<br>3.3 E-01   |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134                               | 5.15 E-02<br>7.54 E-02<br>1.07 E-01<br>4.91 E-03<br>9.47 E-02<br>3.3 E-01<br>2.25 E-04  |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134<br>CS-137                     | 5.15 E-02<br>7.54 E-02<br>1.07 E-01<br>4.91 E-03<br>9.47 E-02<br>3.3 E-01<br>2.25 E-04<br>1.03 E-04                           |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134<br>CS-137<br>BA-140           | 5.15 E-02<br>7.54 E-02<br>1.07 E-01<br>4.91 E-03<br>9.47 E-02<br>3.3 E-01<br>2.25 E-04<br>1.03 E-04<br>3.32 E-06              |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134<br>CS-137<br>BA-140<br>LA-140 | 5.15 E-02<br>7.54 E-02<br>1.07 E-01<br>4.91 E-03<br>9.47 E-02<br>3.3 E-01<br>2.25 E-04<br>1.03 E-04<br>3.32 E-06<br>3.00 E-06 |

\* Concentrations corrected to time of reactor shutdown (0535 hr.).

\*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.



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### TABLE 9.7-C

### CONTAINMENT AIR SAMPLE ACTIVITY

( Collection Between 0646 - 0800 hours )

NUCLIDE

### CONCENTRATION (UCI/CC)

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| KR-85  | 4.32 E-02  |
|--|--|
| KR-85-M  | 4.32 E+00  |
| KR-87  | 8.16 E+00  |
| KR-88 ·  | 1.12 E+01  |
| XE-131M  | 1.26 E-01  |
| XE-133   | 3.94 E+01  |
| XE-133M  | 5.72 E+00  |
| XE-135   | 7.42 E+00  |
| XE-135M  | 7.64 E-02  |
| XE-138   | 1.92 E+00  |
| TOTAL NOBLE GAS  | 7.42 E+01  |
|  |  |
| I-131  | 3.34 E-02  |
| I-131<br>I-132   | 3.34 E-02<br>4.84 E-02   |
| I-131<br>I-132<br>I-133  | 3.34 E-02<br>4.84 E-02<br>6.70 E-02  |
| I-131<br>I-132<br>I-133<br>I-134   | 3.34 E-02<br>4.84 E-02<br>. 6.70 E-02<br>1.54 E-03   |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135  | 3.34 E-02<br>4.84 E-02<br>6.70 E-02<br>1.54 E-03<br>6.06 E-02  |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE   | 3.34 E-02<br>4.84 E-02<br>6.70 E-02<br>1.54 E-03<br>6.06 E-02<br>2.10 E-01   |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134                               | 3.34 E-02<br>4.84 E-02<br>6.70 E-02<br>1.54 E-03<br>6.06 E-02<br>2.10 E-01<br>2.36 E-04  |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134<br>CS-137                     | 3.34 E-02<br>4.84 E-02<br>6.70 E-02<br>1.54 E-03<br>6.06 E-02<br>2.10 E-01<br>2.36 E-04<br>1.08 E-04                           |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134<br>CS-137<br>BA-140           | 3.34 E-02<br>4.84 E-02<br>6.70 E-02<br>1.54 E-03<br>6.06 E-02<br>2.10 E-01<br>2.36 E-04<br>1.08 E-04<br>3.48 E-06              |
| I-131<br>I-132<br>I-133<br>I-134<br>I-135<br>TOTAL RADIOIODINE<br>CS-134<br>CS-137<br>BA-140<br>LA-140 | 3.34 E-02<br>4.84 E-02<br>6.70 E-02<br>1.54 E-03<br>6.06 E-02<br>2.10 E-01<br>2.36 E-04<br>1.08 E-04<br>3.48 E-06<br>3.00 E-06 |

\* Concentrations corrected to time of reactor shutdown (0535 hr.).

\*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.



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### TABLE 9.7-D

### CONTAINMENT AIR SAMPLE ACTIVITY

( Collection Between 0831- 1000 hr, DAY 1 ).

NUCLIDE

### CONCENTRATION (UCI/CC)

343

| KR-85             | 2.00 E-02 |
|-------------------|-----------|
| KR-85M            | 2.00 E+00 |
| KR-87             | 4.00 E+00 |
| KR-88             | 5.06 E+00 |
| XE-131M .         | 6.16 E-02 |
| XE-133            | 1.85 E+01 |
| XE-133M           | 2.86 E+00 |
| XE-135            | 3.70 E+00 |
| XE-135M .         | 3.80 E-02 |
| XE-138            | 9.60 E-01 |
| TOTAL NOBLE GAS   | 3.7 E+01  |
| I-131             | 1.62 E-02 |
| I-132             | 2.40 E-02 |
| I-133             | 3.30 E-02 |
| I-134             | 7.70 E-03 |
| I-135             | 3.00 E-02 |
| TOTAL RADIOIODINE | 1.0 E-01  |
| CS-134            | 1.10 E-04 |
| CS-137            | 5.40 E-05 |
| BA-140            | 1.70 E-06 |
| 13-140            |           |

Concentrations corrected to time of reactor shutdown
 ( 0535 hr. ).

\*\* Data to be provided to HP/Chemistry personnel in accordance with Exercise ground rules.





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### TABLE 9.8

### EXPOSURE RATES AT VARIOUS DISTANCES FROM PLANT VENTILATION DUCTWORK

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|                  |        | 1           | MILLIREM P  | ER HR |              |              |
|------------------|--------|-------------|-------------|-------|--------------|--------------|
| TIME             | 0.5 FT | <u>1 FT</u> | <u>3 FT</u> | 5 FT  | <u>10 FT</u> | <u>15 FT</u> |
| 01:00 -<br>06:44 | 0.1    | 0.1         | 0.1         | 0.1   | 0.1          | 0.1          |
| 06:45 -<br>08:00 | 10,000 | 7,900       | 3,500       | 2,000 | 750          | 380          |
| 08:01 -          | 5      | 3           | 0.8         | 0.5   | 0.1          | 0.1          |





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### TABLE 9.9

### HYDROGEN CONCENTRATION IN CONTAINMENT

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| Time      | <u>Concentration</u> (vol |
|-----------|---------------------------|
| 0000-0530 | 0.01                      |
| 0531-0630 | 0.5                       |
| 0631-0645 | 1.0                       |
| 0646-0800 | 0.40                      |
| 0801-1100 | 0.08                      |

All values are below the combustible level of 4%



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### TABLE 9.10

### PRIMARY SYSTEM BORON DATA

| Sample      | <u>Time</u> | ppm Boron  | Hq         |
|-------------|-------------|------------|------------|
| RCS<br>Sump | 0100-0430   | 65<br>40   | 7.3        |
| RCS<br>Sump | 0431-0530   | 120<br>80  | 7.2<br>7.3 |
| RCS<br>Sump | 0531-0630   | 200<br>140 |            |

### NOTE: SI starts at 0530 (Steam Break) and again at 0630 (LOCA)

| RCS  | 0631-0800 | 1700 | 5.8 |
|------|-----------|------|-----|
| Sump |           | 1400 | 6.1 |
| RCS  | 0801-1000 | 2300 | 5.4 |
| Sump |           | 2100 | 5.5 |







### SECTION 10.0

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### METEOROLOGICAL AND OFFSITE RADIOLOGICAL DATA

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SECTION 10.1

### METEOROLOGICAL CONDITIONS AND FORECASTS



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### TABLE 10.1

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|                   | SUMMARY OF GI | NNA SITE METE | OROLOGICAL     | CONDITIONS       |                |  |  |  |
|-------------------|---------------|---------------|----------------|------------------|----------------|--|--|--|
| (HOURLY AVERAGES) |               |               |                |                  |                |  |  |  |
|                   |               |               | ·              |                  |                |  |  |  |
|                   | WS-33F1       | WD-33 FT      | TEMP -         | PASQUILL         | GENERAL        |  |  |  |
| CLOCK TIME        | (MPH)         | (DEG. FROM)   | • <u>33 FT</u> | <u>STABILITY</u> | <u>WEATHER</u> |  |  |  |
| ר עגת             |               |               |                |                  |                |  |  |  |
| DAT T             |               | 222           | ~ ~            | <b>.</b> .       |                |  |  |  |
| 0000-0100         | 3.2           | 330           | 65             | <u>r</u>         | OVERCAST       |  |  |  |
| 0100-0200         | 3.2'          | 330           | 65             | F                | DRIZZLE        |  |  |  |
| 0200-0300         | 3.4           | 328           | 67             | F                | DRIZZLE        |  |  |  |
| 0300-0400         | 4.2           | 337           | 69             | F                | DRIZZLE        |  |  |  |
| 0400-0500         | 4.7           | 342           | 70             | F.               | DRIZZLE        |  |  |  |
| 0500-0600         | 5.6           | 003           | 71             | F                | DRIZZLE        |  |  |  |
| 0600-0700         | 5.5           | 025           | 73             | F                | DRIZZLE        |  |  |  |
| 0700-0800         | 5.5           | 030           | 74             | F                | DRIZZLE        |  |  |  |
| 0800-0900         | 5.3           | 030           | 75             | F                | DRIZZLE        |  |  |  |
| 0900-1000         | 7.1           | 029           | 75             | F                | DRIZZLE        |  |  |  |
| 1000-1100         | 7.1           | 029           | 75             | F                | DRIZZLE        |  |  |  |
| 1100-1200         | 7.5           | 030           | 76             | F                | DRIZZLE        |  |  |  |
| 1200-1300         | 7.0           | 030           | 75             | F                | PT. CLOUDY     |  |  |  |
| 1300-1400         | 7.0           | 030           | 74             | -<br>7           | PT. CLOUDY     |  |  |  |
| 1400-2400         | , • O         | 020           | 65             | •<br>D           |                |  |  |  |
| 1400-2400         | 0.0           | 030           | 00             | U                | FI CLOUDI      |  |  |  |

DAY 2 0000-2400

USE ACTUAL METEOROLOGY

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DAY 3 0000-2400

USE ACTUAL METEOROLOGY

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### TABLE 10.2

### FORECAST INFORMATION

Weather Forecast\*

October , 1987 0200 am

| STATION NAME  | TMP | WIND | GST | VIS | WEATHER    | PS |
|---------------|-----|------|-----|-----|------------|----|
| Kingston, ONT | 63  | 4    |     | 15  | light rain | G  |
| Rochester, NY | 67  | 3    |     | 15  | light rain | F  |
| Syracuse, NY  | 65  | 5    |     | 15  | light rain | F  |
| Buffalo, NY   | 64  | 5    |     | 15  | light rain | F  |

### Zone Forecasts

Western Lake Ontario Counties:

Warm, with light drizzle throughout the day. Winds Today -0 changing to north-northeasterly this morning at 4 to 6 mph. Scattered showers expected in the Finger Lakes area. Partly cloudy this evening with less than 10% chance of precipitation. Highs in the mid 70's.

- 0
  - Tonight Cooler temperatures. Northeasterly winds at 5 to 10 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Eastern Lake Ontario Counties:

o Today - Humid with overcast skies and light rain throughout most of the day. Light winds from the north-northeast at 5 mph. Highs in the mid 70's.

Winds remaining north-northeasterly throughout the

day. Winds less than 8 mph. Wave height less than

 Tonight - Cooler temperatures. Northeasterly winds at 6 to 9 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Lake Ontario (South Shore Marine Forecast):

1 foot.

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To be provided to the Dose Assessment Manager or designee



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TABLE 10.2 (cont'd)

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### FORECAST INFORMATION

Weather Forecast\*

October , 1987 0400 am

| STATION NAME  | TMP | WIND | GST | VIS | WEATHER    | PS |
|---------------|-----|------|-----|-----|------------|----|
| Kingston, ONT | 67  | 4    |     | 15  | light rain | F  |
| Rochester, NY | 69  | 5    |     | 15  | light rain | F  |
| Syracuse, NY  | 68  | - 4  |     | 15  | light rain | Έ  |
| Buffalo, NY   | 66  | 4    |     | 15  | light rain | F  |

### Zone Forecasts

Western Lake Ontario Counties:

Today - Warm, with light drizzle throughout the day. Winds changing to north-northeasterly this morning at 4 to 6 mph. Scattered showers expected in the Finger Lakes area and Southern Tier. Partly cloudy this evening with less than 10% chance of precipitation. Highs in the mid 70's.

 Tonight - Cooler Temperatures. Northeasterly winds at 6 to 9 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Eastern Lake Ontario Counties:

- Today Humid with overcast skies and light rain throughout
  most of the day. Light winds from the north-northeast
  at less than 5 mph. Highs in the mid 70's.
- Tonight Cooler temperatures. Northeasterly winds at 6 to 9 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Lake Ontario (South Shore Marine Forecast):

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Winds remaining north-northeasterly throughout the day. Winds less than 8 mph. Wave height less than 1 foot.

To be provided to the Dose Assessment Manager or designee.

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### TABLE 10.2 (cont'd)

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### FORECAST INFORMATION

Weather Forecast\*

October , 1987 0600 am

| STATION NAME  | TMP | WIND | GST | VIS | WEATHER    | PS |
|---------------|-----|------|-----|-----|------------|----|
| Kingston, ONT | 70  | 4    |     | 15  | light rain | F  |
| Rochester, NY | 72  | 4    |     | 15  | light rain | F  |
| Syracuse, NY  | 71  | 5    |     | 15  | light rain | E  |
| Buffalo, NY   | 70  | 4    |     | 15  | light rain | E  |

### Zone Forecasts

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Western Lake Ontario Counties:

o Today - Warm, with light drizzle throughout the day. Winds from the north-northeast at 4 to 6 mph. Scattered showers expected in the Finger Lakes area and the Southern Tier. Partly cloudy this evening with less than 10% chance of precipitation. High in the mid 70's.

 Tonight - Cooler temperatures. Northeasterly winds at 6 to 9 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Eastern Lake Ontario Counties:

- o Today Humid with overcast skies and light rain throughout most of the day. Light winds from the north-northeast at less than 5 mph. Highs in the mid 70's.
- Tonight Cooler Temperatures. Northeasterly winds at 6 to 9 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Lake Ontario (South Shore Marine Forecast):

• Winds remaining north-northeasterly throughout the day. Winds less than 8 mph. Wave height less than 1 foot.

To be provided to the Dose Assessment Manager or designee.



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#### TABLE 10.2 (cont'd)

#### FORECAST INFORMATION

Weather Forecast\*

October , 1987 0800 am

| STATION NAME  | TMP | WIND | GST | VIS | WEATHER    | PS |
|---------------|-----|------|-----|-----|------------|----|
| Kingston, ONT | 75  | 5    |     | 15  | light rain | F  |
| Rochester, NY | 77  | 6    |     | 15  | light rain | F  |
| Syracuse, NY  | 76  | 6    |     | 15  | light rain | E  |
| Buffalo, NY   | 75  | 5    |     | 15  | light rain | E  |

#### Zone Forecasts

Western Lake Ontario Counties:

 Today - Warm, with light drizzle throughout the day. Winds from the north-northeast at 4 to 6 mph. Scattered showers expected in the Finger Lakes area and the Southern Tier. Partly cloudy this evening with less than 10% chance of precipitation. Highs in the mid 70's.

 Tonight - Cooler temperatures. Northeasterly winds at 6 to 9 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Eastern Lake Ontario Counties:

- Today Humid with overcast skies and light rain throughout
  most of the day. Light winds from the north-northeast at less than 5 mph. Highs in the mid 70's.
- Tonight Cooler temperatures. Northeasterly winds at 6 to 9 mph. Temperature in the low 40's. Less than 10% chance of precipitation.

Lake Ontario (South Shore Marine Forecast):

1 foot.

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To be provided to the Dose Assessment Manager or designee.

Winds remaining north-northeasterly throughout the

day. Winds less than 8 mph. Wave height less than









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## ONSITE AND OFFSITE RADIOLOGICAL READINGS



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FIGURE 10.3

(REFER TO LARGE SIZE

0 - 10 MILE ZONE MAP)



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#### TABLE 10.3

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#### PLUME ARRIVAL/DEPARTURE TIMES

| DISTANCE (MILES) | TIME OF *<br>PLUME ARRIVAL | TIME OF **<br>PLUME DEPARTURE |
|------------------|----------------------------|-------------------------------|
| 0.5              | 06:50                      | 08:05                         |
| 1.0              | 06:55                      | 08:10                         |
| 2.0              | 07:05                      | 08:20                         |
| 3.0              | 07:15                      | 08:30                         |
| 4.0              | 07:25                      | 08:40                         |
| 5.0              | 07:35                      | 08:50                         |
| 6.0              | 07:45                      | 09:00                         |
| 7.0              | 07:55                      | 09:10                         |
| 8.0              | 08:05                      | 09:20                         |
| 9.0              | 08:15                      | 09:30                         |
| 10.0             | 08:25                      | 09:40                         |
| 11.0             | 08:35                      | 09:50                         |
| 12.0             | 08:45                      | 10:00                         |
|                  |                            |                               |

#### NOTES:

- \* After indicated arrival time, refer to offsite radiological data shown on Table 10.4 for zone of interest.
- \*\* After indicated departure time, refer to post-plume offsite radiological data shown on Tables 10.5 and 10.6.

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#### TABLE 10.4

#### RADIOLOGICAL SURVEY/SAMPLING DATA

|      | CLOSE WI<br>(mR/1 | CLOSE WINDOW<br>(mR/hr) |        | OPEN WINDOW<br>(Mr/hr) |                    | IODINE             | PARTICULATE       |
|------|-------------------|-------------------------|--------|------------------------|--------------------|--------------------|-------------------|
| ZONE | 3 FEET            | CONTACT                 | 3 FEET | CONTACT                | EXPOSURE<br>(mREM) | CARTRIDGE<br>(CPM) | C FILTER<br>(CPM) |
| A    | 8,800             | 8,800                   | 12,000 | 12,000                 | 2.200              | 14.000             | 16.000            |
| В    | 4,800             | 4,800                   | 6,400  | 6,400                  | 1,200              | 6,700              | 7,800             |
| С    | 2,400             | 2,400                   | 3,200  | 3,200                  | 600                | 3,200              | 3,800             |
| D    | 1,100             | 1,100                   | 1,400  | 1,400                  | 270                | 1,400              | 1,600             |
| E    | 670               | 670                     |        | 900                    | 170                | 850                | 990               |
| F    | 470               | 470                     | 620    | 620                    | 120                | 560                | . 650             |
| G    | 310               | 310                     | 410    | 410                    | 80                 | 270                | 310               |
| H    | 210               | 210                     | 280    | 280                    | 50                 | 70                 | 80                |
| I    | 180               | 180                     | 240    | 240                    | 45                 | 50                 | 55                |

#### NOTES:

- 1. Dose rate readings apply to AutoDigimaster, RO-2, and CDV-715 instrument or equivalent. Ensure that readings provided do not exceed range of survey instrument being used. Provide only those readings being requested, or in accordance with Controller instructions.
- 2. Dosimeter incremental exposure assumes a 15-minute stay-time in the particular zone of interest. Incremental values may be scaled up or down as appropriate. Provide cumulative DRD reading only when requested.
- 3. Air samples assume use of RADECO H-809C air sampler or equivalent. Volume assumed is approximately 300 liters (10 ft3), and field reading is with HP-190 (background = 20 cpm), or HP-210/260 pancake probe (background = 30 cpm).



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## SECTION 10.3

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## DEPOSITION DATA AT TERMINATION OF RELEASE



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## **GRÓUND SURVEYS (CPM)**

# DAY 1 AFTER PLUME PASSAGE

#### POST-PLUME RADIOLOGICAL SURVEY/SAMPLING DATA ( FOR END WINDOW AND PANCAKE PRDBES)

POST-FLUME DECAY TIME =

0.0 HOURS

|      | END WI   | NDOW<br>(CPM) | PANCAK<br>PROBE ( | E<br>CPM) |         |
|------|----------|---------------|-------------------|-----------|---------|
| ZUNE | UCI/M2   | 1 METER       | 1 CM              | 1 METER   | 1 CM    |
| A    | 2.19E+02 | 7.1E+03       | 5.0E+04           | 1.2E+04   | 5.0E+04 |
| B    | 1.19E+02 | 3.9E+03       | 4.8E+04           | 6.3E+03   | 5.0E+04 |
| C    | 5.95E+01 | 1.9E+03       | 2.4E+04           | 3.2E+03   | 5.0E+04 |
| D    | 2.64E+01 | B.7E+02       | 1.1E+04           | 1.4E+03   | 2.6E+04 |
| E    | 1.67E+01 | 5.6E+02       | 6.7E+03           | 9.1E+02   | 1.7E+04 |
| F    | 1.17E+01 | . 4.0E+02     | 4.7E+03           | 6.5E+02   | 1.2E+04 |
| G    | 7.64E+00 | 2.7E+02       | 3.1E+03           | 4.3E+02   | 7.6E+03 |
| н    | 5.20E+00 | 1.9E+02       | 2.1E+03           | 3.0E+02   | 5.2E+03 |
| I    | 4.50E+00 | 1.6E+02       | 1.8E+03           | 2.7E+02   | 4.5E+03 |
| J    | 1.22E+00 | 5.9E+01       | 4.9E+02           | 9.4E+01   | 1.2E+03 |
| • K  | 2.61E-01 | 5.4E+01       | 1.0E+02           | 8.5E+01   | 2,6E+02 |
| L    | 2.19E-01 | 4.8E+01       | 8.7E+01           | 7.6E+01   | 2.20+02 |
| M    | L.T. LLD | 2.0E+01       | , 2.0E+01         | 3.0E+01   | 3.0E+01 |

NOTE: ASSUMED BACKGROUND READING

20 CPM (END WINDOW) 30 CPM (PANCAKE)





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## MICRO-R/HR

## DAY 1

#### GAMMA MICRO-R/HR READINGS DUE TO GROUND DEPOSITION

POST-PLUME DECAY TIME =

0.0 HOURS

| 20115 | TOTAL    | el Meter        | et CM        |
|-------|----------|-----------------|--------------|
| ZUNE  | UCI/M2   | MICRO-R/HOUR    | MICRD-R/HOUR |
| A     | 2.19E+02 | <b>3.2E+0</b> 3 | 5.5E+03      |
| B     | 1.19E+02 | 1.7E+03         | 3.0E+03      |
| C     | 5.95E+01 | 8.7E+02         | 1.5E+03      |
| D     | 2.64E+01 | 3.9E+02         | 6.6E+02      |
| E     | 1.67E+01 | 2.4E+02         | 4.2E+02      |
| F     | 1.17E+01 | 1.7E+02         | 2.9E+02      |
| G     | 7.64E+00 | 1.1E+02         | 1.9E+02      |
| н     | 5.20E+00 | . 7.6E+01       | 1.3E+02      |
| I     | 4.50E+00 | 6.6E+01         | 1.18+02      |
| J     | 1.22E+00 | 1.8E+01         | 3.0E+01      |
| ĸ     | 2.61E-01 | 1.SE+01         | 2.60+01      |
| Ŀ     | 2.19E-01 | 1.3E+01         | 2.26+01      |
| м     | L.T. LLD | 1.0E+01         | 1.0E+01      |

NOTE: ASSUMED BACKGROUND READING: 10 MICRO-R/HR





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AIR SAMPLE OTOPIC RESULTS



**TABLE 10.7-A** 

AIR PARTICULATE FILTER , ISOTOPIC ACTIVITY

## (COLLECTION DURING RELEASE)

|        |                      |                  | the second se |                      |                      |                      |                      |                      |
|--------|----------------------|------------------|---|----------------------|----------------------|----------------------|----------------------|----------------------|
| ZONE   | TOTAL                | FIELD<br>READING | 1-131   | I-133                | CS-134               | CS-137               | BA-140               | LA-140 .             |
|        | UCI/CC               | (CPM)            | UC1/CC  | UCI/CC               | UCI/CC               | UCI/CC               | UC1/CC *             | UCI/CC               |
| A      | 1.27E-06             | 16,068           | 1.896-07  | 3.78E-07             | 1.81E-09             | 8.31E-10             | 4.236-11             | 4.23F-11             |
| Ð      | 6.16E-07             | 7,822            | 9.18E-08  | 1.84E-07             | 8.81E-10             | 4.04E-10             | 2.06E-11             | 2.06E+11             |
| C      | 2.97E-07             | 3,778            | 4.42E-08  | 8.84E-08             | 4.24E-10             | 1.95E-10             | 9.90E-12             | 9.90E-12             |
| D      | 1.25E-07             | 1,606            | 1.87E-08  | 3.73E-08             | 1.79E-10             | 8.216-11             | 4.18E-12             | 4.18E-12             |
| E      | 7.63E-08             | 986              | 1.146-08  | 2.27E-08             | 1.09E-10             | 5.00E-11             | 2.556-12             | 2.555-12             |
| F      | 4.97E-08             | 649              | 7.40E-09  | 1.48E-08             | 57.11E-11            | 3.26E-11             | 1 665-12             | 1 665-12             |
| G      | 2.326-08             | 314              | 3.46E-09  | 6.92E-09             | 3.32E-11             | 1.52E-11             | 7.75E-13             | 7.756-13             |
| H<br>I | 4.74E-09<br>2.73E-09 | 80<br>55         | 7.06E-10<br>4.07E-10  | 1.41E-09<br>8.14E-10 | 6.78E-12<br>3.91E-12 | 3-11E-12<br>1-79E-12 | 1.58E-13<br>9.12E-14 | 1.58E~13<br>9.12E-14 |
| J      | 1.13E-09             | 34               | 1.6BE-10  | 3.35E-10             | 1.61E-12             | 7.38E-13             | 3.756-14             | 3.758-14             |
| ĸ      | 3.858-10             | 25               | 5.73E-11  | 1.15E-10             | 5.50E-13             | 2.52E-13             | 1.28E-14             | 1. 28E-14            |
| L      | 8.06E-11             | 21               | 1.20E-11  | 2.40E-11             | 1.15E-13             | 5.28E-14             | 2.698-15             | 2.698-15             |
| м      | L.T. LLD             | . 20             | L.T. LLD  | L.T. LLD             | L.T. LLD             | L.T. LLD             | L.T. LLD '           | L.T. LLD             |

## • TABLE 10.7-B

#### SILVER ZEOLITE CARTRIDGE RADIOIODINE ISOTOFIC ACTIVITY

| ZONE | TOTAL<br>ACTIVITY | FIELD  | I-131    | I-132    | I-133    | I-134    | I-135    |
|------|-------------------|--------|----------|----------|----------|----------|----------|
|      | UCI/CC            | (CPM)  | UCI/CC   | UCI/CC   | UCI/CC   | UCI/CC   | UC1/CC   |
| A    | 3.80E-06          | 13.672 | 5.66E-07 | 8.16E-07 | 1.13E-06 | 2.55E-07 | 1.03E-06 |
| В    | 1.85E-06          | 6,657  | 2.75E-07 | 3.97E-07 | 5.51E-07 | 1.24E-07 | 4.98E-07 |
| С    | 8.89E-07          | 3,217  | 1.33E-07 | 1.91E-07 | 2.65E-07 | 5.97E-0B | 2.40E-07 |
| D    | 3.75E-07          | 1,369  | 5.60E-08 | 8.06E-08 | 1.12E-07 | 2.52E-08 | 1.01E+07 |
| E    | 2.28E-07          | 842    | 3.41E-08 | 4.91E-08 | 6.82E-08 | 1.53E-08 | 6.17E-08 |
| F    | 1.49E-07          | 555    | 2.22E-08 | 3.20E-08 | 4.44E-0B | 9.99E-09 | 4.02E-08 |
| G    | 6.96E-08          | , 270  | 1.04E-0B | 1.50E-0B | 2.08E-08 | 4.675-09 | 1.885-08 |
| н    | 1.42E-08          | 71     | 2.12E-09 | 3.05E-09 | 4.24E-09 | 9.54E-10 | 3.84E-09 |
| I    | 0.19E-09          | 49     | 1.228-09 | 1.76E-09 | 2.44E-09 | 5.50E-10 | 2.21E-09 |
| J    | 3.37E-09          | 32     | 5.03E-10 | 7.24E-10 | 1.01E-09 | 2.26E-10 | 9.10E-10 |
| ĸ    | 1.15E-09          | 2,4    | 1.72E-10 | 2.48E-10 | 3.44E-10 | 7.748-11 | 3.11E-10 |
| L    | 2.41E-10          | 21     | 3.60E-11 | 5.186-11 | 7.20E-11 | 1.62E-11 | 6.52E-11 |
| M    | L.T. LLD          | 20     | 1T. LLD  | L.T. LLD | L.T. LLD | L.T. LLD | L.T. LLD |

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