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SUBJECT: Forwards 1990 emergency preparedness exercise objectives for review.

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Iowa Electric Light and Power Company

July 27, 1990  
NEP-90-0352

Mr. A. Bert Davis  
Regional Administrator  
Region III  
U. S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

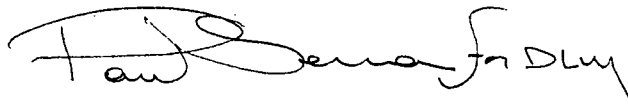
Subject: Duane Arnold Energy Center  
Docket No.: 50-331  
Op. License No: DPR-49  
1990 Emergency Preparedness Exercise Objectives  
File: A-221b

Dear Mr. Davis:

Enclosed please find a copy of our 1990 Emergency Preparedness Exercise Objectives. These objectives are being forwarded to you for review at this time. This submittal also includes offsite objectives which have been prepared for Benton, Buchanan, Linn, and Scott Counties, as well as the State of Iowa, which are being submitted to FEMA Region VII through the State of Iowa.

If you have any questions, please contact Paul Serra, Manager, Emergency Planning at (319) 398-8190, or Grant Harper, Group Leader, Emergency Planning at (319) 398-8177.

Very truly yours,



Daniel L. Mineck  
Manager, Nuclear Division

DLM/GGH/pjv+

Attachments 1: Scope and Objectives Basis  
2: 1990 DAEC Exercise - Onsite Objectives  
3: Offsite Agency Objectives

cc: G. Harper  
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SCOPE AND OBJECTIVES BASIS

Scope

The 1990 Duane Arnold Energy Center (DAEC) Emergency Preparedness Exercise, to be conducted on October 31, 1990 will test and provide the opportunity to evaluate Iowa Electric Light and Power Company, the State of Iowa and Benton and Linn Counties' emergency plans and procedures. It will also test each emergency response organization's ability to assess and respond to emergency conditions and coordinate efforts with other agencies for protection of the health and safety of the public.

Whenever practical, the Exercise will incorporate provisions for "Free Play" on the part of the participants.

The scenario, as driven by the DAEC Control Room Simulator, will depict a simulated sequence of events, resulting in a radiological release of sufficient magnitude to warrant mobilization of State and local agencies to respond to the emergency. Additionally, demonstrations of a "partial" Ingestion Pathway Exercise by the State of Iowa will be conducted on November 1, 1990.

Objectives

The Duane Arnold Energy Center (DAEC) 1990 Emergency Preparedness Exercise Program objectives are based on the Nuclear Regulatory Commission (NRC) requirements delineated in 10 CFR 50.47 and 10 CFR 50, Appendix E and Inspection Procedure No. 82302. Additional guidance provided in NUREG-0654 FEMA-REP-1, Revision 1, NUREG-0696 and NUREG-0737 Supplement 1 was utilized in developing these objectives.

This Exercise will include participation from Linn, Benton, and host Counties, as well as the State of Iowa. The offsite objectives are based on the Federal Emergency Management Agency (FEMA) Guidance Memoranda EX-3 and IN-1. Please note that the warning system sirens and WMT AM/FM, EBS Radio Station for the emergency planning zone, will not be activated during the Exercise.

The purpose of the Exercise is to evaluate the integrated capability of a major portion of the basic elements existing within the onsite and offsite emergency plans and emergency response organizations. The specific objectives of the Exercise to be demonstrated are listed within the following attachments.

## 1990 DAEC EXERCISE ONSITE OBJECTIVES

CORE ELEMENTS (Note 1)	FREQUENCY (Note 1)	REGULATORY REFERENCE (Note 2)	COMMENTS
(a) Accident detection and assessment	Annual	I.1, I.2	Will be demonstrated.
(b) Emergency classification	Annual	D.1, D.2	Will be demonstrated.
(c) Notification of onsite and offsite emergency responders	Annual	E.1, E.2, E.3; J.1	Will be demonstrated. Activation of EBS, sirens and Indoor Warning System by offsite authorities will be simulated. In-plant alarms and pages will be sounded.
(d) Communications	Annual	F.1, F.2; E.2, E.4; H.6; 8.1, 8.2, 8.3, 8.4	Initial "drill" notification to NRC made on ENS network. All other calls and communication with Federal Agencies to be simulated.
(e) Radiological exposure control	Annual	K.1, K.2, K.3, K.5, K.6; J.3, J.6	Will be demonstrated.
(f) Protective action recommendations	Annual	J.7	Will be demonstrated.

Note 1: As delineated in NRC Inspection Manual - Procedure 82302.

Note 2: Items refer to NUREG-0654, Part II, except for elements (d) and (h) in part which the reference is NUREG-0737, Supplement 1.

Note 3: Items refer to NUREG-0654, Part II, except for element (j) in which the reference is NUREG-0737, Supplement 1.

## 1990 DAEC EXERCISE ONSITE OBJECTIVES

CORE ELEMENTS (Note 1)	FREQUENCY (Note 1)	REGULATORY REFERENCE (Note 2)	COMMENTS
(g) Staff augmentation	Annual	A.1, A.3, A.4; B.7, B.8, B.9	Staff augmentation will include ERO supplementing normal shift staffing.
(h) Shift staffing	Annual	B.1, B.2, B.3, B.5; Table 2	Depth and scope of Em. Response Organization evidenced by Emergency Telephone Book.

Note 1: As delineated in NRC Inspection Manual - Procedure 82302.

Note 2: Items refer to NUREG-0654, Part II, except for elements (d) and (h) in part which the reference is NUREG-0737, Supplement 1.

Note 3: Items refer to NUREG-0654, Part II, except for element (j) in which the reference is NUREG-0737, Supplement 1.

## 1990 DAEC EXERCISE ONSITE OBJECTIVES

PERIODIC ELEMENTS (Note 1)	FREQUENCY (Note 1)	REGULATORY REFERENCE (Note 3)	COMMENTS
(a) Off-hours staffing (6 p.m. to 4 a.m.) as referenced in NUREG-0654, Rev. 1, Supplement 1	5 years	N.1.b	Will not be demonstrated in 1990. Last demonstrated in 1986.
(b) Activation of emergency news center (Joint Information Center)	5 years	G.3, G.4	Will be demonstrated.
(c) Use of fire control teams	5 years	N.2.b; O.4.d	Will not be demonstrated in 1990.
(d) Use of first aid and/or rescue teams	5 years	K.1, K.2, K.3, K.4, K.5; L.2; O.4.f	Response to an in-plant medical emergency with potential contamination will be demonstrated.
(e) Use of medical support personnel	5 years	N.2.c; L.1, L.4; O.4.h	Benton-Linn Ambulance Service will receive and transport onsite medical case. Mercy Medical Center will provide treatment.
(f) Use of licensee's headquarters support personnel	5 years	O.4.i	As dictated by nature of scenario, Corporate Support Services will be utilized.
(g) Use of security personnel to provide prompt access for emergency equipment and support	5 years	O.4.d	In processing and escort of personnel and/or support equipment to appropriate destination will be demonstrated.

Note 1: As delineated in NRC Inspection Manual - Procedure 82302.

Note 2: Items refer to NUREG-0654, Part II, except for elements (d) and (h) in part which the reference is NUREG-0737, Supplement 1.

Note 3: Items refer to NUREG-0654, Part II, except for element (j) in which the reference is NUREG-0737, Supplement 1.

## 1990 DAEC EXERCISE ONSITE OBJECTIVES

PERIODIC ELEMENTS (Note 1)	FREQUENCY (Note 1)	REGULATORY REFERENCE (Note 3)	COMMENTS
(h) Use of backup communications	5 years	F.1	Will not be demonstrated in 1990.
(i) Rumor control	5 years	G.4.c	Function will be demonstrated in parallel with activation of the Emergency News Center.
(j) Use of emergency power (where not a part of plant safety systems, e.g., Technical Support System (TSC))	5 years	8.2.1	Will not be demonstrated during Exercise. Completion of this objective ascertained by routine inspection of applicable test procedures.
(k) Evacuation of Emergency Response Facilities (ERFs) and relocation to backup ERFs, where applicable	5 years	J.10.g	Will not be demonstrated in 1990.
(l) Ingestion pathway exercise	5 years	J.9, J.11	Support of State preparation for Ingestion Pathway Exercise will be provided.
(m) Field monitoring, including soil, vegetation, and water sampling	5 years	I.7, I.8, I.11, N.2.d	Collection and analysis of sample media will be demonstrated.
(n) Capability for determining the magnitude and impact of the particular components of a release	5 years	I.3, I.4, I.6, I.8, I.9, I.10	Determination of total release and presence of radio-iodine will be demonstrated.

Note 1: As delineated in NRC Inspection Manual - Procedure 82302.

Note 2: Items refer to NUREG-0654, Part II, except for elements (d) and (h) in part which the reference is NUREG-0737, Supplement 1.

Note 3: Items refer to NUREG-0654, Part II, except for element (j) in which the reference is NUREG-0737, Supplement 1.

## 1990 DAEC EXERCISE ONSITE OBJECTIVES

PERIODIC ELEMENTS (Note 1)	FREQUENCY (Note 1)	REGULATORY REFERENCE (Note 3)	COMMENTS
(o) Capability for post-accident coolant sampling and analysis	5 years	I.2	Will be demonstrated, as necessitated by the scenario.
(p) Use of Potassium Iodide (KI)	5 years	J.6.c	Decision-making process will be demonstrated, as necessitated by the scenario
(q) Assembly and accountability	5 years	J.5	Will be demonstrated.
(r) Recovery and Re-entry	5 years	M.1	Will be demonstrated via a 30-60 minute planning/consideration period in the later phases of the scenario. Coordination between TSC-EOF critical.

Note 1: As delineated in NRC Inspection Manual - Procedure 82302.

Note 2: Items refer to NUREG-0654, Part II, except for elements (d) and (h) in part which the reference is NUREG-0737, Supplement 1.

Note 3: Items refer to NUREG-0654, Part II, except for element (j) in which the reference is NUREG-0737, Supplement 1.



LINN COUNTY OBJECTIVES

<u>Objective</u>	<u>Comment</u>
1. Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECL's as required by the scenario. The four ECL's are: Notification of Unusual Event, Alert, Site Area Emergency and General Emergency.	Based upon the level of classification, actions in accordance with local plans are taken.
2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions.	This includes the County EOC and representatives at the EOF and ENC.
3. Demonstrate the ability to direct, coordinate and control emergency response activities.	Ascertained by general observations of how the response effort is managed.
4. Demonstrate the ability to communicate with all appropriate facilities, organizations and field personnel.	Primary and backup communications will be demonstrated between State and County EOC's and State FCP.
5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.	None
6. Demonstrate the ability to continuously monitor and control emergency worker exposure.	Applicable to respondent working within EPZ. Personnel must know exposure limits and record dosimeter readings every 30 minutes.
12. Demonstrate the ability to initially alert the public within the DAEC EPZ and begin dissemination of an instructional message within 15 minutes of a decision by appropriate State and/or local official(s).	Upon notification of a Site Area Emergency, risk counties have 15 minutes to simulate activation of the siren system and complete transmission of initial EBS message via FAX to WMT-AM/FM. As long as EBS messages are repeated, order of FAX initiation and siren activation is not critical.
13. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred.	Timeliness is defined as that time that assures the public is provided an opportunity to react expeditiously to protective action decisions.

14. Demonstrate the ability to brief the media in an accurate, coordinated and timely manner. Provided by the county representative in the ENC.
16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made if necessitated by radioiodine releases. The State EOC makes the decision to recommend KI, and the County EOC distributes and administers KI. This objective will be scenario driven independent of objective due dates.
18. Demonstrate the ability and resources necessary to implement appropriate protective actions for the impacted permanent and transient plume EPZ population (including transit-dependent persons, special needs populations and handicapped persons. This will be demonstrated in accordance with local plans via simulated EBS messages.
19. Demonstrate the ability and resources necessary to implement appropriate protective actions for school children within the plume EPZ. As necessitated by the scenario, demonstrate protective actions for school children within the plume EPZ in accordance with local plans. Response capabilities of Center Point/Urbana and College Community School Districts to be evaluated separate from the exercise scenario. Credit for demonstration of Center Point/Urbana to be given to both counties, since both communities and schools are cited in the Benton and Linn RERP.
20. Demonstrate the organizational ability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas. Ability and resources necessary to control evacuation traffic and control access to sheltered and evacuated areas will be evaluated in accordance with local plans. No field demonstration of TCPs will be necessary for the evaluation. This function to be evaluated in the EOC's coordination of Traffic Control activities.  
  
During Reentry and Recovery, modification of access control points, in conjunction with relaxation of protective portion instructions, must be demonstrated by way of discussion to reflect limited access to areas identified as being contaminated. Establishing entry "control points" for emergency workers will be essential. Evaluated at EOC's only.

33. Demonstrate the ability to implement appropriate measures for controlled reentry and recovery.

Applicable to State and Risk County EOCs. Accomplished via a 24-hour time jump in the scenario to force discussion regarding implementation of reduced Protective Action Recommendations. Consideration must be given to the needs of reentering evacuees or those continuing to be relocated, resources needed to conduct reentry and recovery operations, and modified access control to areas identified as being contaminated (see objective 20). As needed, use of broadcast media through the Emergency News Center (ENC) to apprise the public of actions being taken will be essential to successful evaluation. Exposure control for personnel going into secured (access controlled) areas is critical. Utilization of checklists to assist in demonstration of this objective is permissible.

34. Demonstrate the ability to maintain staffing on a continuous 24-hour basis by an actual shift change.

Actual shift turnover of emergency personnel must be conducted by personnel in positions which require 24-hour staffing. Alternates must act in positions for approximately 2 hours and demonstrate the ability to make decisions appropriate to the scenario. Personnel must log out/log in to document shift change.

Primaries may return to play for reentry and recovery phase.

BENTON COUNTY OBJECTIVES

<u>Objective</u>	<u>Comment</u>
1. Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECL's as required by the scenario. The four ECL's are: Notification of Unusual Event, Alert, Site Area Emergency and General Emergency.	Based upon the level of classification, actions in accordance with local plans are taken.
2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions.	This includes the County EOC and representatives at the EOF and ENC.
3. Demonstrate the ability to direct, coordinate and control emergency response activities.	Ascertained by general observations of how the response effort is managed.
4. Demonstrate the ability to communicate with all appropriate facilities, organizations and field personnel.	Primary and backup communications will be demonstrated between State and County EOC's and State FCP.
5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.	None
6. Demonstrate the ability to continuously monitor and control emergency worker exposure.	Applicable to respondent working within EPZ. Personnel must know exposure limits and record dosimeter readings every 30 minutes.
12. Demonstrate the ability to initially alert the public within the DAEC EPZ and begin dissemination of an instructional message within 15 minutes of a decision by appropriate State and/or local official(s).	Upon notification of a Site Area Emergency, risk counties have 15 minutes to simulate activation of the siren system and complete transmission of initial EBS message via FAX to WMT-AM/FM. As long as EBS messages are repeated, ordre of FAX initiation and siren activation is not critical.

13. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred.

Timeliness is defined as that time that assures the public is provided an opportunity to react expeditiously to protective action decisions.
14. Demonstrate the ability to brief the media in an accurate, coordinated and timely manner.

Provided by the county representative in the ENC.
16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made if necessitated by radioiodine releases.

The State EOC makes the decision to recommend KI, and the County EOC distributes and administers KI. This objective will be scenario driven independent of objective due dates.
18. Demonstrate the ability and resources necessary to implement appropriate protective actions for the impacted permanent and transient plume EPZ population (including transit-dependent persons, special needs populations and handicapped persons).

This will be demonstrated in accordance with local plans via simulated EBS messages.
19. Demonstrate the ability and resources necessary to implement appropriate protective actions for school children within the plume EPZ.

As necessitated by the scenario, demonstrate protective actions for school children within the plume EPZ in accordance with local plans. Response capabilities of Center Point/Urbana and College Community School Districts to be evaluated separate from the exercise scenario. Credit for demonstration of Center Point/Urbana to be given to both counties, since both communities and schools are cited in the Benton and Linn RERP.
20. Demonstrate the organizational ability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

Ability and resources necessary to control evacuation traffic and control access to sheltered and evacuated areas will be evaluated in accordance with local plans. No field demonstration of TCPs will be necessary for the evaluation. This function to be evaluated in the EOC's coordination of Traffic Control activities.

During Reentry and Recovery, modification of access control points, in conjunction with relaxation of protective portion instructions, must be demonstrated by way of discussion

to reflect limited access to areas identified as being contaminated. Establishing entry "control points" for emergency workers will be essential. Evaluated at EOC's only.

33. Demonstrate the ability to implement appropriate measures for controlled reentry and recovery.

Applicable to State and Risk County EOCs. Accomplished via a 24-hour time jump in the scenario to force discussion regarding implementation of reduced Protective Action Recommendations. Consideration must be given to the needs of reentering evacuees or those continuing to be relocated, resources needed to conduct reentry and recovery operations, and modified access control to areas identified as being contaminated (see objective 20). As needed, use of broadcast media through the Emergency News Center (ENC) to apprise the public of actions being taken will be essential to successful evaluation. Exposure control for personnel going into secured (access controlled) areas is critical. Utilization of checklists to assist in demonstration of this objective is permissible.

34. Demonstrate the ability to maintain staffing on a continuous 24-hour basis by an actual shift change.

Actual shift turnover of emergency personnel must be conducted by personnel in positions which require 24-hour staffing. Alternates must act in positions for approximately 2 hours and demonstrate the ability to make decisions appropriate to the scenario. Personnel must log out/log in to document shift change.

Primaries may return to play for reentry and recovery phase.

STATE OF IOWA OBJECTIVES  
Medical Services Objectives

<u>Objective</u>	<u>Comment</u>
23. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals.	Conducted concurrently with the Exercise, adequacy of equipment, procedures and personnel for the transportation of injured contaminated individuals will be demonstrated by the Benton-Linn Ambulance.
24. Demonstrate the adequacy of medical facilities equipment, procedures and personnel for handling contaminated, injured or exposed individuals.	Adequacy of medical facilities, equipment, procedures, and personnel to treat contaminated injured personnel will be demonstrated by Mercy Medical Center, Cedar Rapids, IA.

Decontamination Objective

25. Demonstrate the adequacy of facilities, equipment, supplies, procedures and personnel for decontamination of emergency workers, equipment and vehicles and for waste disposal.	Adequacy of facilities, equipment, supplies, procedures and personnel for the decontamination of emergency workers, equipment and vehicles and for waste disposal will be demonstrated at the Vinton Recreation Center in accordance with local plans.
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STATE OF IOWA OBJECTIVES  
As Prepared By  
The Iowa Division of Disaster Services

STATE EOC

	<u>Objective</u>	<u>Comment</u>
1.	Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECL's as required by the scenario. The four ECL's are: Notification of Unusual Event, Alert, Site Area Emergency and General Emergency.	NONE
2.	Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions. (See Objective 34 for 24-hour, continuous staffing function within a six-year time frame). (1)	NONE
3.	Demonstrate the ability to direct, coordinate and control emergency activities. (3)	NONE
4.	Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel. (5)	<u>Demonstrate</u> primary commo link and a <u>back-up</u> link.
5.	Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations. (4)	NONE
6.	Demonstrate the ability to continuously monitor and control emergency worker exposure.	Applicable to respondent working within EPZ. Personnel must know exposure limits and record dosimeter readings every 30 minutes.
11.	Demonstrate the ability to make appropriate protection action decisions, based on projected or actual dosage, EPA PAG's, availability of adequate shelter, evacuation time estimates and other relevant factors. (10)	NONE



13. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred. (14, 25) 15 minute clock does not apply to any public instructions after the initial Alert/Notification has occurred.
15. Demonstrate the ability to establish and operate rumor control in a coordinated and timely fashion. (26) NONE
20. Demonstrate the organizational ability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas. (26) State will not actually man TCP's. During Reentry and Recovery discussions amongst state players on the establishment/changing of access control points to allow limited reentry for certain emergency workers; and eventually, the general public.
27. Simulated via scenario messages.
28. Simulated via scenario messages.
29. Demonstrate the ability to project dosage to the public for ingestion pathway exposure and determine appropriate protective measures based on field data, FDA PAG's and other relevant factors. (11) State of Iowa will be partial Ingestion. Discussion/ Decision-making at Iowa State EOC.
30. Demonstrate the ability to implement both preventive and emergency protective actions for ingestion pathway hazards. (12) State of Iowa will be partial Ingestion. Discussion/ Decision-making at Iowa State EOC.
32. Demonstrate the ability to determine appropriate measures for controlled reentry and recovery based on estimated total population exposure, available EPA PAG's and other relevant factors. (35) Discussion and Decision-making only at State EOC.

33. Demonstrate the ability to implement appropriate measures for controlled reentry and recovery. (35)

Applicable to State and Risk County EOC's. Accomplished via a 24-hour time jump in the scenario to force discussion regarding implementation of reduced Protective Action Recommendations. Consideration must be given to the needs of reentering evacuees or those continuing to be relocated, resources needed to conduct reentry and recovery operations, and modified access control to areas identified as being contaminated (see objective 20). As needed, use of broadcast media to apprise the public of actions being taken will be essential to successful evaluation. Exposure control for personnel going into secured (access controlled) areas is critical. Utilization of checklists to assist in demonstration of this objective is permissible. Discussion and Decision-making at State EOC.

An actual shift change will not be required by any organization at the State EOC for this exercise. However, each organization represented must bring a staff roster showing 24 hour capability.

UTILITY EOF

<u>Objective</u>	<u>Comment</u>
1. Demonstrate the ability to monitor, understand, and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECL's as required by the scenario. The four ECL's are: Notification of unusual event, alert, site area emergency, and general emergency.	Only as appropriate to role of Iowa DSD liaison staff.
2. Demonstrate the ability to fully alert, mobilize, and activate personnel for both facility and field-based emergency functions. (See Objective 34 for 24-hour, continuous staffing function within a six-year time frame). (1)	Iowa DSD Liaison to mobilize in real time.
3. Demonstrate the ability to direct, coordinate, and control emergency activities. (3)	NONE
4. Demonstrate the ability to communicate with all appropriate locations, organizations, and field personnel. (5)	Iowa DSD liaison to demonstrate a primary and back-up commo link, from EOF to State EOC.
5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations. (4)	NONE
6. Demonstrate the ability to continuously monitor and control emergency worker exposure. (20 )	Iowa DSD Liaison to demonstrate dosimetry knowledge.
16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases. (21, 22)	The Iowa DSD Liaison will demonstrate knowledge of KI. The IDPH Liaison will do likewise.

14. Demonstrate the ability to maintain staffing on a continuous 24 hour basis by an actual shift change. (2)
- Iowa DSD Liaison to demonstrate shift change.

NOTE: The Iowa Department of Public Health also sends a liaison to the Utility EOF. This liaison simply acts as a back-up link from Utility EOF to Dose Assessment at State EOC. This individual will demonstrate dosimetry knowledge, etc. There will be no shift change required, however, given his/her back-up role.

EMERGENCY NEWS CENTER

<u>Objective</u>	<u>Comment</u>
1. Demonstrate the ability to monitor, understand, and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECL's as required by the scenario. The four ECL's are: Notification of unusual event, alert, site area emergency, and general emergency.	Per the PIO Role, as necessary.
2. Demonstrate the ability to fully alert, mobilize, and activate personnel for both facility and field-based emergency functions. (See Objective 34 for 24-hour, continuous staffing function within a six-year time frame). (1)	Iowa PIO's to mobilize in real time.
4. Demonstrate the ability to communicate with all appropriate locations, organizations, and field personnel. (5)	PIO to demonstrate <u>primary</u> and <u>back-up</u> commo.
5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations. (4)	NONE
6. Demonstrate the ability to continuously control emergency exposure. (20)	PIO's to monitor and demonstrate dosimetry knowledge.
14. Demonstrate the ability to brief the media in an accurate, coordinated and timely manner. (24)	PIO to utilize " <u>Landmark Boundaries</u> " to describe affected areas, not necessarily sectors. PIO's to ensure a timely flow of information received over the Administrative Hot Line to Utility/County PIO's.
15. Demonstrate the ability to establish and operate rumor control in a coordinated and timely fashion. (26)	Rumor control is handled at State EOC. State PIO's at the ENC involved in such as coordination only and only as needed.

16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases. (21, 22)

PIO players to demonstrate knowledge of KI.

34. Demonstrate the ability to maintain staffing on a continuous 24 hour basis by an actual shift change. (2)

Key State PIO player to shift change.

FORWARD COMMAND POST

<u>Objective</u>	<u>Comment</u>
1. Demonstrate the ability to monitor, understand, and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECL's as required by the scenario. The four ECL's are: Notification of unusual event, alert, site area emergency, and general emergency.	NONE
2. Demonstrate the ability to fully alert, mobilize, and activate personnel for both facility and field-based emergency functions. (See Objective 34 for 24-hour, continuous staffing function within a six-year time frame). (1)	Iowa DSD Liaison to mobilize in real time.
3. Demonstrate the ability to direct, coordinate, and control emergency activities. (3)	NONE
4. Demonstrate the ability to communicate with all appropriate locations, organizations, and field personnel. (5)	Iowa DSD liaison and other players at State FCP to demonstrate primary and back-up commo.
5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations. (4)	NONE
6. Demonstrate the ability to continuously monitor and control emergency worker exposure. (20)	Iowa DSD Liaison and other players at State FCP to demonstrate dosimetry.
16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases. (21, 22)	KI decision made at State EOC. IF a recommendation for Emergency Workers to take KI is forthcoming, will demonstrate distribution and simulate administration at State FCP.

20. Demonstrate the organizational ability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas. (16, 17)

This objective is not due for evaluation at this location until 1994; however, we will informally include it. Want the FCP Players to stay active. Also, for Recovery and Reentry, certain organizations (State Patrol, Iowa DOT) will demonstrate a players role and a State EOC Coordination Role, in discussion of the establishment/changing of Access Control Points allowing for limited reentry by Emergency Workers and eventually, the evacuees.

20. Demonstrate the ability to maintain staffing on a continuous 24 hour basis by an actual shift change. (2)

An Actual Shift change by Iowa DSD Liaison, Iowa State Patrol (command and Control Position only), Iowa DOT, Iowa DNR, Iowa National Guard.



DOSE ASSESSMENT

	<u>Objective</u>	<u>Comment</u>
2.	Demonstrate the ability to fully alert, mobilize, and activate personnel for both facility and field-based emergency functions. (See Objective 34 for 24-hour, continuous staffing function within a six-year time frame). (1)	NONE
3.	Demonstrate the ability to direct, coordinate, and control emergency activities. (3)	NONE
4.	Demonstrate the ability to communicate with all appropriate locations, organizations, and field personnel. (5)	NONE
5.	Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations. (4)	NONE
10.	Demonstrate the ability, within the plume exposure pathway, to project dosage to the public via plume exposure, based on plant and field data. (10)	NONE
11.	Demonstrate the ability to make appropriate protection action decisions, based on projected or actual dosage, EPA PAG's, availability of adequate shelter, evacuation time estimates and other relevant factors. (10)	NONE
16.	Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases. (21, 22)	Dose Assessment Group, along with IDPH Community Health representative makes decision to recommend KI to emergency workers.
29.	Demonstrate the ability to project dosage to the public for ingestion pathway exposure and determine appropriate protective measures based on field data, FDA PAG's and other relevant factors. (11)	Performed by Dose Assessment Unit at State EOC for <u>partial</u> Ingestion Pathway play.

31. Demonstrate the ability to estimate total population exposure. (34) Is due for DAEC in 1990; "if additional FEMA guidance is available". (At this writing, is not available and not an Objective for this exercise)
32. Demonstrate the ability to determine appropriate measures for controlled reentry and recovery based on estimated total population exposure, available EPA PAG's and other relevant factors. (35) Discussion and Decision-making only at State EOC.

NOTE: No shift change required for Dose Assessment Unit

RADIOLOGICAL LAB - OAKDALE CAMPUS, UNIVERSITY OF IOWA

<u>Objective</u>	<u>Comment</u>
6. Demonstrate the ability to continuously monitor and control emergency worker exposure. (20)	Applies to monitoring and exposure control of those staff at Oakdale performing receipt/analysis of field samples. This will be demonstrated at Oakdale.
7. Demonstrate the ability to obtain samples of particulate activity in the airborne plume and promptly perform laboratory analysis. (New Objective)	Additional guidance regarding this objective necessary.
28. Demonstrate the appropriate lab operations and procedures for measuring and analyzing samples of vegetation, food crops, milk, meat, poultry, water, and animal feeds (indigenous to the area and stored). (9)	Inasmuch as State is doing a <u>partial</u> Ingestion, this will be demonstrated at Oakdale analysis location.
34. Demonstrate the ability to maintain staffing on a continuous 24 hour basis by an actual shift change. (2)	Demonstrate shift change at Oakdale by <u>analysis staff</u> .

FIELD TEAM COORDINATION

<u>Objective</u>	<u>Comment</u>
2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions. (See Objective 34 for 24-hour, continuous staffing function within a six-year time frame. (1)	<u>Field Team Coordinator &amp; Support Staff</u> to mobilize in real time. (Not due until 1994 but will perform here.)
3. Demonstrate the ability to direct, coordinate and control emergency activities. (3)	NONE
4. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations. (4)	NONE
5. Demonstrate the ability to continuously monitor and control emergency worker exposure. (20)	NONE
10. Demonstrate the ability, within the plume exposure pathway, to project dosage to the public via plume exposure, based on plant and field data. (10)	NONE
16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases. (21, 22)	RERT Coordinator receives KI recommendation from Iowa State EOC and conveys it to Team members.

NOTES: Actual Shift change for the RERT Coordinator is due at the DAEC by 1992. Is not an objective here.

An ARCA from the July, 1989 Fort Calhoun exercise: "The teams were not given specific enough route instructions and traveled in the plume longer than necessary." (Specifically one of the teams carrying samples traveled along the plume center line instead of exiting the plume on the perpendicular, which they could have/should have been instructed to do so.)

FIELD MONITORING TEAMS

<u>Objective</u>	<u>Comment</u>
2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions. (See Objective 34 for 24-hour, continuous staffing function within a six-year time frame). (1)	Both Teams to mobilize in real time.
4. Demonstrate the ability to communicate with all appropriate location, organizations and field personnel. (5)	NONE
6. Demonstrate the ability to continuously monitor and control emergency worker exposure. (20)	NONE
7. Demonstrate the appropriate equipment and procedures for determining field radiation measurements. (7)	NONE
8. Demonstrate the appropriate equipment and procedures for measurement of airborne radioiodine concentrations as low as $10^{-7}$ microcurie/cc in the presence of noble gases. (8)	NONE
9. Demonstrate the ability to obtain samples of particulate activity in the airborne plume and promptly perform laboratory analyses. (New Objectives)	Question this objective.
16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases. (21, 22)	Teams to receive KI instructions from the RERT Coordinator. Will respond/demonstrate as instructed.

27. Demonstrate the appropriate use of equipment and procedures for collection and transport of samples of vegetation, food crops, milk, meat, poultry, water and animal feeds (indigenous to the area and stored). (9)

The State is doing a partial Ingestion and thus will not have monitoring teams in the field for ingestion purposes, per se. There will be a demonstration of: transporting certain samples from plume (early phase) monitoring, to Oakdale; and a demonstration of: equipment/procedures for collection of samples from early phase plume monitoring.

34. Demonstrate the ability to maintain staffing on a continuous 24-hour basis by an actual shift change. (2)

Both Field Teams will shift change.

NOTES: An ARCA from the July, 1989 Fort Calhoun Exercise indicates that both teams will demonstrate primary and backup radio communication at the next exercise. This is scheduled for DAEC, 1990.

HOST COUNTY OBJECTIVES (Buchanan and Scott Counties)

<u>Objective</u>	<u>Comment</u>
2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions.	As specified in local plans, staff should be fully mobilized. Functions such as "Security" should be represented by that position responsible for that function- the entire Security force need not be present.  See Objective 34- 24-hour Staffing
3. Demonstrate the ability to direct, coordinate and control emergency activities.	Direction, command and control provided by State EOC.
4. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.	NONE
6. Demonstrate the ability to continuously monitor and control emergency worker exposure.	Applicable to rad monitor and decon personnel. Personnel must know exposure limits and record dosimetry readings every 30 minutes.
21. Demonstrate the adequacy of procedures, facilities, equipment and personnel for the registration, radiological monitoring and decontamination of evacuees.	1/3 of county rad monitor personnel should be present to conduct demonstration. Monitoring techniques as specified in local plans. Buchanan Co. (MHI) and Scott Co. (No. Scott HS) will be demonstrated separate from the exercise scenario. Generic credit for demonstration of this objective with Duane Arnold to be given to meet Scott County's objective requirements for Quad Cities NPS. (See objectives 2 and 34.)
22. Demonstrate the adequacy of facilities, equipment and personnel for congregate care of evacuees.	Adequacy of facilities, equipment, and personnel utilized for congregate care evaluated through general observation during facility demonstration. Buchanan Co. (MHI) and Scott Co. (No. Scott HS) will be demonstrated separate from the exercise scenario. Evaluator may tour one or more other supporting facilities not demonstrated. Generic credit for demonstration of this objective with Duane Arnold will be given to meet Scott County's objective requirements for Quad Cities NPS.

34. Demonstrate the ability to maintain staffing on a continuous 24-hour basis by an actual shift change.

Actual shift turnover of emergency personnel must be conducted by personnel in positions which require 24-hour staffing. Alternates must act in positions for approximately 2 hours, demonstrating the ability to make decisions appropriate to the response effort. Personnel must log out/log in to document shift change.