Commonwealth Edison Company
1400 Opus Place
Downers Grove, IL 60515-5701

ComEd

August 7, 1998

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Braidwood Station, Units 1 and 2
Facility Operating Licenses NPF-72 and NPF-77
NRC Docket Numbers 50-456 and 50-457

Byron Station, Units 1 and 2
Facility Operating Licenses NPF-37 and NPF-66
NRC Docket Numbers 50-454 and 50-455

Dresden Nuclear Power Station, Units 1, 2, and 3
Facility Operating Licenses DPR-2, DPR-19 and DPR-25
NRC Docket Numbers 50-10, 50-237 and 50-249

LaSalle County Station, Units 1 and 2
Facility Operating Licenses NPF-11 and NPF-18
NRC Docket Numbers 50-373 and 50-374

Quad Cities Nuclear Power Station, Units 1 and 2
Facility Operating Licenses DPR-29 and DPR-30
NRC Docket Numbers 50-254 and 50-265

Zion Nuclear Power Station, Units 1 and 2
Facility Operating Licenses DPR-39 and DPR-48
NRC Docket Numbers 50-295 and 50-304

Subject: Updated Proposal to Consolidate Near-Site Emergency Operations Facilities into a Single Central Emergency Operations Facility

References: 1) "Meeting on March 26, 1998, with Commonwealth Edison Company on Central Emergency Operations Facility," United States Nuclear Regulatory Commission meeting notes, dated May 29, 1998.

2) "Commonwealth Edison Submittal: Proposal to Consolidate Near Site Emergency Operations Facilities (EOFs) into a Single Central EOF," ComEd letter, John C. Brons to United States Nuclear Regulatory Commission, dated January 5, 1995.
3) "Commonwealth Edison Response to: USNRC Request for Additional Information regarding the Central Emergency Operations Facility," ComEd letter, John C. Brons to United States Nuclear Regulatory Commission, dated July 11,1996.
4) "Commonwealth Edison Response to: USNRC Request for Additional Information dated 12/17/96 regarding the Central Emergency Operations Facility," ComEd letter, John C. Brons to United States Nuclear Regulatory Commission, dated February 27,1997.
5) "Summary of Interim Emergency Operations Facility Response Drills through May 31, 1998," ComEd letter, R.M. Krich to United States Nuclear Regulatory Commission, dated July 16, 1998.

On March 26, 1998, Commonwealth Edison (ComEd) Company met with the Nuclear Regulatory Commission (NRC) to discuss the proposed consolidation of the Emergency Operations Facilities (EOFs) into a single Central EOF (CEOF). As requested, ComEd is submitting this letter to document the completion of ComEd's action items from the meeting as described in reference 1.

The management of the ComEd Nuclear Generation Group agrees with the advantages of a CEOF and continues to support the pursuit of NRC approval of this proposal to consolidate the near-site EOFs into a CEOF.

ComEd has reviewed the earlier request for a central EOF made by Duke Power Company and the subsequent response by the NRC to determine what, if any, effect there is on ComEd's request. Attachment A contains the results of ComEd's review, which concludes that the reasons the Duke Power Company proposal was denied will not impact ComEd's proposal.

ComEd has compared the capabilities of the near site EOFs to the CEOF. The review concluded that the capabilities provided in the CEOF are equivalent or better than those in the near-site EOFs. The comparison is provided in Attachment B.

ComEd commits to staffing the CEOF within 60 minutes of the declaration of an "Alert" or higher emergency classification. This commitment will be docketed in a

Generating Station Emergency Plan (GSEP) revision, which will also include revisions to implement the use of a CEOF. This GSEP revision will be submitted within 6 months following NRC approval of ComEd's use of a CEOF in lieu of the near-site EOFs.

ComEd has reviewed its previous submittals on the CEOF. Attachments C through G identify changes from previous submittals. Specific items that have been addressed in these attachments include: (1) the impact of ComEd's decision to cease operation of the Zion Nuclear Power Station; (2) changes made to the communications systems (both computer and voice communications); (3) availability of backup power; and (4) the results of the special drills that have been conducted.

ComEd conducted a real-time drive-in staffing drill for the CEOF on May 14, 1998. The results of this drill were submitted to the NRC in reference 5. Another real-time drive-in drill was conducted on August 4, 1998; the results of that drill will be documented in a separate submittal. ComEd plans to conduct another real-time drive-in drill later in 1998.

ComEd commits to conduct unannounced, real-time off-hour drive-in drills every 6 months, until three successive drills have been successfully completed. Upon completion of three consecutive successful drills, ComEd will conduct these drills once every six years, consistent with the guidance in NUREG-0654. The results of these drills will be provided to the NRC in a letter following the completion of each drill. The letter will include the results of the drive-in drill, as well as the results of the augmentation phone drills in the preceding time period and ComEd's actions to address any deficiencies.

ComEd's assessment of the potential impact on NRC emergency response capability as a result of implementing the CEOF is contained in Attachment H. ComEd concludes that the change to a CEOF will result in an overall improvement of NRC response capability.

If you have any questions or concerns, please contact K. A. Ainger at (630) 663-7350.

Respectfully,

K. A. Ainger for

R. M. Krich
Vice President - Regulatory Services

Attachments:

A) Comparative Review of ComEd's Request for a Central Emergency Operations Facility to Duke Power Company
B) Comparison of Capabilities Between the Near-Site EOFs and the Corporate Emergency Operations Facility
C) Updated Cost Analysis
D) Summary of Changes in the Communications Technology Area
E) Back-up Power Supply Provisions to the Central Emergency Operations Facility
F) Results and Corrective Actions Taken in Response to Corporate Emergency Operations Facility Staffing Drills
G) Summary of Changes from Previous Submittals
H) Potential Impact on Nuclear Regulatory Commission Emergency Response Due to Central Emergency Operations Facility

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector, Braidwood Station
NRC Senior Resident Inspector, Byron Station
NRC Senior Resident Inspector, Dresden Nuclear Power Station
NRC Senior Resident Inspector, LaSalle County Station
NRC Senior Resident Inspector, Quad Cities Nuclear Power Station

bcc: Illinois Department of Nuclear Safety
Illinois Emergency Management Agency
Iowa Emergency Management Division
Wisconsin Emergency Management
S. Richards, Project Director, Project Directorate III-2, NRC/NRR
G. Dick, Senior Project Manager, Project Directorate III-2, NRC/NRR
M. Vonk, Emergency Preparedness Director
L. Holden, Nuclear Licensing Administrator

ATTACHMENT A

Comparative Review of ComEd's Request for a Central Emergency Operations Facility to Duke Power Company

During the meeting on March 26, 1998, the NRC requested ComEd to review the request for a central EOF made by Duke Power Company, and the subsequent response by the NRC to determine what, if any, affect there is on ComEd's request.

In Duke Power Company's case, the NRC believed that accident management from a distant Emergency Operations Facility (EOF) would not be able to provide adequate response for the following reasons:

- the EOF staff would not be able to interact directly with their Federal, State, and local counterparts
- the utility emergency response manager would not be in face-to-face communication with the NRC Director of Site Operations (DSO)
- the utility emergency manager would not be able to go directly to the plant or State Forward Command Post.

For ComEd, the use of a Central EOF (CEOF) provides the optimum response in that it:

- can be staffed within 60 minutes with qualified individuals,
- reduces the impact on nuclear station resources,
- has no detrimental effect on State or local agency response activities,
- does not reduce the effectiveness of the EOF response functions.

ComEd differs from Duke Power Company in the following ways:

- Direct face-to-face interactions with State and local counterparts at the EOF have never been a part of ComEd's emergency response. State and county decision-makers have not and do not respond to an EOF. The State agencies only send individuals to perform liaison functions. The local agencies do not send any one to the EOF.
- ComEd's emergency response philosophy does not include sending a utility manager from the EOF to the site. Plant managers, trained and qualified as Technical Support Center Directors, direct on-site activities.
- ComEd emergency response philosophy has not and would not relocate the utility emergency response director (Manager of Emergency Operations) to the State Forward Command Post. ComEd does not send anyone to the State Forward Command Post. ComEd does send a utility liaison to the State Emergency Operations Center.
- In contrast to States impacted by Duke Power Company facilities, the States impacted by ComEd direct their activities from facilities located far from any of the sites. Illinois, Iowa, and Wisconsin, respectively, direct their responses from their Emergency Operations Centers in Springfield, Des Moines, and Madison. These cities are in excess of 100 miles from the nearest ComEd EOF. All communications are

conducted via voice and data links and would remain so following adoption of the CEOF.

- In addition, the Federal Radiological Emergency Response Plan (FREP) has undergone significant changes since the Duke Power Company decision. Federal response will be coordinated through the Federal Radiological Management and Assessment Center (FRMAC) and the Joint Operations Center (JOC). Since space is not adequate, nor is it required to be, to support co-location of these facilities at the near-site EOFs, the EOF staff would not be able to interact directly with their federal counterparts. Communications would be conducted via voice and data links.

ComEd's emergency response philosophy described above has been successfully demonstrated over many years in numerous exercises.

ComEd previously provided a detailed comparison to Duke Power Company in response to Question 10 of the first RAI (reference 3).

In conclusion, the reasons the 1984 Duke Power Company proposal was denied will not impact ComEd's proposed CEOF concept. The longstanding emergency response philosophy of ComEd has proven effective and is in concert with affected State and local agency responses, all of which will be carried over into the proposed CEOF concept.

ATTACHMENT B

Comparison of Capabilities Between the Near-Site Emergency Operations Facilities and the Corporate Emergency Operations Facility

The layout of the Corporate EOF is physically different than the near-site EOFs. The primary difference is that the Corporate EOF is compartmentalized by discipline or function while the near-site EOFs contain an open work area for the entire support staff. In the Corporate EOF, there is an Executive Management Center (EMC), an Advisory Support Room, a Protective Measures Room, a Technical Support Room, and a Public Information Room. In addition, two meeting rooms adjacent to the Corporate EOF have been provided with telephone lines. One of these meeting rooms is designated for use by NRC and Federal responders. The other meeting room is designated for use by State responders. There is more square footage provided in the Corporate EOF than in a near-site EOF.

Personnel responding to the Corporate EOF are qualified the same, perform the same functions, and use the same procedures as those who would respond to a near site EOF. The equipment and resources available at the Corporate EOF are equivalent or better than those available at a near-site EOF.

Federal Telecommunication System (FTS) circuits have been installed by the NRC at the existing near-site EOFs. Presently, there are no FTS circuits at the Corporate EOF. ComEd will coordinate installation of the FTS circuits with the NRC.

Following installation of the FTS circuits, or equivalent, there will be no functional difference between the existing near-site EOFs and the Corporate EOF.

NRC evaluation of the Corporate EOF in recent exercises and demonstrations as a back-up EOF have concluded that the proposed CEOF would function in an acceptable manner.

ATTACHMENT C

Updated Cost Analysis

The updated cost analysis takes into consideration the following:

- the potential impact on savings based on the future closure of the Zion near-site EOF because of the station's permanently shutdown status,
- changes made to communication systems (voice and data) since the original submittal, and
- the person-hour savings which would result from the ability to reduce the number of individuals that would need to be trained annually if ComEd were able to form response teams for the full EOF staffing (not just for the reduced Corporate EOF staff).

The results of the cost benefit analysis for ComEd's ability to utilize a single Central EOF in lieu of the near site EOFs indicates an estimated one-time saving (or re-deployment of ComEd assets) of $108,500 and an estimated annual pre-tax savings of $359,168.* If Zion is excluded from these values, the one-time saving would be $78,000 and the annual savings would be $342,817.* The table entitled "Central EOF: Cost Analysis," at the end of this Attachment, provides the values used for each facility.

Future savings will be achieved when desired or necessary upgrades of the near site EOFs or their equipment are made. Upgrades such as the change out of computer systems or technological obsolescence of equipment are often necessary and are dictated by changes made to equipment at the stations. In these cases, ComEd will save approximately 80% of the costs of such equipment changes. As an example, equipment changes that presently cost $100,000 to make will be reduced to $20,000. In addition, changes can be made in a shorter period. This will reduce the time in which response capabilities may be degraded by such modifications. Labor cost to manage and complete future upgrades will also be reduced by a similar portion. Examples of such potential future savings include:

- The Nuclear Accident Reporting System (NARS) is aging and will need to be replaced in the next decade. While the replacement system has not been designed, clearly four fewer locations would be less costly. Based on the cost to install a new NARS site with the current system, ComEd can avoid (at a minimum) $10,000 per site or $40,000.
- Personal computers and printers usually need to be replaced about every five years due to technical obsolescence. This averages out to about $10,000 per year of avoided costs if only one EOF needs to be upgraded.

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* *Includes an estimated reduction of $120,000/year for ComEd microwave maintenance costs, $120,000/year for the fiber optic network maintenance costs, and $28,000 for an estimated 100 person-hour/year savings based on reduced training requirements once Full Staff Team response is introduced. These values are not reflected on the Table.*

ATTACHMENT C

Central EOF: Cost Analysis+

	Dixon	Mazon	Morrison	Zion [Note 6]
One-Time Saving				
Excess A/V Equipment	$20,000 (estimate)	$20,000 (estimate)	$20,000 (estimate)	$20,000 (estimate)
Excess Computer Equipment [Note 1]	$6000 (estimate)	$6000 (estimate)	$6000 (estimate)	$10,500 (estimate)
Annual Savings				
Reduced Communications Surveillance (person-day x $250) [Note 2]	$2125/year (8.5 person-day/year)	$2125/year (8.5 person-day/year)	$2125/year (8.5 person-day/year)	$2125/year (8.5 person-day/year)
Clerical Time [Note 3]	$5550/year	$3120/year	$3120/year	$1170/year
Telephone Service [Note 4]	$7944/year ($662/mo.)	$23,112/year ($1926/mo.)	$13,884/year ($1157/mo.)	$8,448/year ($704/mo.) [Note 5]
NARS [Note 5]	$2,724/year ($227/mo.)	$1,392/year ($116/mo.)	$1,740/year ($145/mo.)	$1,392/year ($116/mo.)
State hotlines [Note 5]			$5,856/year ($488/mo.)	$3,216/year ($268/mo.)

Notes:

1. Computer equipment estimate is based on $1500 per workstation.
2. Based on $50,000 annual salary with $15,000 burden.
3. Based on estimated $15/hour pay (includes burden). Time estimates provided by stations in 1994 (Braidwood estimate not available).
4. Based on actual monthly telephone bills of the EOF less actual monthly telephone bill of Highland Park JPIC.
5. Based on actual monthly telephone bills.
6. Based on the permanently shutdown and defueled status of Zion Station, the Zion EOF will likely be deleted from the GSEP in 1999.

\+ *Values represent pre-tax estimated current values and are rounded to the nearest whole dollar.*

ATTACHMENT D

Summary of Changes in the Communications Technology Area

Over time, ComEd has changed the voice and data communications between the Stations and the EOFs to more current technology. For instance, when the EOFs were first built, remote terminals connected to the stations' process computers were common. Since that time, ComEd installed a mini-computer at each EOF with several terminals. This allowed for several users to see and monitor the plant data at the EOF. Recently, ComEd installed a Local Area Network (LAN) with personal computers (PCs) at all of the EOFs, including the Corporate EOF. Another example of changing technology is data communications between the EOF and the station. The remote terminals installed in the EOFs when they were first built were connected to the station process computer via 300 bits per second data lines, one modem for each terminal. The mini-computer in the EOF was connected to the station via four 9600 bits per second modems. Currently, the EOFs, including the Corporate EOF, are connected using 1.54 million bits per second data lines carried on ComEd owned fiber optic lines. As technology changes, so must the data and voice communications. Each of these changes made an EOF more usable and reliable.

The communication and data systems that are provided in the Corporate EOF are equal or better than those provided in the near site EOFs. Voice communications are provided over a diverse and extensive communication network including commercial lines carried by local telephone company serving offices, station extensions carried by the ComEd-owned fiber optic network, and station extensions and local lines from unaffected communities carried by the ComEd-owned microwave system.

Data communications are provided via ComEd's Wide Area Network (WAN) and Local Area Network (LAN) systems. Data is transmitted from each of the sites' process computers to the WAN, where it can be accessed by numerous terminals located throughout the Corporate EOF. The plant parameter data available to the site is therefore available to the Corporate EOF, just as it is available to the near site EOFs. Data is communicated over a ComEd-owned fiber optic network, which is designed as a counter rotating double ring, which means that a single break in the fiber optic network will not interrupt data communications. The data acquisition speed at the Corporate EOF is much higher than at the near-site EOFs because the data circuit is shared with the rest of the ComEd network at Downers Grove.

ATTACHMENT E

Back-up Power Supply Provisions to the Central Emergency Operations Facility

The Corporate EOF is located in Executive Towers III (ETW III) in Downers Grove, Illinois. There are two 12KV feeds to the building. These feeds are switched through a manual switch. Feed W4521 is the normal feed and is supplied from Transmission Sub-Station (TSS) 145 (York Center). Feed W578 is the secondary feed and is supplied from Transmission Distribution Center (TDC) 557 (Butterfield). The York Center TSS is powered from 138KV lines 10301 and 10302. The configuration of the TSS is such that the 12KV bus that supplies feeder W4521 has two feeds – one from line 10301 and one from line 10302. Loss of either line should not result in an interruption to the 12KV bus that supplies feeder W4521. The Butterfield TDC is powered from 138KV lines 10301 and 10302. The configuration of the TSS is such that the 12KV bus that supplies feeder W578 is normally fed from line 10302. Loss of line 10302 will result in a momentary interruption (10 seconds) to the bus that supplies feeder W578 until a 12KV bus tie autocloses to restore the bus.

In addition, the switching at ETW III has been modified to allow connection of a portable diesel generator with step-up transformer.

The Corporate EOF has DC lighting and uninterruptible power supplies (UPS) for critical equipment to sustain operation should manual switching operations be necessary. Equipment on UPSs include the dose assessment computer, field team radio, and special phone circuits. Phones supplied off of the normal ComEd phone systems (microwave, fiber optic communication network, or Private Branch Exchange (PBX)) are provided with their own back-up power supplies. The PBX has approximately a 6-hour battery backup supply. Both the ComEd microwave and fiber optic systems have approximately 12-hour battery backup supplies. There are also phones that bypass the building PBX. The Ameritech phone network powers these phones.

ATTACHMENT F

Results and Corrective Actions Taken in Response to Corporate Emergency Operations Facility Staffing Drills

Reference 1: "Commonwealth Edison Response to: USNRC Request for Additional Information dated 12/17/96 regarding the Central Emergency Operations Facility," ComEd letter, John C. Brons to United States Nuclear Regulatory Commission, dated February 27,1997.

ComEd had previously installed an automated call out system to notify and activate the Corporate Emergency Response Organization, called the Voice Response Unit (VRU). While this system worked adequately, in July of 1997, ComEd decided, for economic reasons, to contract the call-out process with Community Alert Network (CAN). When activated, the CAN system sequentially calls personnel, either at work during working hours or at home during off-hours. Calls are prioritized by distance from the facility being activated. See Attachment G for more discussion on the CAN system.

Initial implementation of the CAN system was successful, but monthly drills during the summer of 1997 resulted in several drills indicating a staffing time slightly in excess of 60 minutes for the Interim EOF staff. This staffing delay was not associated with the call-out system but rather was generally due to a lack of qualified health physics personnel filling the role of Protective Measures Director. Additional qualified personnel were identified and trained to fill this position.

Late in 1997, communication problems were noted between the Bulk Power Operations (now known as Electrical Operations [EO]) dispatcher (the designated ComEd position for initiating the call-out process) and the CAN staff which led to incorrect facilities being activated. Since the EO dispatcher could activate any of the ComEd off-site nuclear emergency response facilities, the dispatcher had to interpret which Emergency Response Organization (ERO) and facility was to be activated from the Nuclear Accident Reporting System notification, and then verbally communicate this information to the CAN staff. Both of these communications permitted possible interpretation errors. This resulted in two drills where confusion existed as to whether the near-site EOF was to be activated or the Corporate EOF was to be activated. The activation form was modified in an attempt to clarify which ERO and facility were to be activated. Additional training was provided to involved ComEd and CAN personnel. However, when the EO dispatcher simulated activation of the Byron near-site EOF instead of the Corporate EOF during the February 1998 drill, this indicated that the problem had not been corrected. Subsequent to the February 1998 drill, the EO dispatcher was limited to activating only the Interim EOF staff

that responds to the Corporate EOF. The Nuclear Duty Officer through use of a separate password, is still authorized to activate any other required facility, thereby maintaining the previous flexibility in facility activation. There have been no similar problems involving facility activation in the 15 drills conducted since this change was implemented.

Following the February 1998 drill, the conduct of drills was accelerated to a weekly frequency in an effort to verify the effectiveness of corrective actions and to provide more experience to the individuals involved in the call-out process. Seven CAN drills were conducted at this weekly interval following the change. Four of these phone drills resulted in an estimated facility staffing of less than 50 minutes. The other three resulted in staffing times ranging from 67 to 84 minutes. In all cases, the results were due to the inability to staff a single position. The unfilled position varied with each drill. No specific corrective action could be identified that would remedy the problem. In order to further improve staffing time and response effectiveness, ComEd recently revised its Interim EOF staffing response strategy to that of a dedicated response team. A description of the change is provided in Attachment G.

Weekly off-hours drills are being continued to validate the new activation system. Four phone drills were conducted between April 13, and May 14, 1998. These drills were conducted on weekday evenings between 1800 and 2100. Three of these drills resulted in Interim EOF staffing times of 50 minutes or less. The results of the fourth drill were indeterminate because a discrepancy was identified between the recorded time of the responders voice message and the time he claimed he left the message. The drill was indeterminate because that individual's response time was indeterminate. The possibility of this recurring will be reviewed in future drills, but to date this has been the only occurrence.

In accordance with ComEd's commitment to conduct actual staffing (drive-in) drills at semi-annual intervals until three successful drills are demonstrated, this new activation system was used to conduct an Interim EOF staffing drill on May 14, 1998 at 1900. Successful staffing was attained in 40 minutes from the classification time. Further details of the results of this drill and the previous 6-months of phone drills are contained in reference 1.

In 1997 and 1998, ComEd conducted multi-station drills based on postulated summer grid reliability events. The results of these drills indicated the capability of the facility to coordinate and control activities for multiple site events.

ATTACHMENT G

Summary of Changes from Previous Submittals

Augmentation Call-Out System Changes

In July of 1997, ComEd decided, for economic reasons, to contract the call-out process with the Community Alert Network (CAN) call-out system in place of the previously installed Voice Response Unit (VRU). When activated, the CAN system sequentially calls personnel, either at work during working hours or at home during off-hours. Calls are prioritized by distance from the facility being activated.

CAN has the capability to handle 100 calls/minute using up to 200 phone lines. CAN functions from two locations (Reno, Nevada and Albany, New York). CAN has long distance service from more than one long distance carrier at both of their locations. In addition, CAN has back-up power generation capacity at both locations which can provide for all of the power needs for the CAN office. The database of responders' names and telephone numbers and the call out program is located at both locations.

ComEd's Emergency Team Response Strategy

On April 13, 1998, ComEd implemented a dedicated response team approach to staff the Corporate EOF. To align with the Nuclear Generation Group (NGG) expectations of accountability and improved performance, the decision was made to implement a team response concept for the Interim EOF. Having dedicated teams on call allows for specific accountability for emergency response. It also provides for improved performance since teams train, drill and exercise as units. Minimum Staff team members are selected based on living within 60 minutes of the Corporate EOF.

Personnel are assigned to one of four rotating teams. One-week duty periods extending from Monday 0800 to Monday 0800 are assigned to each team. All team personnel are assigned pagers. Team members who are on duty are expected to meet Fitness-for-Duty and proximity requirements (Minimum Staff positions are required to remain within 60 minutes of the CEOF). If a duty Team member needs to be outside the 60 minutes response expectation, they must identify a qualified individual to assume their duty responsibilities. In addition to the duty team, a back-up team is identified in the rotation. Both teams, duty and back-up, are required to respond to the Corporate EOF for a real activation or a drive-in drill. For phone-in drill purposes, both teams are to call-in with an estimated response time to the Corporate EOF. The above would apply to CEOF activation as well. Specific teams have been assigned to participate in each exercise.

The Electric Operation (EO) dispatcher, as was done in the previous activation methods, initiates activation of the team response. When the EO dispatcher

receives notification of an emergency classification of Alert or higher, he activates the pager system, rather than a phone call-out system. Response team personnel are responsible for correctly responding to the page. The Nuclear Duty Officer (NDO) also receives the page. In addition, by procedure, the EO dispatcher notifies the NDO. This ensures that the NDO is aware of the event and that the proper facility was activated. In order to provide additional confidence that the facility is activated, the NDO can activate the pager system independent of the EO dispatcher.

ComEd has provided an additional back-up capability should the pager system fail. The NDO and two Emergency Preparedness Department (EPD) personnel (not assigned to the response team on duty) maintain current telephone directories for all qualified Emergency Responders. If necessary, the NDO pages the two EPD personnel (using a different pager system, operated by a separate company from the team responder pager system) or calls them by phone, and instructs them to initiate staffing by calling emergency responders using the phone directory. The phone directory is prioritized by off-hours proximity to the Corporate EOF and each of the near-site EOFs.

ComEd still uses the CAN system to staff the near-site EOFs or to augment the Interim EOF staff at the Corporate EOF to a full EOF staff. The NDO is responsible for activating the CAN system.

ComEd would use the same team concept for staffing the Central EOF.

State Forward Command Posts

The following State Forward Command Posts (SFCPs) have been relocated:

Station	SFCP Location	Distance to Site (miles)
Quad Cities	Morrison, IL	20
Zion	Lake County Community Coordination Center (CCC) Libertyville, IL	15
Byron	Rochelle IDNS Office Rochelle, IL	19

Corporate Emergency Operations Facility

The floor plan essentially remains unchanged from previous submittals with the exception that the square footage of the State responder area has been reduced from 870 square feet to 400 square feet. This is because Room 512 has been designated as a computer lab and is no longer considered to be part of the Corporate EOF.

ATTACHMENT H

Potential Impact on Nuclear Regulatory Commission Emergency Response Due to Central Emergency Operations Facility

The change to a Central EOF (CEOF) for ComEd will result in an overall improvement of incident response capability for the NRC based on an improvement in response time for the Director of Site Operations and his key support staff. The response time to the CEOF, for the majority of the NRC team members, including the Director of Site Operations, will be reduced. The response time for the team members going directly to the site or the Press Information Center will remain unchanged.

As previously discussed with the NRC, ComEd will maintain near-site facilities for NRC response. The proposed facilities would be co-located with the Joint Public Information Centers. ComEd personnel will be available to interface with the NRC near-site response team.

AUG 10 1992

Docket Nos. 50-237;
50-249; 50-254; 50-265;
50-295; 50-304; 50-373;
50-374; 50-454; 50-455;
50-456; 50-457

Commonwealth Edison Company
ATTN: Mr. Cordell Reed
Senior Vice President
Opus West III
1400 Opus Place
Downers Grove, IL 60515

Dear Mr. Reed:

This refers to the inspection conducted by Mr. T. Ploski and others of this office on July 27-29, 1992. The inspection included a review of authorized activities for your corporate emergency preparedness department. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed report.

Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

During this inspection, certain of your activities appeared to be in violation of NRC requirements. However, as described in the enclosed inspection report, you identified the violation. Therefore, the violation will not be subject to enforcement action because your efforts in identifying and correcting the violation meet the criteria specified in Section VII.B of the "General Statement of Policy and Procedures for NRC Enforcement Actions," (Enforcement Policy, 10 CFR Part 2, Appendix C (1992)).

In addition, we have identified a significant issue concerning your ability to activate your Emergency Operation Facilities (EOF) in a timely manner. Your most recent augmentation drills indicate that minimum staffing would take at least two to three hours after your staff members were notified and complete staff augmentation would take as long as four hours. NRC regulations require timely augmentation of response capabilities. NUREG-0737, Supplement 1, specifies that facilities shall have as a goal emergency activation times for their EOF within the guidelines of Table 2 of the NUREG. The NRC's position is that an EOF should be staffed in about one hour after the decision to activate the facility is made. Supplement 1 to the NUREG also states that "reasonable exceptions" to this goal "should be justified and will be considered by NRC staff". The NRC is not aware of justification for staff augmentation times indicated by your recent drills. Therefore, your current emergency preparedness program does not appear to adequately meet the intent of the regulations pertaining to timeliness. We request a written response

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CPB

Attachment 6

winthin 30 days describing your actions to address this inadequacy in your emergency preparedness program.

Your response should also include a description of how the results of your corrective actions will be assessed in accordance with 10 CFR 50.47(b)(14) which requires you to conduct exercises to evaluate major portions of your emergency response capabilities.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter, the enclosed inspection report, and your response to this letter will be placed in the NRC Public Document Room.

The response directed by this letter is not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

ORIGINAL SIGNED BY CHARLES E NORELIUS

Charles E. Norelius, Director
Division of Radiation Safety
and Safeguards

Enclosure: Inspection Report
Nos. 50-237/92022(DRSS); 50-249/92022(DRSS);
50-254/92019(DRSS); 50-265/92019(DRSS);
50-295/92020(DRSS); 50-304/92020(DRSS);
50-373/92017(DRSS); 50-374/92017(DRSS);
50-454/92014(DRSS); 50-455/92014(DRSS);
50-456/92016(DRSS); 50-457/92016(DRSS)

See Attached Distribution:

RIII	RIII	RIII	RIII	RIII	NRR	RIII
Ploski/jp	Simons	Cox	Knop	Farber	Erickson	McCormick-Barger
RIII	RIII			9/16/92		
Pederson	Norelius					
08//0/92						

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I. Johnson, CECo, Emergency Preparedness Director
D. Bement, FEMA, RV
R. Bissell, FEMA, RVII

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report Nos. 50-237/92022(DRSS); 50-249/92022(DRSS)
50-254/92019(DRSS); 50-265/92019(DRSS)
50-295/92020(DRSS); 50-304/92020(DRSS)
50-373/92017(DRSS); 50-374/92017(DRSS)
50-454/92014(DRSS); 50-455/92014(DRSS)
50-456/92016(DRSS); 50-457/92016(DRSS)

Docket Nos. 50-237; 50-249; 50-254; 50-265; 50-295; 50-304; 50-373; 50-374; 50-454; 50-455; 50-456; 50-457

License Nos. DPR-19; DPR-25; DPR-29; DPR-30; DPR-39; DPR-48; NPF-11; NPF-18; NPF-37; NPF-66; NPF-72; NPF-77

Licensee: Commonwealth Edison Company
Opus West III
1400 Opus Place
Downers Grove, IL 60515

Facility Name: Nuclear Safety and Emergency Preparedness Department

Inspection At: Chicago, Illinois

Inspection Conducted: July 27-29, 1992

Inspectors: T. Ploski — Date

H. Simons — Date

L. Cox — Date

Approved By: J. W. McCormick-Barger, Chief — Date
Emergency Preparedness and
Non-Power Reactor Section

Inspection Summary

Inspection on July 27-29, 1992 (Report Nos. 50-237/92022(DRSS); 50-249/92022(DRSS); 50-254/92019(DRSS); 50-265/92019(DRSS); 50-295/92020(DRSS); 50-304/92020(DRSS); 50-373/92017(DRSS); 50-374/92017(DRSS); 50-454/92014(DRSS); 50-455/92014(DRSS); 50-456/92016(DRSS); 50-457/92016(DRSS))
Areas Inspected: Routine, announced inspection of the activities of the licensee's corporate Emergency Preparedness (EP) staff (IP 82701) by three NRC inspectors.

Results: One non-cited violation was identified related to the corporate EP training program (Section 3.d). A significant issue was identified concerning the licensee's ability to activate their Emergency Operation Facilities (EOF) in a timely manner (Section 3.c). Recent augmentation drills indicate that minimum staffing would take at least two to three hours after staff members were notified and complete staff augmentation would take as long as four hours.

Other aspects of the emergency preparedness program which the corporate staff are responsible for remained well maintained.

DETAILS

1. Persons Contacted

a. Licensee Representatives Contacted

I. Johnson, Emergency Preparedness (EP) Director
L. Holden, EP Supervisor
T. Blackmon, EP Supervisor
M. Pavey, Emergency Planner
K. Steele, EP Instructor
D. Silcox, EP Instructor

b. Others Contacted

J. Bradley, Murray and Trettel, Inc.

The above licensee representatives attended the NRC exit interview on July 29, 1992. The inspectors also contacted other licensee personnel during the inspection.

2. Licensee Action on Inspection Followup Items (IP 82701)

(Closed) Inspection Followup Item No. 454/92004-01 and 455/92004-01: The licensee failed to revise the emergency implementing procedure pertaining to emergency action levels following a revision to the Byron Annex to the Generating Stations Emergency Plan (GSEP).

The licensee had completed the corrective actions on this violation. An administrative procedure for updating and revising the station annexes to the GSEP had been written and approved. One corporate emergency planning specialist was responsible for coordinating annex revisions. The Byron Annex was revised to be consistent with the GSEP. This item is closed.

3. Operational Status of the Emergency Preparedness (EP) Program (IP 82701)

a. Emergency Plan and Implementing Procedures

Several Corporate Emergency Plan Implementing Procedures (CEPIPs) were reviewed. All CEPIPs had been revised following the implementation of Revision 7 of the GSEP. The CEPIPs were well structured into position specific instructions for use during an emergency.

A review of 1992 CEPIP revisions indicated that, with one minor exception, they had been submitted to the NRC within 30 days of their final approvals, per the requirements of 10 CFR 50.4 and 10 CFR 50, Appendix E, Paragraph V.

No violations or deviations were identified.

b. Emergency Response Facility, Equipment and Supplies

The Zion Station's Backup Emergency Operations Facility (BEOF) was located in the licensee's downtown Chicago offices. Records review and a tour of this facility indicated that it has been maintained in an adequate state of operational readiness. The licensee planned to request NRC approval in order to change the Zion Station's BEOF to the Corporate EOF, which was constructed in 1991 at the licensee's newer corporate offices in Downers Grove, Illinois.

The public notification systems for the six stations' plume pathway Emergency Planning Zones (EPZs) were discussed with cognizant staff and appeared to be adequate. Outdoor sirens were the principal means of alerting the public within the EPZs while route alerting by local officials would be utilized for rural portions of some EPZs.

A contractor had performed semi-annual preventive maintenance and emergency maintenance on the outdoor siren system, including the equipment which the local officials used to activate the system.

The contractor had begun installing telemetry equipment on most of the 396 sirens in the six stations' EPZs as another means to better assure siren system operability. The telemetry installation project was scheduled for completion by 1993. The licensee indicated that its contractor would perform daily telemetry checks on each siren.

The licensee recently developed reference documents for each EPZ's siren system. These documents contained basic information on each siren, including maps illustrating each siren's zone of coverage. Controlled copies of these reference documents were provided to local officials for use in their Emergency Operations Centers.

No violations or deviations were identified.

c. Organization and Management Control

The Corporate EP Director and her staff reported to the Senior Vice President - Nuclear Operations through the General Manager of the Nuclear Safety and Emergency Preparedness Department. The corporate EP staff's responsibilities were as described in Chapter 8 of the GSEP. Although there were a number of personnel changes in recent years, the corporate EP staff's size and internal organization remained largely unchanged since mid-1988.

The licensee has increased the number of its corporate staff having responsibilities for interfacing with state and local officials in a variety of matters, including the maintenance of counties' radiological emergency response plans and procedures.

and the conduct of related training. Corporate staff previously utilized contractors to a great extent on such offsite EP matters.

The licensee utilized several formal mechanisms to share information between corporate and station-based EP staff. Counterpart meetings involving corporate EP staff and the stations' EP coordinators and instructors had occurred several times per year for over four years. Since the late 1980s, corporate staff had issued several categories of "SALP 1 Lessons Learned Letters" to the stations' management and EP coordinators. As was being done in other functional areas, quarterly "Executive Summary/Window Reports" had been issued regarding each station's EP program.

Corporate staff were responsible for maintaining Letters of Agreement (LOAs) with support organizations which were common to all six nuclear stations. These LOAs were updated in 1992.

The GSEP Telephone Directory, which listed corporate and station-based personnel assigned to positions in the licensee's offsite Emergency Response Organization (ERO), was well maintained and revised quarterly. Review of the current and recent revisions of the directory indicated that the licensee maintained excellent numbers of personnel for all key and support positions in its offsite ERO.

The licensee's approved GSEP did not include a time commitment by which its personnel would be expected to staff a station's EOF or Joint Public Information Center (JPIC) following any Site Area Emergency, General Emergency declaration, or a decision to activate the facility. Since the licensee typically prepositioned its EOF and JPIC responders at local motels for annual EP exercises, the timeframes needed to adequately staff any station's EOF during normal and offhours in the event of an actual Site Area or General Emergency declaration remained uncertain.

The current Revision 7 to the GSEP included a new commitment that the licensee would conduct semi-annual, off-hours notification drills of its offsite ERO. Each drill would be based on the decision to activate one station's EOF and JPIC. Persons contacted were required to provide estimated times of arrival at their assigned response facility, rather than having to actually report to that location. Offsite ERO's notification drills had been conducted on three occasions per procedure. Records reviewed identified several concerns regarding the evaluation and conduct of these notification drills. The criteria for evaluating a drill's success or failure did not include the timeliness of adequately staffing an EOF or a JPIC. Instead, the drills' objectives were limited to the timeliness of completing the notification call tree and the ability to contact sufficient personnel to fill an EOF's "minimum staff" and "complete staff" positions.

Drill records indicated some problems with call tree implementation and some lack of documentation of estimated arrival times by persons implementing the call tree. There were apparent delays in submitting call records to corporate EP staff so that the drills could be evaluated within a reasonable timeframe and issued within the 30 days required per procedure.

Records indicated that the June 1991 notification drill for the Mazon EOF shared by the Dresden, LaSalle County and Braidwood Stations was considered acceptable by the licensee, although about 47 minutes were needed to contact persons qualified for each "minimum staff" position and five of the six persons contacted indicated that their estimated arrival times were two to three hours after being notified.

The December 1991 drill for the Byron Station's EOF was also considered to be acceptable. That drill's report indicated that the "minimum staff" would have arrived at the EOF within about two hours after being notified, while the "complete staff" would have arrived within about four hours.

The draft evaluation report for the May 1992 notification drill for the Zion Station's EOF indicated that drill was unsuccessful due to problems in implementing the call tree. The inspectors noted that four of six persons, who were qualified to fill the EOF's "minimum staff" positions, estimated their arrivals as two to three hours after being notified.

The inspectors' review of drill records indicated the need for the following: additional training on implementing the call tree; more timely submittal of complete notification drill records for evaluation; revision of the timeliness criterion for conducting a remedial drill; and reassessment of the drill's objectives. In addition, corporate EP staff should ensure that each station's onsite ERO is informed of the available time estimates for staffing their station's EOF. Further, drill records should be evaluated to determine the adequacy of the licensee's method for ensuring minimum staffing of the applicable EOF in about one hour of the appropriate emergency declaration.

The need to further review the licensee's provisions for timely staffing of its EOFs and its notification drills for offsite ERO personnel will be tracked as Inspection Follow-up Item Nos. 237/92022-01; 249/92022-01; 254/92019-01; 265/92019-01; 295/92020-01; 304/92020-01; 373/92017-01; 374/92017-01; 454/92014-01; 455/92014-01; 456/92016-01; and 457/92016-01.

No violations or deviations were identified; however, one inspection follow-up item was identified.

d. EP Training Program

The EP training program for the Corporate ERO was reviewed. Corporate EP staff is responsible for providing training to personnel assigned to the EOF, the CEOF, and the JPIC. The licensee's GSEP required an approved training matrix and current lesson plans. However, the inspectors found that the licensee was not using an approved training matrix. In addition, the licensee was not using lesson plans. Since the lesson plans had become out of date and inaccurate, the EP trainers began training ERO members using the position specific procedure.

The licensee identified this concern and had all the training modules related to EOF and JPIC training rewritten by a contractor. These new modules were well written and were excellent in scope and depth. Prior to the end of the inspection, the licensee provided the inspectors with a draft training matrix which was expected to be approved and should reflect the actual training given to ERO members.

The failure to use an approved training matrix and current lesson plan, as required by the GSEP, appears to be in violation of NRC requirements. However, the licensee identified this violation and it is not being cited because the criteria specified in Section VII.B.1 of the "General Statement of Policy and Procedures for NRC Enforcement Actions," (Enforcement Policy, 10 CFR Part 2, Appendix C (1992)), were satisfied.

Corporate staff were responsible for providing initial and periodic requalification training to station and corporate based personnel assigned to certain offsite radiological impact assessment positions in the onsite and offsite EROs. Introductory, advanced and requalification training materials were revised and reformatted earlier in 1992. Persons responsible for conducting the training had implemented effective administrative mechanisms for informing the stations' and corporate EP staffs of quarterly training sessions and identifying persons needing and successfully completing the appropriate training module.

One non-cited violation was identified.

e. Audits

Records review indicated that members of the Nuclear Quality Programs (NQP) Department conducted an audit of the corporate EP staff's activities in 1990 and 1991. Corporate EP staff were responsive to the concerns identified during these audits.

Corporate staff utilized a contractor to conduct detailed audits of the quality of licensee's interfaces with state and local support organizations. These audits included interviews with a number of offsite agencies' representatives plus records review

During 1991, such audits were conducted for the Quad Cities and Zion Stations, as was described in subsequent NRC inspection reports for these sites. The contractor's 1992 audits of offsite interface were performed for the Dresden, LaSalle County and Braidwood Stations. The 1991 and 1992 audits had very good scope and depth and satisfied the requirements of 10 CFR 50.54(t). Records review and discussions with licensee staff indicated that items identified during the contractor's 1991 audits were tracked and addressed, and that the 1992 audits' findings would be handled in the same manner. The licensee currently planned to have its contractor audit offsite interfaces for the Byron Station during 1993.

No violations or deviations were identified.

f. Meteorological Monitoring and Offsite Dose Assessment

Ongoing projects regarding the six stations' meteorological monitoring programs were discussed with an EP Supervisor and a representative of the licensee's meteorological services contractor.

The contractor was in the midst of a study to determine the affects of recent building construction at the LaSalle Station on that site's meteorological sensors. The study was scheduled for completion by October 1992. Preliminary results indicated that onsite structures were affecting some wind speed and direction measurements. After review of the study, the licensee planned to meet with NRC staff to discuss the situation and possible corrective actions.

The contractor was continuing the installation of heat lamps, whose heat energy would be directed at the wind sensors mounted on the six stations' meteorological towers. The heat lamp installation project was scheduled for completion at all six stations by the Winter of 1992.

Plans were underway to upgrade the lightning protection equipment for the Braidwood Station's meteorological monitoring system.

The licensee continued to work with representatives of the Illinois Department of Nuclear Safety (IDNS) and Illinois Power Company (IPC) to utilize MESOREM as a common offsite dose projection methodology. A committee has been formed to ensure that any model revisions would be properly coordinated, tested and documented prior to their implementation. The licensee has not yet completed all of its Nuclear Quality Programs (NQP) Department's requirements in order to implement MESOREM. The licensee may elect not to implement this methodology until it has been revised to address the changes in 10 CFR Part 20.

No violations or deviations were identified.

g. Public Information Program

A review of records and discussion with cognizant licensee staff indicated that the overall process of developing, reviewing and annually distributing copies of the emergency information brochures to residences, businesses and public use facilities within the six nuclear stations' EPZs remained adequate and largely unchanged in recent years.

Improvements in recent years' editions of the brochures included the upgrading of their maps, increasing the brochures' physical dimensions and standardizing their texts wherever possible. A total of about 350,000 copies of the six stations' brochures were printed annually for distribution during the third calendar quarter. Electric utility customer mailing lists were utilized for brochure mailings to residences and bulk deliveries were made to businesses and public use facilities.

No violations or deviations were identified.

4. Exit Interview

The inspectors conducted an exit interview on July 29, 1992, with the licensee representatives identified in Section 1. The inspectors discussed the scope and preliminary findings of the inspection. The licensee indicated that none of the matters discussed were proprietary in nature.

Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

September 17, 1993

Mr. John B. Hickman
Project Manager
Project Directorate III-2
Division of Reactor Projects
III/IV/V Office of Nuclear Reactor Regulations
U. S. NRC
Washington, D.C. 20555

Subject: Response to Request for Additional Information Related to the Proposed Generating Station Emergency Plan (GSEP) Revision Incorporating the Corporate EOF as an Interim EOF, GSEP Change Request Number 93-1

Reference:
1) Teleconference between Commonwealth Edison Company (CECo) and Nuclear Regualtory Commission (NRC) dated September 3, 1993; Clarifying Additional Information Requested.

2) Teleconference between CECo and NRC dated July 22, 1993; Re: Clarifying Information Provided in Submittal of Change Request Number 93-01 to the CECo Generic Generating Station Emergency Plan (GSEP).

3) D. Saccomando letter to Mr. John Hickman dated August 5, 1993; Re: Response to NRC request for additional information pertaining to subject submittal.

With regard to Commonwealth Edison Company's (CECo's) submittal of Generating Station's Emergency Plan Change 93-1, and subsequent communications between CECo Emergency Preparedness Staff and the NRC, CECo is providing information requested during the referenced teleconference 1.

The response times for the Corporate Emergency Operations Facility (CEOF) staff and the EOF(s) minimum staff is provided in Attachment A. The information provided is the most recent and will reflect that provided in the fourth quarter GSEP Phone Directory.

Information that may be useful when reviewing Attachment A is provided as follows:

1) Response time to CECo Emergency Response Facilities (ERFs) are based upon results obtained through a written survey which queried the EOF and CEOF responders.

2) Response to a given EOF is provided by corporate and unaffected station personnel.

3) Minimum staffing for the EOF consists of: Manager of Emergency Operations (MEO), Technical Support Manager (TSM), Emergency Planner, Protective Measures Director (PMD), Advisory Support Manager (ASM), Environmental Emergency Coordinator (EEC), Offsite Dose Calculation System (ODCS) Specialist and one other member of the technical group. Response times for the remaining unspecified position are not included in the enclosure as this position will be filled by any of the remaining technical responders. Since the callout scheme utilized by Edison includes full EOF staffing, this position is expected to be filled in a short time frame and is not the limiting factor to achieving minimum staffing.

4) CEOF responders respond only to the CEOF and are not prioritized for response to any EOF.

Attachment A clearly illustrates the wide geographic distribution of CECo personnel relative to its stations and emergency response facilities. Through the use of the CEOF and reprioritization of EOF responders, CECo is able to ensure that its facilities are staffed expeditiously and timely support to the TSC is provided.

Attachment B contains a summary which provides background information regarding the experience level of CEOF and EOF responders. Included in this summary is a description of their roles and responsibilities in addition to typical position characteristics. As this attachment shows, these positions are filled by seasoned individuals with significant experience in the nuclear industry. We believe that staffing the EOF and CEOF with high caliber personnel will ensure an effective offsite response without depleting critical onsite resources.

As you requested during the referenced Teleconference 2, Commonwealth Edison is enclosing documentation from the States of Illinois, Iowa and Wisconsin indicating their acceptance of CECo's proposal to use the Corporate EOF as an interim response facility until the nearsite EOF can be staffed. As indicated in Attachment C, the States concur with CECo proposed plan revision and that the information regarding coordination with the state and local governments was accurate.

Please direct any questions you or your staff may have regarding this matter to Ms. Irene Johnson at (708)663-2095 or Ms. Leslie Holden at (708)663-6673.

Very Truly Yours,

D. Saccomando
Nuclear Licensing Administrator

DS/MV/

k:rpa:gsep:nrcsub:2

DS/TW/

Attachments

cc: R. Emch - NRR
R. Pedersen - NRR
J. McCormick-Barger - NRC Region III
NRC Resident Inspector - Dresden, w/o enclosure
NRC Resident Inspector - Braidwood, w/o enclosure
NRC Resident Inspector - Byron, w/o enclosure
NRC Resident Inspector - Zion, w/o enclosure
NRC Resident Inspector - LaSalle, w/o enclosure
NRC Resident Inspector - Quad Cities, w/o enclosure
NRC Document Control Desk

k:rpa:gsep:nrcsub:3

Attachment A

EOF Prioritized Responders

MANAGER OF EMERGENCY OPERATIONS

Priority Notification for DIXON EOF

	Name	Work Location	Drive Time *
1	@PLENIEWICZ, RICHARD	Quad Cities	030 MINUTES
2	@BAX, RICHARD L.	QUAD CITIES	030 MINUTES
3	@WARD, ROBERT C.	DOWNERS GROVE 3RD FLR	140 MINUTES
4	@JOYCE, THOMAS P.	DOWNERS GROVE 6TH FLR	150 MINUTES

Priority Notification for MAZON-BRAIDWOOD

	Name	Work Location	Drive Time *
1	@SCHROEDER, CHARLES	EDISON BUILDING	50 MINUTES
2	@PLENIEWICZ, RICHARD	QUAD CITIES	120 MINUTES
3	@WARD, ROBERT C.	DOWNERS GROVE 3RD FLR	120 MINUTES
4	@JOYCE, THOMAS P.	DOWNERS GROVE 6TH FLR	120 MINUTES

Priority Notification for MAZON-DRESDEN

	Name	Work Location	Drive Time *
1	@SCHROEDER, CHARLES	EDISON BUILDING	50 MINUTES
2	@PLENIEWICZ, RICHARD	QUAD CITIES	120 MINUTES
3	@WARD, ROBERT C.	DOWNERS GROVE 3RD FLR	120 MINUTES
4	@JOYCE, THOMAS P.	DOWNERS GROVE 6TH FLR	120 MINUTES

Priority Notification for MAZON-LASALLE

	Name	Work Location	Drive Time *
1	@SCHROEDER, CHARLES	EDISON BUILDING	50 MINUTES
2	@PLENIEWICZ, RICHARD	QUAD CITIES	120 MINUTES
3	@WARD, ROBERT C.	DOWNERS GROVE 3RD FLR	120 MINUTES
4	@JOYCE, THOMAS P.	DOWNERS GROVE 6TH FLR	120 MINUTES

* Drive Time is from the responder's home location.

k:rpa:gsep:nrcsub:4

Attachment A

EOF Prioritized Responders (Continued)

Priority Notification for MORRISON EOF

	Name	Work Location	Drive Time *
1	@GRAESSER, KENNETH L.	Byron	150 MINUTES
2	@SCHROEDER, CHARLES	EDISON BUILDING	150 MINUTES
3	@WARD, ROBERT C.	DOWNERS GROVE 3RD FLR	160 MINUTES
4	@JOYCE, THOMAS P.	DOWNERS GROVE 6TH FLR	195 MINUTES

Priority Notification for ZION EOF

	Name	Work Location	Drive Time *
1	@WARD, ROBERT C.	DOWNERS GROVE 3RD FLR	010 MINUTES
2	@GRAESSER, KENNETH L.	Byron	020 MINUTES
3	@JOYCE, THOMAS P.	DOWNERS GROVE 6TH FLR	030 MINUTES
4	@SCHROEDER, CHARLES	EDISON BUILDING	100 MINUTES

TECHNICAL SUPPORT MANAGER

Priority Notification for DIXON EOF

	Name	Work Location	Drive Time *
1	@HUNTINGTON, WILLIAM R.	DOWNERS GROVE 3RD FLR	070 MINUTES
2	@KOPACZ, JEFFREY J.	QUAD CITIES	070 MINUTES
3	@GROTH, GERALD E.	BRAIDWOOD	090 MINUTES
4	@KURTH, WILLIAM R.	ZION	160 MINUTES

Priority Notification for MAZON-BRAIDWOOD

	Name	Work Location	Drive Time *
1	@SPEDL, GARY F.	DRESDEN	030 MINUTES
2	@HUNTINGTON, WILLIAM R.	DOWNERS GROVE 3RD FLR	035 MINUTES
3	@TULON, TIMOTHY J.	BYRON	120 MINUTES
4	@KURTH, WILLIAM R.	ZION	160 MINUTES

* Drive Time is from the responder's home location.

k:rpa:gsep:nrcsub:5

Attachment A

EOF Prioritized Responders (Continued)

Priority Notification for MAZON-DRESDEN

	Name	Work Location	Drive Time *
1	@GROTH, GERALD E.	BRAIDWOOD	020 MINUTES
2	@HUNTINGTON, WILLIAM R.	DOWNERS GROVE 3RD FLR	035 MINUTES
3	@TULON, TIMOTHY J.	BYRON	120 MINUTES
4	@KURTH, WILLIAM R.	ZION	160 MINUTES

Priority Notification for MAZON-LASALLE

	Name	Work Location	Drive Time *
1	@GROTH, GERALD E.	BRAIDWOOD	020 MINUTES
2	@SPEDL, GARY F.	DRESDEN	030 MINUTES
3	@HUNTINGTON, WILLIAM R.	DOWNERS GROVE 3RD FLR	035 MINUTES
4	@TULON, TIMOTHY J.	BYRON	120 MINUTES

Priority Notification for MORRISON EOF

	Name	Work Location	Drive Time *
1	@TULON, TIMOTHY J.	BYRON	090 MINUTES
2	@GROTH, GERALD E.	BRAIDWOOD	090 MINUTES
3	@HUNTINGTON, WILLIAM R.	DOWNERS GROVE 3RD FLR	095 MINUTES
4	@SPEDL, GARY F.	DRESDEN	150 MINUTES

Priority Notification for ZION EOF

	Name	Work Location	Drive Time *
1	@TULON, TIMOTHY J.	BYRON	120 MINUTES
2	@GROTH, GERALD E.	BRAIDWOOD	120 MINUTES
3	@HUNTINGTON, WILLIAM R.	DOWNERS GROVE 3RD FLR	140 MINUTES
4	@SPEDL, GARY F.	DRESDEN	180 MINUTES

* Drive Time is from the responder's home location.

Attachment A

EOF Prioritized Responders (Continued)

EMERGENCY PLANNER

Priority Notification for DIXON EOF

	Name	Work Location	Drive Time *
1	@HOOGHEEM, DAVID W.	QUAD CITIES	055 MINUTES
2	@KREUDER, LINDA L.	QUAD CITIES	065 MINUTES
3	@HOUSTON, JERRY A.	LASALLE	070 MINUTES
4	@SHARPER, DEAN E.	DRESDEN	120 MINUTES

Priority Notification for MAZON-BRAIDWOOD

	Name	Work Location	Drive Time *
1	@SHARPER, DEAN E.	DRESDEN	015 MINUTES
2	@HOUSTON, JERRY A.	LASALLE	035 MINUTES
3	@MAYER, BARBARA J.	DRESDEN	040 MINUTES
4	@HARKER, DONALD P.	DOWNERS GROVE 3RD FLR	090 MINUTES

Priority Notification for MAZON-DRESDEN

	Name	Work Location	Drive Time *
1	@HOUSTON, JERRY A.	LASALLE	035 MINUTES
2	@HARKER, DONALD P.	DOWNERS GROVE 3RD FLR	090 MINUTES
3	@SUNDERLAND, PAUL R.	DOWNERS GROVE 3RD FLR	110 MINUTES
4	@MINEJEVS, LIGA	DOWNERS GROVE 3RD FLR	120 MINUTES

Priority Notification for MAZON-LASALLE

	Name	Work Location	Drive Time *
1	@SHARPER, DEAN E.	DRESDEN	015 MINUTES
2	@MAYER, BARBARA J.	DRESDEN	040 MINUTES
3	@HARKER, DONALD P.	DOWNERS GROVE 3RD FLR	090 MINUTES
4	@SUNDERLAND, PAUL R.	DOWNERS GROVE 3RD FLR	110 MINUTES

* Drive Time is from the responder's home location.

Attachment A

EOF Prioritized Responders (Continued)

Priority Notification for MORRISON EOF

	Name	Work Location	Drive Time *
1	@MCNEILL, WILLIAM R.	BYRON	120 MINUTES
2	@SHARPER, DEAN E.	DRESDEN	120 MINUTES
3	@HOUSTON, JERRY A.	LASALLE	120 MINUTES
4	@SUNDERLAND, PAUL R.	DOWNERS GROVE 3RD FLR	140 MINUTES

Priority Notification for ZION EOF

	Name	Work Location	Drive Time *
1	@MINEJEVS, LIGA	DOWNERS GROVE 3RD FLR	015 MINUTES
2	@HARKER, DONALD P.	DOWNERS GROVE 3RD FLR	030 MINUTES
3	@SUNDERLAND, PAUL R.	DOWNERS GROVE 3RD FLR	030 MINUTES
4	@SHARPER, DEAN E.	DRESDEN	090 MINUTES

PROTECTIVE MEASURES DIRECTOR/ENV. EMERG COORDINATOR

Priority Notification for DIXON EOF

	Name	Work Location	Drive Time *
1	@SOBER, SHARON D.	QUAD CITIES	025 MINUTES
2	@POWELL, GREG R.	QUAD CITIES	075 MINUTES
3	@LEWIS, ALAN D.	QUAD CITIES	080 MINUTES
4	@LEWIS, JOSEPH G.	LASALLE	090 MINUTES

Priority Notification for MAZON-BRAIDWOOD

	Name	Work Location	Drive Time *
1	@HAYWORTH, MICHAEL P.	DRESDEN	010 MINUTES
2	@FRIEDMANN, MARK A.	LASALLE	015 MINUTES
3	@LEWIS, JOSEPH G.	LASALLE	030 MINUTES
4	@OSHIER, LEONARD L.	LASALLE	035 MINUTES

* Drive Time is from the responder's home location.

Attachment A

EOF Prioritized Responders (Continued)

Priority Notification for MAZON-DRESDEN

	Name	Work Location	Drive Time *
1	@FRIEDMANN, MARK A.	LASALLE	015 MINUTES
2	@LEWIS, JOSEPH G.	LASALLE	030 MINUTES
3	@OSHIER, LEONARD L.	LASALLE	035 MINUTES
4	@GOLDEN, JOHN C.	DOWNER'S GROVE 5TH FLR	080 MINUTES

Priority Notification for MAZON-LASALLE

	Name	Work Location	Drive Time *
1	@HAYWORTH, MICHAEL P.	DRESDEN	010 MINUTES
2	@GOLDEN, JOHN C.	DOWNER'S GROVE	080 MINUTES
3	@SOBER, SHARON D.	QUAD CITIES	100 MINUTES
4	@ELKMANN, PAUL J.	DOWNERS GROVE 3RD FLR	105 MINUTES

Priority Notification for MORRISON EOF

	Name	Work Location	Drive Time *
1	@FRIEDMANN, MARK A.	LASALLE	120 MINUTES
2	@OSHIER, LEONARD L.	LASALLE	120 MINUTES
3	@LEWIS, JOSEPH G.	LASALLE	135 MINUTES
4	@HAYWORTH, MICHAEL P.	DRESDEN	150 MINUTES

Priority Notification for ZION EOF

	Name	Work Location	Drive Time *
1	@ELKMANN, PAUL J.	DOWNERS GROVE 5RD FLR	040 MINUTES
2	@GOLDEN, JOHN C.	DOWNERS GROVE 5TH FLR	075 MINUTES
3	@SOBER, SHARON D.	QUAD CITIES	100 MINUTES
4	@OSHIER, LEONARD L.	LASALLE GENERATING STA	120 MINUTES

* Drive Time is from the responder's home location.

Attachment A

EOF Prioritized Responders (Continued)

ADVISORY SUPPORT MANAGER

Priority Notification for DIXON EOF

	Name	Work Location	Drive Time *
1	@SUES, LEE A.	DOWNERS GROVE 3RD FLR	030 MINUTES
2	@SIROVY, JOSEPH E.	QUAD CITIES	080 MINUTES
3	@CIESLA, THOMAS A.	DOWNERS GROVE 3RD FLR	090 MINUTES
4	@RAGAN, RONALD M.	LASALLE	100 MINUTES

Priority Notification for MAZON-BRAIDWOOD

	Name	Work Location	Drive Time *
1	@RAGAN, RONALD M.	LASALLE	015 MINUTES
2	@MANNING, PATRICK F.	DOWNERS GROVE 4TH FLR	040 MINUTES
3	@STRAIT, MICHAEL C.	DRESDEN	045 MINUTES
4	@DAVIS, LARRY E.	PRODUCTION TRAINING CE	045 MINUTES

Priority Notification for MAZON-DRESDEN

	Name	Work Location	Drive Time *
1	@RAGAN, RONALD M.	LASALLE	015 MINUTES
2	@MANNING, PATRICK F.	DOWNERS GROVE 4TH FLR	040 MINUTES
3	@DAVIS, LARRY E.	PRODUCTION TRAINING CE	045 MINUTES
4	@CIESLA, THOMAS A.	DOWNERS GROVE 3RD FLR	045 MINUTES

Priority Notification for MAZON-LASALLE

	Name	Work Location	Drive Time *
1	@MANNING, PATRICK F.	DOWNERS GROVE 4TH FLR	040 MINUTES
2	@STRAIT, MICHAEL C.	DRESDEN	045 MINUTES
3	@DAVIS, LARRY E.	PRODUCTION TRAINING CE	045 MINUTES
4	@CIESLA, THOMAS A.	DOWNERS GROVE 3RD FLR	045 MINUTES

* Drive Time is from the responder's home location.

Attachment A

EOF Prioritized Responders (Continued)

Priority Notification for MORRISON EOF

	Name	Work Location	Drive Time *
1	@SNOW, MARSEYNE	BYRON	045 MINUTES
2	@SUES, LEE A.	DOWNERS GROVE 3RD FLR	065 MINUTES
3	@CASCARANO, ROBERT N.	ZION	090 MINUTES
4	@DAVIS, LARRY E.	PRODUCTION TRAINING CE	120 MINUTES

Priority Notification for ZION EOF

	Name	Work Location	Drive Time *
1	@LEMKE, ROBERT C.	DOWNERS GROVE 3RD FLR	105 MINUTES
2	@DAVIS, LARRY E.	PRODUCTION TRAINING CE	120 MINUTES
3	@SNOW, MARSEYNE	BYRON	120 MINUTES
4	@RAGAN, RONALD M.	LASALLE	120 MINUTES

ODCS SPECIALIST

Priority Notification for DIXON EOF

	Name	Work Location	Drive Time *
1	@SHAW, PRISCILLA	LASALLE	070 MINUTES
2	@KOVALL, SCOTT A.	LASALLE	075 MINUTES
3	@RAGUSE, RICK A.	DRESDEN	120 MINUTES
4	@LABURN, RICHARD S.	ZION	150 MINUTES

Priority Notification for MAZON-BRAIDWOOD

	Name	Work Location	Drive Time *
1	@RAGUSE, RICK A.	DRESDEN	035 MINUTES
2	@SHAW, PRISCILLA	LASALLE	040 MINUTES
3	@KOVALL, SCOTT A.	LASALLE	050 MINUTES
4	@ROBINSON, STEPHEN D.	BYRON	120 MINUTES

* Drive Time is from the responder's home location.

k:rpa:gsep:nrcsub:11

Attachment A

EOF Prioritized Responders (Continued)

Priority Notification for MAZON-DRESDEN

	Name	Work Location	Drive Time *
1	@SHAW, PRISCILLA	LASALLE	040 MINUTES
2	@ALESHIRE, KIMBERLY A.	BRAIDWOOD	045 MINUTES
3	@KOVALL, SCOTT A.	LASALLE	050 MINUTES
4	@ROBINSON, STEPHEN D.	BYRON	120 MINUTES

Priority Notification for MAZON-LASALLE

	Name	Work Location	Drive Time *
1	@RAGUSE, RICK A.	DRESDEN	035 MINUTES
2	@ALESHIRE, KIMBERLY A.	BRAIDWOOD	045 MINUTES
3	@ROBINSON, STEPHEN D.	BYRON	120 MINUTES
4	@LABURN, RICHARD S.	ZION	120 MINUTES

Priority Notification for MORRISON EOF

	Name	Work Location	Drive Time *
1	@VITALIS, PAUL D.	BYRON	075 MINUTES
2	@ROBINSON, STEPHEN D.	BYRON	090 MINUTES
3	@KOVALL, SCOTT A.	LASALLE	090 MINUTES
4	@SHAW, PRISCILLA	LASALLE	120 MINUTES

Priority Notification for ZION EOF

	Name	Work Location	Drive Time *
1	@KOVALL, SCOTT A.	LASALLE	120 MINUTES
2	@ALESHIRE, KIMBERLY A.	BRAIDWOOD	120 MINUTES
3	@RAGUSE, RICK A.	DRESDEN	120 MINUTES
4	@SHAW, PRISCILLA	LASALLE	150 MINUTES

* Drive Time is from the responder's home location.

Attachment A

CEOF Prioritized Responders

MANAGER OF EMERGENCY OPERATIONS

Priority Notification for CEOF

	Name	Work Location	Drive Time *
1	@PLIML, GEORGE J.	DOWNERS GROVE 3RD FLR	010 MINUTES
2	@KOFRON, KURT L.	BRAIDWOOD	030 MINUTES
3	@SCOTT, DOUGLAS J.	DOWNERS GROVE 3RD FLR	045 MINUTES
4	@EENIGENBURG, ELTON D.	DOWNERS GROVE 6TH FLR	045 MINUTES

TECHNICAL SUPPORT MANAGER

Priority Notification for CEOF

	Name	Work Location	Drive Time *
1	@ELIAS, DAVID	DOWNERS GROVE 3RD FLR	025 MINUTES
2	@GERNER, LAWRENCE F.	DOWNERS GROVE 6TH FLR	030 MINUTES
3	@OBRIEN, DELIS E.	OFC SR VP REED	030 MINUTES
4	@WOZNIAK, DAVID B.	ZION	040 MINUTES

TECHNICAL SPECIALIST

Priority Notification for CEOF

	Name	Work Location	Drive Time *
1	@MELNICOFF, MARK A.	DOWNERS GROVE 3RD FLR	025 MINUTES
2	@WIEGAND, CHRISTOPHER	BRAIDWOOD	050 MINUTES
3	@GIESEKER, JAMES W.	LASALLE	060 MINUTES
4	@REDDEN, DANIEL R.	NUCLEAR FUEL SERVICES	060 MINUTES

EMERGENCY PLANNER

Priority Notification for CEOF

	Name	Work Location	Drive Time *
1	@GROVES, ROOSEVELT	DOWNERS GROVE 3RD FLR	015 MINUTES
2	@DIPONZIO, MARY E.	DOWNERS GROVE 3RD FLR	020 MINUTES
3	@NETTLES, TAMARA D.	DOWNERS GROVE 3RD FLR	020 MINUTES
4	@SILCOX, DANIEL L.	DOWNERS GROVE 3RD FLR	030 MINUTES

* Drive Time is from the responder's home location.

k:rpa:gsep:nrcsub:13

Attachment A

CEOF Prioritized Responders (Continued)

PROTECTIVE MEASURES DIRECTOR

Priority Notification for CEOF

	Name	Work Location	Drive Time *
1	@THACKER, RICKY L.	BRAIDWOOD	015 MINUTES
2	@KLOTZ, KARL F.	DOWNER'S GROVE 8TH FLR	015 MINUTES
3	@ALDRICH, LARY R.	DOWNER'S GROVE 8TH FLR	030 MINUTES
4	@BURNS, JOELLEN	DOWNERS GROVE 3RD FLR	045 MINUTES

ADVISORY SUPPORT MANAGER

Priority Notification for CEOF

	Name	Work Location	Drive Time *
1	@BRUNNER, JACK D.	DOWNERS GROVE 3RD FLR	015 MINUTES
2	@BUTTERFIELD, L D.	DOWNERS GROVE 6TH FLR	020 MINUTES
3	@ABRELL, GARY A.	EDISON BUILDING	020 MINUTES
4	@ACHTERBERG, JOHN	BRAIDWOOD	030 MINUTES

HP/ENVIRONMENTAL SPECIALIST(2)

Priority Notification for CEOF

	Name	Work Location	Drive Time *
1	@BELL, STEPHEN J.	DOWNERS GROVE 8TH FLR	015 MINUTES
2	@RAO, SANTOSH S.	DOWNERS GROVE 8TH FLR	020 MINUTES
3	@WEAVER, KIT T.	DOWNERS GROVE 8TH FLR	030 MINUTES
4	@KOBACK, ROBERT	BRAIDWOOD	030 MINUTES
5	@POI, DEBORAH A.	BRAIDWOOD	050 MINUTES
6	@COLE, G D.	DOWNERS GROVE 8TH FLR	075 MINUTES

* Drive Time is from the responder's home location.

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

MANAGER OF EMERGENCY OPERATIONS (MEO)
ASSISTANT MEO

PRIMARY PURPOSE OF POSITION

The manager of emergency operations (MEO) is the designated CECo individual who has the authority, management ability, and technical knowledge to manage Commonwealth Emergency Response operations.

The Assistant Manager of Emergency Operations (AMEO) has the authority, management ability and technical knowledge to assist the MEO in the management of CECo's Emergency Response operations. The Assistant MEO reports directly to the MEO and in the event that the MEO becomes incapacitated, shall assume the responsibilities of the MEO.

POSITION CHARACTERISTICS

Strong interpersonal communication and management skills are necessary. An understanding of Regulatory and intra-company relationships will significantly contribute to success in this position.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:

- Site Vice Presidents
- Station Managers
- Station Technical Superintendents
- Nuclear Operations Managers
- Engineering & Construction Managers

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

TECHNICAL SUPPORT MANAGER (TSM)
TECHNICAL SUPPORT DIRECTOR (TSD)

ROLES & RESPONSIBILITY

The Technical Support Manager (TSM) is the designated CECo individual who has requisite authority, nuclear experience and technical expertise to manage a technical staff in support of Emergency Response operations. The Technical Support Manager shall report directly to the Manager of Emergency Operations. The Technical Support Director reports to the TSM.

The Technical Support Director (TSD) is the designated CECo individual who has the responsibility to direct a technical staff in support of Emergency Response Operations. The Technical Support Director shall report directly to the Technical Support Manager.

POSITION CHARACTERISTICS

Strong interpersonal, analytical and management skills are necessary. Well developed written and oral communication skills are also important. A strong questioning attitude will contribute to success.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:

- Station Technical Services Superintendent
- Station Operations Manager
- Station Maintenance Superintendent
- Site Engineering & Construction Managers
- Nuclear Support Manager
- Nuclear Fuel Services Manager
- Performance Monitoring & Improvement Manager

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

PROTECTIVE MEASURES COORDINATOR (PMC)

ROLES & RESPONSIBILITY

The Protective Measures Coordinator (PMC) is responsible for ensuring that the Protective Measures Director and the Environmental Emergency Coordinator are informed of plant status changes that may directly or potentially impact the public. The PMC will serve as a support individual for the Technical Support Director and functionally support the Protective Measures Director.

POSITION CHARACTERISTICS

Strong communication, interpersonal and analytical skills are necessary. A strong questioning attitude will contribute to success in this position.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:

- Station Operations Manager
- Operating Engineer
- Site Vice President Executive Assistant
- Training Supervisor
- Regulatory Assurance Supervisor
- Onsite Quality Verification Director
- Offsite Quality Verification Director

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

DESIGN & CONSTRUCTION SUPPORT DIRECTOR

ROLES & RESPONSIBILITY

The Design and Construction Support Director (DCSD) is the designated CECo individual who has the requisite authority to interface with the Architect/Engineers (A/E), Nuclear Steam Supply System (NSSS), and construction representatives on design or system modifications required for recovery activities. The DCSD shall report to the Technical Support Director.

POSITION CHARACTERISTICS

Well developed engineering judgement. Good oral and written communication skills.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:

-Mechanical/Structural Design Superintendent
-Electrical/I&C Design Superintendent
-Nuclear Construction Superintendent
-Station Support Engineering Supervisor
-Modification Design Supervisor
-Site Construction Superintendent

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

WASTE SYSTEMS DIRECTOR (WSD)

ROLES & RESPONSIBILITY

The Waste Systems Director (WSD) is the designated CECo individual who has the requisite authority, nuclear experience, and technical expertise to manage the radioactive waste aspects of the emergency operations. The WSD shall support the onsite radwaste activities by providing technical assistance in the form of manpower, equipment, supplies, and recommendations for both onsite and offsite activities. The WSD shall report to the Technical Support Director.

POSITION CHARACTERISTICS

Interpersonal skills and well developed oral communication skills are necessary. Proactive and aggressive at identifying potential radwaste processing and shipping methods.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:
-Station Radwaste Foreman
-Radwaste Coordinator

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

TECHNICAL INFORMATION COORDINATOR (TIC)
SPDS/PTHSTY SPECIALIST (SPDS)
TECHNICAL SPECIALIST (TS-CEOF)

ROLES & RESPONSIBILITYS

The Technical Information Coordinator (TIC) is responsible for obtaining plant status information and ensuring that it is properly posted and disseminated. The TIC shall serve as a support individual for the Technical Support Director.

The SPDS/PTHSTY Specialist is responsible for trending plant parameter information utilizing the Safety Parameter Display system (SPDS) Program and the Point History (PTHSTY) Program. The SPDS/PTHSTY Specialist will assist in trending critical parameters as they pertain to the accident. The SPDS/PTHSTY Specialist shall serve as a support individual for the Technical Information Coordinator.

The Technical Specialist (TS) is responsible for obtaining and disseminating plant condition and status information in the CEOF. The Technical Specialist reports to the Technical Support Manager (CEOF).

POSITION CHARACTERISTICS

Good interpersonal and analytic skills. Well developed oral communication skills and questioning attitude will contribute to success in this position.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:

-Systems Engineering Supervisor
-Station Support Engineering - Group Leads
-Outage Coordinators
-Station Training - Group Leads
-MIS Supervisors
-Nuclear Fuel Services Supervisors or Senior Engineers
-PRA & Design Administrative Support Senior Engineers
-Production Training - Group Leads
-Systems Engineering Support - Senior Engineers

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

TECHNICAL COMMUNICATOR (TO TSC)
ENS COMMUNICATOR

ROLES & RESPONSIBILITY

EOF Communicators are responsible for transmitting/receiving information to/from the EOF and documenting information relayed to the EOF over the various communication systems.

POSITION CHARACTERISTICS

Well developed listening and oral communication skills are a must in this position. Good interpersonal skills and a questioning attitude are also important.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:

-Licensed Operator Training Instructors
-Simulator Training Instructors
-Station Regulatory Assurance Staff
-Regulatory Performance Staff
-Onsite Quality Verification Staff
-Offsite Quality Verification Staff

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

EOF STATUS BOARD RECORDERS
(MANUAL & ELECTRONIC)

ROLES & RESPONSIBILITY

The EOF Status Board Recorders shall report to the Technical Information Coordinator. These individuals shall post approved information and data to EOF manual and electronic status boards.

POSITION CHARACTERISTICS

Good observation and data assimilation capabilities. Ability to obtain data from various media and sources. Good interpersonal skills, and written and verbal communication skills contribute to success in this position.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION:
-Corporate MIS staff
-Station MIS staff
-Performance Monitoring and Improvement Staff

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

PROTECTIVE MEASURES DIRECTOR (PMD) (EOF/CEOF)
ENVIRONMENTAL EMERGENCY COORDINATOR (EEC) (EOF)
HEALTH PHYSICS/ENVIRONMENTAL SPECIALIST (HP/ES) (CEOF)

ROLES & RESPONSIBILITY

The Protective Measures Director (PMD) is the designated CECo individual who is specifically qualified in the management of radiological consequence assessment and who is authorized to interact with supporting agencies. This individual will supervise the environmental assessment functions at the EOF or CEOF. The PMD shall report to the Manager of Emergency Operations.

The Environmental Emergency Coordinator (EEC) is the designated CECo individual who is specifically qualified in the coordination of radiological consequence assessment. The EEC shall report to the PMD.

The Health Physics/Environmental Specialists (HP/ES) (CEOF) reports to the PMD (CEOF). The HP/ES shall monitor onsite and offsite radiological conditions to collect and disseminate information to the CEOF staff.

POSITION CHARACTERISTICS

Interpersonal skills are a must in this position. Well developed written and oral communications skills are also important. Listening and questioning skills will contribute to success.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Station Health Physics staff
-Corporate Radiation Protection staff
-EPSP Environmental group
-Nuclear Fuel Services personnel

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

HEALTH PHYSICS DIRECTOR (HPD)

ROLES & RESPONSIBILITY

The Health Physics Director (HPD) shall support the onsite Health Physics activities under the direction of the Protective Measures Director. The HPD shall make recommendations on dose management techniques for both onsite and offsite activities for maintaining personnel exposures as low as reasonably achievable.

POSITION CHARACTERISTICS

Interpersonal skills are a must in this position. Well developed written and oral communication skills are also important. Listening and questioning skills will contribute to success.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Station RP staff
-Corporate RP staff
-Nuclear Regulatory Services staff with RP background

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

STATE ENVIRONS COORDINATOR (SEC)
EOF ODCS SPECIALIST (ODCS)
EOF ENVIRONS DIRECTOR (ED)

ROLES & RESPONSIBILITY

The State Environs Coordinator, located at the EOF, is responsible for interfacing with the affected State(s) Environs Emergency Response authorities. In contact with these state personnel, the SEC communicates and exchanges environmental information and helps coordinate joint utility and state environmental response personnel activities.

The EOF ODCS Specialist is responsible for providing dose projections using the ODCS computer models. Upon activation of the EOF Organization, the EOF ODCS Specialist shall serve as a support individual for the EEC at the EOF.

The EOF Environs Director is the member of the EOF Organization who will supervise the activities of CECo Environmental Sampling teams in an emergency. The EOF ED shall serve under the EEC.

POSITION CHARACTERISTICS

Interpersonal skills are a must in this position. Well developed written and oral communication skills are also important. Listening and questioning skills will contribute to success.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.
-Station RP staff
-Corporate RP staff
-EPSP Environs Group staff
-PTD RP staff
-NFS personnel.

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

HPN COMMUNICATOR (HPN)
PROTECTIVE MEASURES COMMUNICATOR (PMC)
GSEP RADIO COMMUNICATOR

ROLES & RESPONSIBILITY

EOF Communicators are responsible for transmitting/receiving information to/from the EOF and documenting information relayed at the EOF over the various communication systems.

POSITION CHARACTERISTICS

Interpersonal skills are a must in this position. Well developed written and oral communication skills are also important. Listening and questioning skills will contribute to success.

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

ADVISORY SUPPORT MANAGER (ASM)
ADVISORY SUPPORT DIRECTOR (ASD)

ROLES & RESPONSIBILITY

The Advisory Support Manager (ASM) is the designated CECo individual who will manage the efforts of the Advisory Support Group located at the EOF or the CEOF. This group provides support functions in organizational logistics and governmental interface. The ASM shall report directly to the Manager of Emergency Operations in the EOF or the CEOF.

The Advisory Support Director (ASD) is the designated CECo individual who will direct the efforts of the Advisory Support group located at the EOF. This group provides support functions in organizational logistics and governmental interface areas. The ASD shall report to the Advisory Support Manager.

POSITION CHARACTERISTICS

Interpersonal skills are a must in this position. Well developed written and oral communication skills are also important. Listening skills and questioning attitude will contribute to success.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

- Executive Assistants to the Site Vice Presidents
- Nuclear Oversight personnel
- Nuclear Regulatory Services personnel
- Business Services personnel

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

EMERGENCY PLANNER (EP)

ROLES & RESPONSIBILITY

The Emergency Planner (EP) in the EOF is responsible for verifying that the CECo Generating Station Emergency Plan (GSEP) is implemented properly. The EP shall serve as a support individual for the Advisory Support Manager.

The Emergency Planner (EP) in the CEOF is responsible for verifying that the CECo Generating Station Emergency Plan (GSEP) is implemented effectively and assist the CEOF staff in facility utilization. The EP (CEOF) reports to the MEO (CEOF).

POSITION CHARACTERISTICS

Interpersonal skills and well developed oral communication skills are a must in this position.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Station Emergency Preparedness Coordinator
-Station Emergency Preparedness Trainer
-Corporate Emergency Preparedness Personnel

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

MANPOWER/LOGISTICS DIRECTOR (MLD)

ROLES & RESPONSIBILITY

The Manpower/Logistics Director is the designated CECo individual who is responsible for providing administrative, logistic, communications, and personnel support for the emergency response operations. The Manpower/Logistics Director shall report to the Advisory Support Director.

POSITION CHARACTERISTICS

Interpersonal skills are a must in this position. Problem solving and decision making skills are also important. Knowledge of bargaining unit/labor relations policies, purchasing procedures and company administrative procedures.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Nuclear Station Office Supervisors
-Nuclear Operations Division - Office Supervisors
-Nuclear Station Assistant Office Supervisors

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

COMMUNICATIONS DIRECTOR

ROLES & RESPONSIBILITY

The Communications Director is responsible for the procurement of required telephone and radio communications service and facilities as specified by the Manpower/Logistics Director. The communications Director shall provide for the maintenance of the communications, as required.

POSITION CHARACTERISTICS

Proactive and aggressive at identifying and correcting problems in a crisis environment.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Information Systems personnel qualified to work with microwave, radio and telephones.

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

COMPUTER SPECIALIST(S)

ROLES & RESPONSIBILITY

The Computer Specialist shall assist the EOF Organization in the operation of Computer Systems and programs available at the EOF. This individual shall be familiar with the various station specific and Company programs utilized for computerized information retrieval and transmittal. The Computer Specialist shall assist in accessing information as requested, and shall initiate system repairs as necessary.

POSITION CHARACTERISTICS

Proactive and aggressive at identifying and correcting problems in a crisis environment.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Information Systems personnel knowledgeable in GSEP programs and computer systems.

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

GOVERNMENTAL SUPPORT DIRECTOR (GSD)

ROLES & RESPONSIBILITY

The Governmental Support Director (GSD) is responsible for maintaining effective interfaces between state and local agencies and shall provide State agencies with periodic updates and allot them working space in the EOF. The GSD shall serve as a support individual under the direction of the Advisory Support Director.

POSITION CHARACTERISTICS

Interpersonal skills are a must in this position. Well developed written and oral communications skills are also important. Listening and questioning attitude will contribute to success.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Executive Assistants to the Site Vice Presidents
-Nuclear Oversight personnel
-Nuclear Regulatory Services personnel
-Business Services personnel

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

GOVERNMENTAL COMMUNICATOR(S)
CECo EOC LIAISON(S)

ROLES & RESPONSIBILITY

EOF Communicators are responsible for transmitting/receiving information to/from the EOF and documenting information relayed at the EOF over the various communication systems.

The CECo EOC Liaison(s) are responsible for assisting in the interface between Commonwealth Edison and offsite governmental officials. They shall be located at the appropriate federal/state or county Emergency Operation Center (EOC) or command post. They shall use the Governmental Support Director as their official contact at the EOF.

POSITION CHARACTERISTICS

Interpersonal skills, listening skills, and questioning attitude are a must in this positions. Well developed written and oral communication skills are also important.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Nuclear Oversight personnel
-Training Department personnel
-Nuclear Regulatory Services personnel
-Business Services personnel
-Onsite Quality Verification personnel

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

SAFEGUARDS SPECIALIST

ROLES & RESPONSIBILITY

The Safeguards Specialist is the designated CECo individual who is responsible for the interface between the Station Security Director and the Emergency Operations Facility (EOF) on events or items relating to the security of a Nuclear Station. The Safeguards Specialist shall report to the Advisory Support Director.

POSITION CHARACTERISTICS

Interpersonal skills, listening and questioning skills are a must in this position. Well developed oral communication skills are also essential.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Corporate or Station Security Administrator

Attachment B

EOF/CEOF Responders Typical Background Information (Continued)

ACCESS CONTROL COORDINATOR

ROLES & RESPONSIBILITY

The Access Control Coordinator reports to the Safeguards Specialist. The Access Control Coordinators's duties may be assumed by the Safeguards Specialist or another director until the Access Control Coordinator arrives.

POSITION CHARACTERISTICS

Interpersonal skills and well developed oral communication skills are a must in this position.

THE FOLLOWING COMPANY POSITIONS WOULD BE CONSIDERED AS TYPICAL SOURCES TO FILL THIS GSEP POSITION.

-Corporate and Station Security Administrators

Attachment C

State Acceptance Of CECo's Proposal To Use Corporate EOF As An Interim Response Facility

Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

Rick

August 6, 1993

Ms. Ellen Gordon
Iowa Emergency Management Division
Hoover State Office Building
Room A-29
Des Moines, Iowa 50319

Dear Ms. Gordon,

Commonwealth Edison has been interacting with the Nuclear Regulatory Commission on an issue involving the timeliness of Commonwealth Edison (CECo) emergency response to our near-site Emergency Operations Facilities. (i.e. the NUREG 0654 "goal" of staffing a near site EOF within one hour from declaration of Site Area Emergency.)

Given the area Commonwealth Edison covers and our desire to support the affected station with resources from the corporate organization and other unaffected stations, Edison has proposed an alternate approach to the one hour EOF staffing goal. CECo has proposed the staffing and use of our Corporate Emergency Operations Facility (CEOF) located at Downers Grove, IL as an interim response facility until the nearsite EOF can be staffed. Staffing of the CEOF will be initiated at the Alert Classification. Staffing of the EOF will continue to be initiated upon the declaration of Site Area or General Emergency.

An element of this approach which requires further clarification for the NRC involves the coordination of the states and locals with the utility at the EOF. The NRC is concerned that the response to an emergency by state and local authorities could be affected by the time needed to staff the EOF and the use of the CEOF as an interim EOF. Attached is a copy of our reply to the NRC's concern.

If this reply is compatible with state and local response plans, please sign, date and return to me. If you have any reservations about the use of the CEOF as an interim EOF while staffing of the EOF is in progress, please let us know. We do not believe the use of the interim CEOF to be a problem given state response times to the EOF. The activation of the nearsite EOF is similar in nature to the establishment of a state forward command post with the State EOC in command. If you have any concerns with this response, please provide a letter addressing your concerns. We would appreciate a response no later than September 1, 1993.

TB/h:44

If you have questions, please contact Terry Blackmon (708)663-2097 or myself (708)663-2095.

I.M. Johnson
Emergency Preparedness and
State Programs Director

IMJ/TB/ktd

Attachment

cc: T. Blackmon

TB/h:45

Question 5: Coordination with State and Local Governments

The EOF is the interface for coordination of emergency response activities with the State and local governments during an emergency. The response to an emergency by the state and local authorities could be affected by the time needed to staff the EOF and the use of the CEOF as an interim EOF. The staff requests information regarding the position of the State or local governments concerning the CECo proposal.

Provide documentation regarding coordination with the affected State and local governments on the time "goal" for the staffing of the CECo near-site EOFs and the use of the CEOF as an interim EOF until the near-site EOFs are staffed.

Response:

Interface for coordination of emergency response activities with State and local governments during an emergency is initiated with the first phone call from the control room. Interface with State and local authorities for purposes of decision making transfers with command and control.

In all cases, State decisionmakers operate out of Emergency Operations Centers (EOCs) located in their respective state capitals. Local decisionmakers operate out of county EOCs. No State or local decisionmakers come to the EOF.

State personnel, who eventually arrive at the EOF, act as liaisons. As liaisons, they monitor information being provided through official channels to ensure information is being provided accurately and timely. Liaisons have no authority to make decisions for the agency they represent.

In the unique case of Illinois, data are transmitted twenty four hours a day to Springfield. The Illinois Department of Nuclear Safety (IDNS) not only gathers information from the data link but also from a real time Gaseous Effluent Monitoring System and a system of Reuter-Stokes radiation monitors (which are located in a ring near the site) on a continuous basis. As a result of the Memorandum of Understanding (MOU) between IDNS and NRC, the IDNS resident engineers report to the TSC as their emergency response location. These resident engineers remain at the TSC even after the EOF is manned. The resident engineers act as liaisons to the TSC and monitor information flow for the Illinois Department of Nuclear Safety.

Wisconsin and Iowa are provided information via telephone communications. In addition, a dedicated Decisionmakers Conference Line has been provided at Zion and Quad Cities. The Decisionmakers Conference Line connects the Station Director in the TSC or the Manager of Emergency Operations in the CEOF or EOF with the Radiological Emergency Assessment Center (REAC) Commander (IDNS), and the State Radiological Coordinator (Iowa, or Wisconsin, as appropriate). This dedicated link allows for rapid consultation on protective action decisions.

None of the counties in Illinois, Iowa or Wisconsin dispatch representation to CECo's EOFs. Counties in Illinois receive initial notification from the Illinois Emergency Management Agency (IEMA). Scott and Clinton counties in Iowa are notified at the Unusual Event (UE) and Alert level by the Iowa Emergency Management Division (IEMD) and at the Site Area Emergency (SAE) and General Emergency (GE) level by CECo. Kenosha County, Wisconsin is notified by CECo at all classification levels.

Supporting information to the counties is provided by the states either by phone or by state presence in the county EOC. CECo also dispatches a representative to the counties. CECo representatives are called out with the EOF staff and have arrival times commensurate with that to an EOF and with state representatives for a given county.

In the event that a General Emergency were the initiating event, CECo recommends protective actions directly to States and Counties simultaneously. In this event, counties would most likely take protective actions before any facility (i.e. a TSC, EOF, or State EOC) were manned.

Name

August 16, 1993
Date

TB/h:47

T. Backmon

State of Wisconsin \ Department of Military Affairs
DIVISION OF EMERGENCY GOVERNMENT

4802 SHEBOYGAN AVENUE, ROOM
PO BOX 7865
MADISON WISCONSIN 53707-7865
Telephone (608) 266-3232
Facsimile (608) 266-1569

August 19, 1993

Ms. Irene M. Johnson
Emergency Preparedness and
State Programs Director
Commonwealth Edison Company
1400 Opus Place
Downers Grove, IL 60515

Dear Ms. Johnson:

Attached is my signed approval of that part of your proposed response to the NRC dealing with the effectiveness of the coordination between Wisconsin state and local governments in the event of a nuclear power plant (NPP) incident.

The statement appropriately identifies the communications means and protocols between the plant EOF and the State and county EOCs.

If NRC Region III requires any further information on this issue, they may call me at (608) 266-1899 or contact Garrett Nielsen at (608) 266-3115.

Sincerely,

Christine C. Bacon

Christine C. Bacon, Director
Bureau of Technological Hazards

pc: LeRoy E. Conner, Jr., Administrator
Garrett A. Nielsen, Manager, REP Program

enclosure

(893APLTR.UCW)

Question 5: Coordination with State and Local Governments

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In the event that a General Emergency were the initiating event, CECo recommends protective actions directly to States and Counties simultaneously. In this event, counties would most likely take protective actions before any facility (i.e. a TSC, EOF, or State EOC) were manned.

Christine Bacon
Name

Aug 12, 1993
Date

TB/h:51

Question 5: Coordination with State and Local Governments

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In the event that a General Emergency were the initiating event, CECo recommends protective actions directly to States and Counties simultaneously. In this event, counties would most likely take protective actions before any facility (i.e. a TSC, EOF, or State EOC) were manned.

David L Smith
Name

8/30/93
Date

TB/h:55

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

OFFICE OF THE
SECRETARY

IN RESPONSE, PLEASE
REFER TO: M830302B

ACTION - DeYoung
Cys: Dircks
Roe
Rehm
Stello
GCunningham
Denton

March 3, 1983

ACTION

MEMORANDUM FOR: William J. Dircks, Executive Director
for Operations

FROM: Samuel J. Chilk, Secretary

SUBJECT: STAFF REQUIREMENTS - BRIEFING ON STAFF ACTIONS REGARDING LOCATION OF EMERGENCY OPERATIONS FACILITIES, 2:30 P.M., WEDNESDAY, MARCH 2, 1983, COMMISSIONERS' CONFERENCE ROOM, D.C. OFFICE (OPEN TO PUBLIC ATTENDANCE)

The Commission was briefed by staff on actions regarding the location and habitability of emergency operations facilities proposed by utilities.

A majority of the Commission expressed a continuing desire to review all exemption requests; and directed staff to refer exemption requests and proposed staff action (grant or deny) to the Commission for decision on a negative consent basis. Chairman Palladino, and Commissioners Gilinsky, Ahearne and Asselstine were in favor of this action; Commissioner Roberts dissented. He preferred that the Commission review only exemption requests of special interest.

(IE)

cc: Chairman Palladino
Commissioner Gilinsky
Commissioner Ahearne
Commissioner Roberts
Commissioner Asselstine
Commission Staff Offices
PDR - Advance
DCS - 016 Phillips

RECEIVED
Date 3-7-83
Time 1:30 P.M.

Attachment 8

OFFICE OF THE SECRETARY

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

March 3, 1983

IN RESPONSE, PLEASE REFER TO: M830302B

ACTION - DeYoung
Cys: Dircks
Roe
Rehm
Stello
GCunningham
Denton

ACTION

MEMORANDUM FOR: William J. Dircks, Executive Director for Operations

FROM: Samuel J. Chilk, Secretary

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(IE)

cc: Chairman Palladino
Commissioner Gilinsky
Commissioner Ahearne
Commissioner Roberts
Commissioner Asselstine
Commission Staff Offices
PDR - Advance
DCS - 016 Phillips

Received OM, EDO
Date 3-7-83
Time 1:32 p

Attachment 5

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

OFFICE OF THE SECRETARY

April 30, 1987

MEMORANDUM FOR: Victor Stello, Jr., Executive Director for Operations

FROM: Samuel J. Chilk, Secretary

SUBJECT: SECY-87-67 - EXCEPTION FOR THE EMERGENCY OPERATIONS FACILITY DESIGN FOR THE OCONEE NUCLEAR STATION

The Commission has no objection to the staff's proposed approval of the Duke Power Company's request for an exception to the location, radiological habitability, and backup requirements for the Oconee Emergency Operations Facility.

The Commission (with Chairman Zech and Commissioners Asselstine and Carr approving) has agreed that future requests for exceptions to EOF requirements should continue to be submitted to the Commission. Commissioner Roberts agreed with the staff's request to act on future requests.

Copies:
Chairman Zech
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
Commissioner Carr
OGC (H Street)
GPA

Attachment 9

Action: Russell, NRR

Cys: Taylor
Milhoan
Thompson
Blaha
EFox, NRR ✓

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

OFFICE OF THE
SECRETARY

September 18, 1996

MEMORANDUM TO: James M. Taylor
Executive Director for Operations

FROM: John C. Hoyle, Secretary /RA/ for

SUBJECT: STAFF REQUIREMENTS - SECY-96-170 - ASSESSMENT OF EXCEPTIONS GRANTED FOR LOCATIONS AND STAFFING TIMES OF EMERGENCY OPERATION FACILITIES

The Commission has approved the staff proposal to maintain existing guidance for locations and staffing times for emergency operations facilities (EOF).

The Commission also has approved the staff recommendation that it be authorized to accept or reject exceptions to the criteria for EOF and backup EOF locations which are within five miles beyond the distance contained in NUREG-0737, Supplement 1. Cases where the licensee has proposed a deviation beyond this authorization and those for centralized EOF proposals will continue to require Commission approval.

(NRR) 9600059

cc: Chairman Jackson
Commissioner Rogers
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
OGC
OCA
OIG
Office Directors, Regions, ACRS, ACNW, ASLBP (via E-Mail)

SECY NOTE: THIS SRM, SECY-96-170, AND THE VOTE SHEETS OF ALL COMMISSIONERS WILL BE MADE PUBLICLY AVAILABLE 5 WORKING DAYS FROM THE DATE OF THIS SRM.

Attachment 10

POLICY ISSUE
(Notation Vote)

August 5, 1996 SECY-96-170

FOR: The Commissioners

FROM: James M. Taylor
Executive Director for Operations

SUBJECT: ASSESSMENT OF EXCEPTIONS GRANTED FOR LOCATIONS AND STAFFING TIMES OF EMERGENCY OPERATION FACILITIES

PURPOSE:

To provide to the Commission, as requested, the results of the staffs review and an assessment of whether the guidance in NUREG-0737, Supplement 1, "Clarification of TMI Action Plan Requirements (Requirements for Emergency Response Capability)," with respect to the location and staffing times of emergency operations facilities (EOFs) is appropriate.

SUMMARY:

In response to a staff requirements memorandum (SRM), the staff has reviewed existing guidance for location and staffing times for EOFs to determine their adequacy. As a result of that review, the staff has concluded that the guidance on the location and staffing time specified for the EOF in NUREG-0737, Supplement 1 is still generally appropriate.

BACKGROUND:

In an SRM dated April 3, 1996, which responds to SECY-96-057, "Relocation of Emergency Operations Facility for Susquehanna Steam Electric Station," the Commission noted that the staff's request contained an exception to NUREG-0737 with respect to the location of the EOF. The Commission requested the staff to review the number of sites for which exceptions on the EOF location and staffing times had been granted, as well as pending requests, and assess whether the guidance in NUREG-0737 with respect to EOFs is appropriate or should be changed.

Contact: Edwin F. Fox, Jr., NRR/PERB
415-2908

NOTE: TO BE MADE PUBLICLY AVAILABLE WHEN THE FINAL SRM IS MADE AVAILABLE

On January 21, 1981, the Commission approved two options for the location of the EOF at nuclear power plant sites, in COMJA-80-37. One option allowed for a single EOF location between 10 and 20 miles from the site with no habitability features. The second option allowed for a primary EOF located up to 10 miles from the site with habitability features and a backup EOF without habitability features located between 10 and 20 miles from the site.

In a Chilk to Dircks memorandum of September 30, 1981, responding to SECY-81-509, the Commission disapproved a recommendation that the staff approve licensee requests for exceptions to COMJA-80-37 concerning EOF location and backup criteria where the licensee had provided a heavily shielded EOF located within 10 miles or less of the plant site without a backup EOF. The Commission stated in this memorandum that the staff could accept such facilities provided each emergency plan identified an alternate location where utility and government officials can meet and have contingency arrangements for communications to the Technical Support Center (TSC).

On November 22, 1982, the Commission approved Supplement 1 to NUREG-0737, which was subsequently issued to licensees in Generic Letter (GL) 82-33 dated December 17, 1982. Table 1 in Supplement 1 to NUREG-0737 is the same table from COMJA-80-37 which describes the EOF location options.

Licensees' responses to GL 82-33 were confirmed by Order. Supplement 1 to NUREG-0737 (at 22) states that "the EOF will be... located and provided with radiological protection features as described in Table 1 (previous guidance approved by the Commission)." The attached Table 1, "Emergency Operations Facility," of Supplement 1 to NUREG-0737 describes two options for locating the EOF. Option 1 provides for an EOF that meets radiological habitability requirements and is located within 10 miles of the site and a backup EOF that has no radiological habitability features and is located between 10 and 20 miles from the site. Option 2 provides for a single EOF that has no radiological habitability features and is located "at or beyond 10 miles" from the site, with "specific approval required by the Commission if beyond 20 miles, and some provision for NRC site team closer to the site." In addition, Table 1 "strongly recommended" that a location selected under option 2 "be coordinated with offsite authorities."

Commission SRM M830302B, dated March 3, 1983, directed the staff to refer all requests for exceptions concerning location or habitability of EOFs, along with proposed staff actions, to the Commission for decision. On April 30, 1987, in response to SECY-87-67, the Commission again directed the staff to continue to submit all future requests for exceptions to EOF requirements to the Commission.

DISCUSSION:

Rationale for Retaining the EOF Guidance Criteria

The rationale for the requirement for locating an unshielded primary EOF under option 2 (or the backup EOF under option 1) of NUREG-0737, Supplement 1, between 10 to 20 miles from the nuclear power reactor site is traceable to early Commission briefings and decisions. The 10-mile lower limit was determined to be sufficiently far from the site to avoid potentially significant radiation exposures that may be associated with core-melt accidents, yet still close enough to allow the EOF to readily communicate with the site and with personnel engaged in an emergency response. The EOF is intended to facilitate face-to-face communications between the licensee, State and local governmental officials, and the NRC staff, and the briefing and debriefing of persons going to and from the site, without exposing those persons to undue radiological risks. The 20-mile upper limit was considered to be the generally maximum optimal distance within which such face-to-face communications between the licensee, State and local government officials, and the NRC staff could continue to be effective, while permitting the timely briefing and debriefing of persons going to and from the site. While these goals have been found to be generally attainable at certain sites without strict adherence to the 10-to-20 mile criterion, or conditions may have been found to exist which would support excepting a specific site from this criterion, the staff is not aware of any information that has been presented to date which would invalidate this criterion on a generic basis.

Supplement 1 to NUREG-0737 also provides guidance with respect to EOF staffing and indicates (at 23) that "the EOF will be... staffed using Table 2 (previous guidance approved by the Commission) as a goal. Reasonable exceptions to goals for the number of additional staff personnel and response time for their arrival should be justified and will be considered by the NRC staff." Table 2, "Minimum Staffing Requirements for NRC Licensees for Nuclear Power Plant Emergencies" of Supplement 1 to NUREG-0737, provides guidance regarding the capability for staffing additions and the times for those additions. Supplement 1 to NUREG-0737 does not specifically indicate when the EOF is to be staffed or fully operational, however, NUREG-0696, "Functional Criteria for Emergency Response Facilities" (February 1981) indicates (at 19) that "Upon EOF activation, designated personnel shall report directly to the EOF to achieve full functional operation within 1 hour."[1]

---

[1] NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (November 1980) indicates (§ II.H.2, at 52) that EOFs are to be established and operated in accordance with the guidance contained in NUREG-0696, Revision 1.

The basis for the 60 minute EOF staffing goal is not set out in either NUREG-0696 or NUREG-0737, Supplement 1. However, the 60 minute goal is generally consistent with the reactor safety studies documented in NUREG-0396, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants," which indicates in part (at 19) that "the planning basis for the time dependence of a release is expressed as a range of time values in which to implement protective action. This range of values prior to the start of a major release is of the order of one-half hour to several hours." In addition, a time of 60 minutes is generally deemed to be the minimum required time for assembling key licensee, State and local governmental officials at an EOF. While some exceptions to this staffing goal have been granted in the past, based upon site-or licensee-specific considerations, the staff is not aware of any information which would suggest that the 60-minute staffing goal should be modified on a generic basis.

Exceptions to the EOF Guidance Criteria:

Supplement 1 to NUREG-0737 (at 24) states that "exemptions from or alternative methods of implementing these requirements should be discussed with NRC staff and in some cases could require Commission approval."[2]

1. Exceptions to EOF Location Guidance

Exceptions to EOF location criteria fall generally into four categories:

1. Exceptions to the primary EOF location.
2. Exceptions to the backup EOF location, if there is a requirement for a backup EOF.
3. Exceptions for an alternate EOF or its location when the primary EOF is hardened.[3]
4. Exceptions to the near-site EOF concept in Supplement 1 to NUREG-0737. (Attachment 2, Notes B and D)

Staff records indicate that, for currently operating plants, the Commission has granted 12 exceptions from the primary EOF location criteria and 23 exceptions from the backup EOF location criteria as specified in NUREG-0737, Supplement 1. (The staff did not include exceptions granted for sites that are no longer operational or under construction, i.e., Yankee Rowe,

---

[2] The guidance contained in NUREG-0737, Supplement 1 does not constitute in itself regulatory requirements for licensees. Accordingly, the "exemptions" referred to in Supplement 1 to NUREG-0737 are not exemptions as defined in the regulations (10 CFR 50.12) but more accurately are described as "exceptions" from the guidance.

[3] Hardened EOF - Located within the 10-mile emergency planning zone with protection factors much greater than 5 and ventilation systems that will ensure a habitable facility even during a core-melt accident.

Rancho Seco, WNP3, et. al.) Attachment 2 contains a list of sites for which an exception has been granted for currently operating plants with respect to the location of either the primary EOF or the backup EOF, if applicable.

As shown in Attachment 2, many of the exceptions which have been granted pertained to deviations of distances ranging from 0 to 5 miles from the 20-mile criterion for either the primary EOFs (3 of 12 exceptions) or backup EOFs (10 of 23 exceptions). The rationale for granting the exceptions from the primary EOF location criteria was, in most cases, that the new location was sufficiently close (between slightly more than 0 to less than 5 miles) to the 10-to-20-mile outer boundary criterion. EOF locations greater than 25 miles from the site have also been accepted for some primary EOFs (8 of 12 exceptions) or backup EOFs (5 of 23 exceptions). When the EOF location was a greater distance from the site (beyond 25 miles), the accepted rationale for its location was generally either (1) the EOF and the State Emergency Operations Center could be collocated, (2) the location was more favorable to the state or local government officials, or (3) the location facilitated a common licensee EOF. The bases for granting exceptions from the backup EOF location criteria were similar to those for exceptions to the primary EOF. Additionally, some EOF locations less than 10 miles from the site were accepted for some primary EOFs (1 of 12 exceptions) or backup EOFs (3 of 23 exceptions), generally based upon the determination that it was only a 1-to-2-mile deviation from the 10-mile criterion and this distance was offset by the use of licensee facilities which were better and amenable to use by the State and local government officials. Finally, an exception from having an alternate EOF (1 of 23 exceptions) was granted generally based upon the location of the hardened EOF (7.5 miles from the site) and its accessibility by the State and local governmental officials.

In response to SECY-81-509, the Commission authorized the staff to approve an alternate location in place of a backup EOF when the licensee had built an EOF with a high degree of habitability protection within 10 miles of the plant. The exception could be granted provided (1) that each emergency plan identified an alternate location where utility and Government officials could meet to discuss plant status and appropriate public protective actions, and (2) that the emergency plan indicated that contingency arrangements had been made to provide equipment for necessary communication with the TSC in the event of an emergency. The staff has accepted seven close-in hardened EOFs which are identified in Attachment 2 (Note A). Of the 23 exceptions granted for backup EOFs, three were for alternate EOF locations as shown in Attachment 2 (Note C).

Regarding centralized EOFs with locations well beyond the distance criteria specified in NUREG-0737, Supplement 1, the Commission has considered three proposed emergency plans that contained provisions for a centralized EOF that would serve as a single EOF for a multi-site licensee, one of which was rejected. Attachment 2 identifies those sites with a centralized EOF which have been approved by the Commission. Proposals for a centralized EOF were considered as follows: First, on January 21, 1981, before issuance of NUREG-0696, the Commission approved the TVA plan to locate the EOF for its

nuclear reactor sites beyond the distance specified in the NRC guidance (COMJA-80-37). Currently, the TVA emergency plan specifies the use of a centralized EOF located approximately 100 miles from the most distant TVA nuclear plant, with accommodations near each plant for an NRC site team.

Second, the Commission rejected an exception to the guidelines for the EOF for the Oconee Nuclear Station. Duke Power Company, licensee for Oconee, proposed to use a centralized EOF 125 miles from the Oconee site. The staff recommended that the Commission reject the Oconee proposal because the principal EOF management staff could not interact directly with its Federal, State, and local counterparts located near the plant site. Additionally, the Oconee plan did not contain provisions for staffing a near-site EOF. In an opinion issued June 24, 1985, the Fourth Circuit Court of Appeals upheld the Commission's decision not to grant Duke Power Company an exception to locate the EOF for the Oconee plant 125 miles from the site, at Duke's corporate headquarters [Duke Power Co. v. USNRC, 770 F.2d 386 (4th Cir. 1985)].

Third, the Commission has recently approved Commonwealth Edison Company's (ComEd) use of its corporate EOF as an interim EOF during an emergency at any of its nuclear stations until the affected station's near-site EOF[4] can be staffed and is operational (which usually takes 2 to 4 hours). The use of an interim EOF allows the licensee to meet the 60-minute staffing goal, and the subsequent use of near-site EOFs allows the licensee to meet the location criterion specified in NUREG-0737, Supplement 1. However, inasmuch as exceptions were required for both EOF locations and staffing times, these are included in Attachments 2 and 3, respectively. The staff is currently evaluating ComEd's further proposal to utilize a centralized EOF throughout the course of an emergency and the associated elimination of its near-site EOFs, as a separate issue from this paper, as noted in SECY-95-274.

2. Exceptions to EOF Staffing Time Guidance

As listed in Attachment 3, 17 exceptions have been granted by the staff to the 60 minute EOF staffing time goal. As of the date of this paper, no applications are pending for an exception to the 60-minute EOF staffing time guideline. As shown in Attachment 3, eight of the 17 exceptions allowed the staffing time goal of 60 minutes to be exceeded by 15 minutes and three of the 17 exceptions to be exceeded by thirty minutes. The staff accepted the licensees' justification for the deviations from the 60-minute staffing time goal based upon the overall remoteness of the sites and the location of the EOFs with respect to the individual sites. In addition, a few exception were made for longer times. For Palo Verde, the staff accepted a 120-minute staffing time because of the remoteness of the site and the fact that travel time required to staff the EOF during off-hours would be more than 1 hour.

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[4]Four near-site EOFs support the six ComEd sites. Braidwood, Dresden, and LaSalle are supported by an EOF located at Mazon, Illinois, located 32, 40, and 45 miles, respectively, from those sites. Byron, Quad Cities, and Zion each have a near-site EOF which meets NRC's location guidance.

For Waterford, the staff accepted the 120-minute staffing time during licensing primarily because of the site's location. The remaining four exceptions were ComEd sites wherein the staff supported the licensee's proposal for the use of an interim EOF which would be staffed in 60 minutes, which would allow the near-site EOFs to be staffed in 2 to 4 hours.

Adequacy of Guidance on Locations and Staffing Times for EOFs in Supplement 1 to NUREG-0737

The criteria specified in NUREG-0737, Supplement 1, with respect to the location of EOFs and backup EOFs, is similar to the guidance contained in regulatory guides: "Methods and solutions different from those set out in the guides will be acceptable if they provide a basis for the findings requisite to the issuance or continuance of a permit or license by the Commission." GL 82-33 indicates, in part (at 1), that "The enclosures to this letter are a distillation of the basic requirements...from...guidance documents.... It is our intent that the guidance documents themselves, referred to in the enclosures, are not to be used as requirements, but rather that they are to be used as sources of guidance for NRC reviewers and licensees regarding acceptable means for meeting the basic requirements." GL 82-33 also states, in part (id.) that "the staffing levels in Table 2 to the enclosure are only goals, and are not strict requirements."

The staff's assessment of requests for exceptions previously discussed indicates that the guidance on the location and staffing time specified for the EOF in Supplement 1 to NUREG-0737 is still generally appropriate. The staff's view is that this guidance provides a reasonable framework which has withstood the test of time. This view is based on the fact that the guidance, as reflected in licensees' emergency plans, has been successfully tested on numerous occasions during emergency preparedness exercises and has been demonstrated to be adequate during responses to actual events since the early 1980's. This guidance fits a majority of nuclear power plant sites; however, a consideration of site specific factors has prompted licensees on occasion to request exceptions to the established guidance. For example, thirteen EOF exceptions could have been avoided if the primary, backup, or alternate EOF outer boundary location guidance were changed from 20 to 25 miles. However, in view of the existing state of licensee emergency preparedness programs which includes established and approved EOFs for all sites, and considering that the staff does not expect a large number of EOF location exception requests in the future (only 4 in the last 5 years), it is the staff's recommendations that the guidance should not be changed.

Similarly, eight EOF staffing time exception approvals could have been avoided if the EOF staffing time were changed, for example, from 60 to 75 minutes. However, given the existing state of licensee emergency preparedness programs, the fact that no information has been received which would indicate the 60 minute criterion is inappropriate, and the anticipated small number of future requests for exceptions to EOF staffing times, it is the staff's view that the EOF staffing time guidance remains adequate.

The staff concludes, on the basis of its assessment of the rationale for deviations from guidance for location of both the primary and backup EOFs and staffing times, that the guidance in NUREG-0737, Supplement 1, is adequate and no changes are necessary. The staff notes that since many of the EOF location exceptions only deviated from the distance guidance in NUREG-0737, Supplement 1, by 0 to 5 miles, the review process could be streamlined by allowing the staff to review and approve or disapprove exceptions, without referral to the Commission, for primary or backup EOFs located 25 miles from the site, i.e., a deviation distance of 5 miles or less from the 20-mile EOF outer boundary criterion. If such an approach is acceptable to the Commission, the staff would continue to refer to the Commission those instances where the exceptions proposed by the licensee significantly deviate from EOF location guidance, such as closer-in or more distant locations, and centralized EOF proposals like those submitted by Duke Power Company and Commonwealth Edison Company. Such instances are expected to be relatively infrequent, and are more appropriate for Commission consideration.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

RECOMMENDATIONS:

(1) That based upon this assessment, the staff does not recommend changing the guidance in NUREG-0737, Supplement 1, with respect to locations and staffing times for EOFs.

(2) That the Commission authorize the staff to accept or reject exceptions to the criteria for the locations of EOFs and backup EOFs which are within a distance of 5 miles of the guidance as specified in NUREG-0737, Supplement 1. Cases where the licensee has proposed a significant deviation from the EOF location guidance as described herein would continue to be referred to the Commission for approval.

(3) Note that the staff is still evaluating the concept of a single centralized EOF for utilities with nuclear power plants located on more than one site as noted in SECY-95-274 and will report to the Commission the staff's assessment of this proposal as it relates to the criteria for the locations and staffing times of EOFs in NUREG-0737, Supplement 1.

James M. Taylor
Executive Director
for Operations

Attachments: 1. Table 1, "Emergency Operations Facility," of Supplement 1 to NUREG-0737
2. Exceptions to Locations for EOFs and Backup EOFs
3. Exceptions to Staffing Times for EOFs

Commissioners' comments or consent should be provided directly to the Office of the Secretary by COB Monday, August 19, 1996.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Monday, August 12, 1996, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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TABLE 1

EMERGENCY OPERATIONS FACILITY

Option 1
Two Facilities

Close-in Primary: Reduce Habitability*

- o within 10 miles
- o protection factor = 5
- o ventilation isolation with HEPA (no charcoal)

Backup EOF

- o between 10-20 miles
- o no separate, dedicated facility
- o arrangements for portable backup equipment
- o strongly recommended location be coordinated with offsite authorities
- o continuity of dose projection and decision making capability

Option 2
One Facility

- o At or Beyond 10 miles.
- o No special protection factor.
- o If beyond 20 miles, specific approval required by the Commission, and some provision for NRC site team closer to site.
- o Strongly recommended location be coordinated with offsite authorities.

For both Options:

- located outside security boundary
- space for about 10 NRC employees
- none designated for severe phenomena, e.g., earthquakes

*abitability requirements are only for the part of the EOF in which dose assessments communications and decision making take place.

f a utility has begun construction of a new building for an EOF that is located with 5 miles, that new acility is acceptable (with less than protection factor of 5 and ventilation isolation and HEPA) provided hat a backup EOF similar to "B" in Option 1 is provided.

ATTACHMENT 1

EXCEPTIONS TO LOCATIONS FOR
EOFs AND BACKUP EOFs

The following sites have been granted an exception to the location criteria in NUREG-0737, Supplement 1, for either the primary EOF, the backup EOF, or the alternate EOF.

REGION - SITE	PRIMARY EOF EXCEPTIONS (Miles)	BACKUP EOF EXCEPTIONS[A] (Miles)
Region I -		
Artificial Island	-	NO ALTERNATE EOF SECY-84-63 [C]
Limerick	21 (>20) SECY-90-072	-
Maine Yankee	-	25(>20) SECY-83-192
Millstone	-	38(>20) SECY-84-176
Peach Bottom	45 (>20) SECY-90-072	-
Susquehanna	22 (>20) SECY-96-057	-
Region II -		
Browns Ferry [B]	104 (>20) CECC CONCEPT [B]	-
Harris	-	21 (>20) ALTERNATE EOF [C]
Hatch	-	21 (>20) SECY-93-004
North Anna	-	29 (>20) SECY-83-478
Summer	-	25 (>20) SECY-84-125
Surry	-	58 (>20) SECY-83-478
Turkey Point	24 (>20) SECY-83-111	-
Watts Bar [B]	50 (>20) CECC CONCEPT [B]	-
Region III -		
Braidwood/Dresden/LaSalle	32-45 (>20) SECY-95-274 [D]	-
Byron	66 (>20) SECY-95-274 [D]	-
Clinton	-	22 (>20) SECY-85-152
Davis-Besse	-	21 (>20) SECY-83-191
Fermi	-	22 (>20) SECY-83-524
Kewaunee	26.1 (>20) SECY-87-311	-
Monticello	-	45 (>20) SECY-83-363
Palisades	9.1 (<10) SECY-87-161	-
Point Beach	-	88 (>20) SECY-90-151
Prairie Island	-	55 (>20) SECY-83-363
Quad Cities	116 (>20) SECY-95-274 [D]	-
Zion	45 (>20) SECY-95-274 [D]	45 (>20) SECY-93-175
Region IV -		
Arkansas Nuclear One	-	7 (<10) SECY-84-19
Callaway	-	25 (>20) SECY-83-161
Palo Verde	-	8 (<10) SECY-83-516
River Bend	-	23 (>20) SECY-83-152

ATTACHMENT 2

EXCEPTIONS TO LOCATIONS FOR
EOFs AND BACKUP EOFs (Continued)

REGION - SITE	PRIMARY EOF EXCEPTIONS (Miles)	BACKUP EOF EXCEPTIONS[A] (Miles)
Region IV (Cont.) -		
San Onofre	-	35 (>20) Commission Vote - Full Power License)
Waterford	-	25 (>20) SECY-83-205
WNP2	-	9.5(<10) ALTERNATE EOF SECY-83-361 [C]
Wolf Creek	-	28 (>20) SECY-95-105
TOTAL EXCEPTIONS	12	23 [C]

ATTACHMENT 2

Note A - In response to SECY-81-509, the Commission authorized the staff to approve an alternate location in place of a backup EOF where licensees had built an EOF with a high degree of habitability within 10 miles of the plant. An alternate location is defined by the Commission as a facility located between 10 and 20 miles of the plant site where utility and Government officials can meet to discuss plant status and appropriate public protective actions, and arrangements have been made to communicate with the Technical Support Center. The seven currently operating sites which have hardened EOFs include Artificial Island, Haddam Neck, Pilgrim, Vermont Yankee, Brunswick, Harris, and WNP2.

Note B - In COMJA-80-37 -- issued prior to NUREG-0737, Supplement 1 --, the Commission accepted the Tennessee Valley Authority's arrangement for a centralized EOF for the Browns Ferry, Watts Bar and Sequoyah facilities, as a special case with the addition of some provisions near each site for the NRC site team. Browns Ferry and Watts Bar exceed the 20-mile EOF location criterion by being located 105 and 50 miles from their sites, respectively. The Sequoyah site is located within the 10-to-20-mile EOF location criterion and, consequently, is not included in this list.

Note C - The 23 exceptions granted for the location of backup EOFs include 3 exceptions (Artificial Island, Harris and WNP2, also listed in Note A above) granted for locating the alternate EOF where utilities have provided hardened EOFs. Artificial Island has a hardened EOF and because of its location (7.5 miles) and its accessibility under accident conditions by State and local government officials, an alternate EOF was not needed. The Harris alternate EOF, located at 21 miles from the site, was granted an exception because the criterion of 20 miles for backup EOFs is exceeded by only 1 mile and the location was satisfactory to State and local governmental officials. The third exception was granted to WNP2 for use of the Washington Public Power Supply System headquarters building as its alternate EOF because it is located 9.5 miles from the site which is only slightly less than the 10-mile criterion for backup EOFs and would allow access to the utility communications center, corporate management, and corporate engineering staff.

Note D - Commonwealth Edison was granted an exception to permit it to staff a corporate EOF beyond 20 miles from the site of its reactor facilities on an interim basis, while emergency personnel are dispatched to the site's primary EOF. (See page 6 for a discussion of this issue.)

EXCEPTIONS TO STAFFING TIMES FOR EOFs

The following sites have been granted an exception from the staffing goal of 60 minutes for the EOF.

REGION - SITE	EXCEPTION TO EOF STAFFING GOAL (Minutes)
Region I	
Susquehanna	90
Region II	
Brunswick	75
Catawba	75
Farley	75
Harris	75
McGuire	75
Oconee	75
Robinson	75
Surry	90
Region III	
Big Rock Point	90
Braidwood/Dresden/LaSalle	240
Bryon	240
Quad Cities	240
Zion	240
Region IV	
South Texas Project	75
Palo Verde	120
Waterford	120
TOTAL EXCEPTIONS	17

ATTACHMENT 3

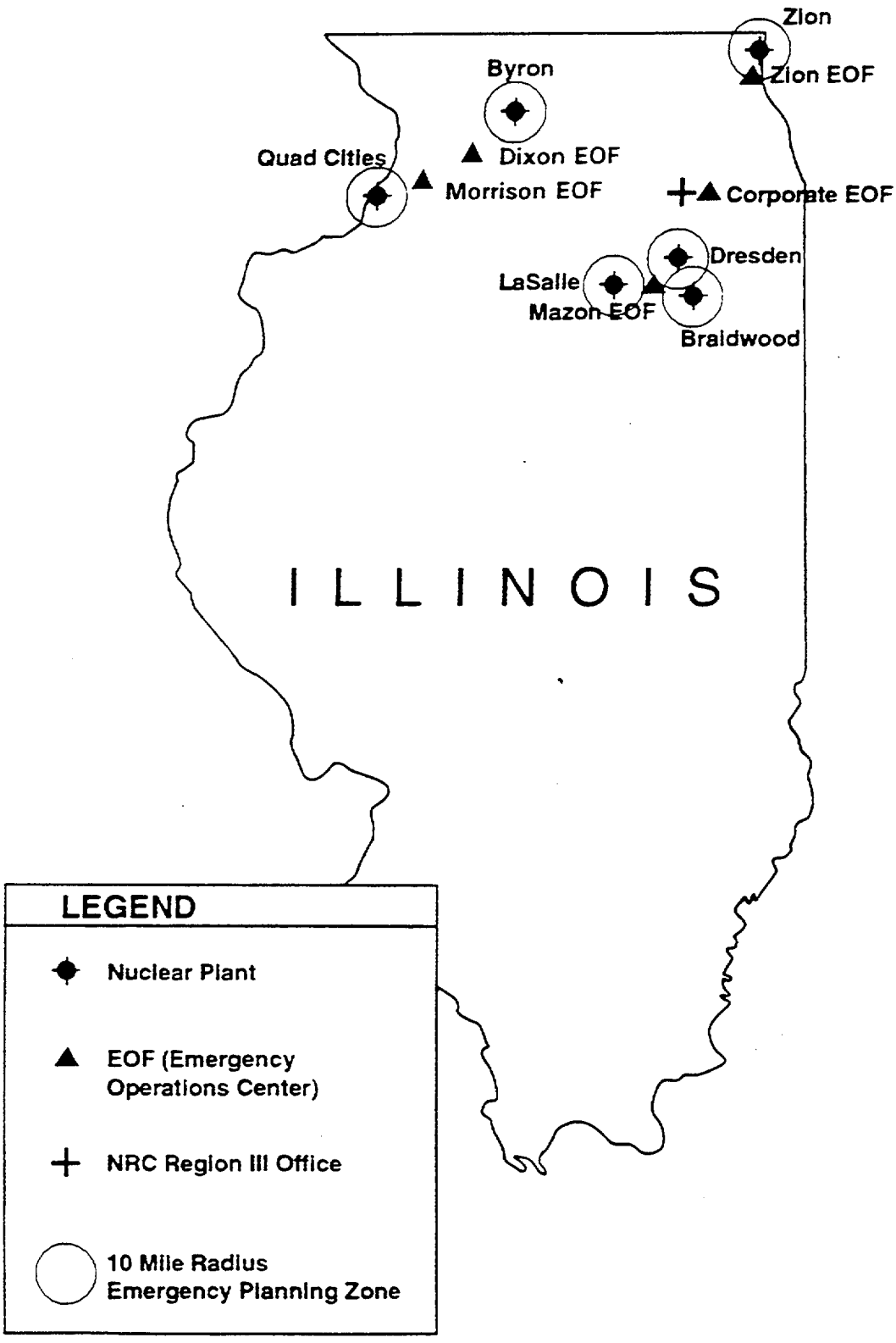
ATTACHMENT A

TABLE 1

STRAIGHT LINE DISTANCE FROM THE STATIONS

STATION	CENTRAL EOF	NEAR-SITE EOF
Dresden	32 miles	10 miles
Braidwood	40 miles	10 miles
Zion	45 miles	0.5 miles
LaSalle	48 miles	10 miles
Byron	66 miles	20 miles
Quad Cities	116 miles	18 miles

MAP OF COMMONWEALTH EDISON COMPANY'S FACILITIES



1400 Opus Place
Downers Grove, IL 60515

ComEd

Feb. 27, 1997

U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

Subject: Braidwood Station Units 1 and 2
Byron Station Units 1 and 2
Dresden Station Units 1, 2, and 3
LaSalle County Station Units 1 and 2
Quad Cities Station Units 1 and 2
Zion Station Units 1 and 2

Commonwealth Edison Response to: USNRC Request for Additional Information dated 12/17/96 regarding the Central Emergency Operations Facility (TAC Nos. M91309, M91310, M91311, M91312, M91313, M91314, M91315, M91316, M91317, M91318, M91319, M91320)

NRC Dockets 50-454 and 50-455
NRC Dockets 50-456 and 50-457
NRC Dockets 50-10, 50-237 and 50-249
NRC Dockets 50-373 and 50-374
NRC Dockets 50-254 and 50-265
NRC Dockets 50-295 and 50-304

Reference:

1) ComEd letter, John C. Brons' to USNRC dated January 5, 1995, "Commonwealth Edison Submittal: Proposal to Consolidate Near-Site Emergency Operations Facilities (EOFs) into a Central EOF"

2) USNRC letter, George F. Dick, to D. L. Farrar dated May 23, 1996, "Request for Additional Information regarding the Central Emergency Operations Facility"

3) ComEd letter to USNRC, John B. Hickman, dated August 5, 1993, "Response to Request for Additional Information Related to the Proposed Generating Station Emergency Plans (GSEP) Revision Incorporating the Corporate EOF as an Interim EOF"

4) USNRC letter (G.F. Dick) to ComEd (I.M. Johnson) dated December 17, 1996, "Request for Additional Information regarding the Central Emergency Operations Facility"

EPMISC/Chron/wonk/10

This letter provides the Commonwealth Edison (ComEd) response (Attachment 1) to the most recent Request for Additional Information (Reference 4) pertaining to the consolidation of ComEd's near site Emergency Operations Facilities (EOFs) into a Central EOF (cEOF) (Reference 1). ComEd remains firmly convinced that the consolidation described in Reference 1 provides the most effective response to a classifiable emergency condition in accordance with our Emergency Plan and the overall coordinated plan originally contemplated in NUREG-0654/FEMA Rep. 1.

While this proposal was originally submitted as a Cost Beneficial Licensing Action, and remains so today, this emergency plan change enhances our ability to effectively respond to potential emergencies. A list of the other additional benefits is provided as follows:

- Prompt "minimum staffing" during normal working hours.
- Improved access for greater numbers of ComEd responders off hours.
- Immediate access to various corporate support organizations.
- Enhanced ability of Senior personnel to quickly respond.
- Increased floor space for ComEd, State and Federal Responders.
- Reduced susceptibility to potential near-site problems.
- Proximity to USNRC Regional Headquarters. (10 minute drive time)

ComEd proposes to demonstrate the use of the Downers Grove facility as a single EOF (cEOF) for the 1997 Dresden Full State participation exercise in the summer of 1997. It was last successfully demonstrated in this capacity when performing its licensed function as the back-up EOF for Zion Station in a utility only drill.

ComEd appreciates the opportunity to clarify our submittal. ComEd will also make arrangements with NRR to schedule a meeting to discuss this further with the Staff. Please contact Mrs. I.M. Johnson at (630) 663-2096 if you have any questions pertaining to this response or the proposed meeting.

Sincerely,

John C. Brons
Nuclear Support Vice-President

MV/JCB/hg

EPMISC/Chron/vonk/11

Document Control Desk (3) February 27, 1997

Attachment 1: Specific Response to NRC Request for Additional Information, (Reference 4)

Attachment 2: ComEd Detailed Response with respect to Metropolitan Edison Company (Three mile Island Nuclear Station, Unit No. 1), CLI-83-22, NRC 299, 308 (1983).

cc: A.B. Beach, Regional Administrator , USNRC Region III
R. Capra, Director of Directorate III-2, NRR
G. Dick, ComEd Generic Issues Administrator, NRR
Senior Resident Inspector (Braidwood)
Senior Resident Inspector (Byron)
Senior Resident Inspector (Dresden)
Senior Resident Inspector (LaSalle)
Senior Resident Inspector (Quad Cities)
Senior Resident Inspector (Zion)
R. Wight, Office of Facility Safety, IDNS

Attachment 1
Commonwealth Edison
Detailed Response

to

USNRC Request for Additional Information (RAI)
Related to the Review of
The Central Emergency Operations Facility

1) During its review of the Interim Emergency Operations Facility (EOF) request from the licensee, one of the issues that was addressed was ComEd's ability to staff and activate the facility within 60 minutes. In response to the staff's concerns, ComEd successfully conducted unannounced drills to support its position that the Interim EOF can be activated in a timely manner (60 minutes). However, during an actual event at Quad Cities in May 1996, the licensee took 98 minutes to accomplish the activation of the Interim EOF. What assurances can ComEd provide to the staff that the Central EOF will be staffed and activated within 60 minutes, including off-hours, in accordance with the goal as stated in NUREG-0737, Supplement I (Clarification of TMI Action Plan Requirements)?

ComEd immediately initiated a review of the Quad Cities event to determine lessons learned, and identify needed improvement areas. That evaluation has been provided on several occasions to NRC Staff performing on-site inspections and was summarized in the SALP meeting.

The review concludes the delay in activation of the Interim EOF experienced at Quad Cities was due to a delay in initiating the notification system and would have existed regardless of the location or makeup of the EOFs. The Bulk Power Operator (BPO), assigned responsibility to activate the Computer Response Unit, did not respond to the initial NARS call. The BPO is a position staffed by a ComEd employee 24 hours a day, seven days a week, located in our Bulk Power Office. The BPO is connected to the GSEP system through the Nuclear Accident Reporting System (NARS). This is the system ComEd uses to perform state notifications of an emergency classification.

In past notification schemes, the BPO when notified of the emergency classification would notify the Nuclear Duty Officer (NDO), who in turn would activate the offsite emergency response organization. [The NDO is the person responsible for monitoring operations of the six ComEd Nuclear Stations and acting as a liaison with senior corporate management during events.] In order to minimize the offsite emergency response activation time the responsibility of offsite activation was given directly to the BPO. The BPO was selected for this role because the position is notified simultaneously to the State using the same notification system. This ensures activation of the offsite response organization as the next immediate action after State notification. This activation scheme also does not burden the Control Room at a time when they are focused on reactor safety concerns.

During the Quad Cities event in May 1996, the Station, recognizing that the BPO had not responded to the NARS notification, notified the BPO via land lines. Prior to activating the Interim EOF, the BPO confirmed with the Nuclear Duty Officer that, in fact, the Interim EOF should be activated. Once activated, the Interim EOF responders were notified and responded in a timely manner.

ComEd's internal investigation of the event indicated that had the initiation occurred in normal sequential order all minimum staff would have arrived at the Interim EOF in approximately 65 minutes.

Efforts to prevent recurrence of this particular problem were directed toward the BPO function. BPO Procedure 13-4.05 was enhanced in July to further emphasize the order and importance of notifications. The emphasis is placed upon the fact that Interim EOF activation is the first priority following NARS notification, followed then by notification of the NDO. The NDO's procedure has also been modified to check activation of the Interim EOF, immediately following his notification by the BPO. In parallel to the procedure changes, supervision in the Bulk Power Office reinforced to the onshift BPOs the importance of the notification requirements. Three drills using simulated NARS notifications have been conducted with BPO since the implementation of the corrective actions to ensure effectiveness. On-shift BPOs correctly initiated the appropriate facility activation.

For events initiated at an ALERT classification, it remains ComEd's intention to activate the cEOF staff, equivalent to the Interim EOF staff (13 people) as approved by the Nuclear Regulatory Commission, for either daytime or off-hours events. The remainder of the EOF staff would then be activated should the classification increase to Site Area or General Emergency.

The changes implemented since the Quad Cities event and the continuing commitment to staff the Interim EOF or, following approval, the staff described above for the cEOF are designed to provide assurance of ComEd's commitment to the staffing of an EOF in accordance with the 60 minute goal described in NUREG-0654. These commitments will be carried over into the activation of the cEOF staff.

2) It is the expectation of the staff and the general practice of the industry that from the time a Site Area Emergency or General Emergency is declared activation of an EOF should occur within 60 minutes. Please indicate the time at which the "activation clock" is started and the criteria used to determine when the EOF is activated for the ComEd Central EOF.

ComEd considers the activation clock, as it applies to the NUREG-0654 staffing goals to start at the classification time of the event. This classification time is recorded on the NARS form. The clock is stopped when the minimum staff (defined in the GSEP) is in the appropriate facility. For example, if the Site Emergency were classified at 10:00 AM the clock for determination of attaining the staffing goal in accordance with NUREG-0654 would expire at 11:00 AM. To further enhance ComEd's ability to staff the offsite facilities within the one hour goal ComEd intends to staff cEOF positions equivalent to the current Interim EOF staff at the ALERT or above for either daytime or offhours events as described in the answer to Question 1. The remainder of the full cEOF staff will be activated at a Site Area Emergency Classification or higher.

3) The conduct of a full participation exposure and ingestion pathway exercise as specified in 10 CFR 50, Appendix E (F)(2)(c) and (d) would fully demonstrate the functionality of the Central EOF. Please indicate to the staff how this will be accomplished.

As specified in 10 CFR 50, Appendix E (F)(2)(c), ComEd will conduct a full scale exercise with the State of Illinois at Dresden on August 20, 1997. We intend to use the cEOF, as a fully staffed, stand alone EOF for this exercise to fully demonstrate the functionality of the concept. We offered and continue to offer the NRC the opportunity to participate in this exercise.

With regard to the ingestion pathway requirements specified in 10 CFR Part 50, Appendix E (F)(2)(d), these requirements apply to the states. ingestion activities are a function of the states and, to the degree requested, the Federal agencies. Licensees have minimal, if any, activities to be performed in ingestion exercises or real event ingestion activities. Ingestion activities have been demonstrated at the Zion Federal Field Exercise in 1987 (Wisconsin & Illinois), the Byron Ingestion Exercise in 1989 (Wisconsin & Illinois), the Quad Cities Ingestion Exercise in 1990 (Iowa), and the Dresden Ingestion Exercise in 1995 (Indiana & Illinois). ComEd, as the licensee, had no role in ingestion activities. The states successfully demonstrated the exercise objectives related to ingestion pathway requirements operating out of their respective Emergency Operations Centers and not the Licensee's EOF. No ingestion pathway exercise involving ComEd is scheduled to be conducted until 2001.

4) In response to question 8 of the staff's May 23, 1996 RAI, ComEd indicated that any of its six stations' Technical Support Centers (TSC) can act as a back up to the Central EOF. Please provide information on the use of these TSCs as a backup, including the present and future plans, arrangements, training, procedures and experience using this approach.

In the highly unlikely event that ComEd would be unable to use the cEOF, the TSC at an unaffected station could provide adequate capabilities to function as an EOF. All TSCs are connected with the same redundant communications channels as the EOF. Access to computer programs necessary for emergency response are available through the ComEd Wide Area Network. With regard to staffing, unaffected station staff would be already available to initially staff with existing qualified TSC personnel and take on EOF duties. The existing station TSC staff's parallel EOF staff in training and positions and in many instances personnel are qualified EOF responders. The stations have repeatedly demonstrated the capability to staff their respective TSC's within 60 minutes (both daytime and off-hours). The station staff responding would be supplemented as needed by qualified EOF responders.

ComEd has no immediate plans to make additional changes to the TSC with respect to training, organization, or physical arrangement to formalize the use of a TSC as a cEOF back-up.

5) In ComEd's response to question 12 of the staff's May 23, 1996 RAI, ComEd stated that the NRC site team could use the current EOF's in order to be located near the site. Please provide additional information regarding the number and type of personnel, physical arrangements, communications, and other support requirements that would be available.

ComEd anticipates that NRC would send site team members to the station's Technical Support Center, the Operational Support Center and the Joint Public Information Center, and that the remainder of the site team would report to the central EOF.

For those NRC personnel who desire near site space, ComEd intends to maintain the facilities currently at Mazon (Dresden, Braidwood, & LaSalle), Morrison (Quad Cities), Dixon (Byron), as Joint Press Information Centers (JPICs). The dedicated space currently assigned the NRC for EOF purposes would be available.

For Zion, no ComEd personnel dedicated to Emergency Response at what is now the Zion nearsite EOF would be present under the new system. Like the other existing EOFs the NRC room currently maintained for dedicated NRC use in an emergency would continue to be maintained. ComEd could provide an individual to assist with access and setup of the workspace maintained for NRC. The Public Information staff would continue to be maintained at the Highland Park JPIC. If the NRC desires, the FTS communications already installed in the dedicated rooms can be maintained. The currently available NRC counterpart seating that exists at any the EOFs will be eliminated. The space currently provided in the NRC rooms has been demonstrated to be adequate during exercises in which the NRC has played.

Beyond the floor space and communications listed below and the staffing described above, ComEd does not propose to provide any additional staffing, plant documents, or supplies to these facilities beyond what is needed to support public information activities.

NRC Room

Dixon Facility	Dimensions:	24' by 30'
	FTS Phone Lines:	6
Mazon Facility	Dimensions:	17' by 28'
	FTS Phone Lines:	6
Morrison Facility	Dimensions:	17' by 28'
	FTS Phone Lines:	6
Zion Facility	Dimensions:	32' by 30'
	FTS Phone Lines:	6

6) ComEd's response to question 13 of the staff's May 23, 1996 RAI, did not adequately answer the question regarding accommodating Federal, State and local response agencies, if in the future, those agencies wanted to send personnel to the site. Please provide information on how Federal, State, and local response agencies would be accommodated near the plant?

Responding agencies have already designated those locations near the plant to which they intend to respond. A detailed summary of these facilities is provided below. Designated available locations provide sufficient opportunity for nearsite (beyond EPZ) operations and coordination.

In addition to the Radiological Emergency Assessment Center (Springfield, IL), the Illinois Department of Nuclear Safety (IDNS) currently dispatches their resident inspectors to the plant Technical Support Center. In addition, IDNS establishes a Radiological Assessment Field Team (RAFT) location near the plant site. This team is dispatched by IDNS in Springfield and reports to an existing forward operating location. For the long term, the RAFT will most likely co-locate with Federal Radiological Monitoring and Assessment Center (FRMAC) or vice versa. The RAFT locations are described below.

Station	RAFT Location	Distance to Site (miles)*
Dresden	Mazon Middle School Mazon, IL	10
LaSalle	Mazon Middle School Mazon, IL	12
Braidwood	Mazon Middle School Mazon, IL	12
Byron	Rochelle IDNS Office Rochelle, Illinois	13
Quad Cities	Garden Plain Township Bldg. Garden Plain, IL	11
Zion	Warren Township Center Warren Township, IL	13

* Straight line distance

In addition to the State Emergency Operations Center (Springfield, IL), Illinois Emergency Management Agency (IEMA) establishes a State Forward Command Post (SFCP) nearsite but beyond the EPZ. IEMA, as does other states, uses such forward operations for disasters of all types. Illinois, for example, activated the SFCP at the Mazon facility for the flooding in Northern Illinois in 1996. The SFCP locations are described below.

Station	SFCP Location	Distance to Site (miles)
Dresden	Mazon Facility Mazon, IL	10
LaSalle	Mazon Facility Mazon, IL	13
Braidwood	Mazon Facility Mazon, IL	10
Byron	Lee County EOC Dixon, Illinois	19
Quad Cities	Garden Plain Township Bldg. Garden Plain, IL	11
Zion	Lake County Fair Grounds* Lake County, IL	13

* Illinois is currently planning to move to this facility. This was also the site of the DFO and FRMAC during the Zion Federal Field Exercise.

In addition to the State Emergency Operations Center (Des Moines, IA), the State of Iowa also establishes a SFCP location in Stockton, Iowa. The Iowa Field Team Coordination Group was previously located with the Illinois RAFT at Garden Plain. Exercise performance showed that, given the improvements in available communication resources, the improved timeliness of response to the Iowa Forward Command Post, and the ability to remain away from the potentially contaminated area, the Iowa teams coordination has been relocated from a joint Iowa/Illinois center to the Iowa Forward Command Post in Stockton Iowa. Stockton Iowa is approximately 30 miles southwest of the Quad Cities Station.

In addition to the State Emergency Operations Center (Madison, WI), The State of Wisconsin establishes a Forward Operating Center/Mobile Laboratory at the National Guard Armory in Kenosha, Wisconsin. The Armory is located approximately 18 miles from Zion Station.

County Emergency Operations Centers (EOC) are located nearsite but are beyond the 10 mile EPZ. Current county plans do not provide for any presence in the EOF. County decisionmakers have expressed a desire to remain with their support staff at their respective EOCs to be certain all necessary decisions are being handled properly.

ComEd understands and appreciates the NRC's concern that the use of the cEOF would remove the current EOF's as potential sources of discretionary space should it be desired by other Federal agencies. Although the provision of such discretionary space is not required by NRC regulations, ComEd believes that such discretionary space would be available, nearsite, for Federal agencies, at the Disaster Field Office and the FRMAC as contemplated by Federal Plans.

The designated locations described above provide sufficient location and opportunity for nearsite, and beyond EPZ, operations and coordination.

7) In response to question 15 of the staff's May 23, 1996 RAI, ComEd discussed its layered communications system. Are any of these systems dedicated for emergency preparedness? How often is the computerized call out system tested and what is its reliability record since being installed?

ComEd does have a layered communication system which provides a defense in depth philosophy to communications. The phone systems that are dedicated for emergency preparedness are described in the approved Generating Stations Emergency Plan. Those dedicated phones are described below.

Nuclear Accident Reporting System - Activated from the Control Room, TSC, Interim EOF, EOFs, or State EOC's. Used to contact states and locals.

Decisionmakers Conference Lines - Available for Zion and Quad Cities only. Activated by TSC, Interim EOF, EOFs, or State locations. Used to connect licensee decisionmakers with state technical decisionmakers.

Generating Station Emergency Plan (GSEP) Phone - Available from TSC, Interim EOF, & EOF. Used to connect licensee decisionmakers.

Alternate (GSEP) Phone - Available from Control Room, TSC, Interim EOF, & EOF. Used to transmit technical information between licensee facilities.

Environmental Party Line - Available from TSC, Interim EOF, & EOF. Allows personnel of the same discipline to conference up to six different locations at the same time.

With regard to the computerized callout system reliability record, ComEd conducted six drills and one actual callout during 1996. While the computer system adequately handled callout of the Interim EOF staff , it could not be successfully programmed in a cost effective manner, to callout the full EOF staff. Consequently, ComEd has contracted with Community Alert Network (CAN) which has been used successfully by other utilities to perform callouts. CAN has the capability to handle 6,000 calls/hour (100 calls/min). CAN functions from two locations (Reno Nevada and Schenectady New York) that backup each other. Each CAN location has backup power and backup computer systems.

The CAN system will be placed in operation in the first quarter of 1997. ComEd intends to test the callout capability at least quarterly.

Eleven Augmentation Drills involving the Interim EOF have been conducted since the implementation of the VRU system and are summarized below.

Augmentation Drill Results
using the VRU System

Date	Success	Reason
09/18/95	Yes (Note 1)	
11/21/95	Fail	Computer Failure (Note 2)
12/18/95	Yes	
01/31/96	Staff Late	1 designated Minimum Staff position, theTechnical Support Manager was not contacted.
03/04/96	Undetermined (Note 3)	
03/25/96	Staff Late	1 designated Minimum Staff position, a Radiation Protection responder (1 of 2 equivalently qualified responders) was not available for 85 minutes.
04/16/96	Staff Late	1 Minimum Staff position, the Technical Support Manager was not available for 93 minutes. (Note 4)

05/10/96	Staff Late	Quad Cities Actual Event. BPO delayed activation for approximately 30 minutes. (See Question 1)
09/11/96	Undetermined	Computer Record Failure (Note 5) (Note 2)
12/05/96	Undetermined	Computer Record Failure (Note 5) (Note 2)
01/29/97	Yes	

Note 1: Yes = Minimum Staff attained in 60 minutes based on drive times
Note 2: The Backup Notification System was activated following the results of the surveillance for facility staffing.
Note 3: Dual Activation Codes were entered which eliminated time record data. Individuals were contacted but time of response could not be determined.
Note 4: Additional Technical Support Managers with Downers Grove assignments were identified and qualified.
Note 5: Computer Time Stamp was lost. Individuals were contacted but without time stamp time estimate was not possible.

The backup system to the computer actuated call-out consists of Corporate Emergency Preparedness Staff assigned pager responsibility for four pre-designated call lists. Two lists divide the Interim EOF responders and the remaining two support normal nearsite EOF call-out. Each caller is provided an approved procedure including an updated copy of the current Emergency Responder phone directory. The back-up system is tested weekly for pager functionality and semi-annually for call-out capability as a portion of the full EOF augmentation drill. In addition, senior Emergency Preparedness Staff are maintained on the same pager system with access to all four of the call-out lists and can be activated by the Nuclear Duty Officer to support any of the pre-designated call-outs.

Pursuant to these surveillance results, ComEd has continued to evaluate timely staffing of offsite Emergency Response Facilities. The existing VRU system has demonstrated the ability to rapidly notify offsite responders to initiate staffing of the facilities. To further facilitate timely response, ComEd has continued to evaluate personnel qualifications and identify additional responders to further improve the capability. Approximately 50 additional responders where identified in the Corporate organization for training and qualification. ComEd has not been satisfied with the record management capability of the VRU system. The surveillance results led us to further evaluate the technology currently available and begin conversion to the CAN system previously described.

8) Please explain how the use of a centralized EOF provides the "optimum" functional characteristics specified in NUREG-0696, "Functional Criteria for Emergency Response Facilities," (pp. 17-18) as compared to a near-site EOF. Please include in your response consideration of the Commission's determination that face-to-face -- rather than telephone -- communications between a licensee and offsite officials provide the best means to exchange information and formulate protective action recommendations. Metropolitan Edison Company (Three mile Island Nuclear Station, Unit No. 1), CLI-83-22, NRC 299, 308 (1983).

NUREG-0696 is guidance to licensees on how to implement the NRC's emergency preparedness requirements. Neither it, nor the underlying requirements explicitly recommend face-to-face communication. Reliance on face-to-face communications arose in the context of a specific case in which the State and local officials argued strongly for such communications in the face of opposition by the licensee. The Commission, consistent with its policy of supporting State and local officials in emergency preparedness matters, responded to State and local concerns by supporting face-to-face communications in that case. Where the facts are completely different, as they are here, because State and local officials have no desire to rely on face-to-face communication but, instead, have relied consistently on communication technology that was not available earlier, the imposition of face-to-face communication would be inconsistent with Commission policy.

This origin of the preference for face-to-face communications is important for several reasons. First, it shows that the Commission is especially sensitive to the communication needs of State and local officials. Where, as here, those officials have expressed no interest in face-to-face communications but, rather, prefer to rely on modern communication techniques that were not available when the Commission made its decision in the TMI-1 case, this precedent indicates that the Commission will honor that position and not impose such communications. Second, face-to-face communications was not considered by the NRC to be a generic "optimum functional characteristic of emergency response. Face-to-face communications was not among the characteristics enumerated in NUREG-0696. Third, even if face-to-face communication has become an "optimum" characteristic of emergency preparedness, its history shows that its consideration as an "optimum" characteristic is relative, based on the specific situation. Face-to-face communication may be an "optimum" characteristic where it is desired by State and local officials, it cannot be so considered where those officials have expressed a clear desire to rely on other, more modern means of communication. Finally, even if face-to-face communication is viewed by the NRC as a generically applicable "optimum" characteristic of emergency preparedness, it is not required to be adopted by a licensee, especially where it would serve no purpose. There is no regulatory requirement to adopt the "optimum" functional characteristics in NUREG-0696. Reasonable assurance of adequate protection is the well established regulatory standard. It is met in this case where State and local officials have determined that they can best engage in the necessary communication with the licensee by using modern communication technology. Consistent with it, prior deference to such State and local decisions, the Commission should honor those desires in this case too and not impose an unnecessary and unwanted requirement for face-to-face communication.

See Attachment 2 for additional clarification to this response.

ATTACHMENT 2

ComEd Detailed Response with respect to Metropolitan Edison Company
(Three mile Island Nuclear Station, Unit No. 1),
CLI-83-22, NRC 299, 308 (1983).

8) Please explain how the use of a centralized EOF provides the "optimum" functional characteristics specified in NUREG-0696, "Functional Criteria for Emergency Response Facilities," (pp. 17-18) as compared to a near-site EOF. Please include in your response consideration of the Commission's determination that face-to-face -- rather than telephone -- communications between a licensee and offsite officials provide the best means to exchange information and formulate protective action recommendations. Metropolitan Edison Company (Three mile Island Nuclear Station, Unit No. 1), CLI-83-22, NRC 299, 308 (1983).

To more fully answer this question, it is useful first to establish the framework in which the answer must be evaluated. NUREG-0696 is a draft report. It "describes a set of NRC functional criteria for nuclear power plant emergency facilities." The functional criterion that is relevant to this response is that the "EOF is designed to provide assistance in the decision making process to protect the public health and safety". To implement this criterion the NUREG contemplates that the "EOF shall be the location where the licensee will provide current information on conditions potentially affecting the public to the NRC and to State and local emergency response agencies." In particular, to fulfill the function of providing information, "[a]dequate communications systems are necessary for the EOF to ... disseminate information to responsible government agencies. ...As a minimum, priority access voice communication links shall be provided between the EOF and ... State and local emergency response networks."

NUREG-0696 is guidance on how the emergency preparedness requirements should be implemented. The staff stresses that NUREG-0696, ... provides guidance to licensees on how they can adequately implement the Commission's emergency planning regulations". Under well-established NRC practice, it does not establish requirements. That conclusion is particularly important in this case because licensees must be responsive to the methods of communication that are preferred by the State and local officials. Where State and local officials prefer to rely on adequate voice communications systems exclusively and choose not to engage in face-to-face communication, a licensee could not be found to be in non-compliance with NRC emergency preparedness requirements when it cannot alter the decision of those government agencies.

As guidance, NUREG-0696 describes the "optimum" functional characteristics for an EOF. Since reasonable assurance is a regulatory standard, there is an implication that there is a range of alternatives, which may be considered less than optimum in some sense, that are also acceptable to as demonstrate compliance with the NRC emergency preparedness requirements. 10 CFR 50.47 and Appendix E to 10 CFR Part 50 require licensees to adopt the optimum alternative for implementing the rule. Flexibility in implementation is especially important where, as here, the State and local officials clearly have determined that face-to-face communication would be optimum for them. Since this is the choice of the State and local officials, the licensee has no choice but to defer to them. This is consistent with the NRC's cooperation with State and local officials in this particular area, as is clearly shown by the TMI-Decision.

In the TMI-Decision, the issue decided by the Commission was narrowly limited to when responsibilities for making radiological assessments and protective action recommendations needed to be transferred from the Emergency Director in the control room to the Emergency Support Director in the EOF.

> There is no dispute between the parties regarding the functions that are to be performed from the EOF during an emergency, the controversy centers on how quickly that facility must be fully functional following the declaration of a site emergency.
> [18 NRC 306]

The Commission determined that such transfer should occur no later than one hour following the declaration of an emergency. In reaching that decision, the Commission relied principally on the need to minimize confusion in control room, and in part on the desires of the Commonwealth of Pennsylvania to engage in face-to-face communication in the control room promptly after the declaration of an emergency.

The Commonwealth's position was summarized by the Commission as follows:

> The Commonwealth also disagrees with the Appeal board. Its primary concern is with the adequacy of information exchange and the interaction between Commonwealth and Licensee officials during the early state of an accident. It emphasizes that the ultimate decision regarding protective actions is made by the Governor, based on recommendations received from his designated representative at the site. The Commonwealth stresses that the process of protective action decisionmaking is bi-directional and that in making its recommendation to the state, the Licensee will need information such as weather and road conditions as well as information regarding the specific technical status of the plant. The Commonwealth asserts that the EOF is the facility specifically designed for the exchange of information between the officials of the utility and the representative of the Commonwealth and where the implications of that information can be discussed. Accordingly it believes Licensee's proposal would impede necessary exchanges of information.

In response, the Commission adopted the Commonwealth's concern:

> Furthermore, as the Commonwealth stresses, the EOF is the ideal place for face-to-face communications regarding protective actions recommendations between federal, state, and local officials, and the Licensee official charged with making the recommendations to the Commonwealth. The Commission does not believe, as Licensee suggests, that telephonic communications between the governmental officials in the EOF and the Licensee's decisionmaker in the control room provide an equivalent opportunity for an exchange of information. The Commission views the opportunity for face-to-face communications as the best means to exchange pertinent information between government officials and the Licensee and to formulate protective action recommendations, particularly when it is essential that there not be misunderstandings between those involved.
> [18 NRC 30]

Since 1983, when this dictum was written, the situation regarding emergency preparedness has changed substantially in general and in particular for Commonwealth Edison. Electronic communications have improved in ways that could not have been anticipated. Many exercises have been held to provide clearer insights into the limits on the value of face-to-face communication. New avenues have been opened for transmitting plant status to State and local officials.

For Commonwealth Edison, the changes since 1983 have been especially dramatic. State and local officials have affirmatively declared that face-to-face communication is not their preferred mode for communicating with licensees. Years of successful exercises have demonstrated that the alternative provided by technologically improved communication equipment provides more than adequate opportunities to communicate effectively. Plant status information is transmitted regularly to the Illinois Department of Nuclear Safety in a manner not contemplated in 1983. Illinois' Reactor Data Link (RDL) is a real time computer link from the six stations on-line computer monitoring system, directly to Springfield, In excess of 1000 data points, identified as critical by ComEd and IDNS personnel are transmitted to the Radiological Emergency Assessment Center (REAC) in Springfield on a continuous basis. IDNS personnel have developed extensive analytical techniques to assess plant conditions based on this data. Similarly, with the adoption of the NRC's Emergency Response Data System (ERDS), plant status, selected as critical by the Nuclear Regulatory Commission, is transmitted to the Rockville Operations Center and the Regions Incident Response Center. ERDS is subsequently available to those affected states. These factors clearly demonstrate that the reasons for the Commission's TMI-Decision do not apply to this request for a cEOF.

For the Commission to follow its underlying logic in the TMI-Decision as applied to this request, the Commission would need to take into account the communication desires of the State and local officials, as it took into account the desires of the Commonwealth of Pennsylvania. Since the states and local officials do not desire face-to-face communication they Commission would conclude that face-to-face communication is not an optimum functional characteristic for this situation.

Finally, it should be noted that the guidance in NUREG-0696 does not explicitly recommend fact-to-face communications between licensee and offsite officials. A licensee, by using adequate voice communication systems, would use the EOF as the location to provide current information to State and local emergency response agencies. Accordingly, face-to-face communications were not considered at the time to be an optimum functional characteristic of an EOF.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON D.C. 20555

COMJA-80-

OFFICE OF THE SECRETARY

January 21, 1981

MEMORANDUM FOR: William J. Dircks, Executive Director for Operations

FROM: Samuel J. Chilk, Secretary

SUBJECT: ACTION PLAN III.A.1.2 - EOF

Subsequent to the October 30, 1980 Commission meeting on the subject matter, the staff responded by memorandum dated November 12, 1980 in which a number of options were delineated (Enclosure 1 of November 12, 1980 memorandum - a marked-up copy is enclosed).

Among the various options proposed for EOF's, the Commission approves Option 2 (two facilities) for all reactor facilities licensed or to be licensed for operation. The Commission also approves a modified Option 4 (one facility and no protection factor) for all reactors if the EOF is located at or beyond 10 miles from the reactor with the provision that if the EOF is located beyond 20 miles, specific Commission approval is required* and arrangements to locate the NRC staff closer to the reactor are provided. The footnotes in Enclosure 1 to the November 12 memorandum apply, as noted on the modified copy enclosed. The TVA arrangement for a centralized EOF is acceptable as a special case of Option 4, with the addition of some provisions near each site for the NRC site team. These provisions need not be elaborate and would be satisfied by a trailer with connections to the TVA emergency communications network.

The Commission as a whole does not have a preference for either of the two options. In coming to this decision, the Commission recognizes that it is the licensees' responsibility to decide where and how their EOF should be built, as long as they meet the criteria required by either option, as modified by this memorandum.

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*Chairman Ahearne believes that the EDO is capable of determining the acceptability of exceptions to guidelines in either option without further Commission guidance.

8108310251

Attachment 13

By this memorandum, the staff is hereby instructed to proceed with the issuance of Action Plan III.A.1.2.

Enclosure:
As Stated

cc:
Chairman Ahearne
Commissioner Gilinsky
Commissioner Hendrie
Commissioner Bradford
Commission Staff Offices

file

NOV 1 2 1980

See Rec / Purple

dates?

MEMORANDUM FOR: Chairman Ahearne
Commissioner Gilinsky
Commissioner Hendrie
Commissioner Bradford

FROM: William J. Dircks
Executive Director for Operations

SUBJECT: ACTION PLAN III.A.1.2 - EOF

At the Commission meeting of October 30, the staff presented two options for the location of the Emergency Operations Facility. These options are included in Enclosure 1 which also contains a number of other options which we believe are responsive to the objectives discussed on October 30. The staff prefers Option 4. Enclosure 2 is a revised clarification for TMI Action Plan Item III.A.1.2 to replace the section deleted from the previous post-TMI requirement clarification document.

(Signed) William J. Dircks

William J. Dircks
Executive Director for Operations

Enclosures:
As Stated

cc: /enclosures
SECY
OPE
OGC

Contact: D. G. Eisenhut
X27672

DUPLICATE DOCUMENT

Entire document previously entered into system under:

ANO 8101080232

No. of pages: 9

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ENCLOSURE 1

EMERGENCY OPERATIONS FACILITY

OPTION 1*
One Facility

- Within about 10 miles
- Fully habitable following Accident***
- Specified Protection Factors

PF	Distance
50	1/2 Mile
25	1 Mile
10	5 Miles
5	10 Miles

- Ventilation system isolation with
  - HEPA filters
  - Charcoal filters

OPTION 2*
Two Facilities**

A. Close-in primary; reduced habitability***
- within 10 miles
- protection factor = 5
- ventilation isolation with HEPA (no charcoal)

B. Backup EOF
- between 10-20 miles
- on separate, dedicated facility
- arrangements for portable backup equipment
- strongly recommend location be coordinated with offsite authorities
- continuity of dose projection and decision making capability

OPTION 3*
One Facility**
- 5 to 15 miles
- Well engineered, no special protection factors
- No special ventilation isolation or filters
- Strongly recommend location be coordinated with offsite authorities

OPTION 3A*
Two Facilities**

A. Close-in primary; reduced habitability
- About 5 miles
- Well engineered, no special protection factors
- No special ventilation isolation or filters
- Strongly recommend location be coordinated with offsite authorities

B. Backup EOF
- Between 10-20 miles
- On separate, Dedicated facility
- Arrangements for portable backup equipment
- Strongly recommend location be coordinated with offsite authorities
- Continuity of dose projection and decision making capability

OPTION 4:
One Facility**
- 5 to 15 miles
- Well engineered
- If 5 to 10 miles, ventilation isolation and HEPA filters
- Strongly recommend location be coordinated with offsite authorities

- For all Options:
  - Located out..the security boundary
  - Space for about 10 EOF employees
  - Room designed for severe phenomena, e.g., earthquakes

** For Options 2 and 4, if in response to this requirement a utility has begun construction of a new building for an EOF that is located within 5 miles, that new facility is acceptable provided that a backup EOF similar to "B" in Option 2 or 3A is provided.

*** Habitability requirements are only for that part of the EOF in which dose assessments accumulations and decision making take place.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

OFFICE OF THE SECRETARY

June 12, 1984

ACTION - DeYoung
Cys: Dircks
Roe
Rehm
Stello
Denton
Eisenhut
GCunningham
O'Reilly
EWilliams

MEMORANDUM FOR: William J. Dircks, Executive Director for Operations

FROM: Samuel J. Chilk, Secretary

SUBJECT: SECY-84-89/89A - EMERGENCY OPERATIONS FACILITY FOR THE OCONEE NUCLEAR STATION, UNITS 1, 2 AND 3

This is to advise you that the Commission has not objected to the staff's proposed disapproval of the Duke Power Company's request for an exception to the distance requirement for an EOF location. Accordingly you should proceed to advise the licensee.

cc: Chairman Palladino
Commissioner Gilinsky
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
OGC
OPE

Rec'd Off. EDO
Date 6-13-84
Time 12:30 p

February 22, 1984

POLICY ISSUE

SECY-84-89

(NEGATIVE CONSENT)

For: The Commissioners

From: William J. Dircks
Executive Director for Operations

Subject: EMERGENCY OPERATIONS FACILITY FOR THE OCONEE NUCLEAR STATION, UNITS 1, 2 and 3

Purpose: To request Commission review of a staff disapproval of a licensee's request for an exception to establish an Emergency Operations Facility (EOF) 125 miles from the Oconee Nuclear Station, Units 1, 2 and 3.

Category: This paper covers a minor policy question.

Issue: Whether the Duke Power Company can establish a EOF for the Oconee Nuclear Station in the company general offices, 125 miles from the plant site.

Alternatives:

1. The Commission can agree with the proposed staff disapproval of a request for an exception by the Duke Power Company to establish the EOF for the Oconee Nuclear Station 125 miles from the plant site.

2. The Commission can disagree with the proposed staff disapproval of the licensee's request for an exception.

Background: On January 21, 1981, the Commission approved two options for the location of the EOF at nuclear power plant sites in COMJA-80-37. One option allowed for a single EOF location between 10 and 20 miles from the site with no habitability features. The second option allowed for a primary EOF located up to 10 miles from the site with habitability features and a backup EOF without habitability features located between 10 and 20 miles from the site.

In the Chilk to Dircks memorandum of September 30, 1981 responding to SECY 81-509, the Commission disapproved a recommendation that the staff have the authority to approve licensee requests for exceptions to COMJA-80-37 concerning EOF location and backup criteria where the licensee had provided a heavily shielded EOF located within 10 miles or less of the plant site without a backup EOF. The Commission

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E. F. Williams, IE
492-7611

stated in this memorandum that the staff could accept such facilities provided each emergency plan identified an alternate location where utility and government officials can meet and have contingency arrangements for communications to the Technical Support Center (TSC).

On July 16, 1982, the Commission approved SECY 82-111B, and on November 22, 1982 the Commission approved Supplement 1 to NUREG-0737 which was subsequently promulgated in Generic Letter 82-33 dated December 17, 1982. Table 1 included in these documents is the same table from COMJA-80-37 which describes the EOF location options.

On March 2, 1983, the Commission directed the staff to refer all exception requests concerning location and habitability of EOFs, along with proposed staff actions, to the Commission for decision (M830302B).

Discussion: The original EOF design concept for the Oconee Nuclear Station was to provide a primary EOF in the Oconee Training Center, one half mile from the reactor containments and a backup EOF in Liberty, South Carolina, 14 miles from the plant site as described in Duke Power Company letters of June 1, 1981 (Enclosure 1) and December 3, 1982 (Enclosure 2). The primary EOF was designed to provide a radiation protection factor (PF) of 50, but the ventilation system was not equipped with HEPA filters and was not designed to be isolated. The backup EOF was to be located in the Duke Power retail office in Liberty. Both of these EOFs were to be established in existing buildings.

In a letter dated June 3, 1983 (Enclosure 3), Duke Power proposes to provide a centralized EOF for the Oconee Nuclear Station, the McGuire Nuclear Station and the Catawba Nuclear Station to be located in the Duke General Offices in Charlotte, North Carolina, 16 miles from McGuire, 17 miles from Catawba and 125 miles from Oconee. Since these distances are within those listed in Table 1 of Supplement 1 to NUREG-0737 for both the McGuire and Catawba plant sites, Duke Power requests an exception only for the distance to the Oconee Nuclear Station. The reason given for requesting the exception to the distance requirement for Oconee is that the staff of the EOF normally work in the Duke General Offices which allows them to respond more quickly and efficiently rather than having to transport them to Oconee. Duke Power states that the time required to activate the original primary EOF at the Oconee Station is three hours while the EOF at the Duke General Offices can be activated in one hour or less because of the decreased driving distance. In addition,

the computer for the emergency data acquisition system for all three plant sites is located in the Duke General Offices and the communications system available in Charlotte is better than the communications system near the Oconee plant site. Duke Power has a microwave communications net between Oconee and Charlotte as well as a ring-down system between the TSC and dedicated lines for specific state interfaces for management, radiological information and media coordination. Duke Power states that it makes no difference whether the EOF is located 10 to 20 miles or 125 miles from the plant site, since they communicate with the plant, State and local personnel by telephone and the plant data is as available in Charlotte as it is near Oconee. Also the cost of maintaining one centralized EOF is less than providing a separate EOF for the Oconee Station.

Personnel from Duke Power and the State of South Carolina met with the NRC staff on September 6, 1983 to present their arguments and provide additional information in support of the request for an exception. In this presentation Duke Power stated that the EOF personnel would be transferred to the Oconee plant site as soon as the emergency phase of the accident has concluded. The personnel from the Duke General Offices who staff the Joint News Center at the Oconee Station will be transported by helicopter to a landing pad at the site within one hour. The reason given for not utilizing helicopters for the EOF personnel was that between 75 and 100 individuals must be transported to the EOF. The reason given for not modifying the original primary EOF was that these modifications would cost approximately $350,000 and the operation of a single EOF for all three Duke nuclear power plants was more efficient and effective. Although the representatives from the South Carolina Department of Health and Environmental Control and the Department of State, Emergency Preparedness Division stated that they did not object to the Oconee EOF being located in Charlotte, they intended to respond to the Forward Emergency Operations Center located at the National Guard Armory in Clemson near the site to perform their functions and would send a liaison representative to the Charlotte EOF. In a letter dated October 25, 1983 (Enclosure 4), Duke Power restates the advantages of the Charlotte location and the difficulty in relocating the EOF staff to Oconee.

The staff believes that this type of accident management will not provide for an adequate response. The principal emergency management and the EOF staff will be unable to interact directly with their Federal, State and local counterparts located near the plant site. In addition, the Duke Recovery Manager will not be in face-to-face communication with the NRC Director of Site Operations. While the local communications system around the Oconee site may not have the same capacity as that in the Charlotte area, these same problems of site area communications will exist whether the EOF is in Charlotte or near the site since the same local system must be used. However, since the Recovery Manager is in Charlotte, he cannot go directly to the plant or the State Foward Emergency Operations Center to confer with these managers if needed. All communications between the Recovery Manager and the appropriate Federal, State and local officials will be limited to voice communications. This isolation of the EOF management and staff from the plant site will result in a higher degree of interfacing by the NRC site team and offsite officials with Duke personnel located in the Oconee TSC and the Joint News Center, which is inappropriate and may result in confusion, impeding the emergency response. This type of remote accident management did not prove to be successful during the TMI-2 accident. For these reasons the staff has previously recommended approval of only two EOF locations under Option 2 in Table 1 of Supplement 1 to NUREG-0737 which are located beyond 20 miles of the plant site (Rancho Seco at 23 miles and Turkey Point at 24 miles). Both these EOFs are located at corporate headquarters with helicopter service between the EOF and the plant. The Commission has previously approved a centralized EOF for TVA which is located in Chattanooga, Tennessee, 110 miles from the Browns Ferry Nuclear Plant and 45 miles from the Watts Bar Nuclear Plant.

It is the staff's opinion that Duke Power should either modify the original Oconee primary EOF to meet the habitability requirements or establish an EOF between 10 and 20 miles of the plant site. The problem with staffing a near-site EOF can be overcome by providing helicopter transportation for the key EOF staff. These individuals can operate the EOF with a manpower augmentation from the Oconee Station until the remainder of the EOF staff arrives using other means of transportation.

Recommendation: That the Commission agree with the proposed staff disapproval of the Duke Power Company's request to establish the Oconee EOF in its General Offices in Charlotte, North Carolina, 125 miles from the plant site as an exception to the distance requirement in Table 1 of Supplement 1 to NUREG-0737.

Note: The staff intends to disapprove the licensee's request for an exception to the distance requirement for EOF locations within 10 working days of the date this paper is received by the Secretary unless otherwise instructed by the Commission. A proposed draft letter to be sent to the Duke Power Company is enclosed (Enclosure 5).

William J. Dircks
Executive Director for Operations

Enclosures:
1. Ltr. from Duke Power dtd. 6/1/81
2. " " " " " 12/3/82
3. " " " " " 6/3/83
4. " " " " " 10/25/83
5. Draft ltr. to Duke Power

SECY NOTE: In the absence of instructions to the contrary, SECY will notify the staff on Friday, March 2, that the Commission, by negative consent, assents to the action proposed in this paper.