

November 23, 1998

FOR: The Commissioners

FROM: William D. Travers /s/
Executive Director for Operations

SUBJECT: COMMONWEALTH EDISON COMPANY'S PROPOSAL TO CENTRALIZE ITS EMERGENCY OPERATIONS FACILITIES AT ITS CORPORATE OFFICES

PURPOSE:

To obtain Commission approval of the proposal by Commonwealth Edison Company to replace its four nearsite emergency operations facilities with a centralized emergency operations facility.

CATEGORY:

This paper discusses a major policy issue requiring Commission consideration.

SUMMARY:

Commonwealth Edison Company (ComEd) proposed to consolidate the four emergency operations facilities (EOFs) at its five operating nuclear power plant sites into a centralized EOF (CEOF) at its corporate offices. Commission approval is required if the EOF is to be located beyond 5 miles of the 20 miles from the site; the distances from the plant sites to the proposed central EOF would range from 32 miles (Dresden) to 116 miles (Quad Cities). For the two similar exception requests by other licensees, the Commission approved one and disapproved the other. The particular circumstances of this proposal are unique in that (1) the Commission already approved the use of the proposed facility as an Interim EOF until the nearsite EOFs can be staffed, (2) the State of Illinois and local decisionmakers do not go to the nearsite EOFs, and (3) the staff believes there would be an improvement in the effectiveness of ComEd's implementation of its emergency plans. While there may be a negative perception that the greater distances involved in the proposed plan would impede the licensee's ability and NRC's ability to perform their respective functions, the staff believes that technological advances in communications and monitoring capabilities, the stationing of other governmental officials remote from the sites, the proximity of NRC's Region III offices to the CEOF, and the improvement in ComEd's emergency response capability outweigh the concerns regarding the distance between the proposed CEOF and the sites. The staff is confident that this proposal will provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. In addition, if approved, there will be resource savings for the licensee and NRC.

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BACKGROUND:

In a letter dated January 5, 1995, ComEd submitted a proposal to change its emergency plan to use ComEd corporate offices as a CEOF and eliminate the four nearsite EOFs ([Attachment 1](#)). This proposal was considered by the staff only after progressive improvements were demonstrated by ComEd in its effectiveness with regard to emergency preparedness (EP).

Evolution of ComEd's Proposal: In the early 1990s, ComEd relocated its corporate Nuclear Operations Division headquarters from Chicago to Downers Grove, Illinois, where it constructed an EOF in its corporate offices designed to function like a nearsite EOF. It was licensed as a backup EOF for the Zion Nuclear Power Station. In letters dated March 31 and August 5, 1993, ComEd proposed to use the corporate offices as an Interim EOF until the affected nuclear power station's nearsite EOF would be staffed and operational ([Attachments 2 and 3](#)). The NRC staff deferred the review of the January 5, 1995, ComEd proposal to use the Interim EOF as a permanent CEOF until the Commission made its decision on the interim use proposal.

In a staff requirements memorandum (SRM) dated January 31, 1996, ([Attachment 4](#)), related to SECY-95-274, the Commission approved the Interim EOF proposal. Following that approval, the staff initiated its review of the permanent CEOF request. A number of issues needed to be resolved, including timely staffing of the CEOF, direct interactions with the State and county officials, and the effect on NRC's accident response procedures. On March 25, 1998, a meeting was held with the licensee. In that meeting, the staff requested that the licensee reaffirm its proposal in light of substantive changes that had transpired since the initial proposal was submitted including management changes at ComEd, staff reductions, and the permanent cessation of operations at Zion. In a letter dated August 7, 1998, ComEd confirmed its request for approval of its proposal to combine the four nearsite EOFs into a CEOF ([Attachment 5](#)).

ComEd's Justification: The initial impetus for many of these changes was ComEd's recognition of shortcomings in its emergency preparedness program and its need for improvement. In an NRC emergency preparedness inspection report of August 20, 1992, documenting an assessment of ComEd's corporate emergency response program, the staff noted ComEd's inability to staff its nearsite EOFs in a timely manner following the declaration of an emergency (i.e., within the 60 minutes provided in regulatory guidance) ([Attachment 6](#)). Consequently, ComEd undertook an improvement program including conducting several off-hours callout drills involving its nearsite EOF responders and performing a comprehensive survey of responder estimated travel times to assigned EOFs. These drills demonstrated that the times needed to staff the nearsite EOFs ranged from 1.5 to 3 hours. The majority of ComEd's Interim EOF responders either are based at the corporate office or can arrive at the Interim EOF quicker than they can arrive at the assigned nearsite EOF. In its proposal, ComEd stated that it can meet the 1-hour goal for staffing the Interim EOF and that it achieved this goal in numerous drills; this is a substantial improvement over the 1.5 to 3 hours determined by ComEd to be necessary to staff the nearsite EOFs ([Attachment 7](#)).

ComEd's CEOF proposal was submitted as a cost-beneficial licensing action. The licensee stated that consolidation of the nearsite EOFs will save resources. In a letter dated August 7, 1998, ComEd presented a cost analysis indicating a one-time savings of \$78,000 to \$108,500 and an annual savings of \$342,817 to \$359,168. The lower values reflect the permanent cessation of operations at the Zion facility.

ComEd's Emergency Response Strategy: ComEd's emergency response strategy involves staffing the majority of the positions at its nearsite EOFs with corporate personnel and personnel from unaffected stations. This approach to nearsite EOF staffing is a departure from industry practice, however, ComEd stated that this strategy optimizes the use of its senior managers; this strategy allows the affected station's management to focus on the onsite response while the nearsite EOF management focuses on offsite response issues. This strategy for staffing its onsite and offsite emergency response organizations influences the nearsite EOF staffing times. In its procedures, ComEd clearly states that there are no provisions or need for the EOF/CEOF Manager of Emergency Operations (MEO) to drive to the site for a face-to-face meeting with the Technical Support Center (TSC) Station Director. Therefore, ComEd asserts that when the CEOF is operational, there should not be a concern that the MEO is too far from the plant to meet face to face with the TSC Station Director.

ComEd's standard practice for EP exercises has been to pre-stage EOF responders at a location in the vicinity of the nearsite EOF and to pre-stage corporate EOF responders in a nearby room in the corporate office. Although such pre-staging of pre-selected participants is acceptable for scheduled EP exercises, it does not necessarily provide an accurate assessment of the time needed for staffing of the nearsite EOFs and the Interim EOF in an actual emergency. Consequently, in response to NRC staff concerns, ComEd developed an unannounced callout drill process to assess its effectiveness for staffing and established a repetitive performance measure.

Regulatory Issue: ComEd's proposal is a departure from the NRC regulatory guidance for acceptable methods for meeting the EP requirements of [10 C.F.R. 50.47](#) and [Appendix E to 10 C.F.R. Part 50](#). In particular, the proposal is a departure from guidance on location and staffing, contained in NUREG-0696, "Functional Criteria for Emergency Response Facilities," and NUREG-0737, Supplement 1, "Clarification of TMI Action Plan Requirements (Requirements for Emergency Response Capability)."

In an SRM dated March 3, 1983, the staff was directed to refer all requests for such exceptions to the Commission ([Attachment 8](#)). The Commission directed that the referrals are to contain the proposed staff action. The Secretary reconfirmed this decision in a memorandum of April 30, 1987 ([Attachment 9](#)). In an SRM dated September 18, 1996, related to SECY-96-170, the Commission reaffirmed the requirement that it approve proposed exceptions from the guidance for locations and staffing times of EOFs, except that the staff was authorized to accept or reject exceptions to the criteria for EOF and backup EOF locations within 5 miles beyond the distance recommended in NUREG-0737 Supplement 1. For cases where the licensee proposed an exception involving a greater deviation and for all CEOF proposals, the staff is required to obtain Commission approval ([Attachment 10](#)).

DISCUSSION:

Regulations and Regulatory Guidance Documents: In [10 C.F.R. 50.47\(b\)](#), the NRC delineates the standards that emergency response plans for nuclear power reactors must meet, including the following: "... (2) On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available" and "(3) ... arrangements to accommodate State and local staff at the licensee's nearsite Emergency Operations Facility have been made ..." (emphasis added). In addition, Section IV.E of [Appendix E to 10 C.F.R. Part 50](#) states: "Adequate provisions shall be made and described for emergency facilities and equipment, including: ... (8) A licensee onsite technical support center and a licensee nearsite emergency operations facility from which effective direction can be given and effective control can be exercised during an emergency" (emphasis added).

The Commission issued Supplement 1 to NUREG-0737 to provide NRC guidance regarding acceptable methods for meeting its EOF emergency planning requirements. Supplement 1 to NUREG-0737 specifies that (1) the EOF must be located between 10 and 20 miles from the site (a primary EOF may be located closer than 10 miles if a backup EOF is located between 10 and 20 miles from the site) and (2) Commission approval is required if the EOF is to be located more than 20 miles from the site. In Table 2, "Minimum Staffing Requirements for NRC Licensees for Nuclear Power Plant Emergencies," the 1-hour goal for the response time to staff the EOF (after an emergency has been declared) is specified and, in Section 8.4.1.b.i., the guidance stipulates that the NRC will consider reasonable exceptions to the goals for the number of additional staff personnel and response times for their arrival. Supplement 1 to NUREG-0737 specifies that the EOF will provide for the key functions of (1) management of overall licensee emergency response, (2) coordination of radiological and environmental assessment, (3) development of recommendations for public protective actions, and (4) coordination of emergency response activities with Federal, State, and local agencies.

ComEd's Corporate Generating Stations Emergency Plan (GSEP): ComEd owns and operates 10 nuclear power reactors at five sites (Braidwood, Byron, Dresden, LaSalle and Quad Cities) in Illinois. (On February 13, 1998, ComEd informed the NRC of the permanent cessation of operations at the Zion facility.) The GSEP has a station-specific annex for each site and, in its current GSEP, ComEd has four dedicated nearsite EOFs for these sites that conform to the distance criteria in Supplement 1 to NUREG-0737. The GSEP includes the use of the Interim EOF in its corporate offices until a nearsite EOF is staffed. The corporate Interim EOF is also the approved backup EOF for Zion. The corporate Interim EOF (the proposed CEOF) is located beyond the distance specified in Supplement 1 to NUREG-0737 for nearsite EOFs. [Attachment 11](#) provides a map and table showing the location of and distances between the ComEd sites and EOFs. The attachment indicates that the distances between the proposed CEOF and the ComEd sites range from 32 miles (Dresden) to 116 miles (Quad Cities).

ComEd estimated that it would take 1.5 to 3 hours for staffing its nearsite EOFs, depending on the site involved, the availability of EOF personnel, time of day, weather and road conditions. This is based upon the results of several off-hours callout drills and a comprehensive survey of responder estimated travel times to assigned EOFs. These estimated times exceed the 1-hour EOF staffing goal specified in Supplement 1 to NUREG-0737, Table 2, and NUREG-0696, and is due, in part, to ComEd's emergency response staffing strategy.

Subsequent to the SRM dated January 31, 1996, ComEd revised its GSEP to include the use of its corporate Interim EOF (including a staffing goal set at 1 hour) as the Interim EOF for all sites until a nearsite EOF was staffed. The Interim EOF would be staffed following the declaration of an Alert or higher emergency classification. If a Site Area Emergency or a General Emergency were declared, a senior corporate EOF official would assume overall command of the ComEd response until the nearsite EOF is staffed and capable of assuming command and control responsibilities.

ComEd's Proposal: ComEd's proposal is to eliminate the nearsite EOFs and establish a CEOF at its corporate offices. ComEd's specific positions follow:

- Emergency response capabilities would be enhanced by improving the timeliness of responders to relieve their technical support center (TSC) counterparts of certain responsibilities (the CEOF could be staffed within 1 hour)
- Establishment of a CEOF would not adversely impact the capabilities of EOF staff to work with State, county, and NRC Site Team responders
- NRC's regulations and guidance do not mandate that a nearsite EOF must be equipped and available for use as a Joint Operations Center (JOC) for the Lead Federal Agency, as described in the Federal Radiological Emergency Response Plan (FRERP)
- There is no need to establish a Joint Public Information Center (JPIC) at the corporate office and no need to have a senior corporate spokesperson at the on-scene JPICs
- Establishing a CEOF in place of four nearsite EOFs would save resources.

Interim EOF Activation Timeliness: The strategy to create an Interim EOF significantly improved ComEd's staffing timeliness and there has been an evident improvement in staffing timeliness since 1996. Historically, prior to using the Interim EOF, the nearsite EOFs were not fully staffed for up to 3 hours. With the use of the Interim EOF, activation times decreased, approaching the 1-hour goal. On September 18, 1995, before the approval of the Interim EOF, a Region III inspector stationed at the corporate Interim EOF observed a successful, off-hours, unannounced callout drill. Subsequently, between September 1995 and January 1997, ComEd conducted 10 callout drills using a computer-based callout system (Voice Recognition Unit or VRU); only 3 were fully successful ([Attachment 12](#)).

During an actual emergency event that occurred on May 10, 1996, the staffing of the Interim EOF was unsatisfactory. In the early morning hours of May 10, 1996, a tornado caused damage at the Quad Cities Station. In accordance with procedures, an Alert was declared and the onsite response facilities and the Interim EOF were activated. Minimum staffing of the Interim EOF, as defined in the emergency plan, was not achieved until 98 minutes after the Alert declaration, 38 minutes beyond the 60-minute goal for staffing the Interim EOF.

To improve performance and reliability, ComEd embarked on a series of initiatives to improve the notification and callout of emergency responders and to meet the 1-hour goal for activation of the Interim EOF. ComEd installed new systems and protocols to solve its notification and callout problems. In July 1997, ComEd switched to the Community Alert Network (CAN), which is a contractor-provided, automated callout service based in Nevada and New York. This is the system that is presently in use. However, in several drills in the summer of 1997, ComEd was unable to lower the staffing times to meet the 1-hour goal. Additional changes were made to improve communications, including improved training. In February 1998, communication drills were conducted on a weekly frequency to improve the callout times. Out of seven CAN drills, four were fully successful and three achieved staffing times between 67 to 84 minutes.

In April 1998, ComEd implemented a new process to achieve consistent EOF staffing times of under 1 hour. It developed a new system using pagers and dedicated response teams. ComEd conducted four weekly off-hour drills to test the system. Three drills were fully successful. The fourth test was indeterminate because of recording discrepancies for one member of the response team. As part of a commitment to NRC, on May 14, 1998, ComEd conducted a successful actual drive-in drill in which the response team actually drove in to the CEOF from their homes. Minimum staffing occurred within 40 minutes of the classification time.

In its August 7, 1998, submittal, ComEd strengthened its commitment to timely activation. ComEd formally committed to minimum staffing of the Interim EOF within 1 hour at the Alert emergency classification. (NRC guidance calls for staffing the EOF at the Site Area Emergency.) Previously, ComEd's GSEP only stated that it had a *goal* to activate the Interim EOF in 1 hour. In addition, ComEd also committed to conducting unannounced, off-hours, drive-in callout drills every 6 months until it has achieved three consecutive successful drills. After three consecutive successful drills are achieved, ComEd would reduce the drill frequency to once every 6 years.

On August 4, 1998, at 4:13 a.m. (CDT), an Unusual Event was declared at the Byron Station. Although not required, ComEd elected to implement the EOF activation procedure; it took 68 minutes to activate the Interim EOF. Consequently, ComEd will continue to drill on a frequent basis until it achieves 3 consecutive Interim EOF activations within 60 minutes.

Unique Site-Specific Considerations: NRC's EOF requirements envisioned that the EOF would serve as the location for the licensee, State and local agency representatives to meet face-to-face, allowing TSC staff to concentrate on onsite issues and mitigative actions. In light of the State and county agencies' plans for responding to emergencies at ComEd sites and the unique capabilities of the Illinois Department of Nuclear Safety (IDNS), this is not an issue for the ComEd proposal.

With respect to ComEd's situation, State and county emergency response organizations operate from their own emergency centers and do not send decisionmakers to the nearsite EOFs. This approved arrangement has been in effect for more than 10 years. Coordination and interaction with the licensee take place by telephone and computerized communications. The three States (Illinois, Wisconsin, and Iowa) within one or more of the ComEd sites' 10-mile emergency planning zones reviewed ComEd's proposal and agreed that the strategy is compatible with their approved emergency plans

(included in [Attachment 1](#)). IDNS stated that as long as adequate information flow, cooperative assessment, and decisionmaking are achieved, a centralized EOF should not impede effective emergency response. Federal Emergency Management Agency (FEMA) Region V staff reviewed ComEd's proposal and indicated that it will have no impact on offsite preparedness (included in [Attachment 1](#)).

In addition, IDNS maintains a computerized data link to the ComEd nuclear stations that provides real-time access to hundreds of plant parameters whether or not an emergency is declared. IDNS has independent vent stack monitors and a network of radiation detection instruments around each ComEd nuclear station. IDNS also maintains a resident engineer at each ComEd nuclear station, who would report to the onsite TSC.

Impact on NRC's Incident Response and NRC Resources: Commission approval of a CEOF at ComEd's corporate office would not be consistent with longstanding Commission policy, as reflected in NUREG-0728 and -0845 and other more recent NRC publications, that the lead for NRC's incident response should be on-scene during an emergency. Although the NRC resident inspector for the affected site would be augmented by several other NRC Site Team representatives in the onsite emergency response facilities, the majority of the NRC Site Team, including the Director of Site Operations (DSO) and many key aides, would be located at the proposed CEOF rather than on-scene. ComEd indicated that pre-designated office space for NRC Site Team representatives in each nearsite EOF would remain available, if needed by NRC, and ComEd would provide any needed communications equipment.

In response to anticipated concerns about a "remote EOF" concept, ComEd raised the issue of using the nearsite EOF as a Joint Operations Center (JOC) for Federal agencies to save Federal resources. Neither the memorandum of understanding between NRC and FEMA concerning the FRERP or NRC regulations require that a licensee convert or allow the nearsite EOF to become a JOC. Also, it has been suggested that NRC could establish the JOC either at FRMAC (Federal Radiological Emergency Monitoring and Analysis Center) or at FEMA's Disaster Field Office.

If the Commission approves ComEd's proposal, the NRC's DSO could appoint another manager to serve as a senior NRC spokesperson at a nearsite JPIC. However, this could separate two key NRC managers for the purpose of a press conference. ComEd's procedures call for its key staff at the JPIC to be technically knowledgeable of the plant and plant conditions. The key staff would be available to interface with the NRC if communications links to the proposed CEOF were unsatisfactory. However, the "remote" location of the senior NRC decisionmaker from the site may create an appearance of "NRC remoteness" that may not be desired. In addition, should the Chairman, President, other elected representatives, or other decisionmakers go to the site, it is likely that the senior NRC manager would be required for support. This could take the senior NRC manager more than one hundred miles from the licensee's senior decisionmaker. These impediments must be weighed in the context of the benefits realized by a more timely response during the earliest stages of an emergency.

The proposed CEOF is about 15 minutes away from the NRC Region III office by automobile. Such proximity will simplify the deployment of the EOF component of an NRC Site Team to the CEOF. If the proposal is approved, NRC Site Team counterpart space and communications provisions may need to be refined. Staffing for the onsite component of an NRC Site Team should also be reassessed to include an onsite NRC manager to augment the resident inspectors and several other on-scene NRC responders, at a minimum.

ComEd Resource Savings: Although the JPICs for all but the Zion facility would remain in the same buildings as the EOFs, ComEd expects to achieve an initial one-time savings of \$78,000 to \$108,500 and an annual savings of up to \$359,168 by eliminating its four nearsite EOFs.

Alternate CEOF: The staff raised a concern about the likelihood that the proposed CEOF at ComEd's corporate office could become unavailable because of the effects of an earthquake or a tornado, an outage of communications equipment, or a security event. There is also a very small likelihood that an event at another facility could affect availability. ComEd stated that, if the CEOF became unavailable for use, the CEOF responsibilities could be transferred to the TSC at one of its unaffected nuclear stations. Although ComEd indicates that it has no immediate plans to modify its TSCs with respect to training, staffing and layout to formalize the use of a TSC as an alternative to the CEOF, the staff believes that the proposed transfer approach is feasible without affecting public health and safety because the TSC responders at the other sites have had training similar to that received by the EOF responders in the CEOF.

Previous Commission Decisions: The Commission has approved five exceptions to its EOF location policy, where the licensee proposed to locate the EOF outside the 20-mile radius from the nuclear power plant. Generally, these exceptions involved locating the proposed EOF a few miles beyond the 20-mile criterion. There is limited experience for locating the EOF at a distance of the order of 100 miles from the nuclear power plant. The Commission considered two emergency plans that proposed a CEOF where the location significantly exceeded the distance criteria in Supplement 1 to NUREG-0737; as discussed below, in one case the Commission approved the proposal, while it disapproved the proposal in the second case.

In early 1981, the Commission approved the Tennessee Valley Authority (TVA) plan to locate the EOF for its nuclear power plant sites beyond the distance which was later specified in NRC guidance, Supplement 1 to NUREG-0737, issued in 1982 ([Attachment 13](#)). The TVA emergency plan specifies the use of a CEOF, which is located approximately 104 miles from TVA's Browns Ferry nuclear plant, with accommodations near each plant for an NRC Site Team. In 1995, Watts Bar Station was licensed. Watts Bar also utilizes the TVA CEOF, which is located approximately 50 miles from the site; the location of the CEOF relative to the Watts Bar site was not explicitly addressed in the licensing action. Region II's experience through inspections and exercise observations confirms that the remote EOF concept is feasible and can afford reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

The Commission disapproved an exception to the guidelines for locating the EOF for the Oconee Nuclear Station ([Attachment 14](#)). Duke Power Company, licensee for Oconee, proposed to use a CEOF located 125 miles from the Oconee site. The staff recommended that the Commission disapprove the Oconee proposal because the principal EOF management staff could not interact directly (face-to-face) with its Federal, State, and local counterparts located near the plant site ([Attachment 15](#)). In addition, the Oconee plan did not contain provisions for staffing a nearsite EOF. The Commission approved the staff's recommendation. A contrary outcome would be reached here if the Commission approves the current proposal. However, in this situation, a unique circumstance exists since other governmental decisionmakers, at their own election, will not be located near the plant site.

STAFF EVALUATION OF PROPOSAL:

The Commission's regulations require reactor licensees to provide a "nearsite" EOF, 10 C.F.R. 50.47(b)(3) and 10 C.F.R. Part 50, Appendix E, IV.E. The term "nearsite" is not defined in the regulations, and Commission guidance has not clarified the meaning of this term except that Supplement 1 to NUREG-0737 indicates that EOFs may be approved by the staff without Commission involvement up to 20 miles from a reactor site, and the Commission may approve EOFs located beyond that distance. In view of the lack of a clear definition of the term "nearsite," and the Commission's approval of the CEOF for TVA's sites, an exemption from the Commission's regulations does not appear to be required.

In NUREG-0696, the Commission described the importance of the EOF as follows: "When the EOF is activated, the functions of providing overall emergency response management, monitoring and assessing radiological effluent and the environs, making offsite dose projections, providing recommendations to State and local officials, and coordinating with Federal officials will shift to the EOF," (NUREG-0696 at 5). With respect to the location of the EOF, NUREG-0696 states:

The location of the EOF, and whether a backup facility is required, should consider the following factors:

Whether the location provides optimum functional and availability characteristics for carrying out the licensee functions specified for the EOF (i.e., overall strategic direction of licensee onsite and support operations, determination of public protective actions to be recommended by the licensee to offsite officials, and coordination of the licensee with Federal, State, and local organizations).

Whether the EOF functions would be interrupted during radiation releases for which it was necessary to recommend protective actions for the public to offsite officials.

It is strongly recommended that the EOF location be coordinated with State and local authorities to improve the relationship between the licensee and offsite organizations. *Id.* at 17-18. *Accord*, Supplement 1 to NUREG-0737, at 22, 8.4.1.a.

In an early decision concerning the importance of an EOF, the Commission emphasized the importance of face-to-face communications among decisionmakers, stating as follows:

[T]he EOF is the ideal place for face-to-face communications regarding protective action recommendations between Federal, State and local officials, and the licensee official charged with making the recommendation to the [State]. The Commission does not believe ... 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. *Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1)*, CLI-83-22, 18 NRC 299, 308 (1983).

The Commission further stated that the EOF "... is where State, local and Federal officials will congregate to exchange information." *Id.* at 309. The Commission similarly emphasized the importance of face-to-face contact among decisionmakers at the EOF in denying Duke Power Company's proposed CEOF for Oconee, as the Court of Appeals noted in finding that the Commission acted within its discretion in denying that proposal. *See Duke Power Co. v. NRC*, 770 F.2d 386, 390-91 (4th Cir. 1985).

The Commission's prior emphasis on the importance of a nearsite EOF in facilitating face-to-face communications does not appear to apply with equal force in the situation presented by ComEd's proposal, as discussed below.

ComEd proposes to use a CEOF, located from 32 to 116 miles from an affected site and staffed within 1 hour of an Alert or higher emergency classification, as an alternative to that specified in NRC's guidance. ComEd's proposal is a departure from the NRC guidance that a nearsite EOF is to be located within 20 miles of the site. With the exception of the location of the CEOF, the CEOF meets all of the staff requirements.

ComEd's proposal provides for performance of all the key EOF functions. The functional capabilities of the CEOF were considered previously and accepted by the staff in approving the facility as the Interim EOF and Zion Backup EOF. NRC inspections of the exercises conducted while the licensee was using the CEOF confirms its functional capabilities.

The existing CEOF has emergency response capabilities (data collection, dose assessment, and communications equipment) similar to those of nearsite EOFs with the exception of FTS-2000 communications lines. NRC would be responsible for installing the lines for the FTS-2000 system. However, NRC would maintain only one system rather than four systems. It is estimated that NRC would save \$10,000 per year if this proposal was approved.

ComEd's commitment is to have the CEOF staffed within about 1 hour of an emergency declaration (Alert or higher) to relieve the TSC staff of responsibilities for offsite interfaces if a Site Area Emergency or a General Emergency is declared. ComEd would staff the CEOF following the declaration of an Alert with the positions equivalent to the staffing plan (minimum staff of 8 and full staff of 13) for the currently approved Interim EOF. The remainder of the CEOF staff would be activated following the declaration of a Site Area Emergency or a General Emergency. Staffing of the CEOF at the Alert level exceeds the guidance of Supplement 1 to NUREG-0737 and increases the overall timeliness of ComEd's emergency preparedness.

The arguments and facts presented by ComEd in its proposal and subsequent correspondence, as well as the results and findings of NRC inspections and events that have ensued since ComEd first proposed the CEOF concept indicate that it would likely provide an increase in effectiveness of emergency preparedness for ComEd. ComEd stated (and the staff agrees) that the CEOF can generally perform the required functions of an EOF in terms of coordinating offsite activities associated with an accident, as envisioned in the regulations and guidance discussed above, and from the lessons learned from Three Mile Island.

With respect to the State and local agencies, the issue of the distance for the EOF is not relevant in this situation since these agencies do not send

decisionmakers to the nearsite EOF. The State of Illinois has an effective program, and maintains its own inspectors in the plant with direct data links to the licensee's computers. NRC inspectors, over the years, have verified that the EOF staff functions and performs the role of coordinating and directing offsite activities associated with an incident even though decisionmakers from the State and local support agencies are not present in the EOF. On the basis of these considerations, the staff has concluded that, in this situation, the distance between the site and the proposed CEOF would not affect the licensee's performance. However, there could be a negative public perception: that the licensee cannot respond to an accident and the NRC Site Team cannot provide effective oversight, from a distance of more than 100 miles from the site. This perception can be addressed by accurately presenting the facts to the public.

ComEd has had problems in timely activation of the Interim EOF as demonstrated in callout drills and in an actual event (the tornado at Quad Cities in May 1995). However, ComEd has taken substantial steps and instituted new programs to solve this problem. ComEd has made a strong corporate commitment to make its proposal work. The results of recent drills show continued improvement in staffing times compared to earlier drills. The licensee has committed to revise the language in the emergency plan to commit to the activation of the proposed CEOF in 1 hour after the declaration of an Alert or higher emergency classification. The main issues remaining are the reliability of ComEd's callout systems and the continuous demonstration of timely activation of the proposed CEOF.

ISSUE:

The issue is whether to permit ComEd to eliminate the four nearsite EOFs in favor of one CEOF.

OPTIONS:

(1) The Commission could reject the proposal.

Pro:

- would maintain consistency with NRC policy in effect since 1982
- would avoid the possibility of additional proposals from other licensees in similar situations
- would not affect the NRC's and Federal planning for deploying on-scene responders

Con:

- Rejection of the proposal would send a negative message to the State and county officials that NRC does not approve of remote decisionmaking
- no resource savings would be realized for ComEd by eliminating four nearsite EOFs
- ComEd would continue to have to transfer responsibilities from the Interim EOF to the nearsite EOF
- would dilute the licensee's pool of senior managers available to fill key emergency response positions
- no resource savings would be realized for NRC by eliminating three sets of FTS-2000 lines

(2) The Commission could accept the proposal.

Pro:

- rapid deployment of the NRC Site Team due to the close proximity of the regional office to the proposed CEOF
- resource savings realized for ComEd by eliminating four near-site EOFs
- would eliminate the transfer of responsibilities from the Interim EOF to the near-site EOF
- resource savings would be realized for NRC by eliminating three sets of FTS-2000 lines

Con:

- potential negative public perception of lack of near/onsite response
- possible influx of proposals from other licensees in similar situations
- would require a modification to NRC planning for deployment of site team personnel
- could require FEMA and/or NRC to reevaluate the expectation that a licensee's nearsite EOF is the optimum location for the Lead Federal Agency's JOC rather than an on-scene, Federally - managed response facility such as FEMA's Disaster Field Office or a FRMAC

CONCLUSION AND RECOMMENDATION:

The ComEd proposal constitutes a departure from the EOF location criteria in Supplement 1 to NUREG-0737. The CEOF meets all the functional as well as the physical requirements (i.e. communications, space, and visual information displays) for EOFs as identified in various agency documents. Conditional upon ComEd's commitments and plan of action, it is expected that the licensee will meet the NRC guidance for timely staffing of the EOF, a goal that has eluded this licensee for years. Commission approval of the proposal will also eliminate the additional step of transferring responsibility for command and control from the currently approved Interim EOF to the nearsite EOF. The ComEd proposal maximizes the use of senior managers to fill key onsite and offsite emergency response positions. Adoption of this proposal will save resources for both the NRC and ComEd.

The acceptance of ComEd's proposal by State and county officials responsible for taking protective measures to protect the health and safety of the populations within the ComEd sites' 10-mile emergency planning zones is a significant factor. Decisionmakers remain in their respective centers and are not sent to the EOFs. The acceptance of this approach relies, at least in part, on the existence of the unique IDNS capability to independently monitor plant radiological effluent conditions, including real-time access to hundreds of other plant parameters.

ComEd's proposal impacts the NRC's policy that the DSO from the NRC Site Team should be on-scene during an emergency and affects the NRC's planning for Site Team deployment for the site EOFs. However, the NRC Site Team deployment to the proposed CEOF should be more effective because the CEOF is accessible in 15 minutes by car from the Region III offices. The total effect on the NRC resources is expected to be minimal.

The staff recommends that Option 2 should be adopted.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection. The Office of the Chief Financial Officer has reviewed this Commission paper for resource implications and has no objection. The Office of the Chief Information Officer has no objections to the information implications contained in this paper.

William D. Travers
Executive Director for Operations

- Attachments:**
1. ComEd letter re:Proposal for Centralized EOF, dated January 5, 1995
 2. Emergency Plan Changes, dated March 31, 1993
 3. ComEd Response to Staff RAI re:Emergency Plan Changes, dated August 5, 1993
 4. Staff Requirements Memorandum, related to SECY-95-274, dated January 31, 1996
 5. ComEd letter re:Updated Proposal for CEOF, dated August 7, 1998
 6. NRC EP Inspection Report, dated August 20, 1992
 7. ComEd Response to Staff RAI, dated September 17, 1993
 8. Staff Requirements Memorandum, related to Commission Meeting (M830302B), dated March 3, 1983
 9. SECY Memorandum re:SECY-87-067, dated April 30, 1987
 10. Staff Requirements Memorandum, related to SECY-96-170, dated September 18, 1996; and SECY-96-170, dated August 5, 1996
 11. Map Showing Locations of ComEd Reactor Sites and nearsite EOFs
 12. ComEd Letter re:Results of Drills, dated February 27, 1997
 13. SECY Memorandum, related to TVA EOFs, dated January 21, 1981
 14. SECY Memorandum, related to SECY-84-089/089A, dated June 12, 1984
 15. SECY-84-089, dated February 22, 1984.