



March 1, 2000

James E. Dyer  
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Region III  
801 Warrenville Road  
Lisle, IL 60532-4351

Byron Station, Units 1 and 2  
Facility Operating License Nos. NPF-37 and NPF-66  
NRC Docket Nos. STN 50-454 and STN 50-455

Subject: Request to Withhold Information from Public Disclosure

- References:
- (1) Letter from R. M. Krich (Commonwealth Edison Company) to J. E. Dyer (U.S. NRC), "Recent Assessments of Safety-Conscious Work Environment at the Byron Nuclear Station," dated January 24, 2000
  - (2) Letter from J. A. Grobe (U.S. NRC) to O. D. Kingsley (Commonwealth Edison Company), "Submittal of Recent Assessments of Safety-Conscious Work Environment at the Byron Nuclear Station," dated February 10, 2000

In Reference 1, we submitted information regarding assessments of the safety-conscious work environment at Byron Station. We requested that the information in this letter be treated as confidential and withheld from public disclosure in accordance with paragraph (a)(6) of 10 CFR 2.790, "Public inspections, exemptions, requests for withholding." In Reference 2, the NRC requested that we identify the portions of Reference 1 to be treated as confidential, provide the bases for this request, and provide a redacted copy of the submittal. This response was requested to be submitted to the NRC by March 1, 2000.

The purpose of our request to withhold the subject information from public disclosure was to maintain the confidentiality of the individuals interviewed during the safety-conscious work environment assessments discussed in Reference 1. Upon further review of the contents of Reference 1, we have identified only one instance where the identity of specific individuals could be ascertained and, therefore, constitute an unwarranted invasion of their personal privacy. Accordingly, as requested, we are providing a bracketed copy of our January 24, 2000 letter (i.e., Attachment 1) identifying the information that should be protected, and a fully redacted copy of the January 24, 2000 letter (i.e., Attachment 2) that deletes the bracketed information.

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Should you have any questions or concerns regarding this issue, please contact me at (630) 663-7330.

Respectfully,

A handwritten signature in black ink, appearing to read "R. M. Krich". The signature is written in a cursive, slightly slanted style.

R. M. Krich  
Vice President – Regulatory Services

Attachment 1: Letter from R. M. Krich (Commonwealth Edison Company) to J. E. Dyer (U.S. NRC), "Recent Assessments of Safety-Conscious Work Environment at the Byron Nuclear Station," dated January 24, 2000 (bracketed)

Attachment 2: Letter from R. M. Krich (Commonwealth Edison Company) to J. E. Dyer (U.S. NRC), "Recent Assessments of Safety-Conscious Work Environment at the Byron Nuclear Station," dated January 24, 2000 (redacted)

ATTACHMENT 2



January 24, 2000

Mr. James E. Dyer  
Regional Administrator - Region III  
U.S. Nuclear Regulatory Commission  
801 Warrenville Road  
Lisle, IL 60532-4351

Byron Station, Units 1 and 2  
Facility Operating License Nos. NPF-37 and NPF-66  
NRC Docket Nos. STN50-454 and STN50-455

SUBJECT: Recent Assessments of Safety-Conscious Work Environment  
at the Byron Nuclear Station

Dear Mr. Dyer:

During a May 27, 1999, meeting between representatives of Commonwealth Edison (ComEd) Company and the NRC Region III, ComEd committed to provide the NRC with the results of an additional assessment of the safety-conscious work environment at the Byron Station. This commitment was documented in the September 2, 1999, NRC letter summarizing the meeting. Subsequently, ComEd conducted additional assessments of the environment at the Byron Station. This letter provides information regarding the results of those assessments. Accordingly, we request that this letter be treated as confidential under 10CFR 2.790 (a) (6). In summary, these assessments continue to show that a safety-conscious work environment exists at the Byron Station. We will continue to reinforce strong support for the maintenance of a safety-conscious work environment and the enforcement of our policy at all ComEd nuclear stations that any adverse actions taken in retaliation for raising safety concerns will not be tolerated.

Background ComEd initiated a major effort a little over two years ago to achieve operational excellence by enhancing the safety and improving the efficiency of its nuclear operations. These objectives were calculated to eliminate cyclic performance of the nuclear stations and position ComEd's nuclear fleet in the top quartile of industry performance indicators. ComEd's efforts to improve the safety and efficiency of all of our nuclear stations have involved a Nuclear Generation Group (NGG)-wide implementation of new standards, processes, and organizational structures, including the assignment of new managers in many positions. As the focus shifted to the implementation of these new standards, process, and organizational structures, a workforce alignment action plan was one of the key initiatives that was carried out to achieve the objective of starting the NGG on its way to operational excellence. The degree of alignment achieved at each ComEd site varied due to the specific circumstances that had developed at each site over time. As expected in any turnaround situation, some workers reacted to these changes and the efforts to achieve alignment with suspicion, anxiety, and, in some cases, resistance. As discussed later, these conditions most likely prompted the increase during the last year in the number of concerns raised to the NRC.

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As a result of these concerns being raised, the NRC requested in the summer of 1998 that we examine whether these concerns were indicative of a possible "chilled environment" at the Byron Station. In response to the NRC's request, ComEd conducted an independent assessment of the environment at the Byron Station which resulted in our November 20, 1998 response to the NRC. We subsequently submitted additional information on May 26, 1999. A meeting with the NRC to discuss our response to the NRC concerning the Byron Station work environment was held on May 27, 1999. As discussed during that meeting, ComEd's overall conclusion was that personnel at the Byron Station have a strong nuclear safety ethic and are not reluctant to raise safety issues. At the same time, we found some long-standing, isolated personal interaction problems existed involving a small number of individuals in the Byron Operations Department. A number of focused and comprehensive corrective actions were taken to address this problem, including changes to the Corrective Action Program (CAP) that ensured that feedback was provided to individuals who raised concerns by initiating Problem Identification Forms (PIFs). Nevertheless, we found a uniform willingness of employees to raise safety issues and we did not find that the examples involving this small group had a pervasive negative effect on the overall working environment at the Byron Station.

At the May 27, 1999, meeting with NRC Region III, ComEd reported on corrective actions that had been implemented in response to the results of the 1998 assessment. These corrective actions were implemented fully at the Byron station, and, as applicable, at other ComEd stations during the first several months of 1999. While we understand that ComEd must continue to reinforce the thrust of the corrective actions taken and to refine the new processes being implemented, including the changes to the CAP, positive results from the corrective actions have been realized at all ComEd nuclear stations as measured by various indicators, including the number and nature of concerns raised to the NRC and the number of PIFs initiated. We also recognize that achieving the level of workforce alignment that we are striving for will take some additional time and not all employees will accept the changes and align to support them. We expect that there will be some employees that may continue to consider all such efforts as aimed at inhibiting the raising of concerns. However, the results of a recently conducted communications survey has shown that employees consider that communications between management and the workforce have improved. This is significant since effective communication is an essential step in achieving workforce alignment.

1999 Additional Assessments of the Byron Station Work Environment After the May 27, 1999 meeting, ComEd conducted three additional assessments of the safety culture at the Byron Station. These additional assessments focused on the willingness of employees to raise safety concerns without fear of retribution. These assessments were conducted by independent ComEd employees over a period of time covering July, September and November/December of 1999 in order to provide the most accurate picture of the Byron Station staff's perception of their ability to raise safety issues and the potential for a "chilled environment" at the site since the corrective actions had been implemented.

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More than 110 Byron Station employees were interviewed during these most recent assessments, and essentially all interviewees stated their opinion that there had been positive improvement in the overall safety culture at the station as a result of the corrective actions taken. Moreover, almost all of the individuals interviewed stated that employees felt free to raise safety concerns without fear of retribution. In short, these multiple assessments, conducted by different teams of independent ComEd employees over several different time periods in 1999, provide substantial assurance that there is no "chilled environment" at the Byron Station. Summaries of these assessments are provided in the attachment to this letter. We note that during the time these 1999 assessments were being conducted, the number of problems reported under the CAP at all ComEd nuclear stations reflected an appropriately low threshold for identifying problems. This fact supports our conclusion regarding employees' willingness to continue to identify and report problems internally in an open manner.

Additional Considerations Since implementation of the corrective actions the number of concerns reported to the NRC has declined for all stations except the Byron Station. Although these concerns have been raised throughout the year, many were reported to the NRC during October and November of 1999, during the Unit 2 fall outage. Moreover, a number of concerns that the NRC referred to ComEd were also reported internally within the CAP and, in some instances, through the ComEd Employee Concerns Program as well. The continuing use by employees of both the internal and external mechanisms for identifying problems supports our conclusion that employees at the Byron Station are not reluctant to raise concerns. These NRC referred concerns cover a range of activities such as whether there is adequate control room manning to respond to postulated design basis events within the time assumed in the safety analysis, and whether new training to upgrade non-licensed operators is adequate and is influenced by operating pressures.

We have looked closely at the concerns raised to the NRC by Byron Station employees that were subsequently referred to ComEd, particularly those that were identified during October - November 1999, in an effort to understand the underlying causes. While there are some common factors among the concerns raised, such as the Unit 2 outage, there does not appear to be any single, overriding common cause. Accordingly, we have concluded that the recently identified concerns reflect a number of different changes that were being implemented at the Byron Station during this time, many of which affected the Byron Station workforce. These changes included the following.

- Changes in operating shift crew schedules and composition.
- Reduced refueling outage durations.
- Strengthening the controls within the overtime policy. (Note: this change together with the new shift crew schedule is reducing the use of overtime).

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- Maintenance personnel assigned to the afternoon-evening shift.
- Upgrading the knowledge and abilities of the new, combined, non-licensed operator position.
- Use of new contractors during the outage.

These same changes have been made at the other ComEd nuclear stations as well. However, changes such as these at a station that, because of its good performance over a long period of time relative to other ComEd Stations, has not had to make the substantive cultural changes that were needed and carried out at the other stations, may have created a sense of anxiety and pressure within some employees. In addition, the recent failure to ratify a new labor agreement in the operations area resulted in the labor union employing various tactics to advance its positions. This in turn may have led to some degree of frustration and a sense of loss by operations personnel of what was perceived to be beneficial practices. We continue to note, however, that during this period of change and uncertainty, Byron Station employees are continuing to raise concerns through the internal mechanisms. In turn, ComEd management is continuing to address each known concern. Management is continuing to reinforce its commitment to the maintenance of a safety conscious work environment at all ComEd stations through appropriate communication channels.

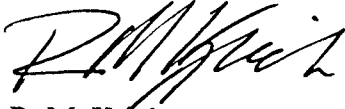
We take very seriously any possibility of a potential "chilled environment" at a ComEd nuclear station – including real or perceived production pressure. We have concluded that during the past two years, the rapid changes in standards, processes, and organizational structure necessary to further improve the safe and efficient operation of all ComEd stations have understandably resulted in some employees not being aligned with the new management direction and in feelings of anxiety by some employees toward the management that is driving these improvements. Yet, overall performance over the past two years has demonstrated a tangible improvement in nuclear safety. Specifically at the Byron Station, there has been notable improvement in such safety measures as the Institute of Nuclear Power Operations (INPO) index which includes measures of unit capacity, unit capability loss, and safety system performance. The number of occurrences that are reportable to the NRC as Licensee Event Reports (LERs) has declined from 19 in 1998 to six in 1999. Also, configuration control incidents has gone from 95 in 1998 to 27 in 1999. Our efforts are by no means completed, and we continue to strive for higher levels of performance. Yet, we have observed that during this time of change, the safety culture at our plants has been such that employees continued to identify problems and raise safety concerns.

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All of the assessments performed at the Byron Station reveal that the corrective actions taken at the beginning of 1999 have strengthened the safety culture at the station, and have provided further additional bases to preclude a "chilled environment." We are sure that as the changes in process, organization, and work practices are fully implemented and the fundamentals of safe, efficient operation are in place, the safety culture will continue to strengthen at all of ComEd's stations.

If you have any questions with regard to the information in this letter, please do not hesitate to contact me.

Respectfully,



R. M. Krich  
Vice President - Regulatory Services

## Attachment A

### July Assessment

From July 19-26, 1999, a ComEd management team independent of Byron Station conducted an assessment of the willingness of employees at Byron to raise safety concerns and of the effectiveness of corrective actions taken as a result of the November, 1998 assessment that covered the same areas. Team members interviewed 45 randomly selected Byron Station employees and observed meetings to gather data. The team focused on three corrective action areas: 1) the Corrective Action Program (CAP), 2) the safety culture at the plant, and 3) management-employee interaction.

The team concluded that the specific corrective actions had been appropriately implemented at the Byron Station and that employees were more willing than ever to raise concerns without fear of retribution. Employees were satisfied with senior management's participation in the senior management committee that reviews Problem Identification Forms (PIFs) (i.e., the Event Screening Committee), the encouragement management gives employees to identify issues, and management's positive response to issues that were raised. Although some employees indicated that management feedback to PIFs needs some improvement, interviewees stated a willingness to raise issues in a variety of ways. Additionally, employees were supportive of the additional Safety Conscious Work Environment training that was provided to supervisors, and saw effective communication between the management and the workforce that was supportive of a safety-conscience work environment. Employees also supported management personnel changes that were implemented after the November 1998 assessment.

### September Assessment

In the summer of 1999, a Nuclear Oversight Assessment group at ComEd evaluated the effectiveness of the Byron Station Corrective Action Program and the willingness of employees to raise concerns. The group collected data by interviewing over 25 employees randomly selected from different departments at the Byron Station. The group used eight previously conducted Nuclear Oversight assessments to support the current assessment.

The September study found that employees were willing to document concerns without fear of discipline or rebuke from management. It noted that a stable, healthy PIF generation rate, such as the one that exists at Byron, indicates a self-critical organization and not an environment that should be considered "chilled." Employees indicated satisfaction with the improvements to the CAP and the corrective actions taken in general.



## November/December Assessment

In November and December 1999, a Nuclear Oversight Assessment group interviewed 43 Byron employees [REDACTED] to assess the willingness of employees to raise concerns and the effectiveness of corrective actions taken at the plant.

Of the 43 employees interviewed, all but two felt that there had been positive improvement in the overall safety culture at the plant as a result of the corrective actions. These interviewees remarked that they were aware of the various avenues available to raise concerns and were satisfied with each of them. Moreover, all but two stated that employees felt free to raise safety concerns without fear of retribution. Some interviewees specifically praised the current Station Manager and Site Vice President for their responsiveness to employees during the latest (i.e., fall 1999) refuel outage. The two individuals who stated that management is not supportive of raising concerns added that no organization was helpful in addressing concerns raised. Additionally, some individuals stated that management is less effective in handling matters such as overtime issues and other management issues.