



Commonwealth Edison  
One First National Plaza, Chicago, Illinois  
Address Reply to: Post Office Box 767  
Chicago, Illinois 60690

July 12, 1983

Mr. James G. Keppler, Regional Administrator  
U.S. Nuclear Regulatory Commission - Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Subject: Systematic Assessment of Licensee Performance  
(SALP) Commonwealth Edison Company Comments  
Byron Station Units 1 and 2  
Braidwood Station Units 1 and 2  
NRC Docket Nos. 50-454/455 and 50-456/457

- References (a): 47 FR 12240 dated March 22, 1982
- (b): Mr. J. A. Hind letter to Mr. Cordell Reed  
dated June 8, 1983 (Byron Station)
- (c): Mr. J. A. Hind letter to Mr. Cordell Reed  
dated June 8, 1983 (Braidwood Station)

Dear Mr. Keppler

The purpose of this letter is to document Commonwealth Edison Company's comments as contemplated by Reference (a) in response to the Systematic Assessment of Licensee Performance (SALP) reports which were the subject of References (b) and (c). These written comments track the specific oral comments with respect to certain of the matters that were discussed at the public meeting concerning the SALP reports which was held on June 13, 1983.

As a result of our continued review of the SALP reports and our reflection on the June 13, 1983 meeting, we wish to make general observations regarding the SALP reports. First, the Company wants to assure you that it takes its responsibilities as an NRC licensee most seriously. We share the NRC's view that the SALP reports are in one sense a "report card" of how the Company has met its commitments to excellence in the construction and operation of its nuclear power plants. Of equal importance in our view is the use of the SALP reports as a management tool to direct the Company's resources to areas in which heightened attention is prudent and necessary.

The NRC evaluation of our performance at Byron is distressing. Of 10 areas appraised, 5 had a below average rating in the initial SALP report. We believe that this is the most below average ratings that any licensee has ever received. This evaluation was, we might add, totally unexpected since the NRC Staff's prepared testimony in the Byron licensing proceedings stated that the Company had implemented an "acceptable

July 12, 1983

quality assurance program". This conclusion was not qualified by any statement that there were evident weaknesses in the program. Yet such a qualification is compelled by a Category 3 rating. In addition, we have received significant positive reactions from the Staff for corrective actions we have implemented in 1983. These corrective actions are a comprehensive response to the deficiencies identified by the Staff.

We therefore have taken the time to not only consider our responses to the NRC's comments on each individual area appraised but also to determine whether there is some generic flaw in the implementation of our construction and quality programs at Byron that would lead to such a negative appraisal by the NRC. The attached enclosures represent written comments on 4 of the 5 areas of Byron appraisal which were categorized below average. The one functional area that is not discussed is the pre-operational testing. We acknowledge the validity of both the NRC's comments and the rating itself for that functional area. With respect to all five areas, however, we have reviewed the corrective actions underway and are unable to discover additional systematic approaches by which we can improve our performance. We recognize that the NRC Staff is not our consultant with respect to how our performance can be improved and do not ask for any specific direction. Nonetheless, the general observations in the SALP report are at odds with our understanding of the Staff's positive reaction to corrective action that we have proposed in the very functional areas which are rated below average. Accordingly, we can only conclude that the ratings themselves are in error.

We urge your reconsideration of these evaluations. The attachments to this letter discuss the underlying facts and corrective actions which have been taken in the four areas where we believe the SALP evaluation to have been inappropriately critical. The Company fully supports the SALP program but its usefulness will be diminished unless there is a good correlation between the NRC's evaluation of the day to day activities of a particular site and the SALP reports.

Very truly yours,

  
W. L. Stiede  
Assistant Vice-President

Assistant Vice-President

lm

Enclosures

6830N

## ENCLOSURE 1

### COMMENTS ON PRELIMINARY BYRON SALP REPORT

#### SAFETY-RELATED COMPONENTS

##### SUMMARY

The care and preservation of safety-related components is a continuing concern at all construction sites. It does not constitute a major concern at Byron. Adequate corrective actions were taken in response to each of the noncompliances identified by the NRC. The noncompliances involved only housekeeping items and potentially damaging situations such as missing pipe caps. Significant physical damage to components was not identified. Housekeeping at a construction site is a broad topic and the several minor unrelated noncompliances do not indicate to us a general problem in this area. The care and preservation of safety-related equipment was not highlighted as an area of major concern by the NRC in management meetings at Glen Ellyn on February 17, 1983 or at Byron on February 28, 1983.

##### ANALYSIS

The first two of the four noncompliances discussed in Section 4 of the preliminary SALP report directly address the issue of care and preservation of safety-related equipment. The other two noncompliances address this issue only indirectly: failure to issue specific NCR's during installation of safety-related equipment and failure to lift safety-related equipment in accordance with approved procedures. These latter two items deal only with procedures and are not indicative of general problems in the care and preservation of equipment.

The noncompliances identified during the evaluation period relate to various aspects of equipment care and preservation. In some cases, the NRC has identified multiple occurrences in issuing a noncompliance but the scope of corrective actions taken has generally been found to be acceptable by CECO and NRC. One example relating to pipe cap was the subject of a later noncompliance which resulted from a misunderstanding of the corrective action implementation schedule. Otherwise, repetition of these violations has not been a significant problem.

The number of examples of noncompliance is not indicative of a general problem when considered in the context of the present level of construction activity. During the SALP evaluation period over two thousand site employees were involved in the completion of innumerable discrete tasks associated with the handling and installation of thousands of individual components and huge quantities of pipe, duct, and cable. Minor deviations occurred but none resulted in any significant damage to safety-related components.

The corrective actions which have been undertaken since the start of the SALP evaluation period demonstrate that a great deal of time and attention has been paid recently to the care and preservation of safety-related equipment at Byron. Specific improvements are detailed in the responses to the noncompliances. As indicated in the attached chronology, broad improvements have been instituted without NRC prompting. CECO performance in this area should be characterized by a Category 2 rating.

The Station Housekeeping Committee has been active since late 1978. In early 1981, Byron Station reviewed LaSalle County Station's NRC Reports and noted the housekeeping concerns therein. Byron Station inspections continued.

April 1982 - Housekeeping efforts were accelerated:

- (1) Warning signs were posted throughout the plant
- (2) Additional Station personnel were assigned to the plant to inspect for housekeeping/equipment protection with issuance of the reports to Station Construction for corrective action
- (3) Memo to all site contractors was sent on this subject

June 1982 - Tech Staff System Test Engineers (STEs) were directed to inspect test areas for housekeeping concerns and equipment protection. Their instructions required:

- (1) Report daily conditions to Tech Staff Supervisor
- (2) Report to be generated weekly to Maintenance Assistant Superintendent
- (3) Information provided to Station Construction for Clean-up/Protection

February 1983 - Station Housekeeping/Equipment Preservation Procedure was revised and reissued emphasizing equipment protection:

- (1) Information to Construction continued being sent
- (2) Follow-up by Station was emphasized.

May 1983 - Testing Observers instructed to monitor for housekeeping conditions resulting in greater than 300 inspection reports regarding housekeeping filed for the month.

June 1983 - Formal procedures implemented for cleanliness zones in Fuel Handling areas.

MANHOURS EXPENDED ON HOUSEKEEPING INSPECTIONS

Weekly Manhours

41 -  
12  
15  
10

78 total hours per week

Station Effort

41 inspectors/Weekly  
6 Hskp Comm/Weekly  
Random Insp./Weekly  
Co-ordinator

TOTAL INSPECTIONS

1982

Assigned/Random  
533 195

1983

Assigned/Random  
843 208

6830N



## ENCLOSURE 2

### COMMENTS ON PRELIMINARY BYRON SALP REPORT

#### SUPPORT SYSTEMS

##### SUMMARY

Recent reviews of HVAC installation work at Byron were undertaken at CECo's initiative because of audit findings and concerns at other construction sites. The preliminary SALP report erroneously indicates that these reviews were prompted by the NRC.

The other miscellaneous minor deficiencies discussed in the preliminary SALP report do not suggest general a management weakness or a need to commit additional resources to this area. Performance in this area is considered adequate and should be given a Category 2 rating.

##### ANALYSIS

Only one noncompliance in this area was identified during the evaluation period. Other noncompliances relating to another area of evaluation are mentioned in the preliminary SALP report but they are only indirectly related and should not weigh heavily in this evaluation. Double counting of noncompliances in the SALP evaluations results in artificially low ratings.

The preliminary report erroneously indicates that HVAC installation work was reviewed "at the urging of the NRC". CECo has aggressively pursued this topic during the past several years at Byron. The attached chronology indicates that strong and effective licensee oversight is in place. -

The preliminary SALP report notes an "unresolved item" from a 1982 NRC inspection regarding fire protection systems and equipment. We understand that this designation simply indicates that additional information is required. This item has been ready since January, 1983 for re-review by NRC. This type of item is not indicative of poor licensee performance and should not be considered in a SALP evaluation.

The preliminary SALP report is not generally supportive of a Category 3 rating for this area of evaluation. The report indicates that CECo's actions regarding HVAC are "aggressive and effective." No substantive reason is apparent for directing increased attention to this area. CECo's performance should be rated Category 2.

CHRONOLOGY OF EVENTS

REGARDING HVAC INSTALLATION RE-REVIEW

- 1) In February 1978, the site identified potential deficiencies with welds on February 2, 1978.

2-06-78 - Q.A. welding engineer and SCD field engineer perform inspection at RSM shop.

2-06-78 - Region III notified of potential 50.55(e) on the subject of weld deficiencies associated with HVAC ductwork support hangers.

2-07-78 - Q.A. directs PTL to perform inspections of welds identified as potentially deficient.

2-10-78 - Region III notified of actions being taken.

2-13-78 - PTL completes inspections and reports issued.

2-14-78 - All unacceptable hangers removed from site.

2-27-78 - CECO NCR #F-182 generated.

From site records, it appears as if this potential 50.55(e) was not formally addressed as a reportable deficiency and was retracted on 2-27-78.

- 2) In June 1978 STL identified apparent noncompliance with the HVAC construction on seismic ducts during a site visit. This was documented in S&L letter dated June 23, 1978.

6-22-78 - Region III notified of potential 50.55(e).

8-17-78 - Final report issued to NRC - W. F. Naughton letter 78-144.

Inspection Report 454/79-01; 455/79-01 closed 50.55(e) but issued open item 79-01-01 pending verification in future inspections that the corrective action has been completed.

Inspection Report 454/79-06; 455/79-06 closed open item 79-01-01 based on corrective actions taken.

Inspection 454/80-19; 455/80-18 reviewed this 50.55(e) and no new items were identified.

- 3) Audit #6-81-344, performed 9/15-17/81, examined activities associated with the installation and inspection of HVAC hangers and equipment/ductwork. During this audit, Reliable Sheet Metal (RSMs) inspection program was evaluated and the procedures for inspection of hangers, equipment and ductwork were found to be inadequate. At that point in time, RSM's inspections were only covering welds and repairs to damaged galvanized coatings. No procedures detailed the dimensional inspections for ductwork and hangers, and equipment inspections were not delineated. Additionally, RSM's program contained no requirements to review and document that all work, inspections and documentation are complete and acceptable prior to turn over of the systems. Corrective actions for these deficiencies resulted in procedure revisions which expanded and delineated RSM's inspection program.

Another deficiency identified during this audit was the installation, inspection and acceptance by RSM of unacceptable welds. This deficiency resulted in a contractor nonconformance, retraining of the inspector and reinspection of all the type of welds identified as deficient in the audit.

A weakness was also identified in the method RSM used to document welding on items other than hangers. RSM had no traveler system to document welds and notify QA to perform inspections of welds other than hangers. Other welds were maintained in a log but the log was maintained by RSM QA. With QA maintaining the log, the in-process welding information was not entered in a timely manner and without each weld being entered as it was performed, the possibility existed for welds to go undocumented and uninspected. To improve this system the logs were given to each area foreman for accurate and timely entries.

- 4) Audit 6-82-14, performed 4/20-23/82, identified two problems in the RSM program. First, documentary evidence that materials and equipment conform to the procurement requirements is not available at the site prior to installation or use. Resolution of this deficiency has resulted in a complete review of all material and equipment procured by RSM for Byron. Several nonconformances reports have been generated, some of which resulted in retesting of materials to determine acceptability.

The second noted deficiency was that no reference is made to the current drawing revision at the time of inspection for ductwork and hangers. Resolution of this deficiency resulted in the inclusion of drawing numbers and revisions on the inspection records.



- 5) Audit 6-82-25, performed 6/22-29/82, identified that several of the RSM procedures were inadequate to ensure that work is performed in the proper sequence and to current design documents. Resolution of this deficiency resulted in revisions to the RSM procedures.
- 6) Audit 6-82-40, performed 11/9-16/82, identified three significant problems. First, it was found that equipment was not being installed in accordance with the design drawings. Two silencers were found being installed in incorrect locations. To prevent this from recurring, RSM generated and implemented a "Control of Construction Processes" procedure which provides delineated controls for installation of equipment and components.

The second item identified was that RSM was performing work to manufactured equipment without instructions, procedures or drawings for doing the work, and performance of the work was not documented. A nonconformance report was generated to document the specific occurrence and controls for future modifications to compensate or equipment was included in the procedure for "Control of Construction Processes".

The last item in this audit was that RSM did not have a program established to assure the preservation of equipment. As resolution of this item, a procedure was generated and implemented for storage of components and materials.

- 7) Site Surveillance #3840, dated 8/30/82, identified a deficiency with the weld quality inspections performed by RSM. This item could not be resolved within the surveillance program so Audit #6-82-59 was performed 10/6-14/82 to track and resolve the deficiency. Resolution of this deficiency requires reinspection of all items inspected by the inspector identified as making unacceptable inspections. All inspection reports by the questioned inspector were negated.

An accumulation of problems in the Reliable Sheet Metal QA program resulted in a "STOP WORK" order being issued on September 17, 1982. This "STOP WORK" remains in effect with only limited release on specifically defined areas. Activities undertaken to resolve the problems which lead to the stop work included revision to all RSM site procedures and generation of new procedures, complete reinspection program for all safety related, seismic installations, expansion of the RSM QC inspection department from one (1) inspector to currently about twenty-five (25) trained and certified inspectors, and more timely resolution of audit deficiencies.

To assure that problems are identified, properly resolved and the revised RSM QA program is effectively implemented, site Quality Assurance has implemented an augmented audit program on RSM which examines their activities bi-monthly. Additionally, site Quality Assurance has assigned two inspectors from the independent testing laboratory to perform overview inspections and surveillances of RSM covering both shifts of work. These activities, in addition to the regularly performed surveillances by site Quality Assurance Engineers/Inspectors, provide documented involvement by QA in the RSM activities and assurance that installation and inspection activities are being properly performed.

As shown in this chronology, the licensee has taken strong, effective, and ongoing actions in this area.

Finally, it should be noted that the Q.A./Q.C. ratio to production staff in the HVAC area has evolved as follows:

Q.A./Q.C. Staff / Production Staff

1st Quarter '81	1/50 (i.e. 3 man-mo/151 man-mo)
2nd Quarter '81	1/53
3rd Quarter '81	1/48
4th Quarter '81	1/45
1st Quarter '82	1/45
2nd Quarter '82	1/13.5
3rd Quarter '82	1/8
4th Quarter '82	1/6
1st Quarter '83	1/2.5
2nd Quarter '83	1/2.2 (i.e. 144 man-mo/314 man-mo)

ENCLOSURE 3

COMMENTS ON PRELIMINARY BYRON AND BRAIDWOOD SALP REPORTS

ELECTRIC POWER SUPPLY AND DISTRIBUTION

SUMMARY

The preliminary SALP reports fail to mention that several of the items of noncompliance are being disputed and that requests for withdrawal have been the subject of correspondence, meetings and telephone conferences. In various cases, our position has been accepted by Region III inspectors. In any case, the Byron report indicates that none of these deficiencies represented a "major program weakness." CECO concurs with this assessment.

Past problems with cable installation have been resolved to the satisfaction of both NRC and CECO. This issue should not bear on the present SALP evaluation. The Byron preliminary report discusses trends which could be indicative of a need for increased management attention. These "trends" appear to us to be more indicative of the high level of activity in this area during the evaluation period. The level of management attention in this area is already high and the examples cited indicate areas of technical dispute rather than growing problems. A Category 2 rating in this area is more appropriate.

ANALYSIS

The analyses presented in both of the Byron and Braidwood Station preliminary SALP Reports do not adequately reflect the actual record concerning each of the seven items of noncompliance listed. Commonwealth Edison has taken the position that, in many cases, the examples cited do not constitute examples of noncompliance. In many cases, we have requested that the item of noncompliance be withdrawn for good reason. In various cases, Region III has accepted our position stated in our responses to the Notices of Violation, but with one exception has remained silent on our requests for withdrawal of the requisite items. Additionally, the conclusions reached by Region III do not appear to fully take into account the actual disposition of the items of noncompliance.

A. Noncompliances

The following discussion documents the current status of each noncompliance based upon the existing written record.

BYRON NONCOMPLIANCE (1): Our thirty day response stated that we did not agree that all of the items referenced in the Notice of Violation constitute examples of noncompliance. The matter of cable tray separation previously appeared in two other inspection reports (see Byron SALP noncompliance (4) and Braidwood SALP noncompliance (1)), and at that time each of our thirty day responses stated our belief that cable tray separation was being appropriately controlled through existing procedures. Our thirty day response to noncompliance (1) discussed our FSAR commitments to IEEE 384 and how those commitments were being satisfied concerning separation criteria between trays. Additionally, we stated our position that our practices concerning cable separation within Class IE equipment were not in violation of IEEE 384 requirements. In our response, we requested that we be given an opportunity to discuss this issue with Region III Management before further inspections of this type were conducted. A resultant management meeting was held on March 7, 1983 to discuss this matter and CECo provided a supplemental response to Region III's concerns.

Region III has referred to the Office of Nuclear Reactor Regulation (NRR) for disposition the matter concerning the Commonwealth Edison interpretation of IEEE 384 requirements, and Region III has acknowledged the programatic changes discussed in our supplemental response.

BYRON NONCOMPLIANCE (2): Our thirty day response stated that we did not agree that the examples cited were actual items of noncompliance and WE REQUESTED THAT THIS VIOLATION BE WITHDRAWN. We provided information supporting this conclusion on a case-by-case basis. In the case of Cable 2SX345, we pointed out that the cable was pulled properly and the FCR procedure was properly implemented. In the case of Cables 1VA156 and 1VE034, we pointed out that these cables were installed in accordance with design instructions as detailed in Item C.5 of drawing 6E-O-3000-A, Sheet 3 and therefore in accordance with established instructions.

Region III's disposition of this matter has not been received.

BYRON NONCOMPLIANCE (3): Our thirty day response pointed out that the example of noncompliance was not the type of cable separation problem that was previously identified and included in our previous commitments. Specifically, the separation criteria that was previously written into the electrical contractor's Procedure Number 10 was written to address the problem of separation of Class IE and Non-Class IE cables in free air. The noncompliance cited in this case involved the separation of cables in air along their routing, to cables which were in a raceway. Thus the separation criteria required

by Procedure Number 10 for cables in free air was not imposed because the cables were not in free air but rather held in place by a cable tray. As a result of this noncompliance, the procedure was subsequently revised to address separation requirements between cables in raceways and cables in air.

BYRON NONCOMPLIANCE (4): Our thirty day response stated that we did not agree that the examples cited were actual items of noncompliance, and WE REQUESTED THAT THIS VIOLATION BE WITHDRAWN. As pointed out in our response, the six specific cases observed concerning cable tray separation criteria were in fact being handled by the described review process and the appropriate design control was being applied. Concerning the second issue of design interface control and design review between the HVAC duct and the safety-related cable raceway, we pointed out that appropriate design control was in fact applied.

Region III's disposition concerning each of these matters has not been received. As stated in our comments to noncompliance (1) above, Region III has referred the IEEE 384 issue to NRR for disposition.

BRAIDWOOD NONCOMPLIANCE (1): Our thirty day response stated that not all of the examples cited involved noncompliance with NRC regulations. Of the four examples of cable tray separation violations cited, we stated that one example was not a noncompliance because appropriate design control was employed. (Region III accepted our response to this particular example); and we stated that one example was not a noncompliance based on our interpretation of IEEE 384. Subsequent correspondence concerning this example re-stated our position that this particular installation did not violate any FSAR commitments because IEEE 384 does not address separation of cables in air to cables in cable tray. A subsequent management meeting was held at Region III on May 10, 1983 concerning the IEEE 384 issue.

Region III has conceded that IEEE 384 does not explicitly address separation between a tray and a cable in air, which is the Commonwealth Edison position. Region III continues to take exception to our position and has referred this matter to the Office of Nuclear Reactor Regulation for disposition.

BRAIDWOOD NONCOMPLIANCE (2): Our thirty day response stated that the Class IE cable 1SX001 routing was accomplished in accordance with the design documents and that this was not an example of noncompliance. WE REQUESTED THAT THIS ITEM BE WITHDRAWN. Region III took issue with our response and questioned the correct interpretation of the tolerance delineated on the drawings. Our subsequent response stated our belief that our interpretation was accurate, that the as-installed condition complies with design parameters and therefore, the routing of the cable meets the intended design parameters.



The Region III correspondence acknowledging our subsequent response did not take further issue with our position.

BRAIDWOOD NONCOMPLIANCE (3): Our thirty day response stated that the four examples cited concerning separation of Class IE cables and non-Class IE cables in air did not represent an item of noncompliance. A case-by-case discussion was presented describing that the separation in each of the four examples was installed or was being installed in accordance with procedures. WE REQUESTED THAT THIS ITEM BE WITHDRAWN.

Region III's response accepted our position concerning two of these examples. We subsequently re-addressed the remaining two examples re-stating our previous response. Region III acknowledgement of our subsequent response did not take issue with our position.

BRAIDWOOD NONCOMPLIANCE: A fourth item of noncompliance contained in (456/82-06; 457/82-06) concerning potentially nonconforming cable reels did not appear in the Braidwood SALP Report. Based upon our responses to this item and subsequent discussions during the May 10, 1983 management meeting, Region III deleted this item from the record based upon the lack of evidence to support the violation.

#### B. Byron Trends

The Byron SALP Report analysis section states:

"...the trends in separation problems, translation of design requirement to field installations and the number of noncompliances coupled with the fact that major corrective measures were supposedly implemented during the previous assessment period indicate an apparent lapse in adequate management attention in this area...

...it was not expected considering the preliminary findings in the last assessment period following a management and enforcement meeting to correct past problems."

This analysis appears to provide the basis for the Byron Station Category 3 rating in the electrical area and Region III conclusion that:

"...NRC findings during this assessment period indicate a need for an increased level of management attention and involvement to complete current corrective measures and to resolve problems associated with the transition of design requirements to installed components and equipment."

A review of the status of the four Byron Station items of noncompliance does not support Region III's conclusion. In the case of Byron noncompliance (1), the record states our FSAR commitments to IEEE 384

are being satisfied and our practices do not violate IEEE 384 requirements. In the case of Byron noncompliance (2), the record states that cables were pulled properly in accordance with design instructions and FCR procedures properly implemented. In the case of Byron noncompliance (3), the record states that this was not a previously identified problem and appropriate corrective measures were taken as a result. In the case of Byron noncompliance (4), the record states that the observed cases concerning cable separation were in fact being handled by the described review process and appropriate design control was in fact applied concerning the interface between the HVAC duct and the raceway.

A review of the electrical issues that currently exist when compared with those of the previous SALP period indicate little or no commonality between the majority of the items. The Attachment to this Item 6 Enclosure provides a topical list of the previous issues for your convenience. In Enclosure 1 to the previous Byron Station SALP Report, Region III stated "Inspections in the latter part of the evaluation period confirmed that the corrective actions have been effective and activities in this area are now considered adequate." Although separation issues were discussed during the previous SALP period, the underlying issue concerning the correct interpretation of IEEE 384 currently being referred to NRR was not in consideration during the previous assessment period. Because of the nature and status of the existing electrical issues when compared to the previous SALP period issues and given the implementation of corrective measures during the previous period, it is our judgement that Region III's assertion of "an apparent lapse in adequate management attention in this area" is unfounded.

Based on the existing record concerning the four Byron Station items of noncompliance, and based on the comparison of the current issues to the previous SALP period electrical issues, we do not conclude, nor do we understand how Region III can continue to support their findings, that an increased level of management attention and involvement is needed to complete the current Byron Station corrective measures or to resolve Byron Station problems associated with the transition of design requirements to installed components and equipment.

### 3. Double Counting

As stated in the Byron SALP Report, "...eight other examples of Quality Assurance items of noncompliance relating primarily to the electrical area were identified in the team and other inspections, and that these noncompliances were combined with the findings in other functional areas to provide an overall assessment of the quality activities discussed in Section IV.9, Quality Assurance." In our judgment, this "double counting" unjustly affects our rating in the electrical area. This matter is further discussed in the Item 9 Quality Assurance Enclosure to this letter.

Of particular concern is the fact that the Byron Station SALP rating of Category 3 in the electrical area does not track with the Braidwood Station rating of Category 2, especially given the fact that many of the issues are the same and of the same status.

In view of the above, we strongly protest the Category 3 rating given to Byron Station in the electrical area and further take this opportunity to request that Region III, exclusive of the IEEE 384 issue, act upon our previous requests to withdraw the items of noncompliance not supported by the record.

#### 4. Braidwood Trends

The Braidwood SALP Report analysis section states:

"...there appears to be a trend in a failure to translate design requirements to field installation as evidenced by noncompliances (1) and (3) above....

Noncompliance (2) above related to a failure to pull a cable in accordance to its pull card and not noting the deviations..."

The Region III Conclusions state that the Braidwood Station overall program in the electrical area appears to have a good base "with some exceptions as noted above".

With regard to the "exceptions", in the case of Braidwood noncompliances (1) and (3), we do not perceive that there is a trend in a failure to translate design requirements to field installation. In the case of Braidwood noncompliance (1), of the four examples cited, the record states our position that one example was not a noncompliance and Region III accepted our response, and the record states our position that one example was not a violation based on our interpretation of IEEE 384 and that FSAR commitments were not violated. In the case of Braidwood noncompliance (3), the record states that in all four examples cited, that the separation was installed or being installed in accordance with procedures and that this item should be withdrawn. In this case, Region III accepted and/or acknowledged our positions.

With regard to Braidwood noncompliance (2), the record states that the as-installed condition complies with the design parameters and therefore the routing of the cable meets the intended design parameters, and that we requested this item be withdrawn. Region III acknowledged our position in the matter but as of this date has not withdrawn this item even though Region III has stated in the analysis section of the SALP Report that this matter appears to have been resolved.

ITEM 6. ATTACHMENT

ELECTRICAL ITEMS OF CONCERN FOR BYRON STATION  
DURING PREVIOUS SALP PERIOD

1. Nonconforming cable entrance frames
2. Bundling of SR and NSR cables together
3. Separation of redundant transmitter impulse lines
4. Deviation from specified cable routing
5. Cable tray welding
6. Cable tray filling
7. Temporary storage of partially pulled cables
8. Preconditioning criteria for cable reels
9. Cable end sealing
10. Conduit support
11. Identification of instrument sensing lines
12. Cable tray inspection for sharp edges
13. Identification of nonconforming equipment
14. Cable tray cleanliness

## ENCLOSURE 4

### COMMENTS ON PRELIMINARY BYRON SALP REPORT

#### QUALITY ASSURANCE

##### SUMMARY

Some of the noncompliances cited do not relate directly to performance in the area of quality assurance. Those that do relate are correctly characterized as having "limited impact on an otherwise effective Q.A. program." The number of violations reflects the NRC's special team inspection in April 1982 and is not indicative of a degradation in performance during 1982. On the contrary, significant improvements were made during this period.

The preliminary SALP report omits all discussion of the large number of issues which were identified by Q.A. and are indicative of an effective program. Further discussion of the examples of misunderstandings of quality requirements supports our conclusion that this is not a major concern.

Q.A. is an area of continuing concern at all nuclear plants. It is continually being upgraded to meet changing standards and changing interpretations of those standards. These changes do not necessarily imply deficiencies. Byron's Q.A. program is keeping pace with industry norms and special attention seems unwarranted at this time. Performance in this area should be rated Category 2.

##### ANALYSIS

- 1) Reference Enclosure Page 1: General Observations Statement.  
"apparent failures by licensee to provide the necessary oversight to assure that such problems were identified by thorough internal or external audit processes and appropriately resolved by comprehensive corrective actions."

Contrary to the above, site Q.A. does identify problems similar to those identified by NRC as exemplified in Section 1 of the SALP Report. Our response to Section 5, Support Systems, also provides detailed chronology of Q.A. discovery and followup of problems in the HVAC area. It may also be noted that most items were isolated in nature and not indicative of a quality assurance breakdown.

- 2) Reference Enclosure Page 2: Quality Assurance.  
The report contains the statement that 34.4% of all noncompliances were assessed against QA. The method of assessment of items by NRC appears random in that actually all items could be assessed against QA, not only 34.4%. Many of the QA related items could have been categorized in other areas and vice-versa. Throughout the SALP report the "double counting" of non-compliances results in artificially low ratings.



- 3) Reference Enclosure 2, Page 15; Quality Assurance.  
The items of noncompliance identified in this section are in general, not of major significance. Because of the NRC's characterization of the team inspection items as having "limited impact on an otherwise effective program", Commonwealth Edison Company did not protest them. The two additional Severity Level IV items do not provide sufficient grounds for a Category 3 rating. The major item was that of QC inspector qualifications. Prior to initiation of corrective actions on this item, it was our belief that we were, in fact, in compliance with N45.2.6. We did, however, commit to an upgrade of our inspector qualification program.
- 4) Statement Page 16, 1st paragraph: "they do indicate deficiencies in training, in a thorough understanding of the program and procedural requirements by all participants, in clear statement of policy and in a failure to self identify these problems through the audit process."

Although these specific cases were not identified by site QA, similar items have been identified through audits and surveillances. A number of examples are listed on the attached tabulation. Also, many of the items such as manual distribution, organization charts, and drawing control are isolated in nature and could occur at any time inadvertently. No examples of programmatic concerns were identified, however.

- 5) Statement Page 16, last paragraph: "exhibited a lack of thorough understanding of quality requirements". The examples given by the NRC on page 17 do not support the above statement.

Relative to the first example, QC qualification deficiencies were found only when evaluating in accordance with criteria never imposed before.

With respect to the second example, it is not true that corrective action was not implemented. The inspector interviewed two QC inspectors who, in turn, did not give him the answers he expected. Therefore, he felt that the corrective action was not adequately implemented.

Relative to care and preservation of stored and installed equipment: isolated examples of uncapped pipe, etc. can be identified on any given day. As in many areas of enforcement, an acceptable level of compliance must be established by the NRC based on the actual damage which is occurring. The CECO program is generally successful in minimizing such damage in spite of minor deviations. Site Q.A. also identifies occasional violations of care and preservation activities before this violations become major safety concerns.

Relative to timely reporting of 50.55e reports; until an evaluation is made as to the reportability, no notification is made. In both cases, the NRC was notified when evaluation indicated the items were reportable.

EXAMPLES OF DEFICIENCIES IDENTIFIED THROUGH Q.A. AUDITS  
(Referenced to the Preliminary Byron SALP List of Noncompliances)

- 1) Identified instances where the licensee's or site contractors Q.A. program did not meet the FSAR commitments (organizational deficiencies):

Date	Audit	Description
11/81	6-81-353	The QA manager for EAS was also the president of the company.
9/81	6-81-343	The QA manager also acted as purchasing agent for RAMCO.
6/81	6-81-327	No job description requirements for Assistant Project Manager at Nuclear Power Services.
7/82	6-82-58	QA manual not reviewed and approved by Commonwealth Edison.
9/82	6-82-39	Nuclear Power Services site QA organizational chart did not reflect current organization.

- 2) Instances where contractor Q.A./Q.C. supervisors and inspectors were not adequately qualified and/or trained to perform safety related inspection functions:

Date	Audit	Description
10/81	6-81-349	Certification and qualification records are not current.
10/81	6-81-347	Documentation of training requirements for Hatfield Electric Company were incomplete.
6/81	6-81-327	Engineering and Design personnel did not meet requirements of training procedure 2 at Nuclear Power Services.
7/81	6-81-329	Certification packages were incomplete per procedure NDE-1 at Ebasco.
6/82	6-82-70	Hunter QC personnel do not meet the requirements of ANSI N45.2.6.
7/82	6-82-29	JCI QC inspectors not properly certified to their Procedure QAS-211-BY Rev. 2.

3) Areas that were not controlled by procedures or instructions:

Date	Audit	Description
11/81	6-81-353	EAS's method for resolution of conditions adverse to quality not covered by procedures.
6/81	6-81-323	Hatfield Electric Company production forms not covered by procedure.
6/81	6-81-322	JCI did not have a procedure to certify inspection personnel.
7/82	6-82-26	PTL performed CEA Length checks without a procedure.
5/82	6-82-19	JCI's CEA procedure was not current.
6/82	6-82-25	RSM procedures and instructions inadequate to properly control quality of work to current design documents.

4) Instances where nonconformance reports were not being properly dispositioned:

Date	Audit	Description
6/81	6-81-323	Hatfield Electric Company NCR's were not always verified by QA.
12/82	6-82-54	RSM processed NCR's with inadequate information on NCR.
10/82	6-82-42	Hunter NR & RND Logs were not kept current.
4/82	6-82-16	NISCO NCR's did not address action to prevent recurrence.
3/82	6-82-9	Hunter was voiding NCR's improperly.
12/80	6-80-291	Hatfield Electric Company was improperly trending NCR's.

5) Instances where site contractor activities were not accomplished according to procedures of instructions:

Date	Audit	Description
12/81	6-81-355	Hatfield did not replace gaskets in accordance with Procedure 27.

11/81	6-81-352	PAP did not tape instrument lines in accordance with Procedure 16.
9/81	6-81-342	Inspections were not performed in accordance to Hatfield Procedure 12B.
8/81	6-81-340	JCI inspectors are not marking welds to signify acceptance.
10/82	6-82-43	BBC is not verifying compressive strength of grout per Procedure 20.
4/82	6-82-17	PTL violated QA manual paragraph 17.9 concerning document control.

6) Instances where site contractor drawings in use were not of the proper revision:

Date	Audit	Description
8/81	6-81-339	S&L used drawings in design activities which were not controlled.
8/81	6-81-331	Hatfield Electric Company was using drawings with incorrect revision.
6/82	6-82-70	Hunter was doing inspections with uncontrolled drawings.
11/82	6-82-50	NPS had design manuals with superseded sheets included in books.
11/82	6-82-46	JCI had drawings, procedures and instructions not controlled.
6/82	6-82-10	PAP had obsolete drawings not voided.

7) According to the NRC, weld parameter sheets were not located at the prescribed activity as required by the ASME Code. No items in this area were identified by CECO Q.A. CECO has taken exception to this item and has subsequently received a favorable Code interpretation by ASME.

8) Storage problems as established by ANSI N45.2.9-1974:

Date	Audit	Description
8/81	6-81-340	JCI personnel are not using out cards when removing Q.A. documents from files.

8/81	6-81-336	NPS did not have an index for QA records.
7/81	6-81-329	Ebasco is not filing inspection records in accordance with Procedure ISI-QC-04.

9) Audit reports that failed to include the criteria established in ANSI N45.2.12-1977:

Date	Audit	Description
11/81	6-81-353	EAS audits lack objective evidence.
11/81	6-81-353	EAS not documenting attendance at exit meetings.
10/81	6-81-349	Ebasco not performing periodic audits as required by QAM Sec. 111-2 and 111-8.
9/81	6-81-338	Elcen audits lacking objective evidence.
8/81	6-81-331	Hatfield using unqualified auditors.
8/81	6-81-331	Hatfield not performing audits periodically.
4/82	6-82-17	PTL audits missing objective evidence.
3/82	6-82-10	PAP has inadequate audit schedule.

10) Failure of a contractor to properly distribute revisions to their QA manual.

Date	Audit	Description
10/81	6-81-349	Ebasco was using an obsolete revision to the QA manual.
10/81	6-81-349	Ebasco failed to mark superseded QA manual procedures void.
9/81	6-81-342	Hatfield Electric Company failed to revise an attachment to a procedure.
5/81	6-81-324	RSM issued revised QA manual pages prior to approval.
6/81	6-81-322	JCI implemented QA manual revisions prior to approval.
6/81	6-81-315	Ebasco inadequately controlling QA manual and procedures.



- 11) The licensee and site contractors QA programs failed to provide adequate control for stored equipment and parts:

Date	Audit	Description
10/81	6-81-347 -	Hatfield was improperly storing cable pans and cable reels.
7/81	6-81-330	Hunter did not perform installed equipment surveillance.
12/81	6-81-355	Hatfield failed to identify a deformed cable.
7/81	6-81-332	Hatfield did not perform installed equipment surveillance.

6830N

## ENCLOSURE 5

### COMMENTS ON BRAIDWOOD PRELIMINARY SALP REPORT

#### SUMMARY

Information is provided to clarify and complete the record regarding certain statements contained in the Braidwood Preliminary SALP Report.

#### ANALYSIS

##### ITEM 3. PIPING SYSTEM AND SUPPORTS

The first paragraph of page 7 states, in part, that "...there is a concern as to whether the current design review system will prevent similar errors like the one associated with the misorientation of check valves caused by a field change request."

Our thirty (30) day response to the item of noncompliance stated, in part, "this was an isolated incident. ECN 1879 required that valve 1CV8467A be rotated from the horizontal position. The general foreman in charge of the work did not observe that the check valve 1CV8466A was rotated at the same time." Subsequently, CECO Quality Assurance has performed a surveillance to assure the correct orientation of check valves. All check valves inspected were oriented correctly (surveillance No. 2628). In our judgement, the "current design review system" should prevent similar recurrences.

##### ITEM 4. SAFETY RELATED COMPONENTS

The second paragraph on page 9 states, in part, that "Non-compliances (2) and (5) are repetitive examples of failure to adequately protect installed equipment. In each case the licensee's corrective action was responsive to correcting the immediate problem areas but lacked consideration for a broader scope of application."

We believe that Region III's analysis is incorrect. In response, not only were the problems resolved immediately but consideration for a broader scope of application was, in fact, applied. G. K. Newberg and L. K. Comstock initiated housekeeping procedures to keep cable tray and floors clean. Project Construction Department assigned two inspection personnel to inspect all equipment for such items as cleanliness and damage on a monthly basis.

The fourth paragraph on page 9 states, in part, "Non-Compliances (3) and (4) and associated findings indicated serious weaknesses in the licensee's management control systems in this area..."

A detailed response to Region III concerns has been provided in our 50.55(e) Report No. 82-07 and our April 4, 1983 response to NRC 82-05 Inspection Report. As stated, in part, "we acknowledge the basic deficiencies in the control and documentation of mechanical equipment installation which were identified by the NRC inspectors. These deficiencies had already been identified by our own inspection and audits." Additionally, since the August 31, 1982 Enforcement Conference the following steps have been taken to improve the Management controls of the CECO organization and Phillips, Getschow Company Engineering and Q.A./Q.C. organizations.

- A. Mike Wallace was assigned as Project Manager for Braidwood Station on September 3, 1982 and reported to the site office on September 7, 1982. Mr. Wallace's addition to the site enhanced the ability of Commonwealth Edison personnel to resolve issues in an acceptable and timely fashion.
- B. On September 13, 1982, the Braidwood Project Manager formed the Technical Support Group consisting of three engineers to evaluate the site with respect to the Enforcement Conference. At the request of the Project Manager, the scheduled Fall General Office Quality Assurance Audit of the Braidwood site was moved up one month to September 13, 1982. The scope of the audit was greatly broadened and the duration was lengthened to seven days.
- C. Revised the Phillips, Getschow Company Engineering organization by transferring CECO personnel back to Project Construction and replaced the CECO personnel with qualified Phillips, Getschow engineering personnel.
- D. Commonwealth Edison contracted with the Daniel Construction Company to provide Senior Level Engineers. Their contracted responsibility is to evaluate Phillips, Getschow's documentation with regards to:
  - 1. Process piping.
  - 2. Instrumentation and hanger/support traveler documentation.
  - 3. Quality Control involvement in the generation and processing of traveler documentation.
  - 4. Quality Control ability to support the construction effort
  - 5. Hanger retro-fit documentation.
  - 6. Document adequate to complete N-5 data reports.

- E. Revise and expanded the Phillips, Getschow Company Quality Assurance/Quality Control organization:
1. Split Quality Control into an office and field group.
  2. Added three Quality Assurance Engineers to assist and overview engineering and Quality Control work activities.
  3. Provide additional Quality Assurance/Quality Control office space and expand the Quality Assurance vault.
  4. Added twelve document control clerks to:
    - a. Review all existing Quality Control documentation travelers
    - b. Documenting reviews for all N-5 sign-off.

Direction to the twelve clerks is provided by Daniel Construction Company, who is reporting directly to the Commonwealth Edison Project Manager.
- F. Organized a Commonwealth Edison Company Project Engineering group. The group will be headed by the Project Construction Superintendent from LaSalle and will report off-site to the Projects' Engineering Manager.
1. The Engineering Group is responsible for close and timely coordination of work activity and problem resolution among Project Construction Department on-site contractors and on-site S&L groups.
- G. Increase the size of the on-site S&L Engineering group from approximately twenty engineers to over 200 by the end of the year.
1. Expansion of the S&L Engineering group will provide more timely resolution and corrective action to site problems.
- H. Commonwealth Edison Quality Assurance Involvement and Changes.
1. Conducted special reviews of safety-related equipment installation.
  2. Provided 100% surveillance activity as part of the retro-fit inspection program.

3. Increased Quality Assurance staff levels above those of last September.
4. Commonwealth Edison Project Manager has initiated weekly working meetings and monthly progress meetings to resolve Q.A./Q.C. problem areas.
5. Organized weekly meetings for Phillips, Getschow and L. K. Comstock to provide a formalized communication link dealing with day to day Q.C./Q.A. problems. Attendees of the meeting consist of representatives from CEC Co Q.A. Project Construction, Project Management and Contractor Q.C./Q.A.

ITEM 6. ELECTRIC POWER SUPPLY AND DISTRIBUTION

The Braidwood Station comments on this functional area are integrated into the Byron Station discussion presented in Enclosure 3 to this letter.

6830N