

Sinnissippi Alliance for the Environment

326 North Avon Street
Rockford, Illinois 61103

May 20, 1982

DOCKETED
USNRC

In the Matter of)
COMMONWEALTH EDISON COMPANY)
Byron Station, Units 1 & 2)

Docket Nos. 50-454 OL
50-455 OL

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DOCKETING & SERVICE
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DAARE/SAFE'S INTERROGATORIES ON THE SER & SSER
TO BE ANSWERED BY COMMONWEALTH EDISON & NRC STAFF

DAARE/SAFE requests, pursuant to 10 C.F.R. 2.740b and 2.741 and the Licensing Board's September 9, 1981 Order, that Commonwealth Edison and NRC Staff answer seperately and fully in writing each of the following Interrogatories addressed to them, and produce the requested documents within the time period stipulated by the above Order, at: (SAFE), 326 N. Avon St., Rockford, Il. 61103.

INSTRUCTIONS AND DEFINITIONS

1. As used in these Interrogatories, whenever appropriate, the term "and" and/or "or" shall be construed either disjunctively or conjunctively as necessary to bring within the scope of these Interrogatories any information which might otherwise be construed to be outside their scope.

2. As used in these Interrogatories, the term "person" includes, without limiting the generality of its meaning, every mature person, corporate entity, partnership, association, governmental body or agency.

3. As used in these Interrogatories, the term "document", "list", "summary", or instruction "summarize" or "provide" shall mean all written or recorded material of any kind or character known to Edison or NRC

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Staff, their agents or consultants or in the possession, custody or control of either's agents or consultants, including; without limitation, letters, correspondence, telegrams, memoranda, notes, records, minutes, contracts, agreements, records or notations of telephone or personal conversations or conferences, interoffice communications, microfilm, bulletins, circulars, pamphlets, studies, notices, summaries, reports, books, articles, treatises, teletype messages, invoices and tape recordings. The term "document" shall also include copies containing information in addition to that contained in or on the original and all the attachments, appendices, enclosures or documents referred to in any documents produced pursuant to this Request.

4. When used with respect to any act, occurrence, transaction, statement, request, conduct, communication, instance, aspect of any event, defect, or omission, "Identify" means, without limitation, to describe in complete detail the event or events constituting such act; when used with respect to a document, "Identify" means without limitation, to state its date, the type of document (e.g., letter, memorandum, telegram, chart, photograph, sound reproduction, et cetera), the author and addressee, the present location and the custodian, and a description of its contents.

5. If any of the information contained in the answers to these Interrogatories is not within the personal knowledge of the person signing the Interrogatory, so state and identify each person, document and communication on which he relies for the information contained in answers not solely based on his personal knowledge.

6. If you cannot answer any portion of the following Interrogatories in full, after exercising diligence

to secure the information to do so, so state and answer to the extent possible, specifying your inability to answer the remainder and stating whatever information or knowledge you have concerning the unanswered portions.

7. If you claim privilege with respect to any information which is requested by these Interrogatories, specify the privilege claimed, the communication and/or answer as to which that claim is made, the parties to the communication, the topic discussed in the communication and the basis for your claim.

8. Pursuant to the Licensing Board's "Memorandum and Order" of August 18, 1981, at page 11 paragraph 2 thereof, these Interrogatories are continuing Interrogatories and require supplemental answers if Commonwealth Edison or NRC Staff, and their consultants, obtain further information between the time the answers are served and the time of an initial decision in the proceeding.

INTERROGATORIES

1. NRC STAFF-
what is the composition of the thin "protective film" mentioned by NRC Staff in the SSER, section 12-1, which will inhibit "the deposition of radioactive corrosion products"? Please identify and describe the substance and method of application, and provide the documentation by which NRC ascertained it's effectiveness. Provide all documents related to testing and operational experience of the "final passivation step" discussed in this section, including a listing of all nuclear facilities which have undergone the process, and an analysis summary of each resultant decrease in deposition rate observed.
2. NRC STAFF -
In Section 3.6.1 (SER) Staff states Edison has not provided sufficient information for Staff to verify the adequacy of plant design protection for safety related components against the effects of piping failures coincident with a single failure, to ensure safe shutdown. Identify the additional information Staff requires and has requested from Edison, and provide this information when available.
3. NRC STAFF -
On page 3-14, Section 3.6.1 of the Byron SER, the NRC staff states it is concerned with a postulated moderate-energy pipe crack in the

safety related component cooling water system discharge piping. It states that a break in the discharge line of one component cooling water pump would cause draining of the entire system and potential subsequent damage to all system pumps. In general, what does the Staff consider to be the minimum response necessary for an adequate resolution of this issue. Identify. Identify also the acceptable quantitative level of draining of the system, and the measures adequate to provide it.

NRC STAFF -

4. In SER, section 5.4.2.2.1 Staff states Edison's steam generator tube inservice inspection program is not in accordance with STS. Identify the program revisions Edison will have to implement to comply with STS provisions.

NRC STAFF -

5. On page C-9, Task A-3, of the Byron SER, the NRC staff states there is no commercial experience of any duration with the Model D4/D5 steam generators at this time. It states that by the fuel loading date, information may be available from other plants that can be factored into the applicants procedures and controls. What additional information from such other plants does the NRC consider to be necessary to complete its review of task A-3 with respect to the Byron SER? To what extent will the NRC staff review and appraise information from the Ringhals 3 plant and the McQuire Unit one plant on tube degradation in Model D steam generators before resolving task A-3? Define the "special attention" that will be given during preoperational testing to tube vibration and potential wear as a result of movement in the tube support sheets and antivibration bars?

EDISON -

6. On page C-15, Section A-43 of the Byron SER, NRC staff states that the loss of the ability to draw water from the containment emergency sump could significantly degrade long term core cooling capability. Identify the maximum credible accident analysis conducted by Edison to determine the worst possible single failure accident that could result in reaching the limiting condition of one-half of the sump screen surface area being blocked. How long will the emergency sump remain functional with the above limiting condition? Identify the results of all tests on the emergency sump to date, and identify all tests that will be done as part of the on-site inspection of Edison's pump and valve operability assurance program.

NRC STAFF -

7. Under Task A-45 on pages C-17 through C-21 of the Byron SER, NRC staff states that the scope of the work required in relation to the DHR systems is complementary to Task A-44, Station Blackout. Will NRC staff resolve this issue prior or following the resolution of Task A-44?

NRC STAFF -

8. On pages C-17 through C-21 of the Byron SER, NRC staff states it is reviewing additional information related to Task A-45 with respect to Byron, and will report its findings in a supplement to this SER. Please identify this additional information.

NRC STAFF -

9. Describe the methodology used by NRC staff to determine that Edison had met the intent of Regulatory Guide 8.19 by making certain improvements in the Byron design to reduce occupational doses.

EDISON -

10. Demonstrate that the man-rem savings for occupational exposure achieved via the design improvements made by Edison, listed in Section 12 of the Byron FSAR and SER, equal or exceed the man-rem savings Edison would have achieved had it made appropriate design or operational changes based upon an assessment of the tasks involved in the operation of the plant, as required by NUREG- 0800.

NRC STAFF -

11. On page 3-6, Section 3.9.3.2 of the Byron SER, the NRC staff states that some question remains as to the confidence level assured by the applicants methodology for qualifying pumps and valves as operable. NRC staff goes on to state that additional component testing is being considered and the confidence level cannot be established without an inspection at the plant site, as part of an on-site audit. What is the current schedule for this on-site audit? Describe in detail the methodology that will be used for the on-site audit and explain why the chosen methodology will effectively determine whether the applicants pump and valve operability assurance program is adequate or not.

NRC STAFF -

12. On page 3-6, Section 3.9.3.2 of the Byron SSER # 1, the NRC staff states that the components to be included in its audit of the applicants pump and valve operability assurance program will be selected by the NRC staff based on information the applicant has been requested to provide. Identify all information Edison has been requested to provide with respect to this audit.

EDISON -

13. On page 6-11, Section 6.2.1.5 of the Byron SER, the NRC staff states that Edison has agreed to provide a revised minimum containment pressure analysis for ECCS performance studies that corrects the problems regarding the RCFC heat removal capacity and initiation time addressed in Section 6.2.1.5 of the Byron SER. Please provide this containment analysis.

EDISON -

14. In Section 4.2.2 of the Byron SER, the NRC staff states that the provision for rod worth tests does not apply at Byron because the plant will use nonleachable hafnium control rods. Identify the chemical process or substance which makes the hafnium control rods nonleachable. Demonstrate the time period over which the hafnium control rods remain nonleachable, and identify the tests used to determine this time period.

NRC STAFF -

15. Under Section 4.2.1 of the Byron SER, NRC staff states that surveillance of the new hafnium control rods will not be required for Byron because of the first-use surveillance programs that will be performed at Comanche Peak and Callaway Unit 1. Identify and describe in detail these surveillance programs.

NRC STAFF and EDISON -

16. Demonstrate that the following factors do not necessitate a surveillance program of the hafnium control rods at Byron: (1) the supplemental ECCS calculations described in Section 4.2.4 of the Byron SER (and resultant increase in peak cladding temperature identified in Section 4.2.4 of the SSER); (2) the need for a 14 year first cycle length at Byron rather than one year (Section 4.3.1); (3) the fact that the hafnium rods do not have an equivalent control worth to silver-indium-cadmium rods (Section 4.3.1).

NRC STAFF -

17. On page 1-2, Section 1.7 of the Byron SSER #1, the NRC staff states that the resolution of 16 outstanding items will be discussed in a future supplement to the SSER. Will all these issues be resolved in one supplement, or will a series of separate supplements be issued as each item or groups of items are resolved?
18. To the extent that the resolution of DAARE/SAFE's outstanding contentions may be contingent upon the resolution of the sixteen outstanding items in Section 1.7 of the Byron SER, and the unresolved safety issues in Appendix C of the SER, it is imperative that DAARE/SAFE be made aware of all information considered by NRC staff in the decision making process with respect to DAARE/SAFE contentions. Therefore, please provide the following:

NRC STAFF and EDISON -

(A). All documents of relevant portions thereof released from this date on, and addressed to Edison or its agents or NRC staff, in which alternatives for the resolution of certain outstanding items in Section 1.7 of the Byron SSER and unresolved safety issues in Appendix C of the Byron SER are discussed.

NRC STAFF -

(B). In order to limit these documents to those which discuss only the outstanding items and unresolved safety issues relevant to DAARE/SAFE contentions, please identify which outstanding items and unresolved safety issues, or parts thereof, which NRC staff interprets to be contained within the scope of DAARE/SAFE contentions.

NRC STAFF -

(C). Provide the implementation timetable for the resolution of each of the outstanding items and unresolved safety issues which NRC staff believes bears upon the outcome of DAARE/SAFE contentions., i.e. Explain what data the applicant will have to make available to NRC staff, when it will be necessary that the data be made available in order for NRC staff to come to an informed judgement in a timely manner, and the time period for resolution of each issue after NRC staff has received all necessary information and data from the applicant.

CERTIFICATE OF SERVICE

I, the undersigned, a member of DAARE/SAFE, do hereby certify that on this date, May 25, 1982, she served a copy of these Interrogatories to the Service List by U.S. Regular Mail, Special Delivery, First Class Mail, or by other means as appropriate.

Diane Chavez (DAARE/SAFE)
Diane Chavez

Date: May 25, 1982
cc: Service List