



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

December 31, 1985

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MEMORANDUM FOR: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

FROM: Guy H. Cunningham, III
Executive Legal Director

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT - REQUEST FOR EXEMPTION
FROM THE 10 MILE PLUME EXPOSURE PATHWAY EPZ REQUIREMENT OF
10 C.F.R. § 50.47(c)(2) AND PART 50, APPENDIX E

In your memorandum dated December 11, 1985, you requested my advice regarding the legal and procedural aspects associated with the Staff's consideration of Baltimore Gas and Electric Company's (BG&E's) November 18, 1985 request, pursuant to 10 C.F.R. § 50.12(a), for an exemption from the requirement of 10 C.F.R. § 50.47(c)(2) and Part 50, Appendix E that,

Generally, the plume exposure pathway EPZ for nuclear power plants shall consist of an area about 10 miles (16 km) in radius . . .

10 C.F.R. § 50.47(c)(2). 1/ More specifically, you requested that I address the legal and procedural issues associated with acting on the requested exemption, as opposed to other options such as rulemaking or denial of the exemption request. You also requested advice on how, where and when public participation might be encouraged. As discussed below, there are several viable options from which the Staff can choose, depending on the Staff's technical and policy judgment. For convenience, the available options can be characterized as (1) considering the requested exemption and the associated license amendment 2/ on the merits, (2) denying the requested exemption in favor of considering a proposed rulemaking proceeding, and (3) suggesting that BG&E withdraw its exemption request and submit a petition for rulemaking. Each of these options will be briefly described.

1/ Identical or virtually identical language is contained in the requirements of 10 C.F.R. Part 50, Appendix E (n.1) and 10 C.F.R. §§ 50.33(g), 50.54(s)(1). BG&E's exemption request only mentions § 50.47(c)(2) and Appendix E. Approval of the request necessarily would involve granting exemptions from all regulations containing the 10-mile EPZ requirement.

2/ The issue of whether the granting of the requested exemption also requires a license amendment will be addressed below.

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1. Considering the Requested Exemption and the Associated License Amendment

The Staff can simply choose to evaluate the exemption request on its merits according to the Commission's standards for granting exemptions. In that regard, note that a new final exemption rule, 10 C.F.R. § 50.12(a), has been promulgated and will be effective on January 13, 1986. Consequently, BG&E's request must be evaluated pursuant to the new § 50.12(a), which provides:

- (a) The Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are --
 - (1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security.
 - (2) The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever--
 - (i) Application of the regulation in the particular circumstances would be in conflict with other rules or requirements of the Commission; or
 - (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or
 - (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or
 - (iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or
 - (v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or
 - (vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

If the Staff concluded that from a technical and safety perspective, the requisite showing had been made, then the Staff could grant the requested

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exemption and other necessary exemptions. 3/ With this option, of course, the generic applicability of BG&E's analyses supporting its exemption request would not be directly considered; i.e., the possibility that other licensees might request similar exemptions based on similar analyses, or the possibility of a rule change, would be addressed at a later time.

If the Staff desires to act on BG&E's request and preliminarily believes that exemptions may be appropriate (assuming the Staff finds the relevant criteria satisfied), then the question arises as to whether there is also a need for licensing action in order to permit a reduction in the plume EPZ for Calvert Cliffs. In this regard, licensees may make changes to their emergency plans without Commission approval "only if such changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 50.47(b) . . . and the requirements of Appendix E Proposed changes that decrease the effectiveness of the approved emergency plans shall not be implemented without application to and approval by the Commission." 10 C.F.R. § 50.54(q). Clearly, the BG&E proposal to reduce the plume EPZ from about 10 to about 2 miles would reduce the effectiveness of its emergency plans and the plans as changed would not continue to meet the requirements of Appendix E. Therefore, there is no question that Commission approval is required before such a reduction in the size of the EPZ may be made. The question which must be addressed next, however, is the form of the required Commission approval.

It is our opinion that proposed changes in emergency plans which involve an unreviewed safety question must be approved by license amendment. Although nothing in § 50.54(q) suggests that the approval of plan changes need be in the form of a license amendment, any such change which involves an unreviewed safety question also must comply with the requirements of 10 C.F.R. § 50.59.

Section 50.59(a) prohibits licensees from making changes in their facility or procedures as described in the safety analysis report without Commission approval if the proposed change involves an unreviewed safety question. A licensee desiring to make a change involving an unreviewed safety question must seek approval of such change by submitting "an application for amendment of his license pursuant to § 50.90." 10 C.F.R. § 50.59(c). Since emergency plans are required to be part of a licensee's final safety analysis report (10 C.F.R. § 50.34(b)(6)(v), 10 C.F.R. Part 50, App. E, §§I, III) and the reduction of the plume exposure pathway EPZ from about 10 miles to about 2 miles would result in changes to emergency procedures and plans which presumably involve an unreviewed safety question because, inter alia, the consequences of an accident previously evaluated in the FSAR may be increased (10 C.F.R. § 50.59(a)(2)), it follows that the approval of such a change must be in the form of a license amendment. 10 C.F.R. § 50.59(c). In short,

3/ See note 1, supra.

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proper and effective authorization of a reduction in the plume EPZ from 10 to 2 miles requires a license amendment in addition to exemptions. 4/

Since approval of the requested reduction of the plume exposure pathway EPZ involves a license amendment, the application, of course, would have to be pre-noticed pursuant to the "Sholly regulations", and the public would have the opportunity for a hearing on the proposed change. If the proposed change involves a significant hazards consideration, then any hearing would be required to be held before the change could be made effective. Regardless of whether the proposed amendment involves a significant hazards consideration, the Staff can choose to forego making a proposed determination on whether there is a significant hazards consideration and offer the opportunity for a prior public hearing if one is requested. Therefore, if the Staff wishes to encourage public participation in the consideration of the amendment involved, it could do so by pre-noticing the proposed action and offering the public an opportunity for a prior public hearing.

If the Staff chooses this option to deal with BG&E's request, another consideration is whether the Sholly Notice regarding the license amendment application would also notice the exemption request. As you know, the NRC does not prenotice exemption requests normally and does not offer an opportunity for hearing on exemptions. However, because in this case the substance of the considerations for the exemptions and the license amendment is much the same and the exemptions and amendment are intertwined, it may be difficult to separate the two. On the other hand, offering an opportunity for hearing on the exemptions in this instance could be viewed as creating a precedent for prenoticing other exemption requests. Nevertheless, this particular exemption request appears to be of such importance and so closely tied to the necessary license amendment that it is easily distinguished from the normal exemption request. Therefore, if the Staff wishes to encourage public participation, it could do so further by also pre-noticing the exemption along with the Sholly Notice regarding the associated license amendment.

4/ If Staff chooses the first option and also believes that its technical evaluation likely will support granting the exemptions, the Staff should advise BG&E that exemptions alone will not be sufficient, that the approval of the changes to the emergency plans should be in the form of a license amendment, and that BG&E, therefore, should submit an application for amendment pursuant to 10 C.F.R. §50.59(c).

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2. Denying the Requested Exemption in Favor of Considering a Proposed Rulemaking Proceeding

It has been suggested that most of the analysis supporting BG&E's exemption request is generic in nature and possibly could be used to support similar requests by many other utilities. Indeed, there is some concern that the Calvert Cliffs proposal is only the first of many to come and that, because of the generic applicability of the Calvert Cliffs justification, any NPC determination on the Calvert Cliffs request will dictate the outcome for similar requests from many other licensees throughout the country. Thus, although the generic nature of much of the data relied upon by BG&E does not prohibit the Staff from acting specifically on only BG&E's request at this time, the Staff might be justified in deciding that the issue of EPZ reduction which is raised by BG&E's request is more appropriately a matter for rulemaking. If the Staff believes that it is preferable to consider the issue of plume exposure pathway EPZ reduction in the rulemaking context rather than acting individually on BG&E's (and perhaps other's) request, then the Staff could propose to institute a rulemaking proceeding. Such a proceeding could consider a proposed reduction of the plume EPZ to about 2 miles, to some distance greater than 2 miles but less than 10 miles, or other options such as a graded response. If the Staff wishes to pursue a possible rule change and not grant BG&E's specific exemption request, however, the Staff still must act on BG&E's exemption request by denying it. ^{5/} Such a denial would have to be supported by the Staff's reasons. Possible bases for denial would include technical reasons (perhaps involving the present uncertainties in source terms, core melt sequences, or other uncertainties), or a technical/legal basis that the granting of such exemptions, indeed the granting of even this one exemption request, would threaten to erode the rule itself, or a combination of such bases.

An issue raised by the denial of BG&E's exemption request is whether BG&E has any hearing rights associated with the denial of its exemption request. Neither the Atomic Energy Act nor the Commission's regulations provide an opportunity for a hearing on the denial of an exemption request. OELD has concluded in the past that there are no hearing rights associated with the denial of an exemption request. Denial of BG&E's exemption request, therefore, would not give rise to a hearing on the denial.

3. Suggesting that BG&E Withdraw its Exemption Request and Submit a Petition for Rulemaking

If the Staff prefers to deal with the issue of plume EPZ reduction by rule rather than individual exemptions, and also prefers not to deny BG&E's exemption request if possible, then the Staff could respond to BG&E's request by a

^{5/} The Staff would not have to deny the request, however, if BG&E withdraws it. This possibility will be discussed below.

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letter informing BG&E of the reasons why the Staff believes it is preferable to consider a generic rule change and suggesting that BG&E may wish to withdraw its exemption request and submit a petition for rulemaking pursuant to 10 C.F.R. § 2.802. This would enable BG&E and/or the industry to present whatever analyses and arguments it wishes in support of a rule change. It is important to emphasize, however, that if BG&E does not withdraw its exemption request, then the Staff must either grant it or deny it, and provide supporting reasons for the Staff's decision.

Finally, you asked whether the Staff should wait to act on BG&E's request until after completion of its current reviews of the new source term data and methodology and/or the reference plant risk profiles, or whether it should proceed in parallel. My advice on the matter depends upon how the Staff decides it wants to proceed. If the Staff wishes to consider granting a specific exemption and amendment to BG&E, then it must be able to support that action by sound technical reasons which demonstrate compliance with the Commission's regulations for granting exemptions and amendments. If the Staff could not do so at this time due to the incomplete reviews regarding source terms and plant risk profiles, then the issuance of any amendment and exemption must await the availability of sufficient data and conclusions to support the Staff action.

If the Staff believes that, at this time, there is insufficient certainty in source terms or plant risk profiles to reasonably support the issuance of an amendment and exemption, then the Staff could deny the exemption request on that basis, with specific reference to the new § 50.12(a) standards.

If the Staff wishes to consider a possible rulemaking proceeding rather than granting individual exemptions and amendments, then, as discussed above, it still must deny BG&E's request unless that request is voluntarily withdrawn. The incompleteness of the Staff's review of source terms and plant risk profiles seems to suggest that the time is not yet ripe to proceed with rulemaking. It would seem preferable for the Staff to propose a rule change only after there is sound basis to do so. Of course, if BG&E or others petition for rulemaking, then the proposed changes would have to be considered on their merits based on the submissions and available information. Uncertainties and incomplete reviews regarding source terms and plant risk profiles could provide a basis, or part of the bases, for denial of a petition for rulemaking.

In summary, the Staff has the following three options regarding BG&E's request to reduce the size of the plume EPZ for Calvert Cliffs:

1. Considering the requested exemption and the associated license amendment on the merits. This will require an evaluation of the requested exemption pursuant to the new exemption standards of 10 C.F.R. §50.12(a) and the processing of a license amendment as required by 10 C.F.R. §50.59. The proposed license amendment must be pre-noticed with the usual offering of an opportunity for a hearing. If the Staff proposed to determine that the

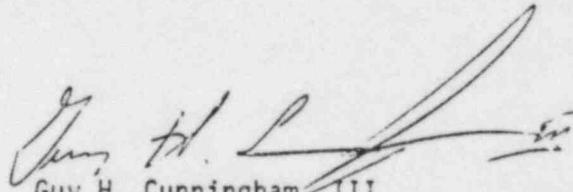
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amendment involves a significant hazards consideration, then any hearing which is held must be completed prior to issuance of the amendment. If the Staff wanted to encourage public participation in its consideration of a possible amendment and exemption, it could forego making a proposed determination on whether the amendment involves a significant hazards consideration and simply offer the public an opportunity for a prior hearing on the amendment and also, if desired, on the exemption. There is likely to be considerable interest in such a hearing, which could involve protracted litigation over PRA's, source terms, core melt sequences, and the like.

2. Denying the requested exemption in favor of considering a proposed rulemaking proceeding. This would require a formal denial of the requested exemption with valid supporting reasons. No hearing on the denial would be required, (although the Commission itself has never directly ruled on whether a licensee has a right to a hearing on denial of its exemption request).

3. Suggesting that BG&E withdraw its exemption request and submit a petition for rulemaking. The Staff could try this before being faced with one of the first two options. If BG&E refused to withdraw its exemption request, however, then the Staff must resort to one of the first two options.

Jack Goldberg or I would be glad to discuss these matters further with you.



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cc: J. Taylor
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