11/29/57

MEMO ROUTE SLIP

Form AEC-93 (Rev. May 14, 1[illegible]

☐ See me about this. ☐ For concurrence. ☐ For action.
☐ Note and return. ☐ For sig[illegible]e. ☐ For information.

TO (Name and unit)	INITIALS / DATE	REMARKS
Beck	WAD 12-6	This is some general thinking I have done to date on construction permits.
TO (Name and unit)	INITIALS / DATE	REMARKS
		It doesn't get in to the guts of the problem - which is what are the minimum
TO (Name and unit)	INITIALS / DATE	REMARKS
File		requirements for issuance of permits - Will appreciate your comments.
FROM (Name and unit)		REMARKS
Kratzer		Criteria & Standards
PHONE NO. 8406	DATE 11/29/57	

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The issuance of construction permits to qualified applicants for facilities licenses may be regarded as intended to accomplish two purposes:

1. It gives the prospective licensee some assurance that, to the extent they have been developed, his plans are not inconsistent with the findings requirm requested to the eventual issuance of a license, and that fuel will be made available to him upon such issuance. Thus, the construction permit reduces the sponsor's risk that he may fail to qualify for an operating license after the expenditure of large sums on development, design and plant construction.

2. By subjecting the plans of prospective licensees to review before the expenditure of large sums the construction permit system reduces the risk to the public that a project of doubtful safety might be licensed because of the pressures which might be brought to bear by or on behalf of a sponsor who had spent a great deal of money on the project.

So long as construction permits are issued only after a complete hazards evaluation, the two purposes listed above are in no way inconsistent. However, experience to date has shown that some of the information essential to a complete hazards evaluation of many of the projects currently being planned is not available at the time when the sponsors of these projects require, for financial and other purposes, some degree of assurance that they will be issued an operating license upon the completion of their projects. Thus, if the civilian nuclear power program is to proceed on a time scale consistent with the Commission's objectives, it is essential that in some cases construction permits be issued before all the information necessary to a complete reactor hazards evaluation is available.

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(approx)

These circumstances, therefore, have made necessary the practice of issuing construction permits which are conditional upon the development subsequent to issuance of the additional information requisite to a finding that a license may be issued. It will be seen, however, that as a construction permit takes on this conditional character, the two purposes indicated above tend to become inconsistent; that is, precisely to the extent that the conditional permit gives, or seems to give, the sponsor assurance that a license will be issued notwithstanding the conditions it reduces, or seems to reduce, the assurance to the public that a license will not be issued unless the conditions are satisfactorily met, regardless of the expenditures which may have been incurred by the sponsors on the faith of the construction permit.

This inconsistency has been resolved in the thinking of the Commission and its staff on the basis that since the requirement to protect the public health and safety is clearly paramount to any equities which the sponsor may acquire by reason of acting in good faith under the construction permit, there is no assurance, express or implied, that a conditional construction permit will mature into a license unless all issues are satisfactorily resolved on the side of protection of the public health and safety. Indeed, since a license itself may be revoked even after operation has begun, if it appears that the public health and safety will be endangered by continued operation, it is reasonable to maintain that a conditional construction permit carries with it no implication that a project of doubtful safety will be licensed.

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Under this reasoning, a conditional construction permit with the possible exception of the assurance it provides that fuel will be made available if the project is licensed, constitutes little more than legal authority to allow the sponsor to gamble that the outcome of his efforts will be determined to have met the same licensing standards which would have been applied in a complete hazards evaluation at the time of the original application if all the information were available. This reasoning is further justified on the basis that,

since the sponsors of nuclear power projects are in general responsible business men with full notice and understanding of the conditional character of the permit which may be issued, their decision to take this gamble is a voluntary one which gives them no right to expect a license and thus give to the public no cause for concern that a license will be issued if safety requirements are not eventually met.

While there may be no defect in the above line of reasoning, the fact remains that there are, in particular instances, likely to be segments of the public who will not be satisfied that a sponsor who has expended large sums on the faith of a conditional construction permit will not be in a strong position to expect the issuance of a license upon completion of the facility. Regardless of our own faith that no operating license will be issued to a completed facility unless it meets all requirements for health and safety, it is understandable that the opposite attitude may be taken in complete good faith on the part of others. Particularly in view of the fact that the composition, and perhaps even the policies of the Commission may well change between the time of the initial issuance of a conditional construction permit and the completion of the facility involved, it is also understandable that the public will attempt to use its earliest opportunity to XXX enforce its right to prevent the licensing of a project which it believes to be of doubtful safety, by preventing the issuance of a construction permit.

The problem created by the conflict between the desire to proceed with the national program of atomic power at a reasonable rate despite technical uncertainties and the importance of safeguarding the public health and safety is a basic and difficult one and will probably not be resolved to the satisfaction of all interested parties by any scheme. However, an analysis of the problem has led to a recommended approach which may represent an improvement over the present method. Briefly, this approach is that a conditional construction permit would provide, by its own terms, for interim reviews which would be undertaken prior

to the making of financial commitments on those features of the facility which are of questionable safety and which, once completed, would be substantially uncorrectable. These reviews phased to specific points in the design and construction schedule could, in very doubtful cases, be supplemented by periodic reviews to determine whether any previously unrecognized problems had developed. The permit would provide that in the event any of these reviews disclose the continued existence of conditions which, if present in the final design, would be deemed sufficient to prevent the issuance of a license, the construction permit would be suspended or an order issued to limit the further expenditures of funds on specific portions of the project until the problem is resolved.

It will be seen that this approach differs somewhat from that used to date, including that in the PRDC case, by providing for mandatory interim submission of supplementary information. By contrast, under existing permits (even the PRDC permit where specific problems requiring solution are referred to) the sponsor may, if he wishes, proceed to the completion of construction before the submission of the additional information required for a complete hazards evaluation and issuance of a license. This, of course, is the very situation which those who doubt the ability of the Commission to deny a license after the expenditure of many millions of dollars would seek to avoid by contesting the issuance of a construction permit.

The approach outlined above seems to have several advantages:

1. It protects the public, reducing the possibility that a project will proceed to completion incorporating features of doubtful safety.
2. It aids the sponsor by minimizing his expenditures in the event of his inability to meet licensing requirements. In this

connection it should be noted that, although it does reduce the opportunity available to him under the present system to "gamble" that the outcome, from a licensing standpoint, will be successful, this opportunity should not be claimed as desirable by any sponsor who shares the Commission's concern for safety. Of course the suspension or revocation of a construction permit, if ever necessary, would not generally be happily received by a sponsor but would still be preferable to the denial of a license upon completion of the project, and if made upon good cause, could hardly be objected to by any party who professed a willingness to abide by the denial of an operating license.

3. By providing for automatic review and suspension unless certain conditions are met, the approach obviously minimizes any implication that a construction permit will mature into a license regardless of safety considerations.

4. The approach is consistent with a "streamlined" treatment and processing of construction permits which may be desirable for administrative reasons. By delaying till future specific times the final consideration of certain problems, it reduces the XXXXXXXXX frequently fruitless and inconclusive attempts to evaluate a project on the basis of insufficient data.

It is also recognized that the above approach has some serious drawbacks. For example, it will rarely be easy to identify the specific features in the design, and the corresponding points in the construction schedule where such reviews would be needed or desirable. Further, each such review, if coupled with a positive finding subject to XXXXX public protest, could be an opportunity for those unfriendly to a given project to delay its progress at great cost to the sponsor. The procedure might also be objected to by sponsors as reducing still further its value of a conditional construction permit. Finally, it can still be expected that the public will not be completely satisfied by this approach since it still makes it possible for sponsors to incur substantial

expenditures before their project is determined (either provisionally or finally) to be safe.

Although the above approach has not yet been worked out in detail and must be tested against several existing projects to determine whether it is reasonable, a few general points can be made about its operation in practice.

1. The first major decision in a project which must be brought to the attention of the Commission through a license application is that of site location. Thus, the original application should contain sufficient information to allow a final determination that the site is suitable for a reactor of the type generally proposed.

2. Since the evaluation of the site is obviously inseparable from a consideration, in at least general terms, of the facility to be located on it, the initial application should contain a general description of the facility including:

   (a). A description of the nuclear and thermal characteristics of the core.