

**NEI PAPER  
MODIFICATION OF OLD  
DESIGN ISSUES**

The NRC has added a section to the NRC INSPECTION MANUAL –MANUAL CHAPTER 0305 on “old design” issues bases. This new section allows the opportunity for NRC to refrain from considering safety significant inspections findings in the assessment program for a finding in the engineering calculations or analysis, associated operating procedure, or installation of plant equipment that meets certain criteria. The detailed criteria mentioned above is stated in 6.06 a.1-4 of the subject manual chapter. This overall change has been viewed by the nuclear industry as a good change to the process. Up until a month ago not many of the inspection findings were classified into this new category (old design issue). In many cases utilities believed from their review that some of items certainly met the criteria. One particular area that there has been disagreement is related to correcting the item in a “reasonable amount of time”. In many cases these issues extend over long periods due to the fact they need to be investigated to first determine if there really is a problem. These investigations can take a good amount of time and once complete the utility needs to figure out a fix. Sometimes these fixes (modifications) could take some period of time. Therefore, the following is a proposal to make changes to the manual chapter to rectify the problem areas.

Utilities may undertake various efforts to review the design and licensing basis of various plant structures, systems and components. These reviews are time intensive and costly and often result in the discovery of a number of problems as well as opportunities for improvement in facility operation. Examples of these issues are; design bases reconstitution, safety system functional assessment, design assessment, activities associated with system engineers reviews, etc. (Example – a utility is planning to change to a new fuel code or vendor. As part of their review and analysis they look at Chapter 15 accidents and find a problem/issue. This type of issue would fall within this concept.) These initiatives often uncover a number of problems that meet or are closely aligned with the Manual Chapter definition of “old design issue”. The initial phase of these reviews often involves a discovery phase where the nature of the areas for improvement and issues are being identified. The licensee would be expected to notify the NRC of the review project and the time needed for the discovery phase. During this discussion the utility would provide their plan and schedule for the review. Periodic updates would also be provided to keep the NRC up to date on the review. During the discovery phase it would be beneficial if the licensee was allowed to continue with the review without resolving the regulatory consequences of issues. This would allow the licensee time to completely characterize the full scope of the project. At the completion of the discovery phase the licensee would communicate to the NRC all discovered issues as self reported “old design issues”, each item would have a proposed corrective action program and schedule for corrective actions. Criteria from 06.06 would still need to be met. NRC updates would ensure that there would be no questions related to timeliness of corrective actions. If this process is used the NRC would not go back and look at possible future

opportunities to have identified this item. The utility would be given credit for performing a voluntary initiative with the intent on improving overall operation and safety.

The NRC would review the sufficiency of the corrective action program and the licensee would be expected to address areas of concern regarding the corrective action program. The NRC could then monitor progress of resolution through inspections and updates provided by the licensee. Issues dispositioned in this manner would not affect the regulatory action matrix in accordance with the policy on "old design issues".

Benefits from this change are as follows.

1. Utilities would continue efforts to be proactive in finding problem areas.
2. NRC would not waste valuable time inspecting these areas. Any reviews necessary would be done as part of normal NRC inspection. No need for special reviews.
3. Eliminate disagreement between what should be classified as an old design issue.
4. NRC/Utility would not waste time on non significant issues.
5. Utilities would be encouraged to look harder for old design issues.

The changes to be made to 06.06 would be minimal. There would need to be a lead paragraph that describes the process as stated above. There may need to be some additional words in 06.06 items 1 and 2. Three and four seemed to be okay.