

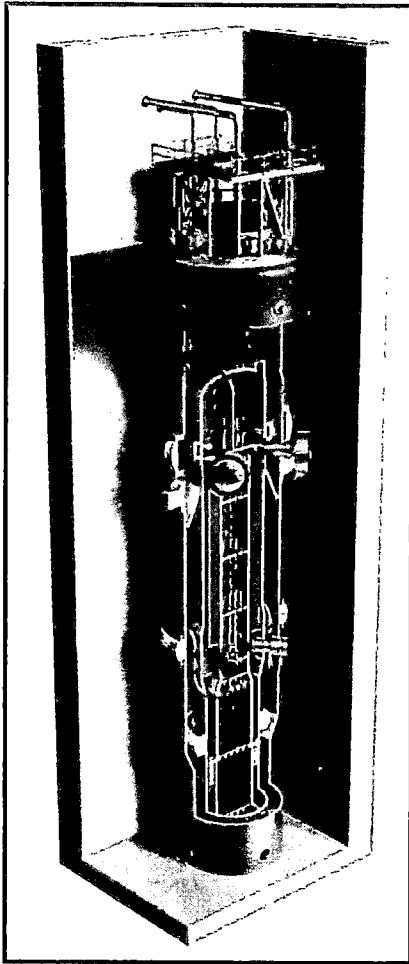
Enclosure 1:

"Chapters 2 and 17 ACRS Full Committee," PM-0219-64333, Revision 0

NuScale Nonproprietary

Chapters 2 and 17

ACRS Full Committee



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Background: NuScale ODI Program

- NuScale's Quality Assurance program is based on ASME NQA-1-2008.
- ASME NQA-1-2008 Part I, Requirement 3, Section 500, Part (b) allows the deferral of design verification activities provided the unverified portions of the design are identified and controlled.
- Open Design Items (ODIs) are a form of engineering assumption controlled under the NuScale Design Control Process. Assumptions are information or data that is selected for a design activity, other than previously validated design criteria, which are taken to be true for the sake of analysis.
- Assumptions, along with verified design inputs, describe the conditions under which design activity results are considered valid.
 - Assumptions are documented and tracked
 - Basis statements provide engineering justification that the assumption is reasonable
 - Verifier assures assumptions are reasonable

Background: NuScale ODI Program (cont.)

- ODIs are resolved/verified via the design verification process.
- Design Verification is required:
 - Ideally before releasing the design for procurement, manufacture, or construction, or for use by another design organization (with a different QA program)
 - In all cases, the design verification is required prior to relying on that SSC to perform its function

NuScale NRC Interactions on ODIs

- 2017 QA Inspection
- Training/Communication of Staff
- DCA Chapter Audits - Review of NuScale ODIs present in source documentation reviewed.
- RAIs

2017 QA Inspection Highlights

- Included review of NuScale's ODI Process
- The NRC report (ML17201J382) cited:
 - Review of 170 specific ODIs
 - NuScale had a conservatively low threshold for opening ODIs
 - No violations or nonconformances were identified
 - NuScale ODI process adequately manages unverified assumptions

Conclusion

- The NuScale ODI process properly controls unverified engineering assumptions in accordance with NQA-1.
- NRC has reviewed ODI process thru various interactions:
 - RAIs
 - DCA Chapter Audits
 - QA Inspection