

BFN-26

APPENDIX I

IDENTIFICATION-RESOLUTION OF CONSTRUCTION PERMIT CONCERNS

TABLE OF CONTENTS

I.1	Summary Description	I.0-1
I.2	Areas Specified In The Browns Ferry AEC-ACRS Construction Permit Reports.....	I.0-2
I.2.1	Introduction	I.0-2
I.2.2	Effects of Fuel Failure on CSCS Performance	I.0-2
I.2.3	Effects of Fuel Bundle Flow Blockage	I.0-4
I.2.4	Verification of Fuel Damage Limit Criterion	I.0-5
I.2.5	Quality Assurance and Inspection of the Reactor Primary System	I.0-6
I.2.6	Effects of Cladding Temperatures and Materials on CSCS Performance	I.0-9
I.2.7	Control Rod Block Monitor Design	I.0-10
I.2.8	Station Startup Program.....	I.0-11
I.2.9	Main Steamline Isolation Valve Testing Under Simulated Accident Conditions	I.0-12
I.2.10	Performance Testing of the Station Standby Diesel Generator System.....	I.0-13
I.2.11	Formulation of an Inservice Inspection Program	I.0-13
I.2.12	Diversification of the CSCS Initiation Signals	I.0-14
I.2.13	Control Systems for Emergency Power.....	I.0-14
I.2.14	Misorientation of Fuel Assemblies.....	I.0-15
I.2.15	Concern of Dr. Stephen H. Hanauer-Emergency Power and Core Standby Cooling Systems	I.0-16
I.2.16	Fuel Clad Disintegration Limitations.....	I.0-17
I.2.17	General Concern with Regard to Reactors of High Power Density and All Large Water-Cooled Power Reactor	I.0-18
I.2.18	Summary.....	I.0-19
I.3	Areas Specified in the AEC-Staff Construction Permit - Safety Evaluation Reports	I.0-19
I.3.1	General	I.0-19
I.3.2	Unit 1 and 2 AEC-STAFF-Construction Permit Concerns	I.0-19
I.3.3	Unit 3 AEC-Staff-Construction Permit Concerns	I.0-26
I.3.4	Summary.....	I.0-32
I.4	Areas Specified in Other Related AEC-ACRS Construction Permit And Operating License Reports.....	I.0-33
I.4.1	General	I.0-33
I.4.2	Ring Header Leakage Design	I.0-34
I.4.3	CSCS Thermal Effects on the Reactor Vessel and Internals	I.0-34
I.4.4	Effects of Blowdown Forces on Reactor Primary System Components	I.0-35
I.4.5	Separation of Control and Protection System Functions	I.0-36
I.4.6	Instrumentation for Prompt Detection of Gross Fuel Failure	I.0-36
I.4.7	Design of Piping Systems to Withstand Earthquake Forces	I.0-37
I.4.8	LPCIS-Logic Control System Design.....	I.0-37
I.4.9	Reevaluation of Main Steamline Break Accident.....	I.0-38
I.4.10	Depressurization Performance of HPCIS	I.0-39

BFN-26

APPENDIX I

IDENTIFICATION-RESOLUTION OF CONSTRUCTION PERMIT CONCERNS

TABLE OF CONTENTS

I.4.11	AEC General Design Criterion No. 35-Design Intent and Conformance	I.0-39
I.4.12	Automatic Pressure Relief System-Initiation Interlock	I.0-39
I.4.13	Scram Reliability Study	I.0-40
I.4.14	Design Basis of Engineered Safety Features	I.0-41
I.4.15	Hydrogen Generation Study	I.0-42
I.4.16	Primary Containment Inerting	I.0-43
I.4.17	Seismic Design and Analysis Models	I.0-44
I.4.18	Automatic Pressure Relief System-Single Component Failure Capability- Manual Operation	I.0-46
I.4.19	Matters of Current Regulatory Staff-Applicant Discussion	I.0-46
I.4.20	Flow Reference Scram	I.0-47
I.4.21	Future Items of Considerations for Incorporation	I.0-48
I.4.22	Diesel Generator Synchronization Considerations	I.0-48
I.4.23	Development of Instrumentation-Primary Containment Leakage Detection System -Increased Sensitivity Studies	I.0-49
I.4.24	Development of Instrumentation-Vibration and Loose Parts Detection Studies	I.0-49
I.4.25	CSCS Leakage Detection, Protection, and Isolation Capability	I.0-50
I.4.26	Main Steamlines-Standards for Fabrication, QC, and Inspection	I.0-52
I.4.27	Summary	I.0-53
I.5	Areas Specified in Other Related AEC-Staff Construction Permit or Operating License Safety Evaluation Reports	I.0-53
I.5.1	General	I.0-53
I.5.2	Tornado and Missile Protection-GE-BWR-Spent Fuel Storage Pool	I.0-53
I.5.3	BWR System Stability Analysis	I.0-54
I.5.4	Summary	I.0-54
I.6	Summary Conclusions	I.0-54
1.7	References	I.0-55