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C.2 REFERENCE CYCLING SCHEME INFORMATION

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Table C.2.1 Main characteristics of the Reference Cycling Scheme - First Core:

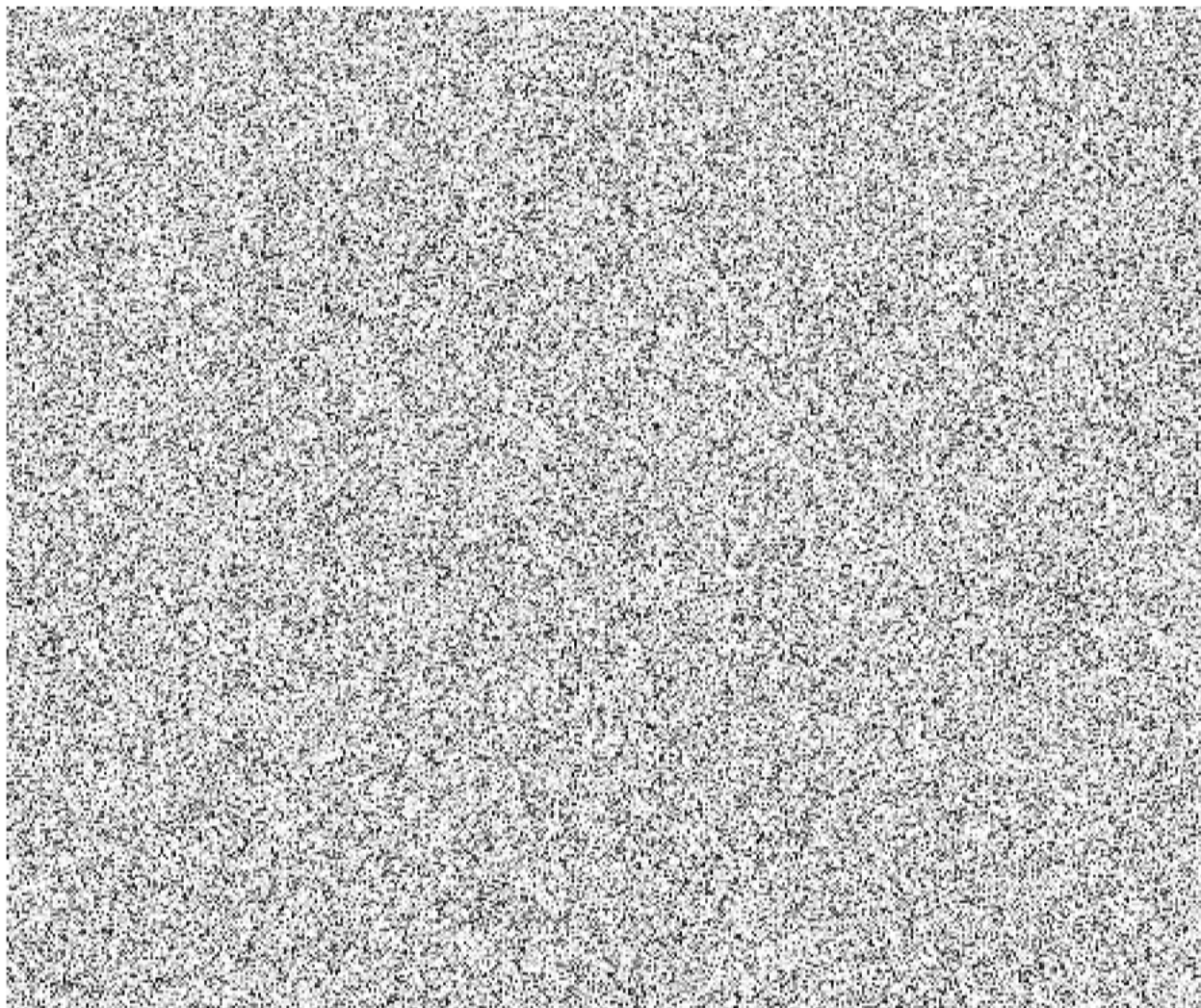


Table C.2.1.1 Fuel Assembly Data of the Reference Cycling Scheme - First Core:

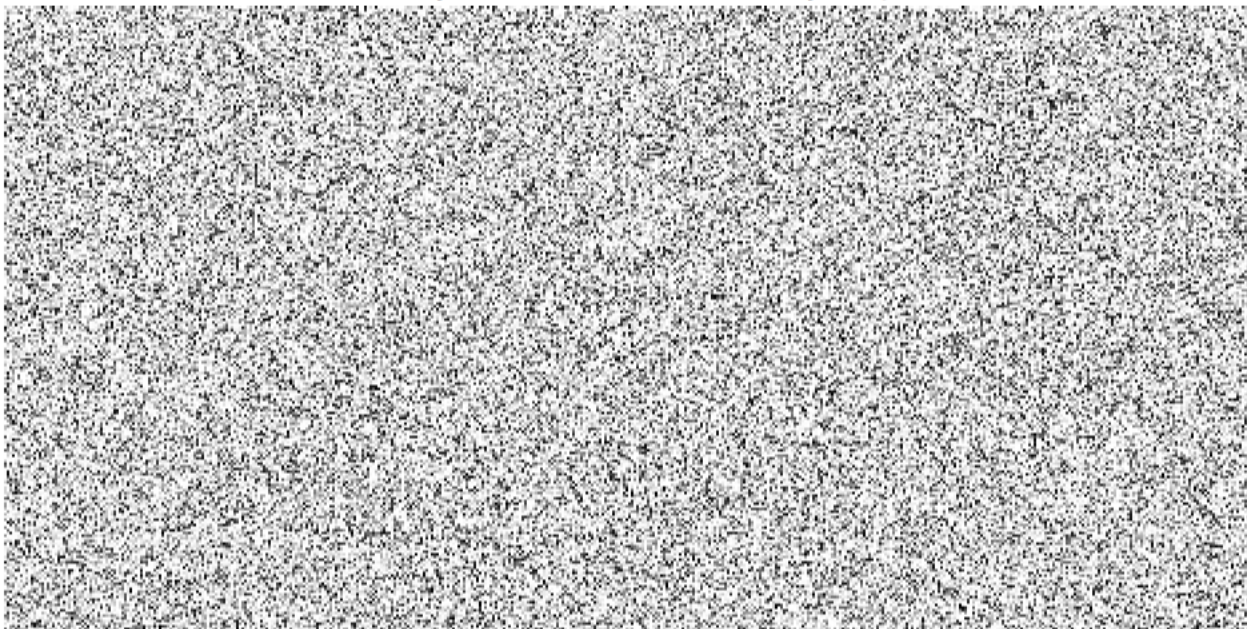


Table C.2.1.2 CBC and Peaking Factor of the Reference Cycling Scheme - First Core:

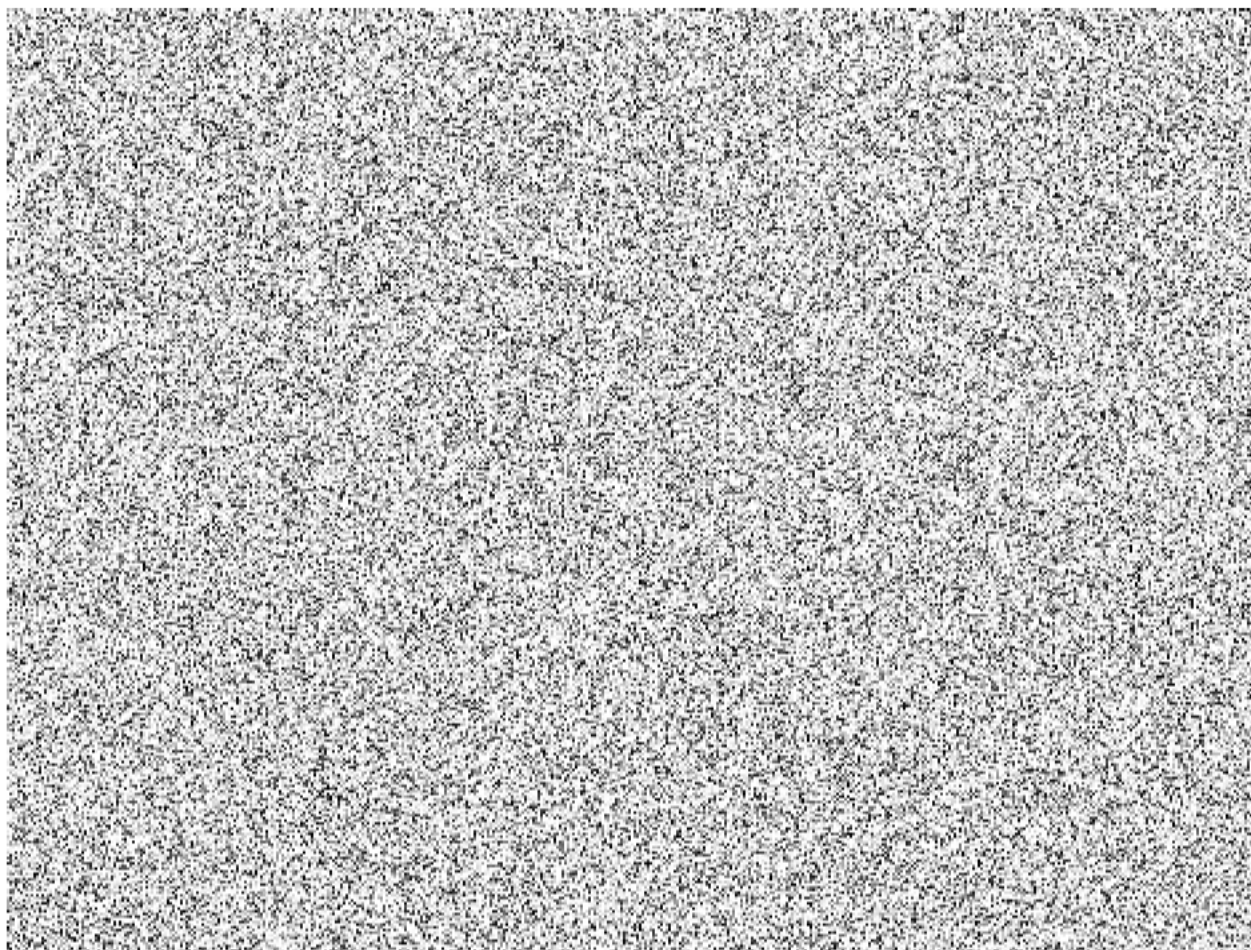


Table C.2.1.3 Key Safety Parameters and Events Specific Data - First Core:

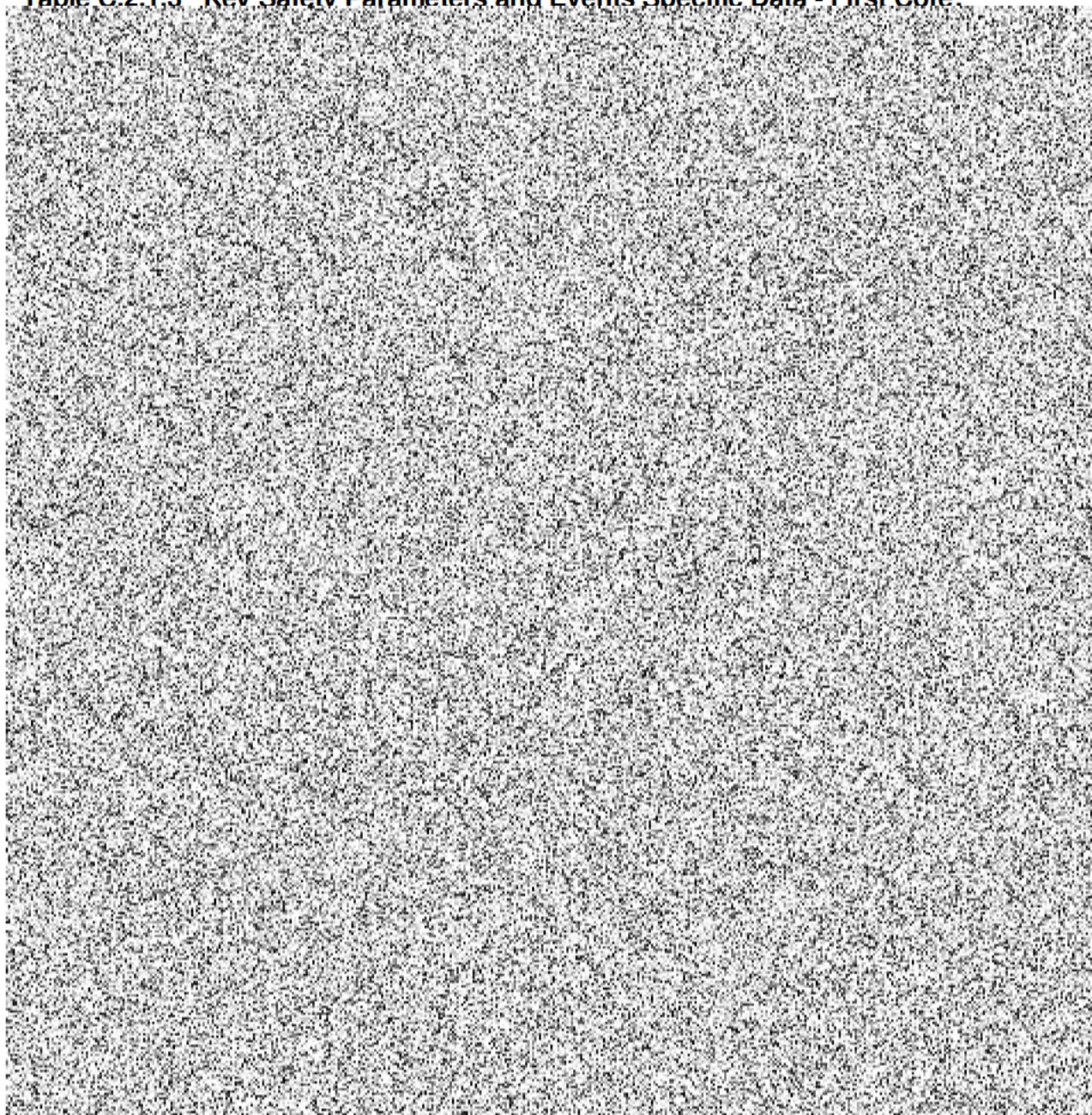


Table C.2.2 Main characteristics of the Reference Cycling Scheme - 2nd Cycle:

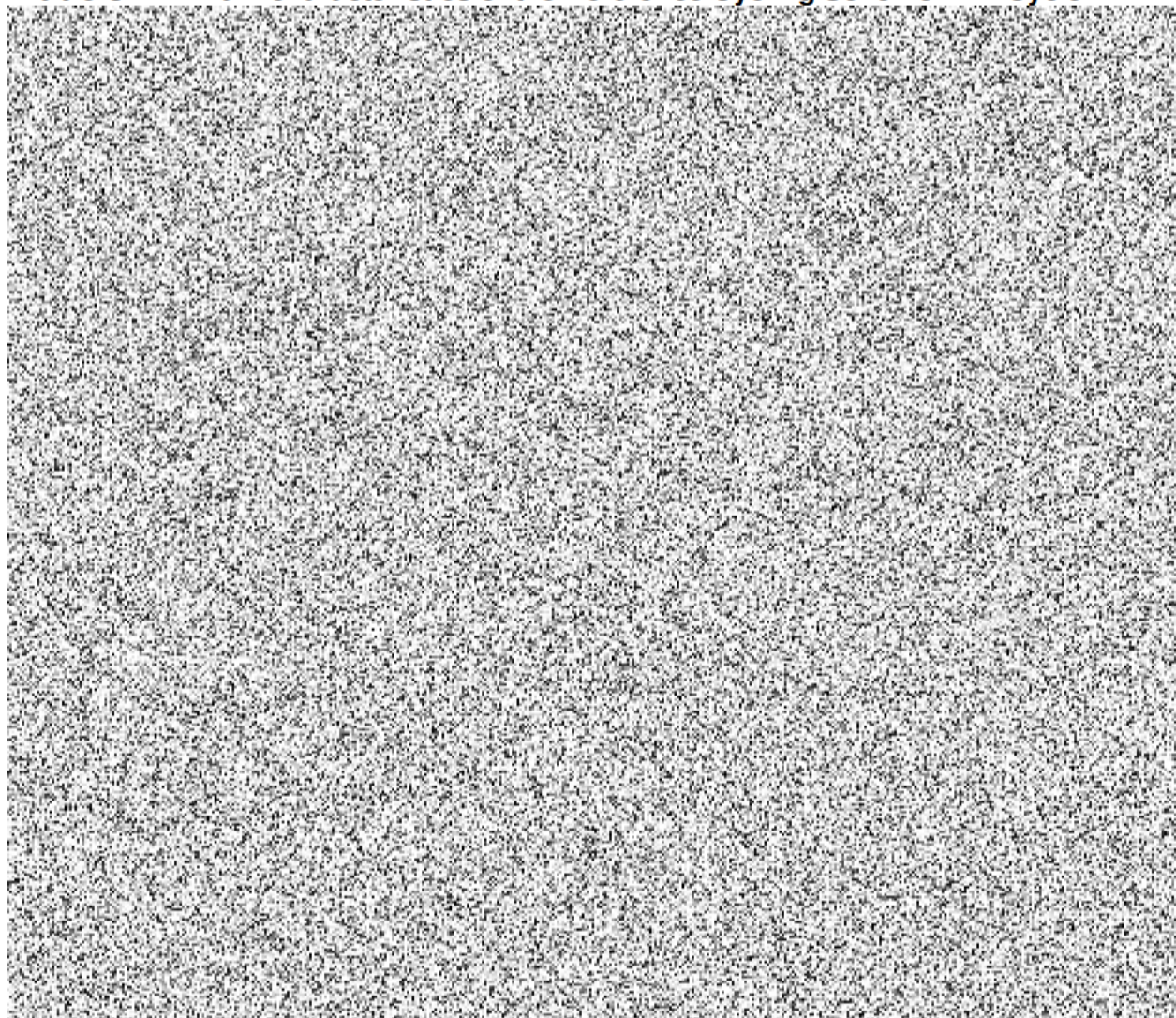


Table C.2.2.1 Fuel Assembly Data of the Reference Cycling Scheme – 2nd Cycle:

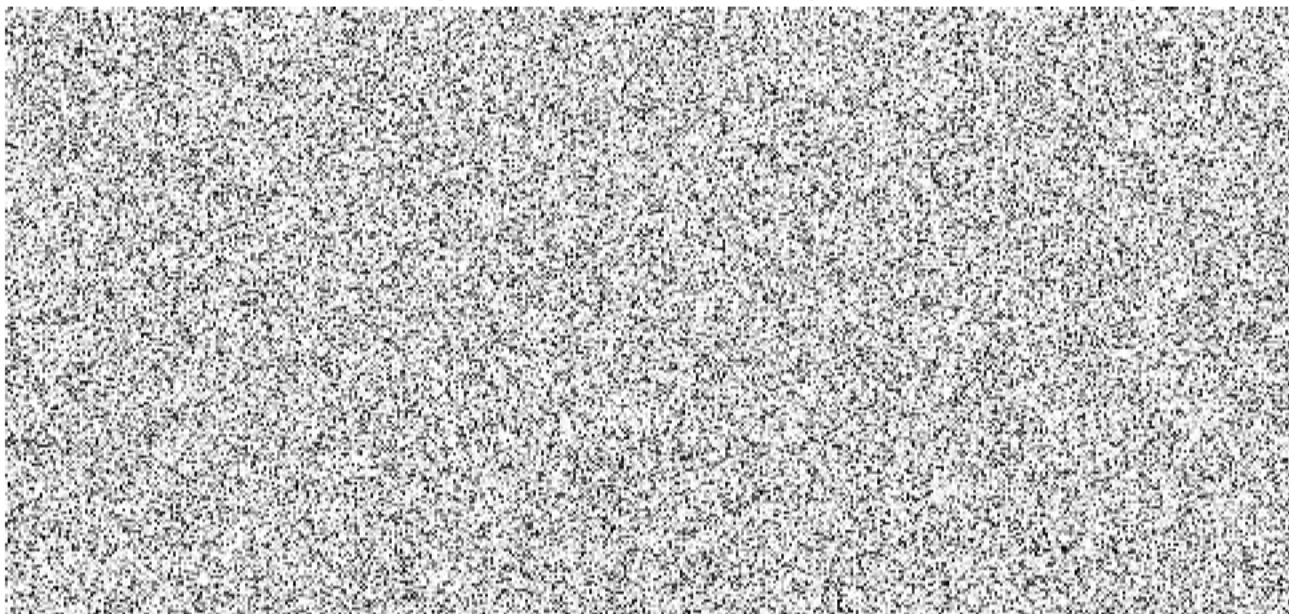


Table C.2.2.2 CBC and Peaking Factor of the Reference Cycling Scheme – 2nd Cycle:

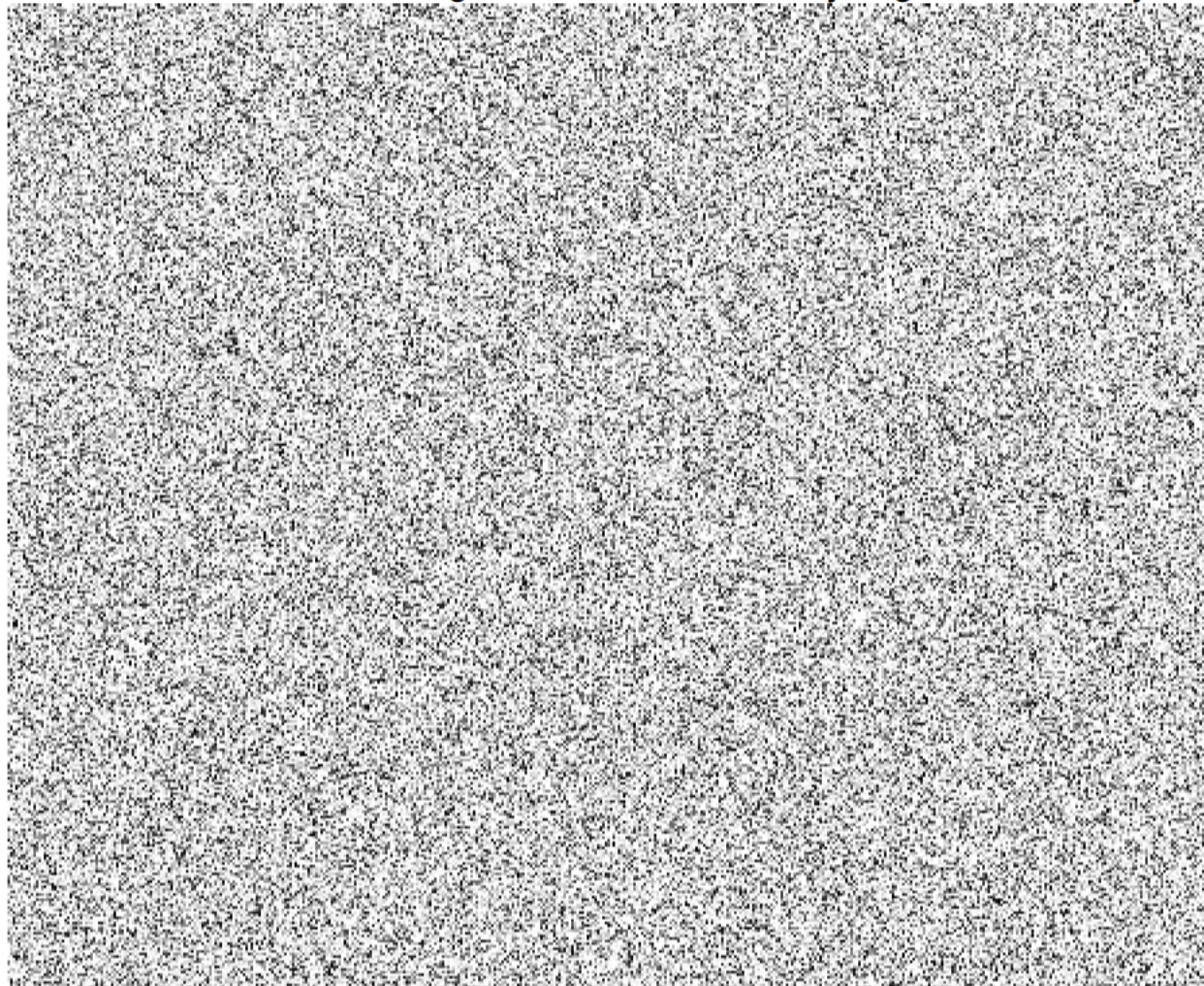


Table C.2.2.3 Shuffling Information of the Reference Cycling Scheme – 2nd Cycle

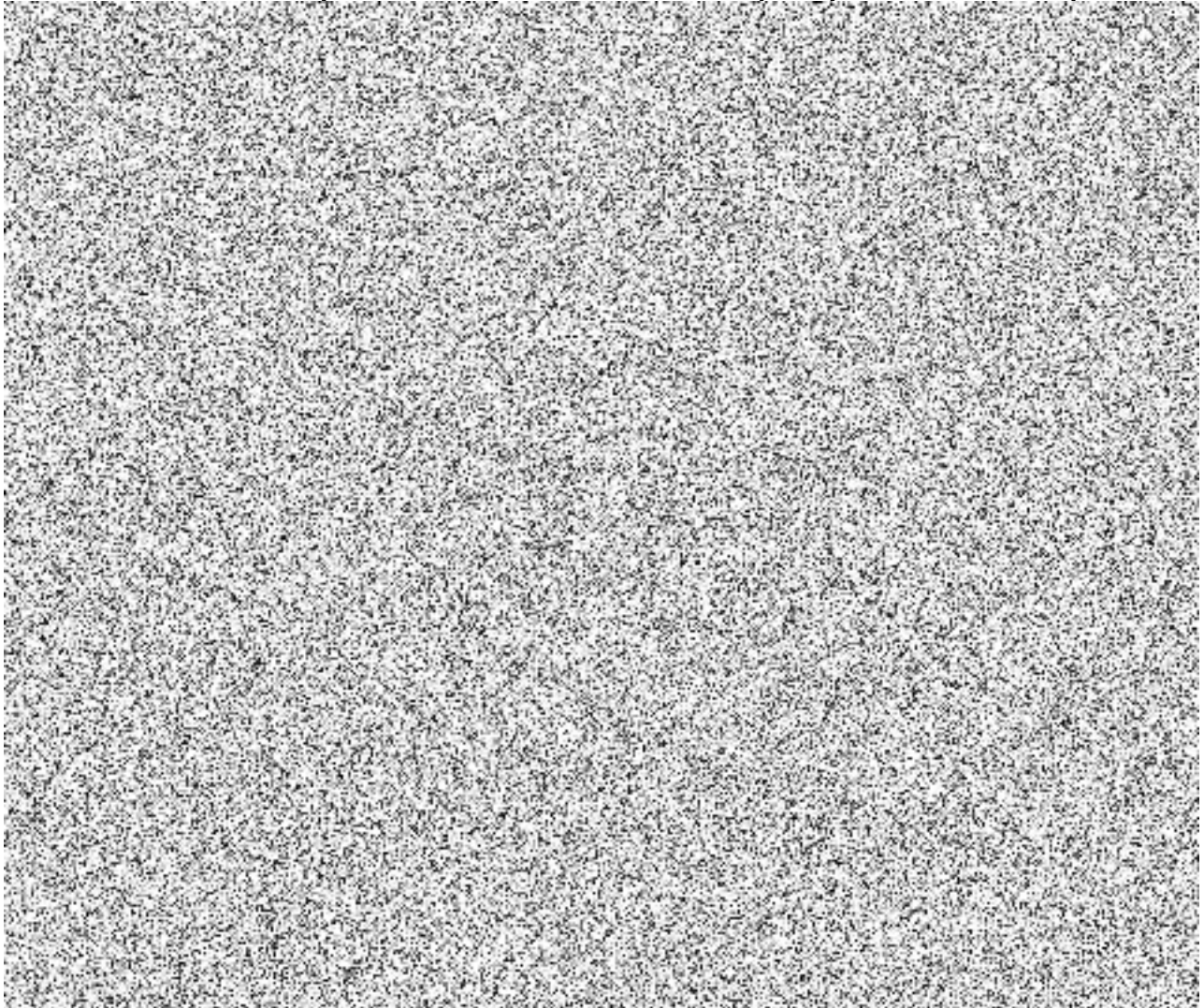


Table C.2.3 Main characteristics of the Reference Cycling Scheme - 3rd Cycle:

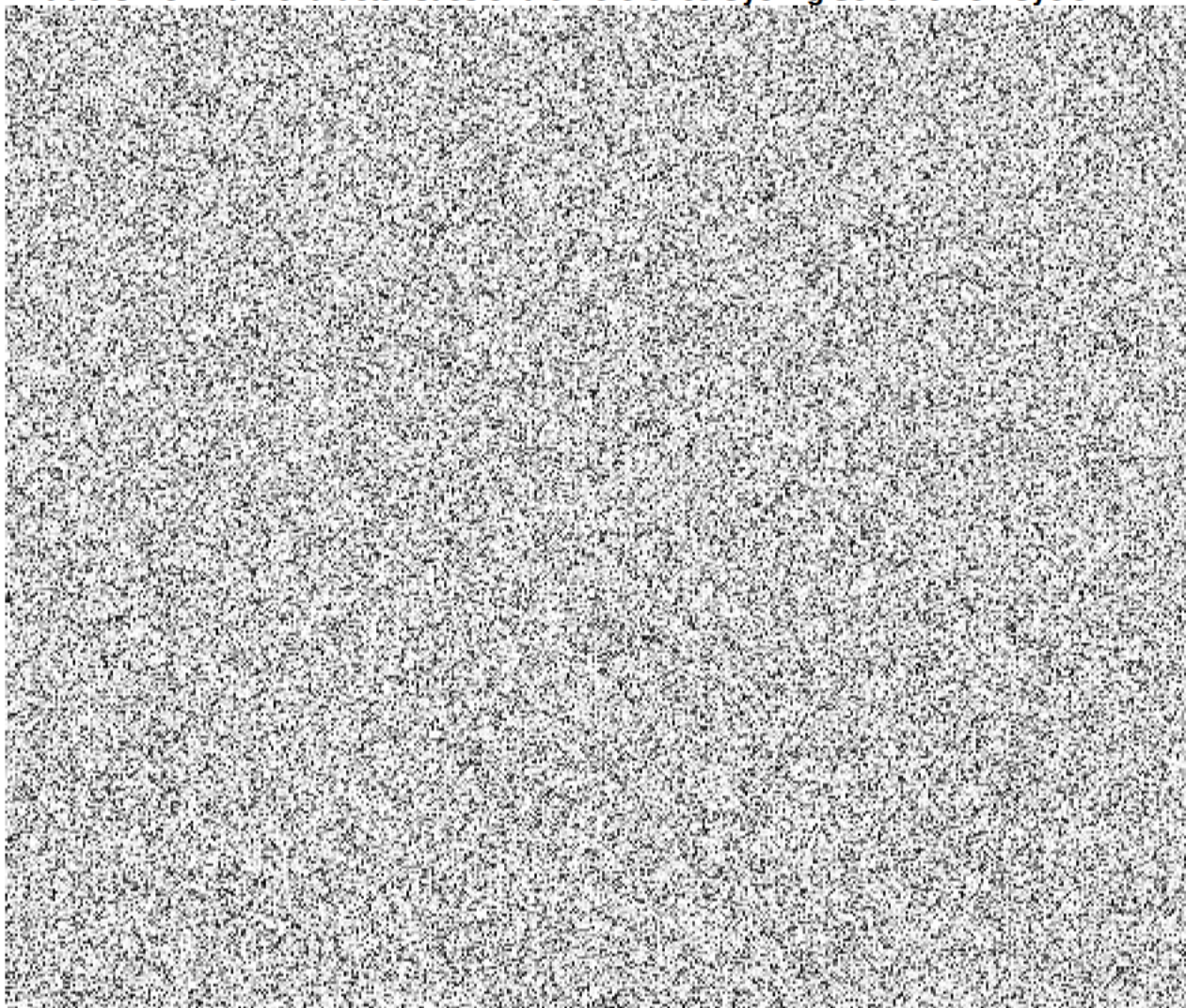


Table C.2.3.1 Fuel Assembly Data of the Reference Cycling Scheme – 3rd Cycle:

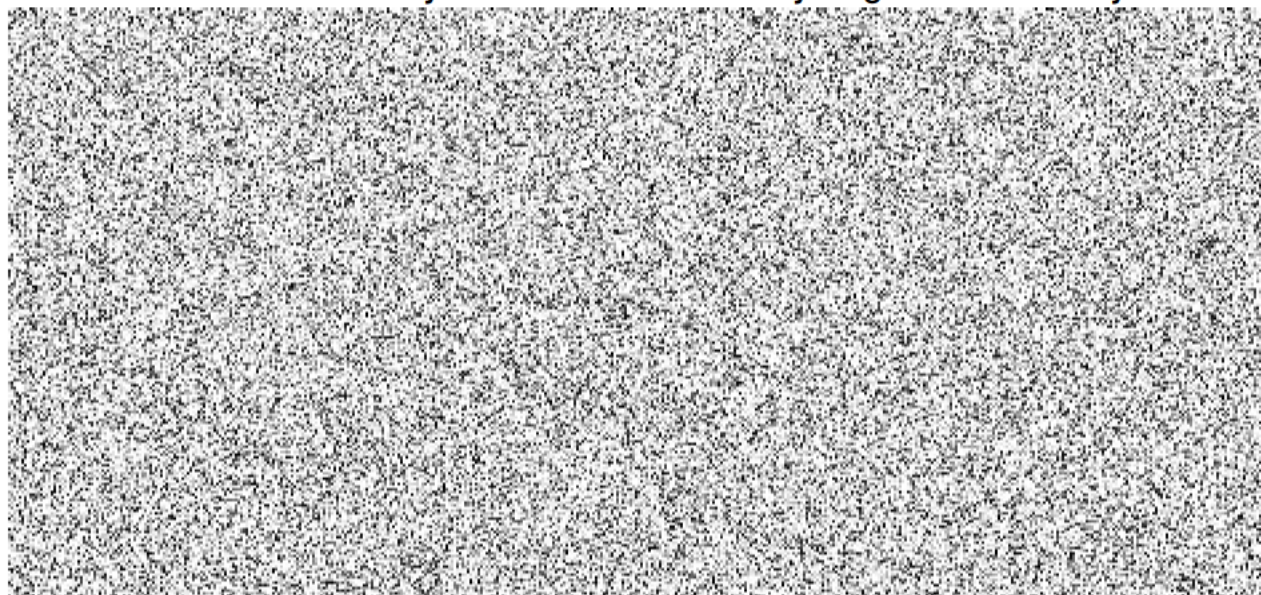


Table C.2.3.2 CBC and Peaking Factor of the Reference Cycling Scheme – 3rd Cycle:

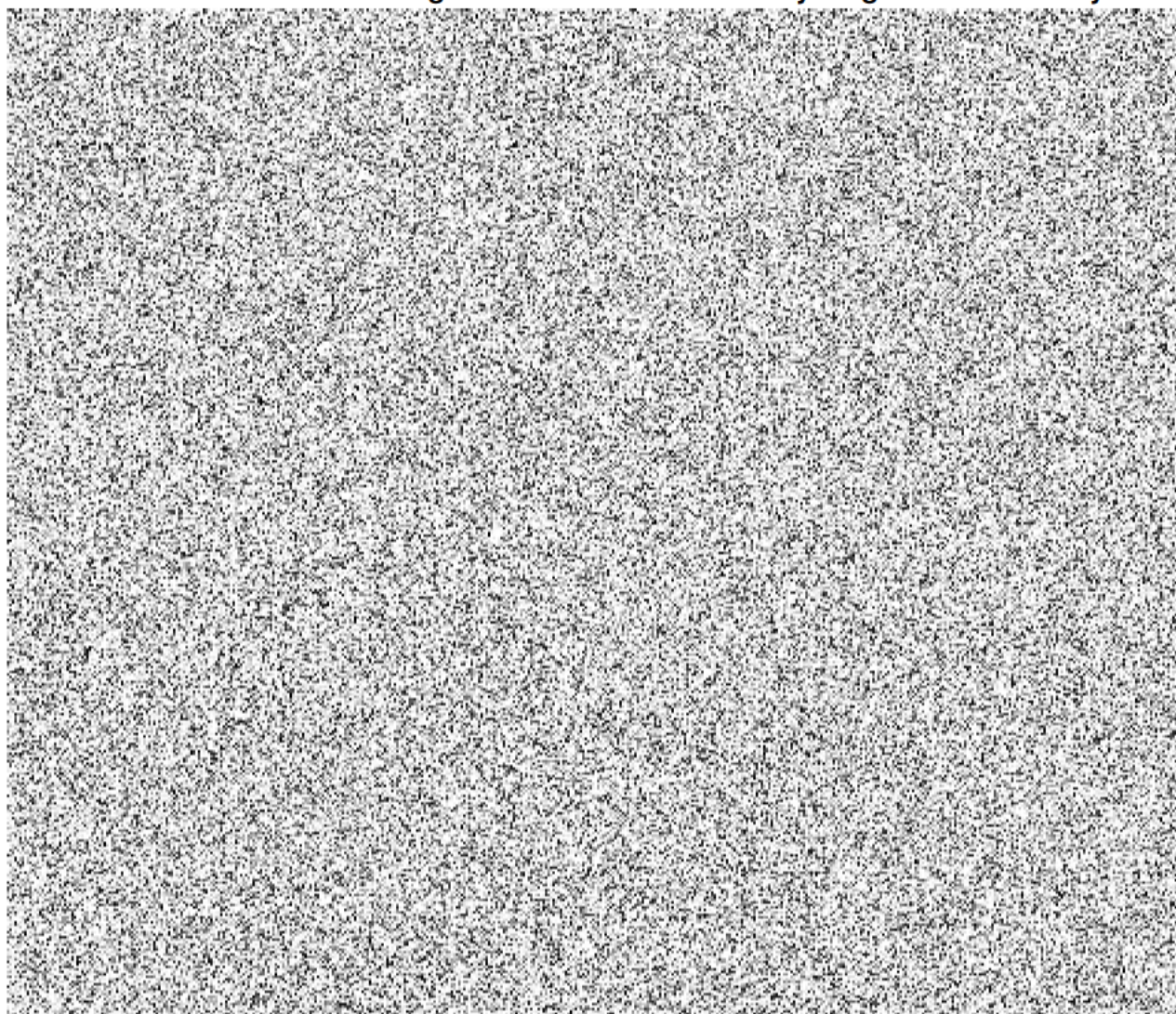


Table C.2.3.3 Shuffling Information of the Reference Cycling Scheme – 3rd Cycle

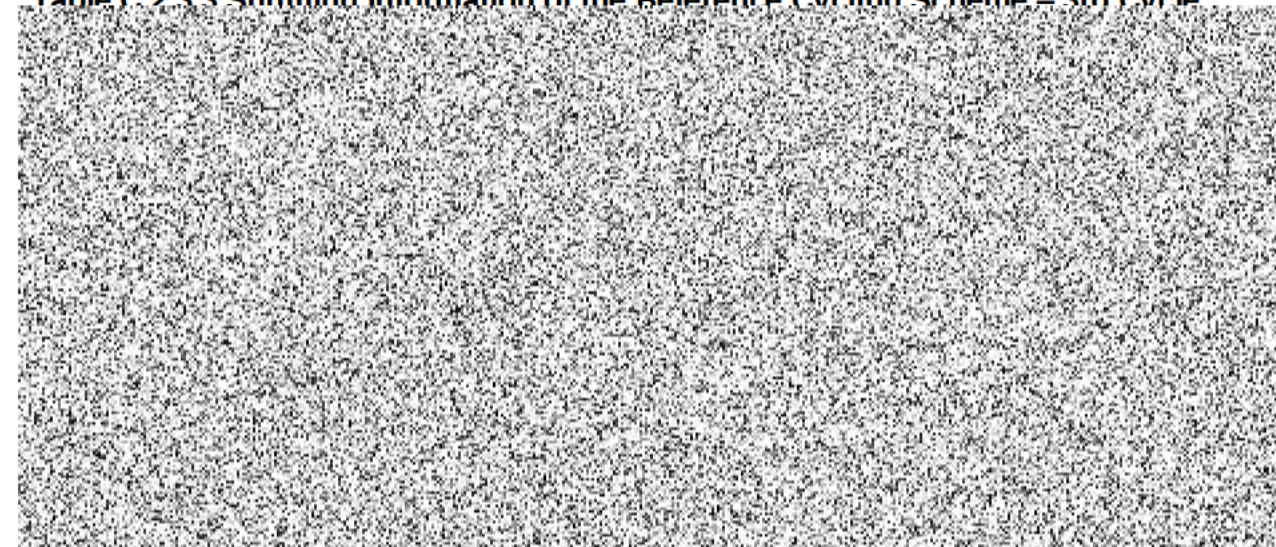


Table C.2.4 Main characteristics of the Reference Cycling Scheme - 4th Cycle:

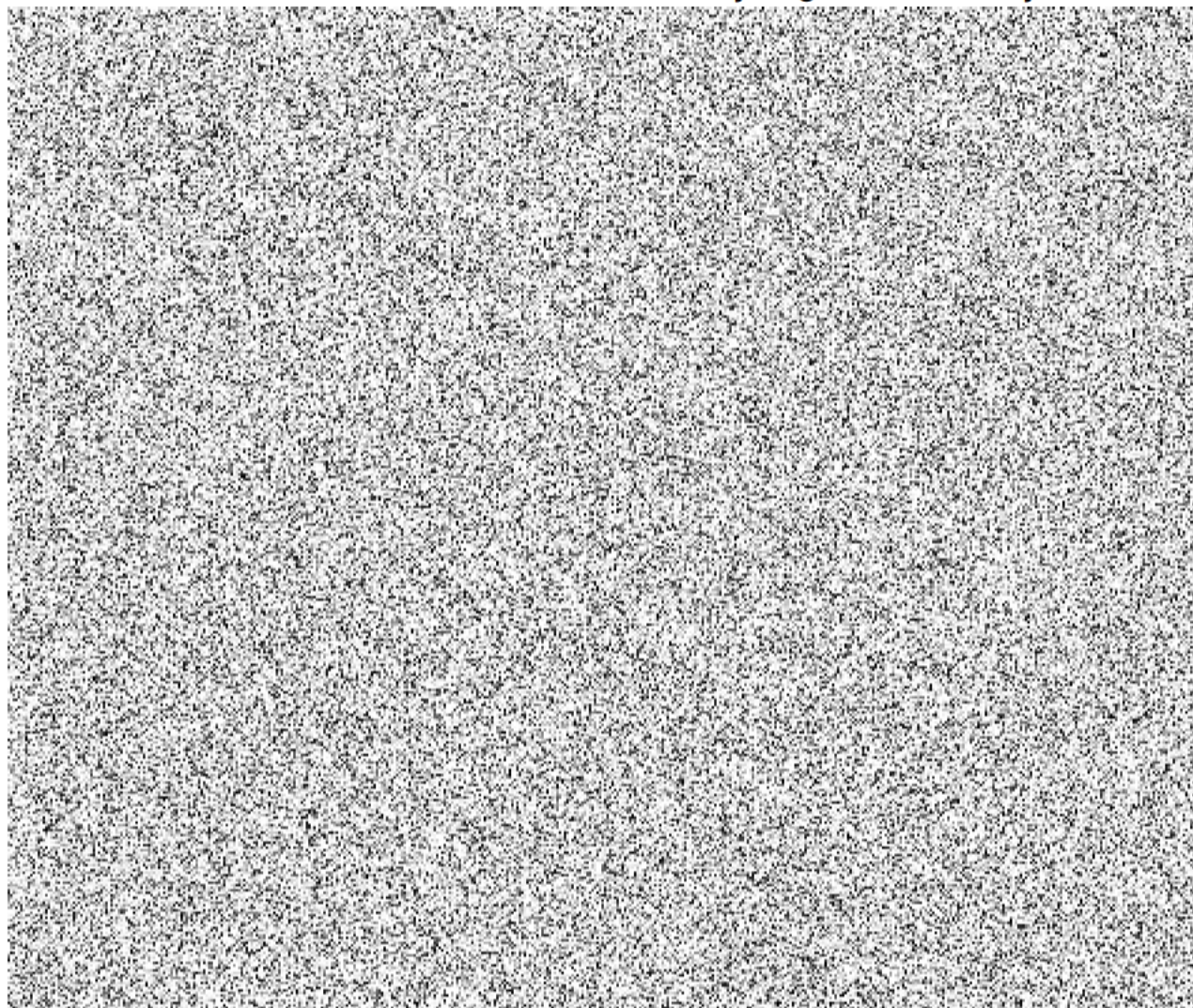


Table C.2.4.1 Fuel Assembly Data of the Reference Cycling Scheme – 4th Cycle:

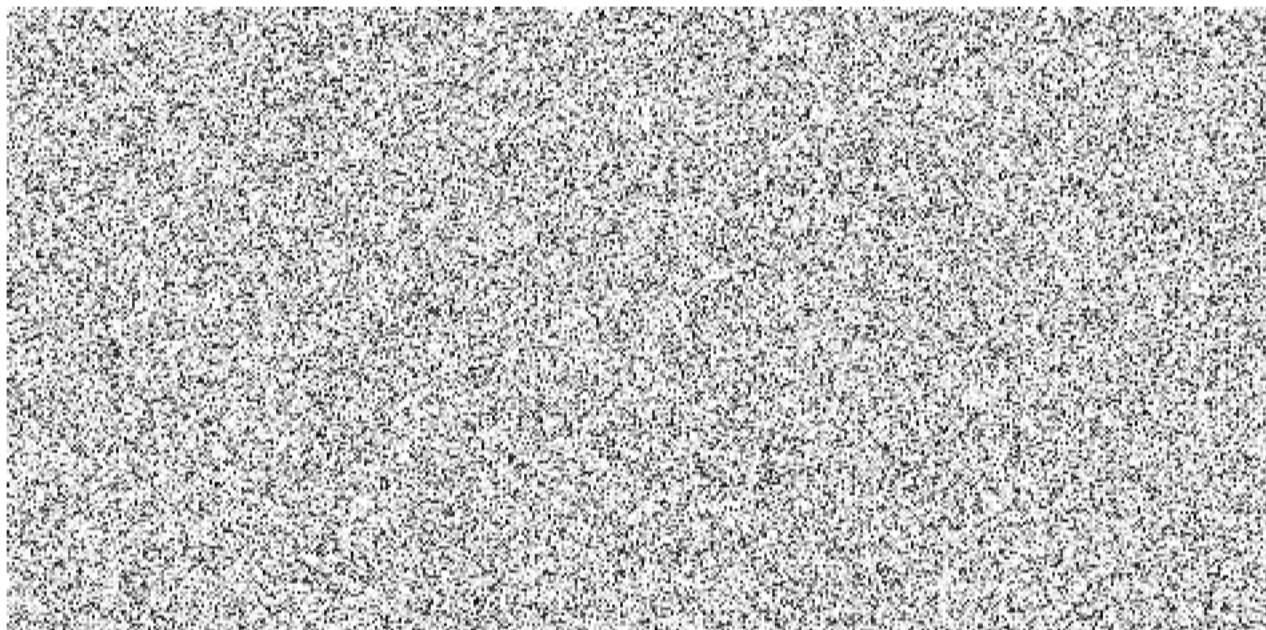


Table C.2.4.2 CBC and Peaking Factor of the Reference Cycling Scheme – 4th Cycle:

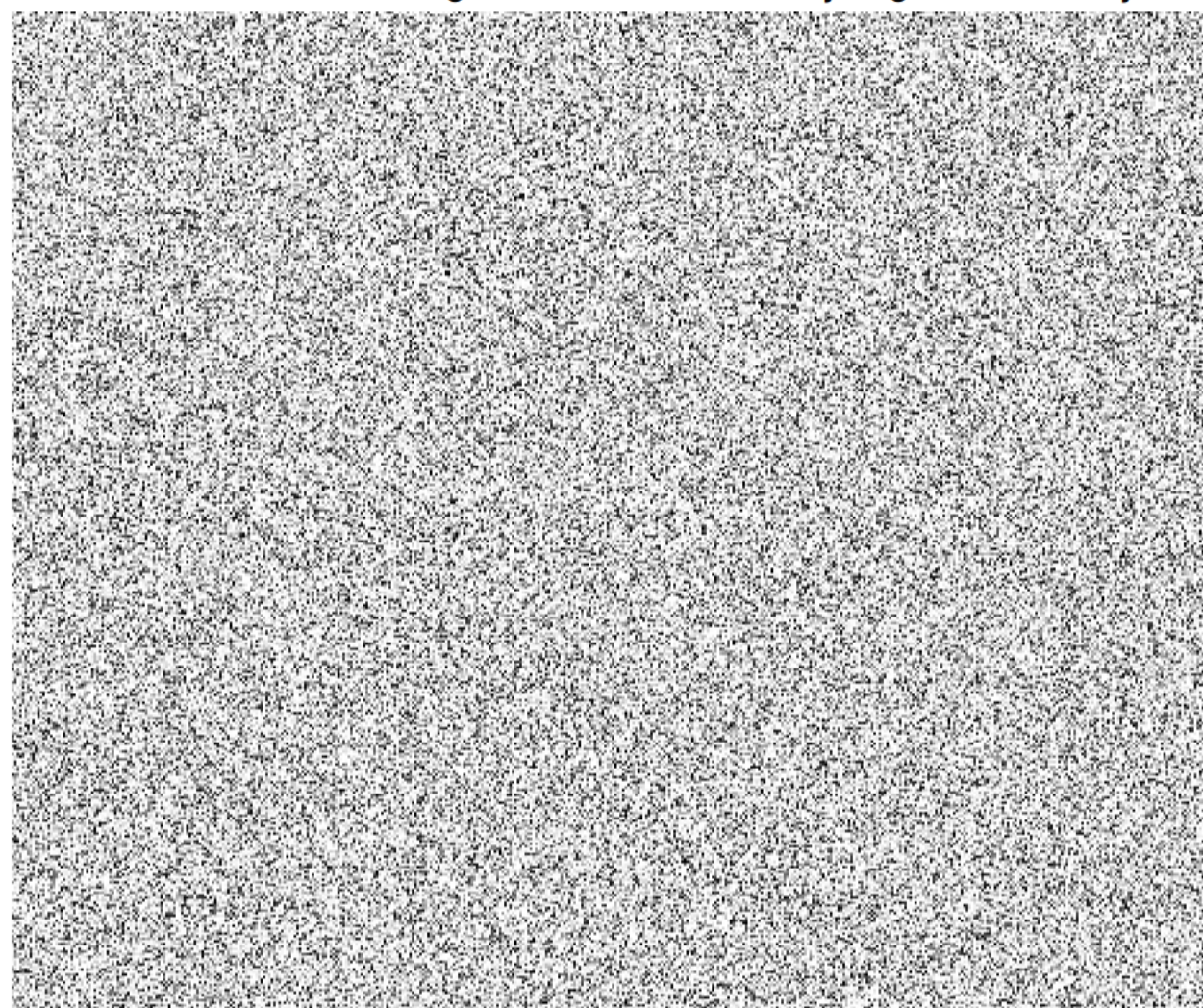


Table C.2.4.3 Shuffling Information of the Reference Cycling Scheme – 4th Cycle

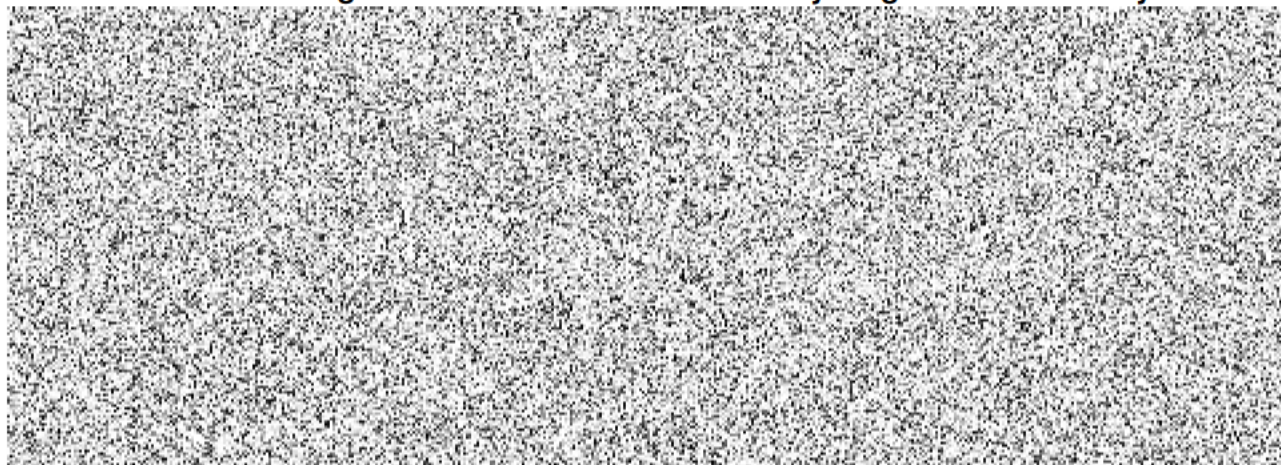


Table C.2.5 Main characteristics of the Reference Cycling Scheme - 5th Cycle:

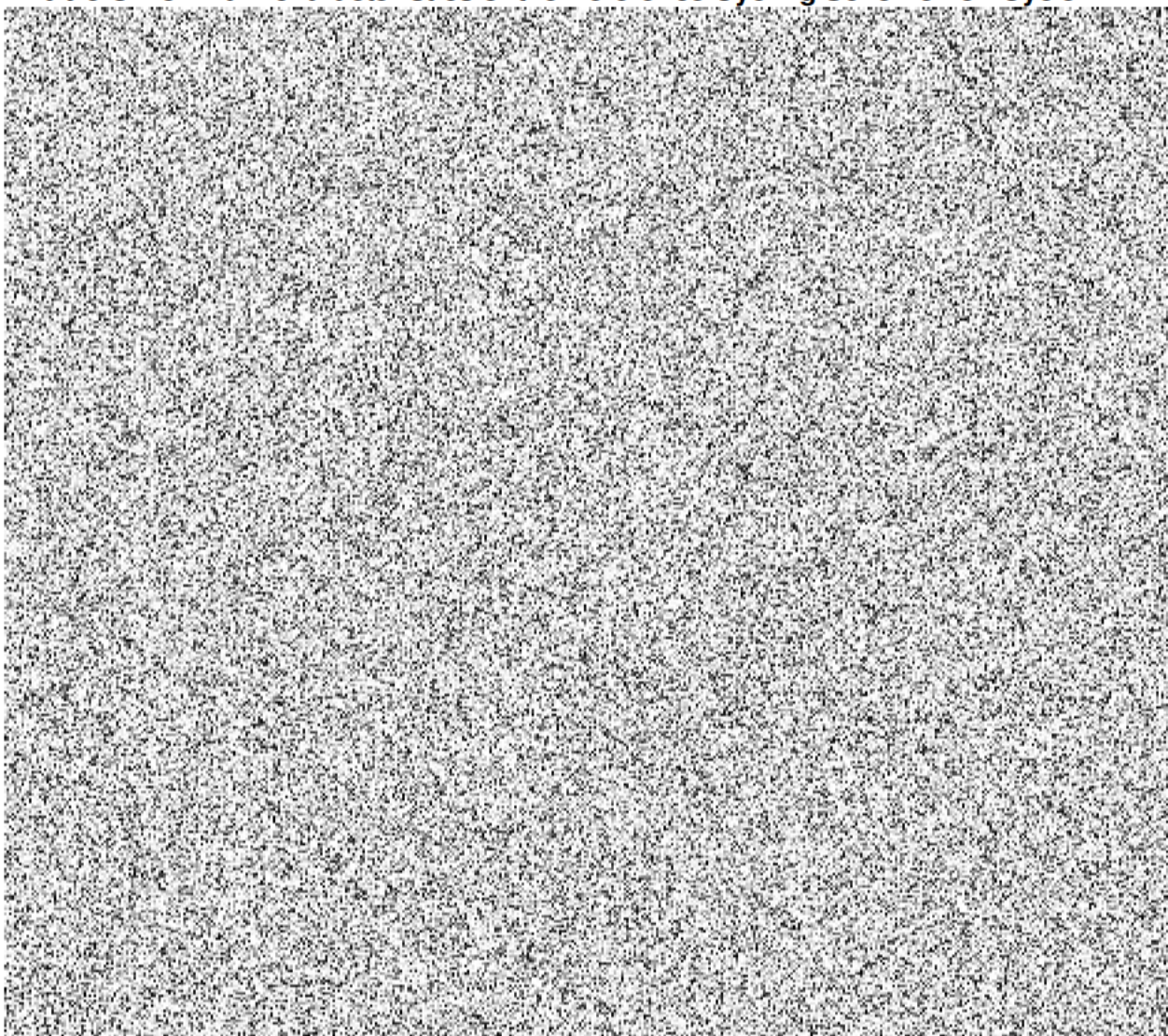


Table C.2.5.1 Fuel Assembly Data of the Reference Cycling Scheme – 5th Cycle:

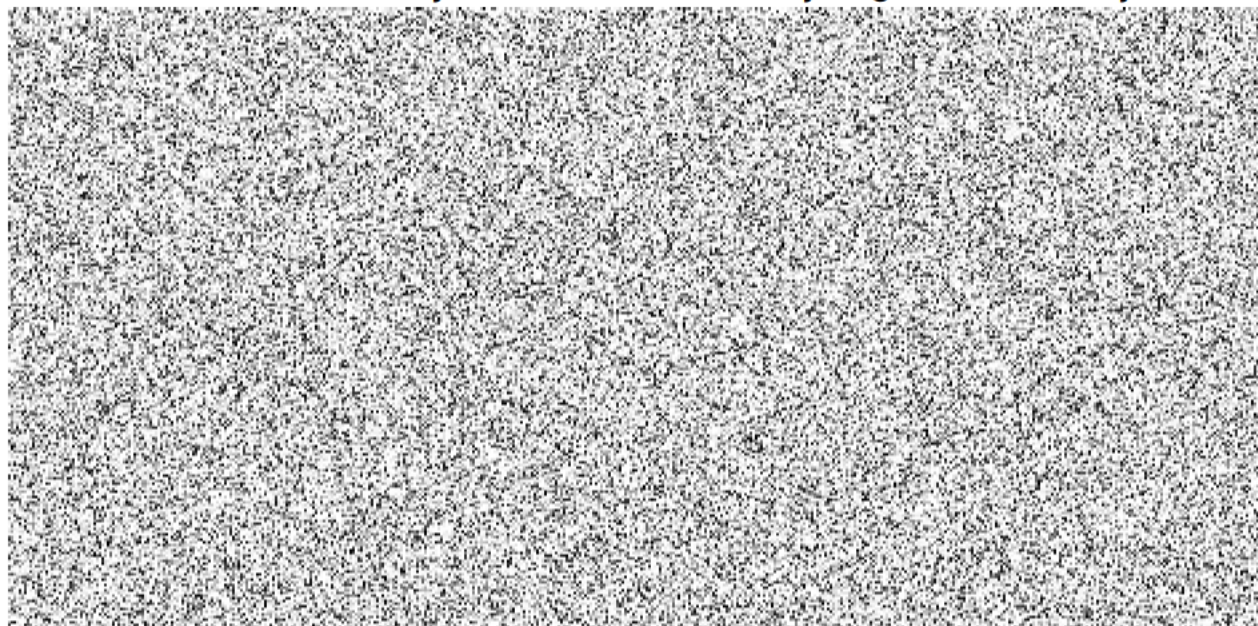


Table C.2.5.2 CBC and Peaking Factor of the Reference Cycling Scheme – 5th Cycle:

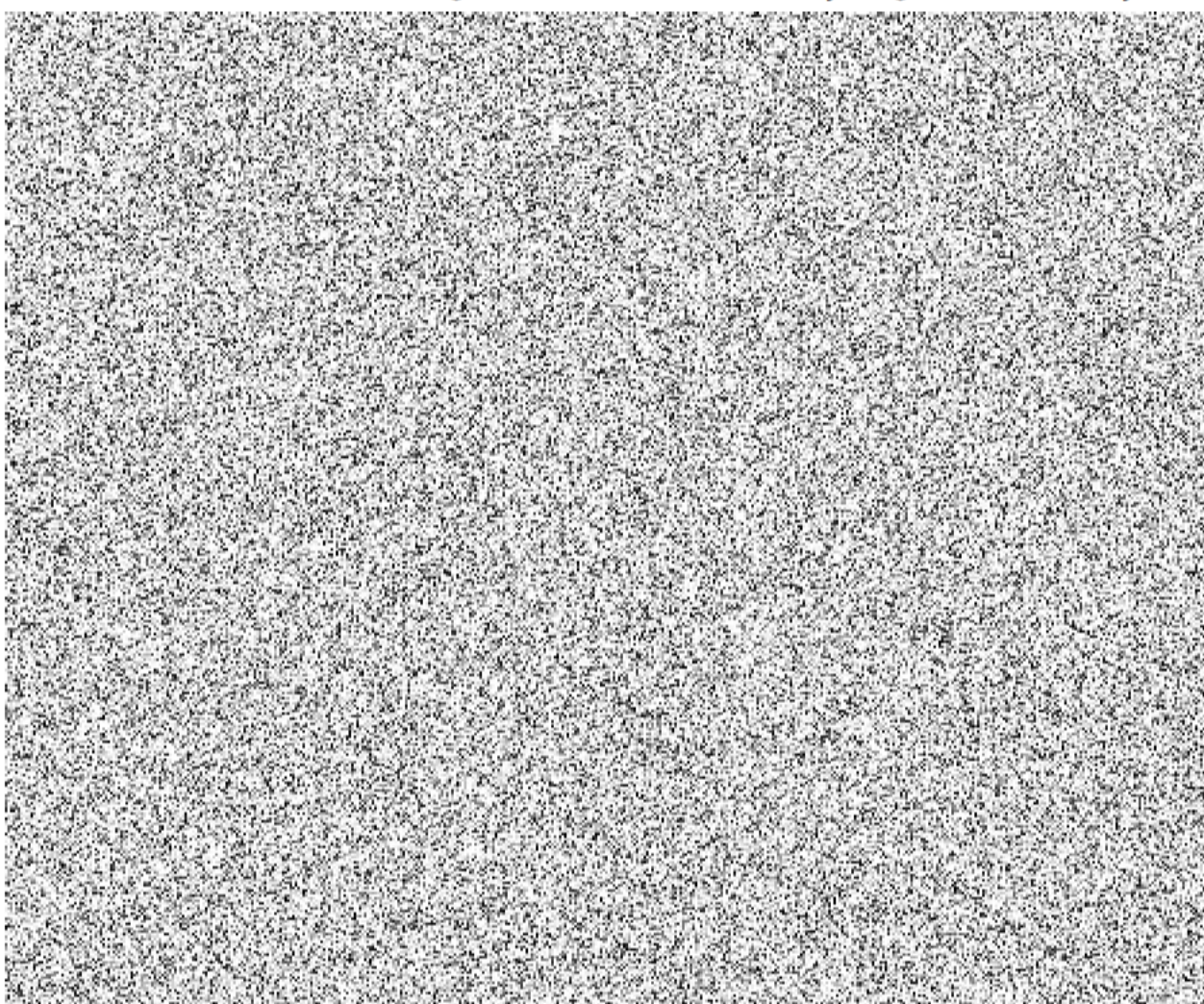


Table C.2.5.3 Shuffling Information of the Reference Cycling Scheme – 5th Cycle

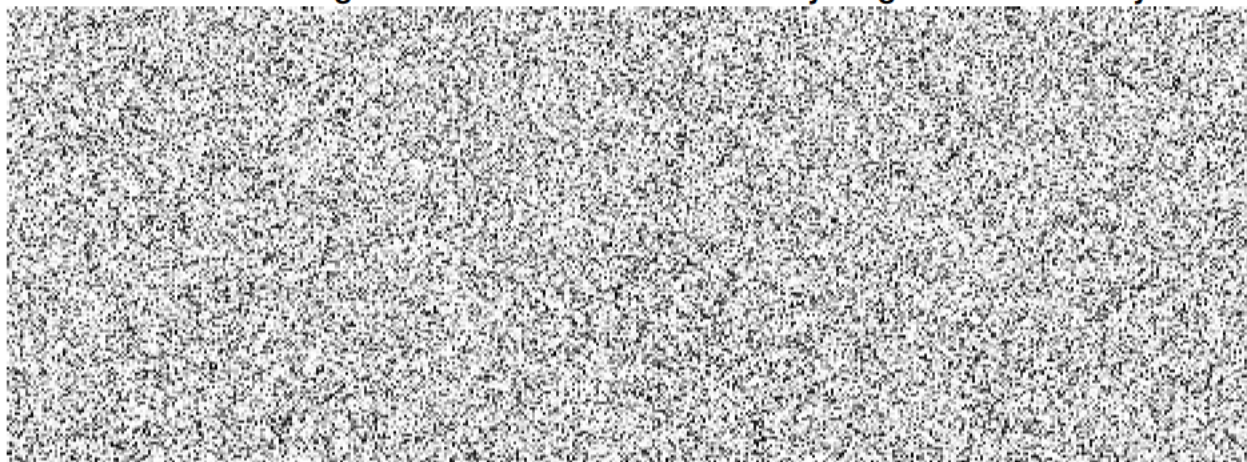


Table C.2.6 Main characteristics of the Reference Cycling Scheme - 6th Cycle:

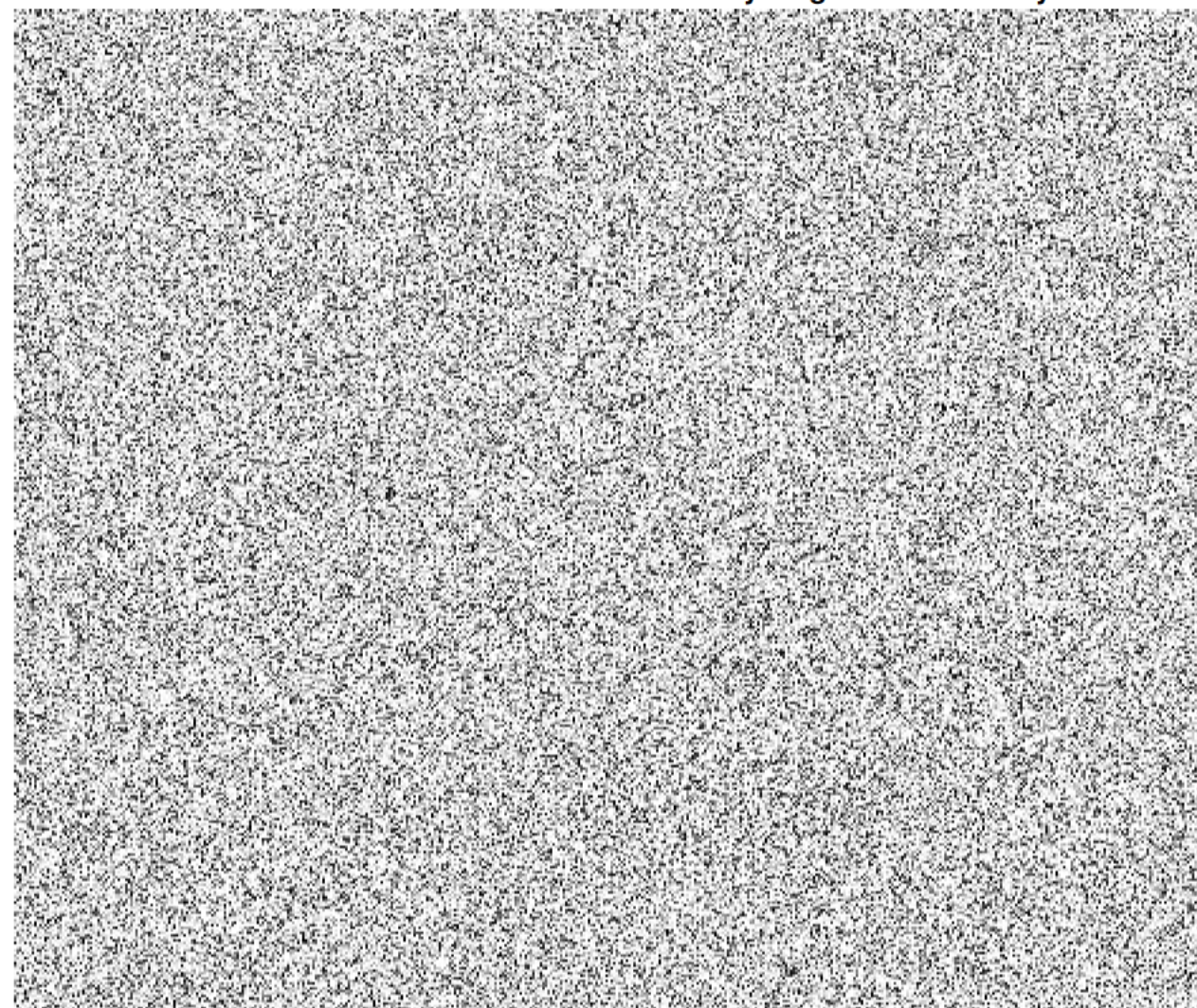


Table C.2.6.1 Fuel Assembly Data of the Reference Cycling Scheme – 6th Cycle:

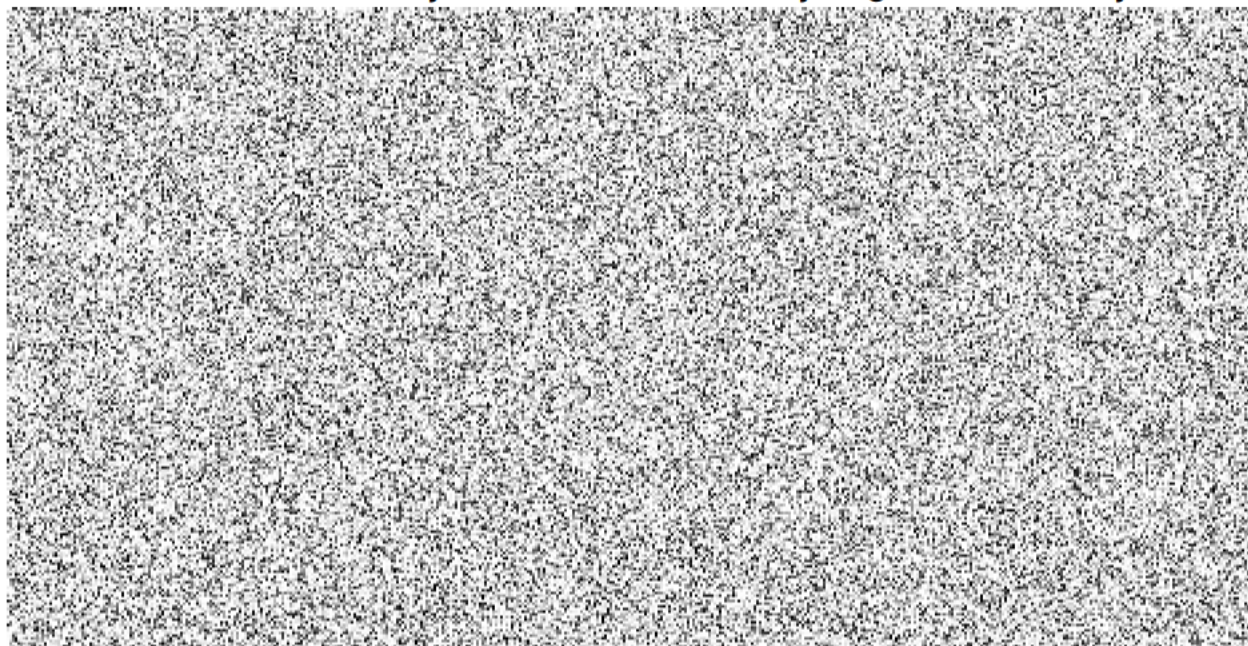


Table C.2.6.2 CBC and Peaking Factor of the Reference Cycling Scheme – 6th Cycle:

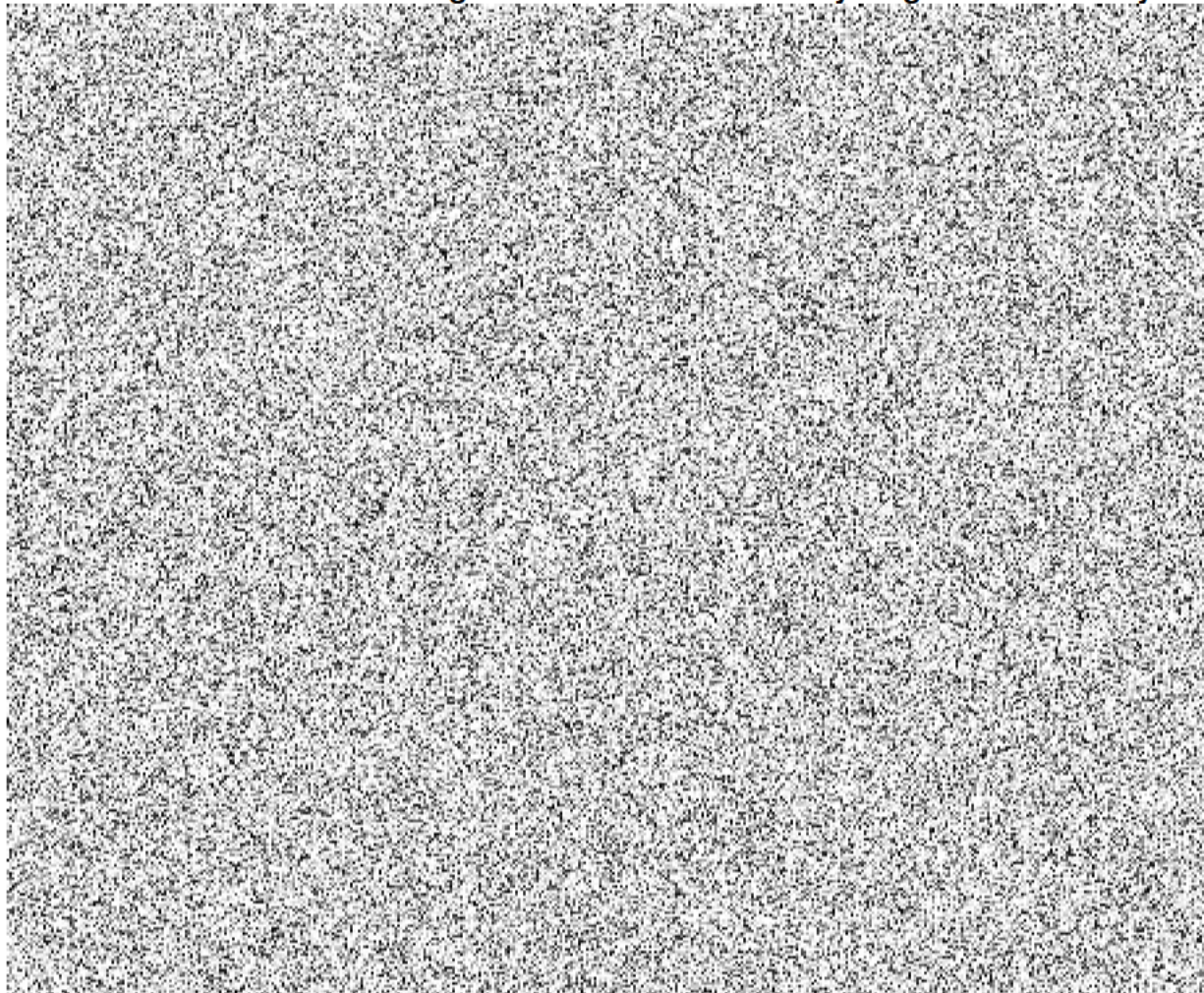


Table C.2.6.3 Shuffling Information of the Reference Cycling Scheme – 6th Cycle

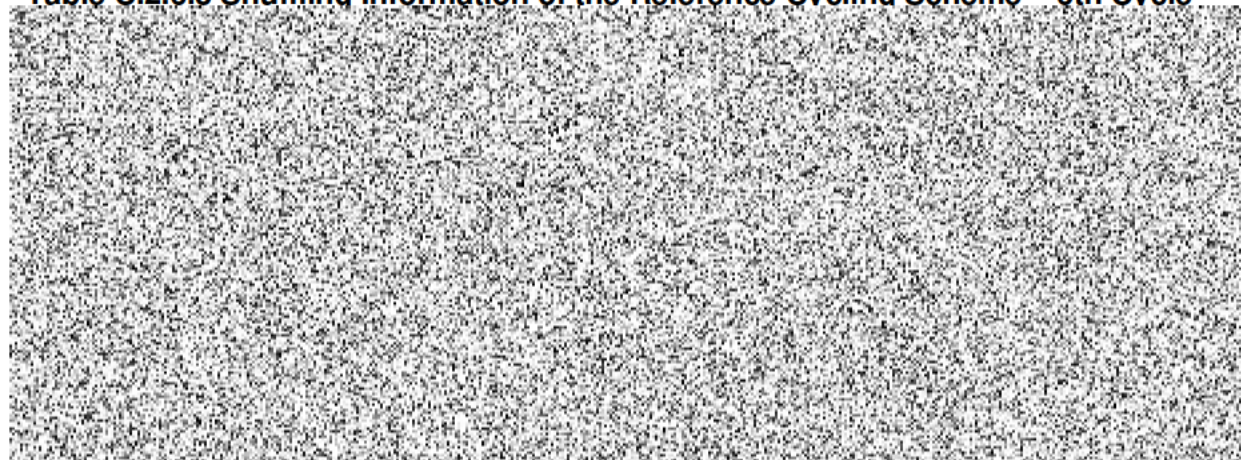


Table C.2.7 Main characteristics of the Reference Cycling Scheme - 7th Cycle:

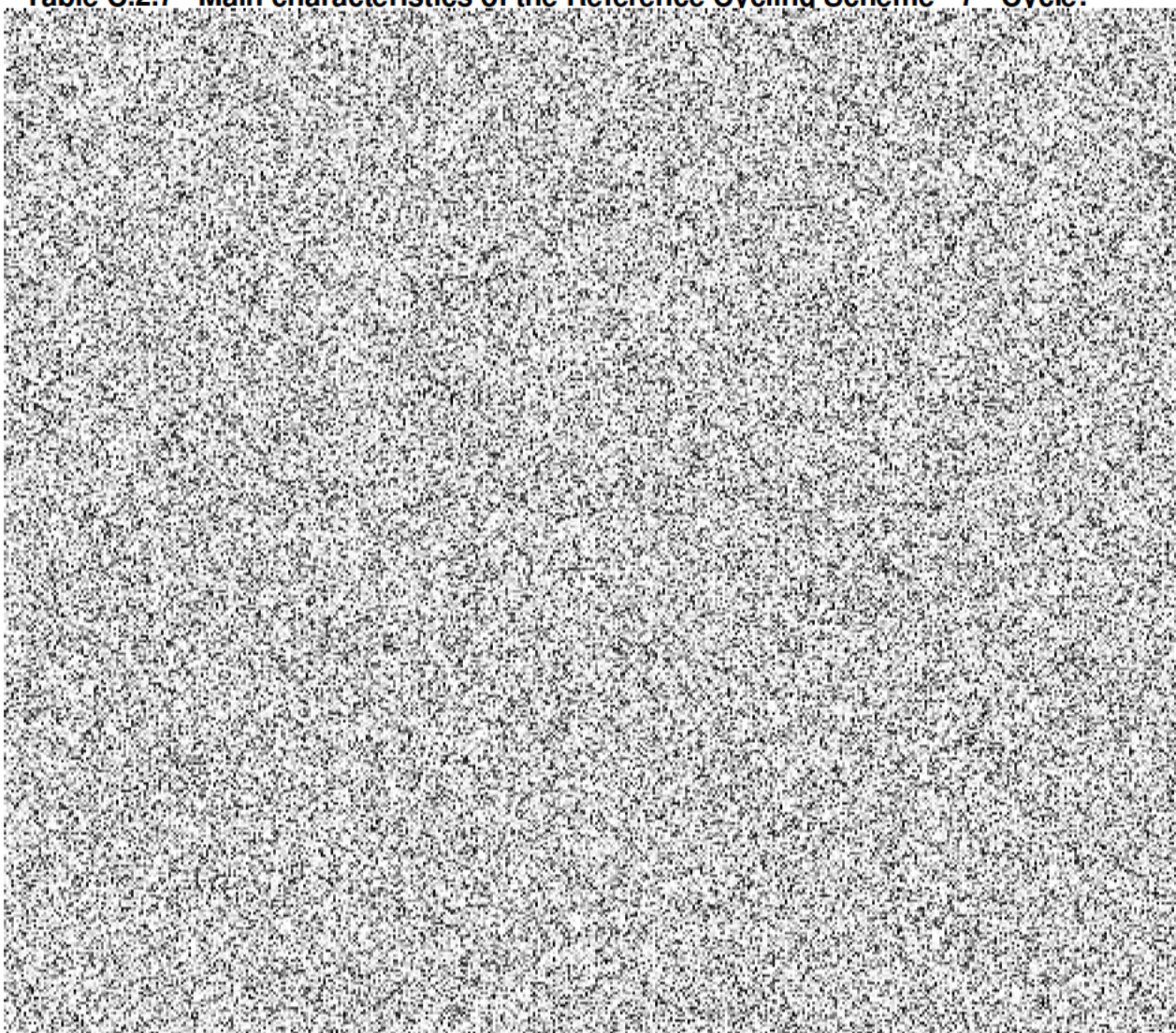


Table C.2.7.1 Fuel Assembly Data of the Reference Cycling Scheme – 7th Cycle:

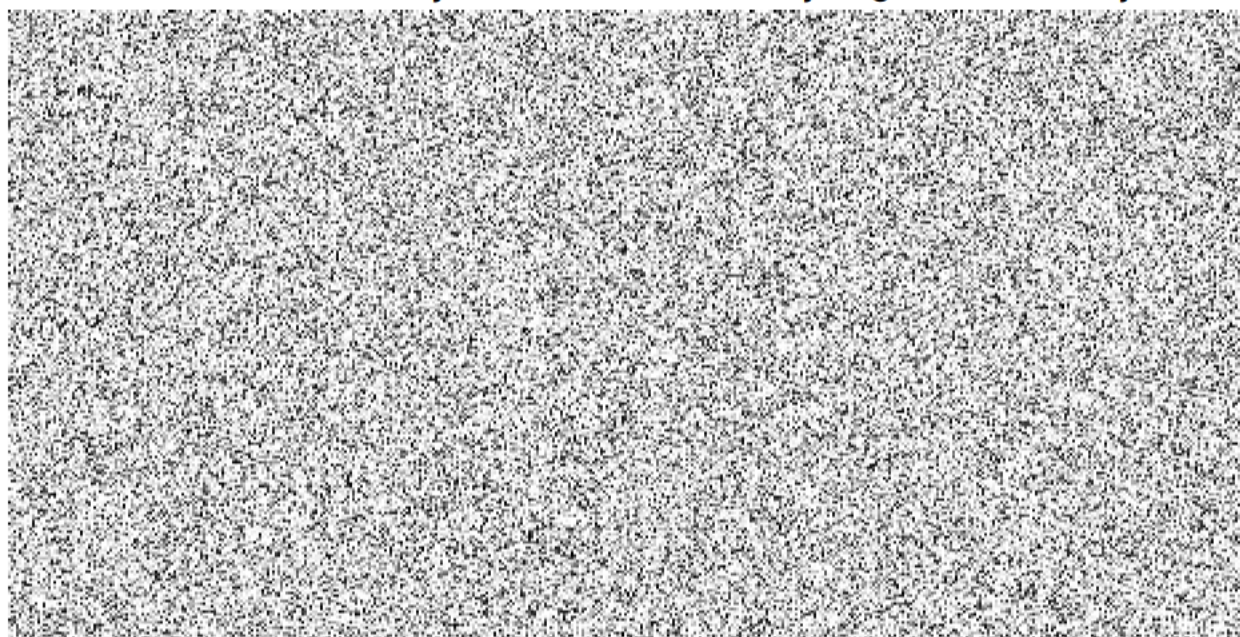


Table C.2.7.2 CBC and Peaking Factor of the Reference Cycling Scheme – 7th Cycle:

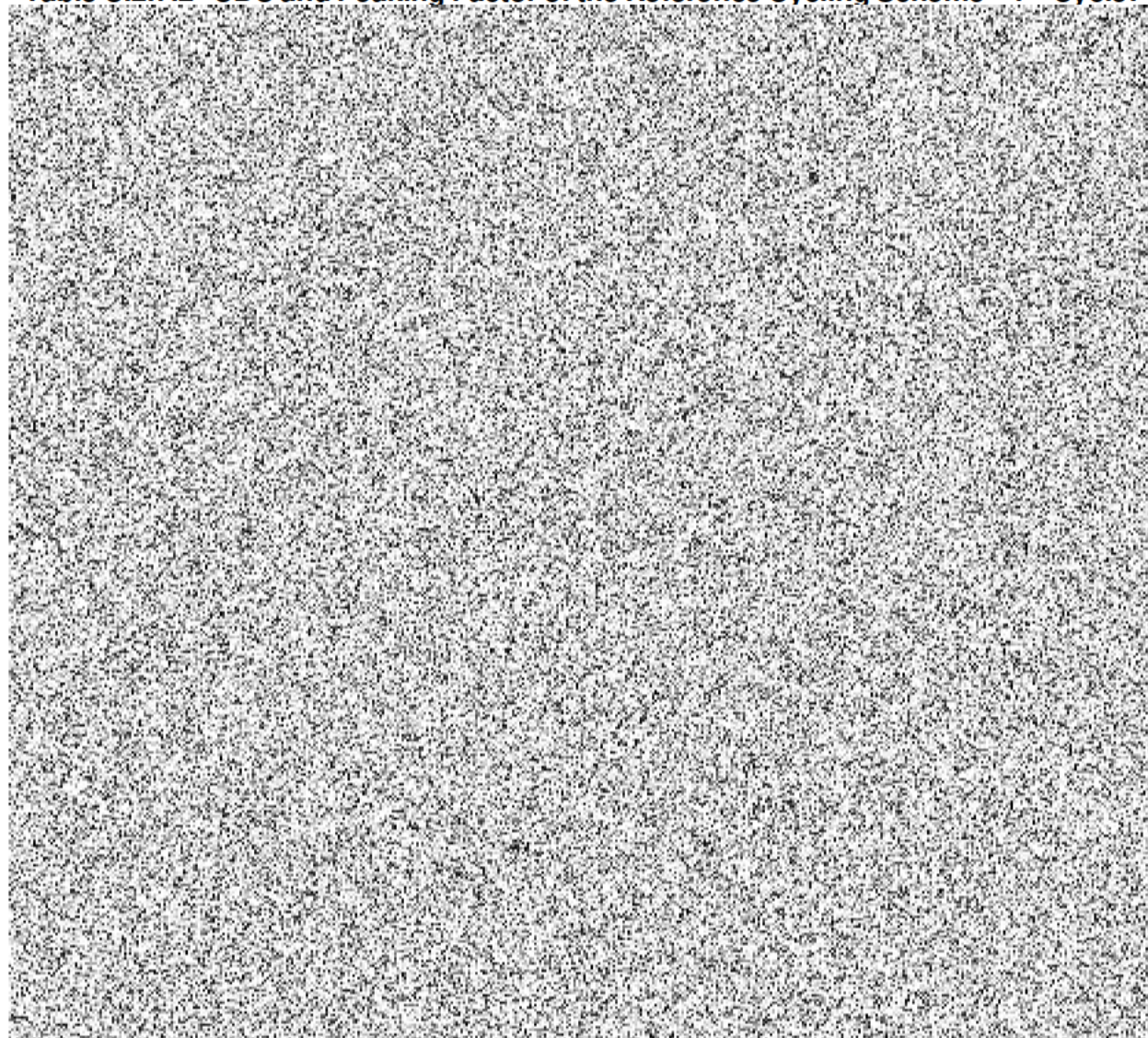


Table C.2.7.3 Shuffling Information of the Reference Cycling Scheme – 7th Cycle

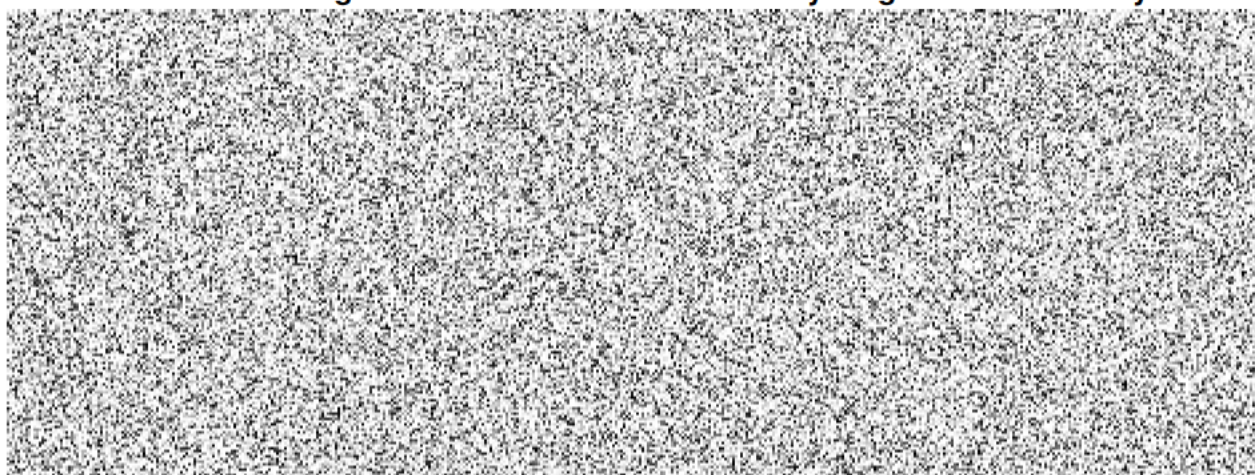
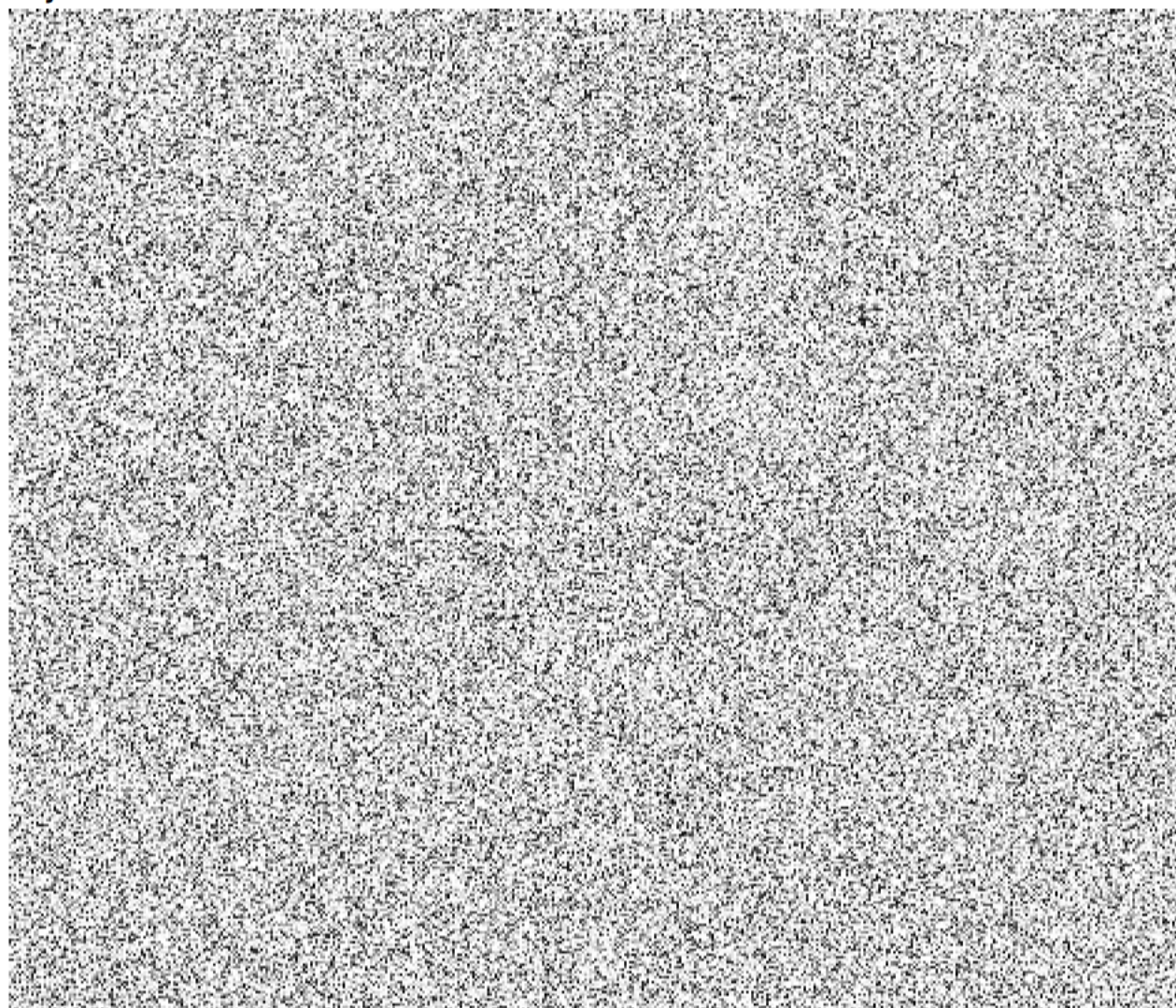


Table C.2.8 Main characteristics of the Reference Cycling Scheme - equilibrium Cycle:



Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX C	Page 41/79
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Table C.2.8.1 Fuel Assembly Data of the Reference Cycling Scheme – equilibrium Cycle:

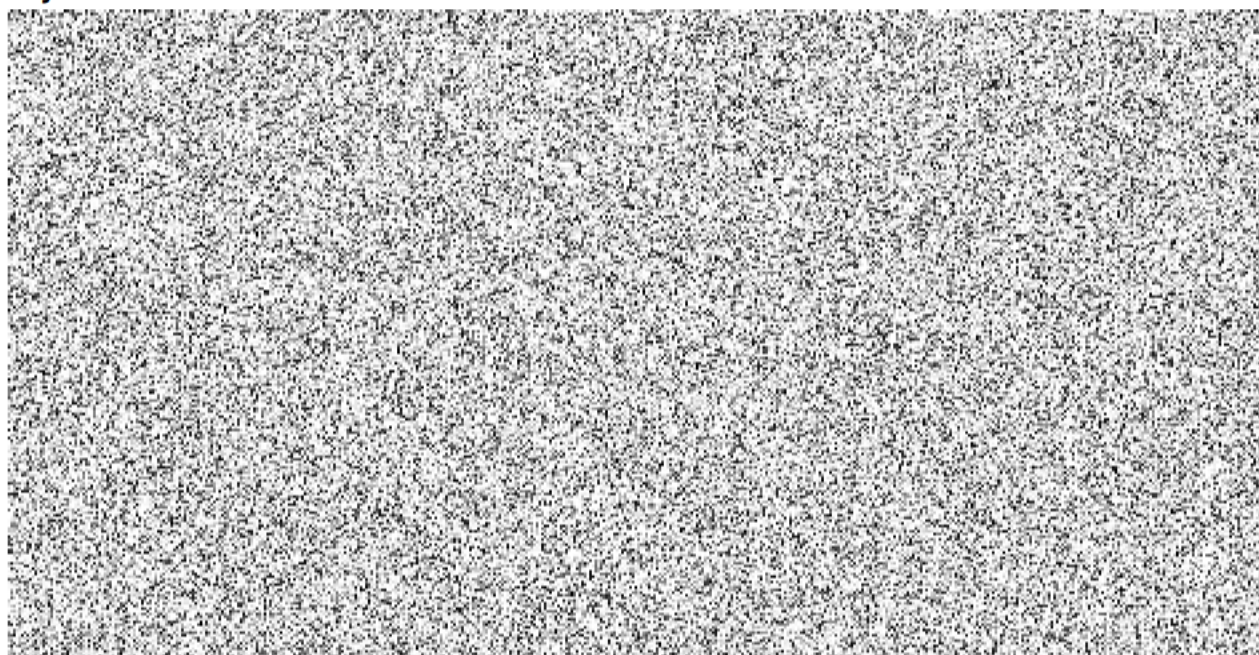


Table C.2.8.2 CBC and Peaking Factor of the Reference Cycling Scheme – equilibrium Cycle:

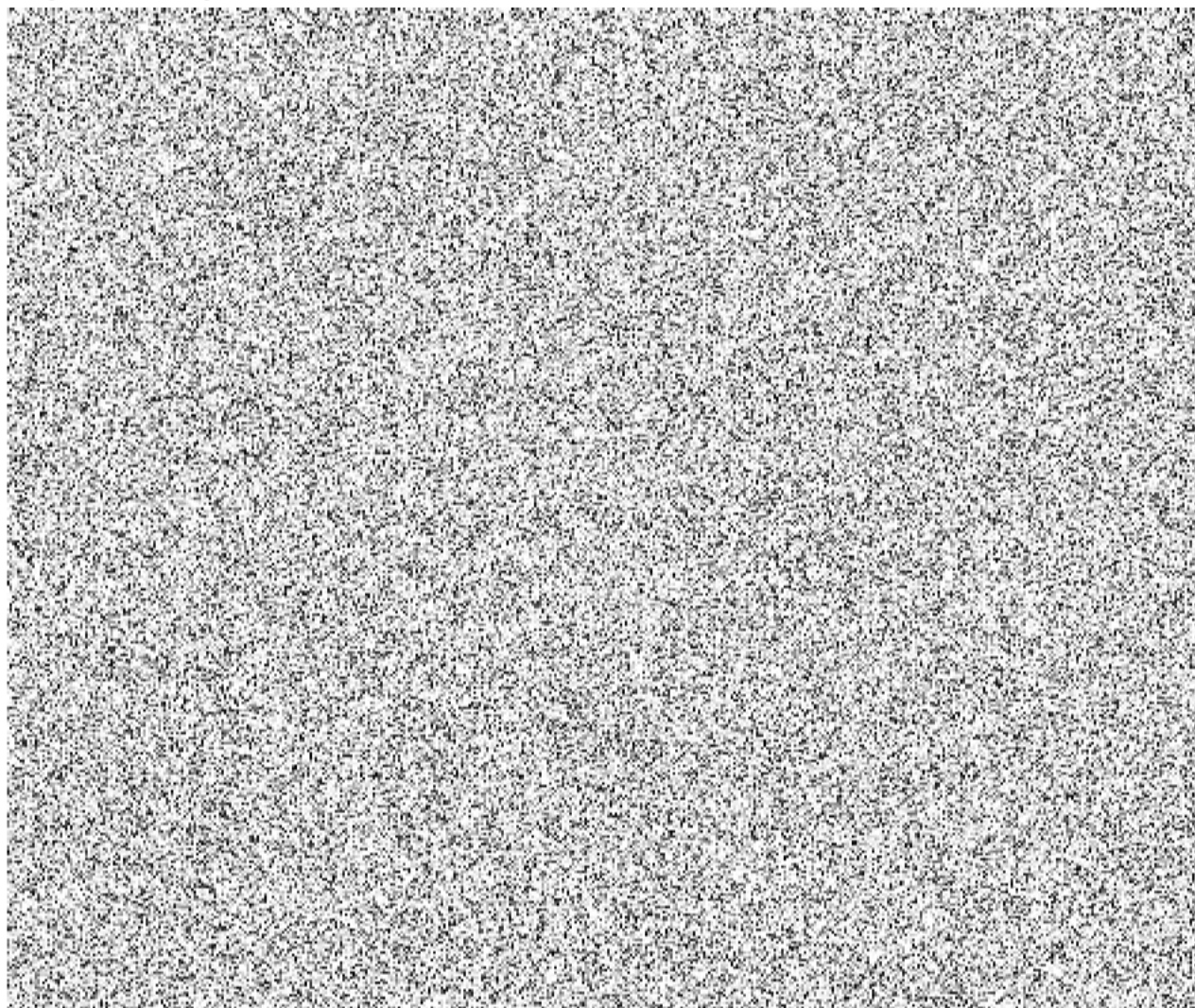


Table C.2.8.3 Shuffling Information of the Reference Cycling Scheme – equilibrium Cycle

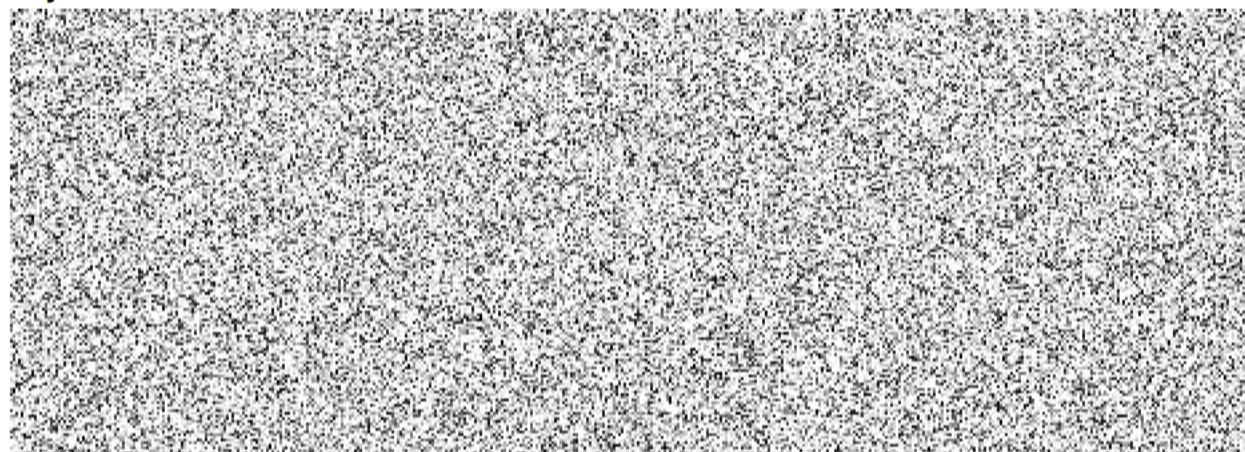


Table C.2.8.4 Key Safety Parameters and Events Specific Data – equilibrium Cycle:

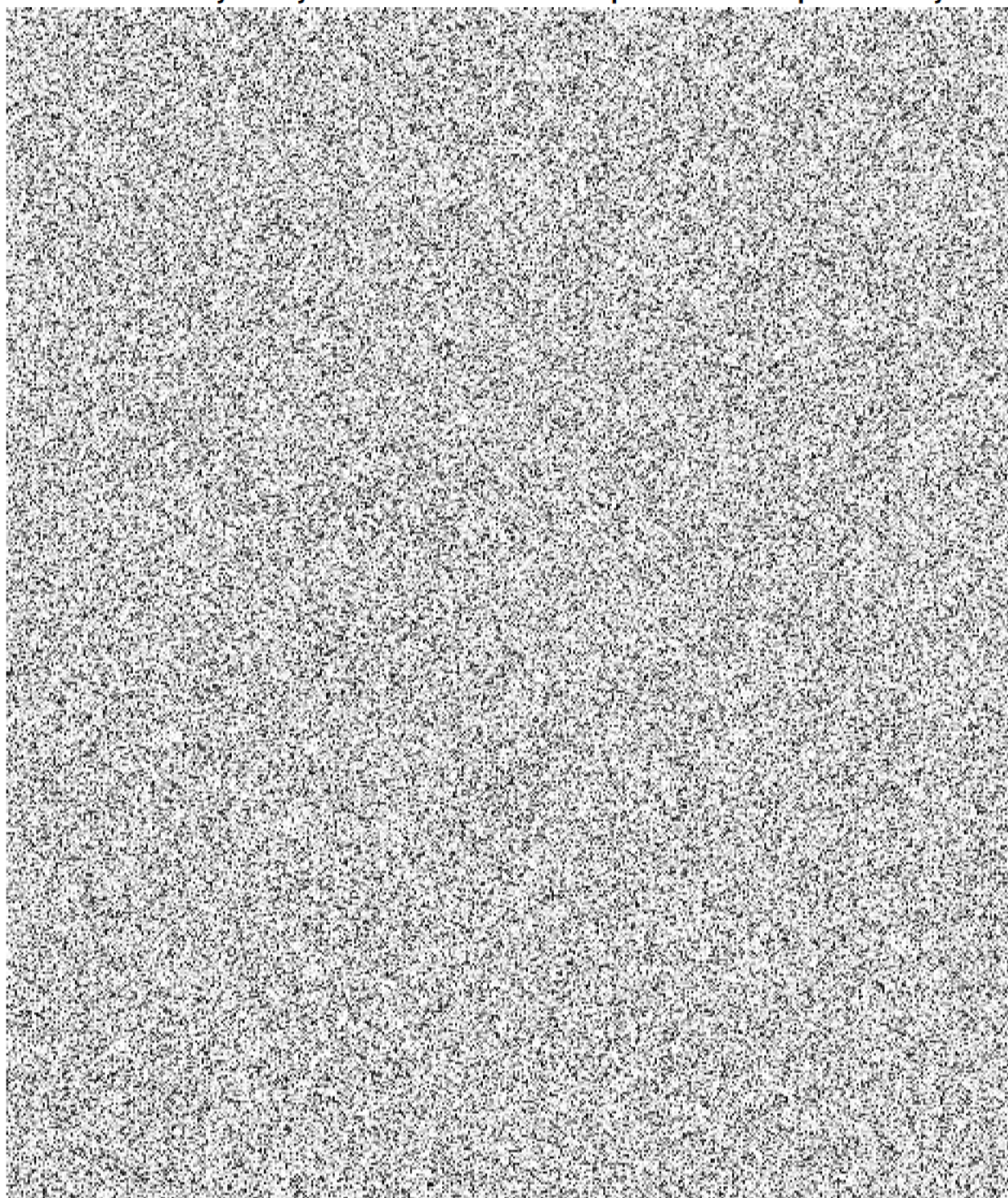
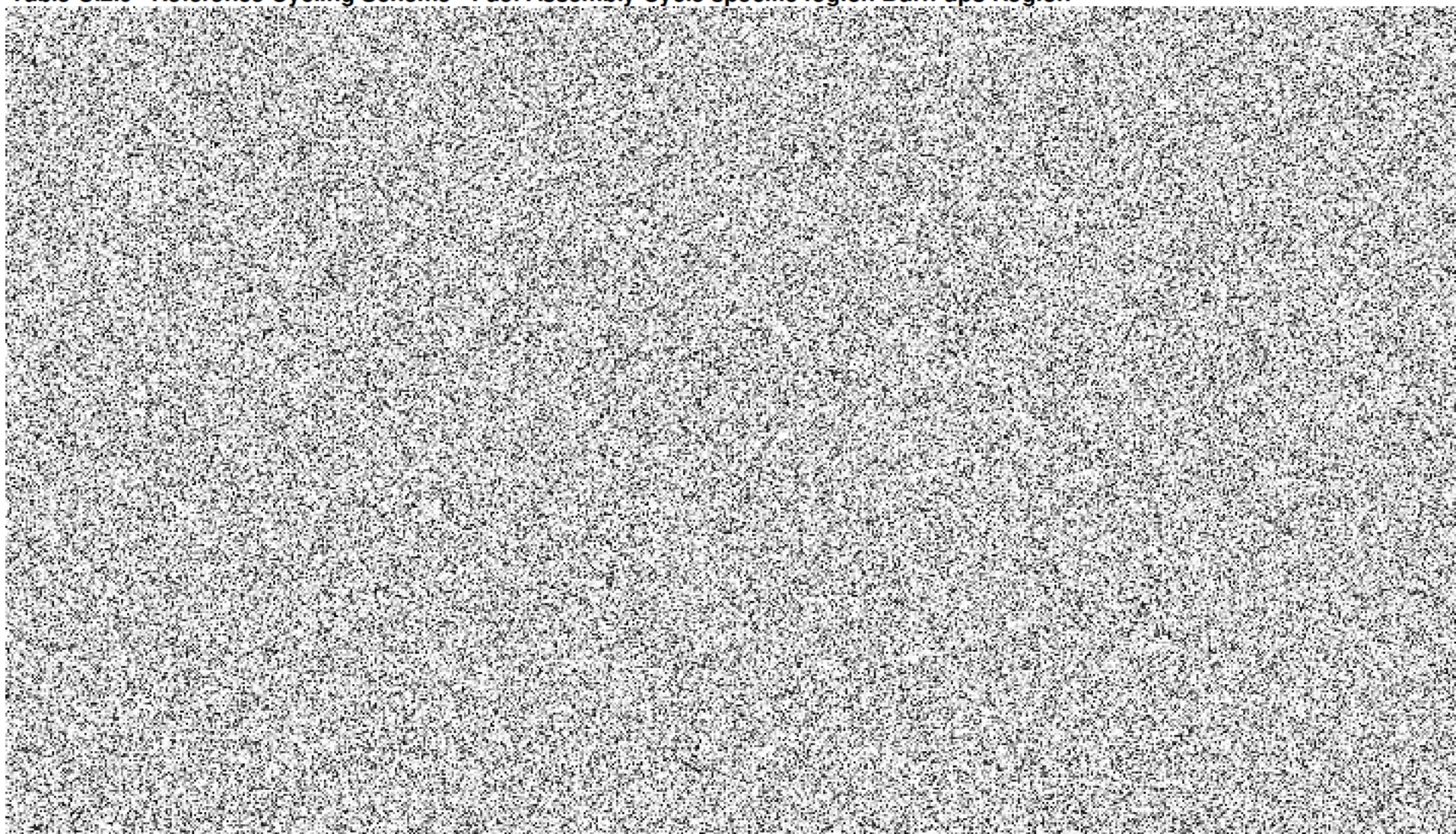
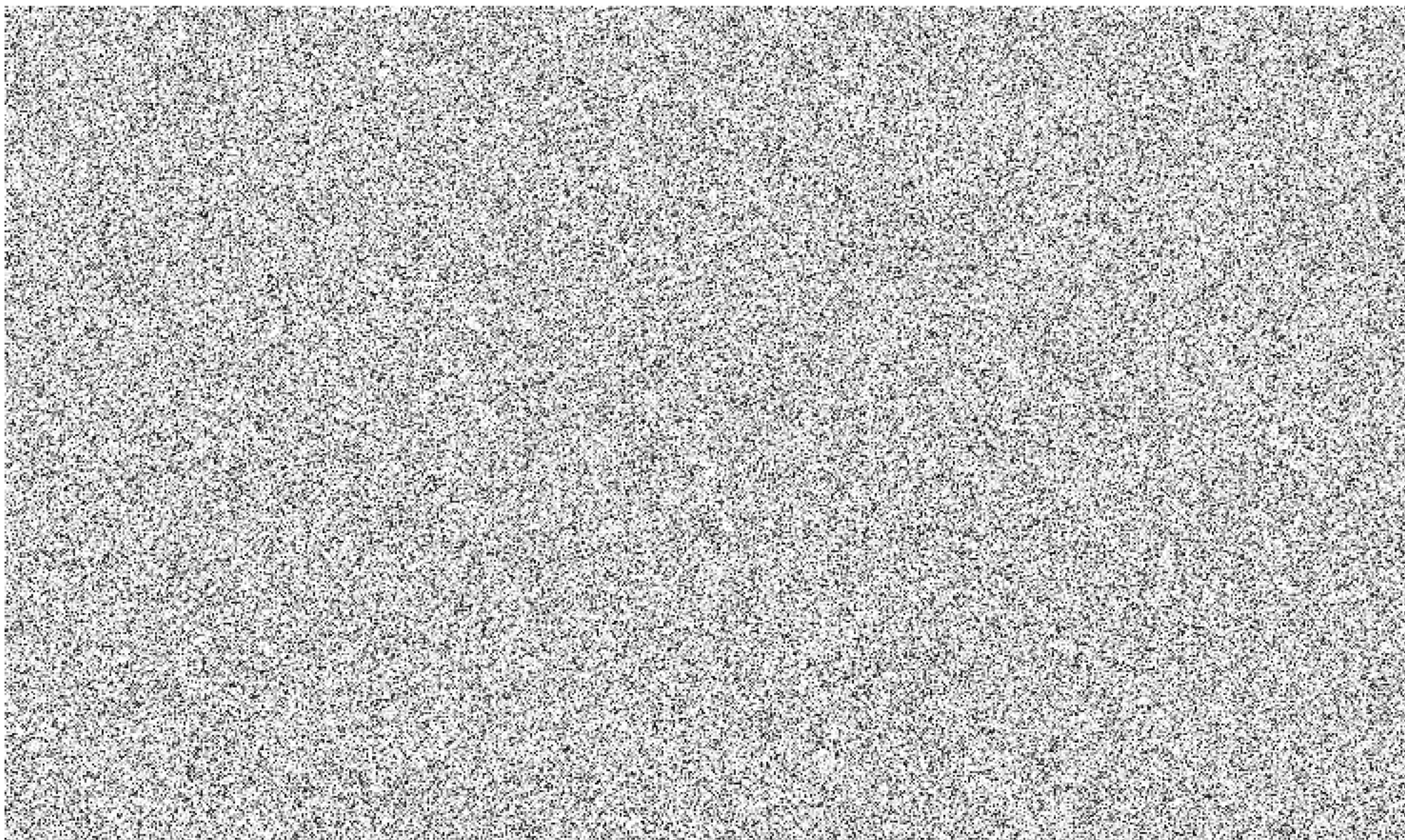
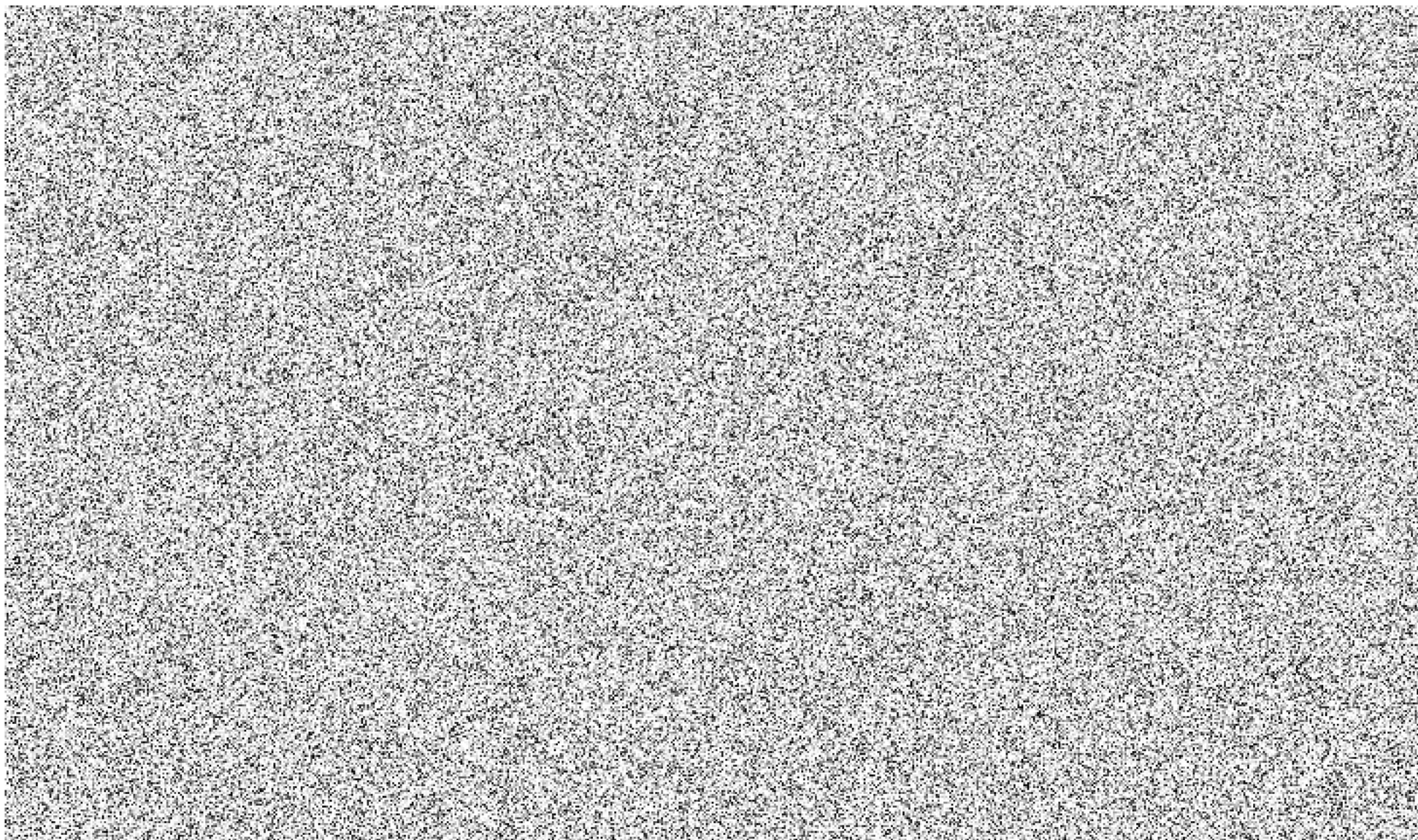


Table C.2.9 Reference Cycling Scheme - Fuel Assembly Cycle specific region Burn-ups Region







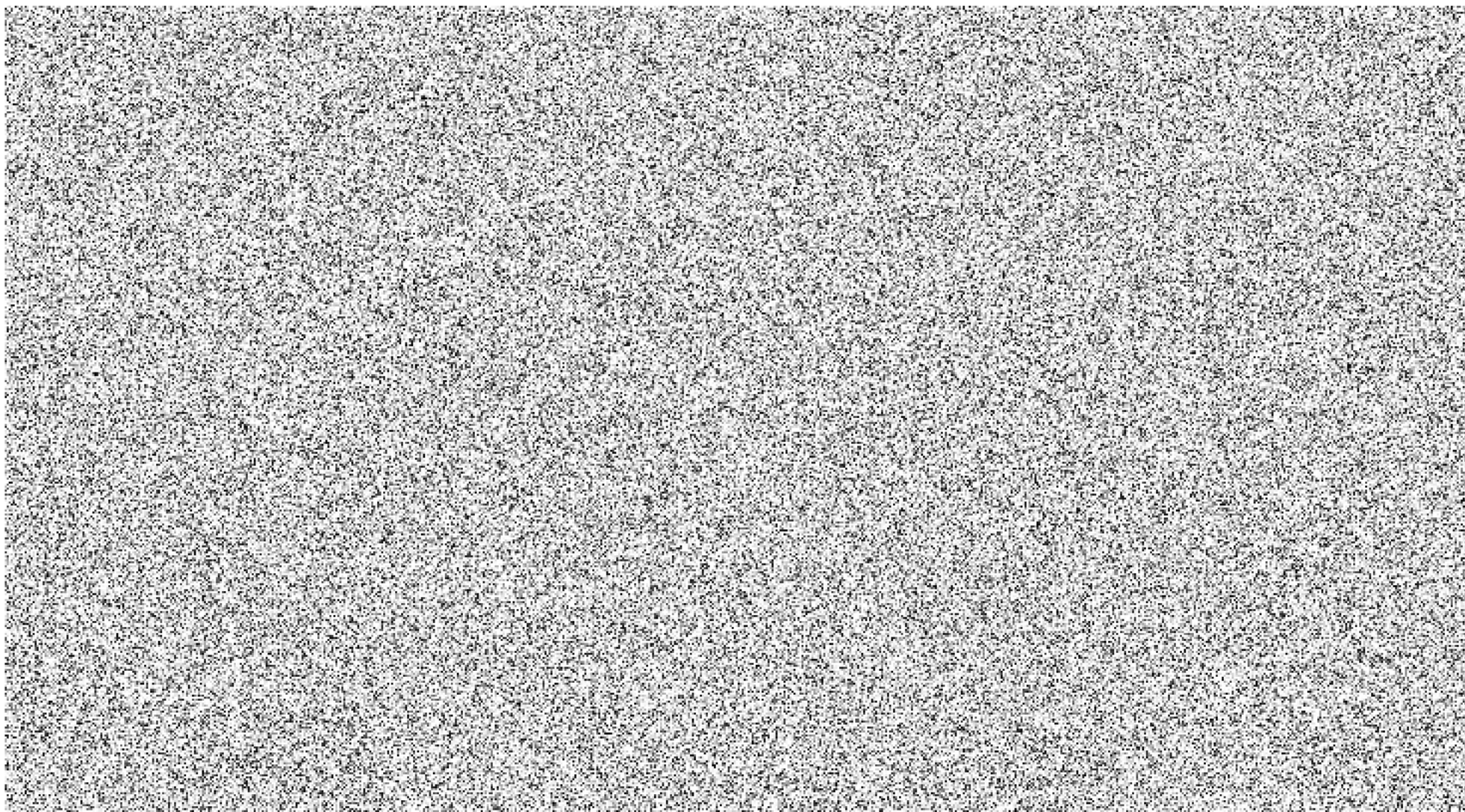


Table C.2.10 Calculation Uncertainty of [REDACTED]

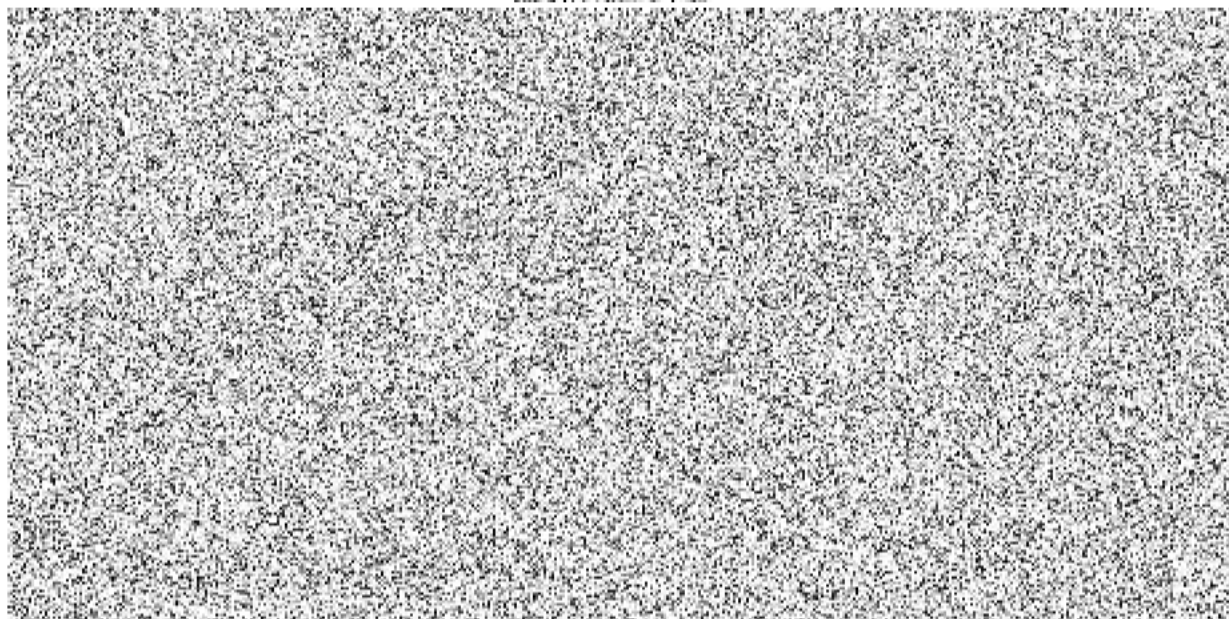


Table C.2.11 Reactivity Bias of [REDACTED]

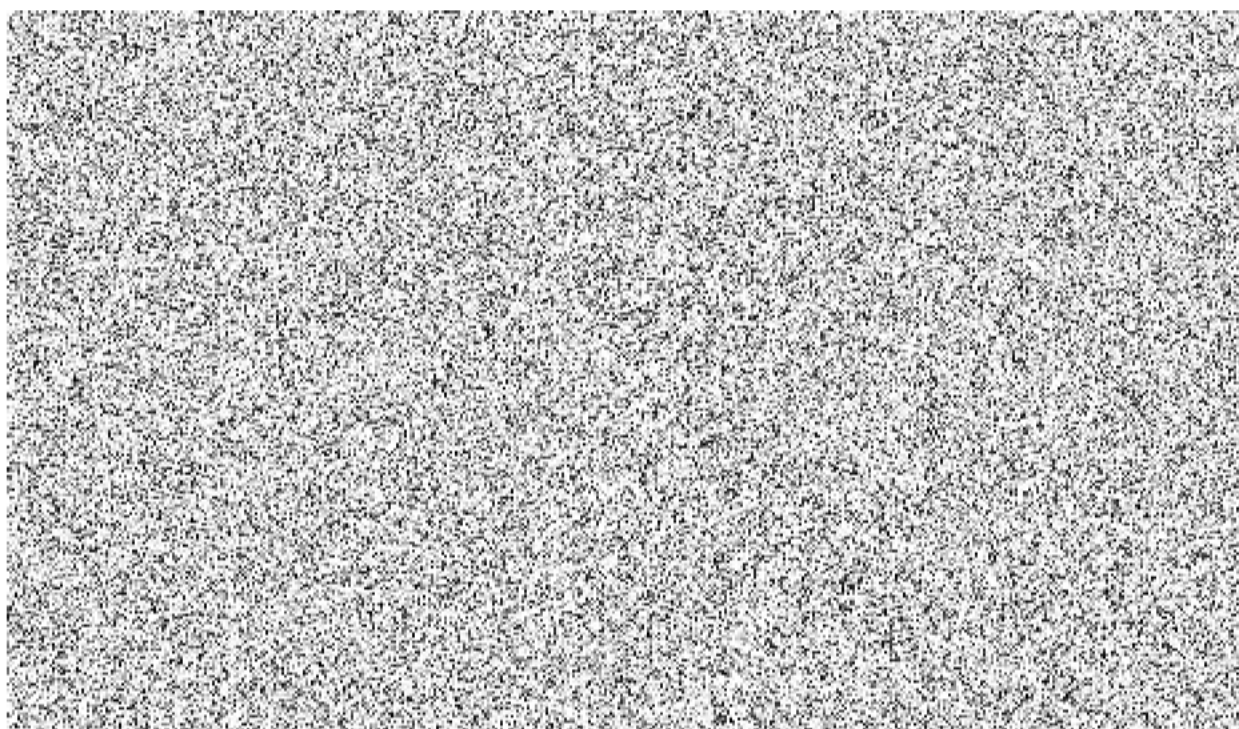
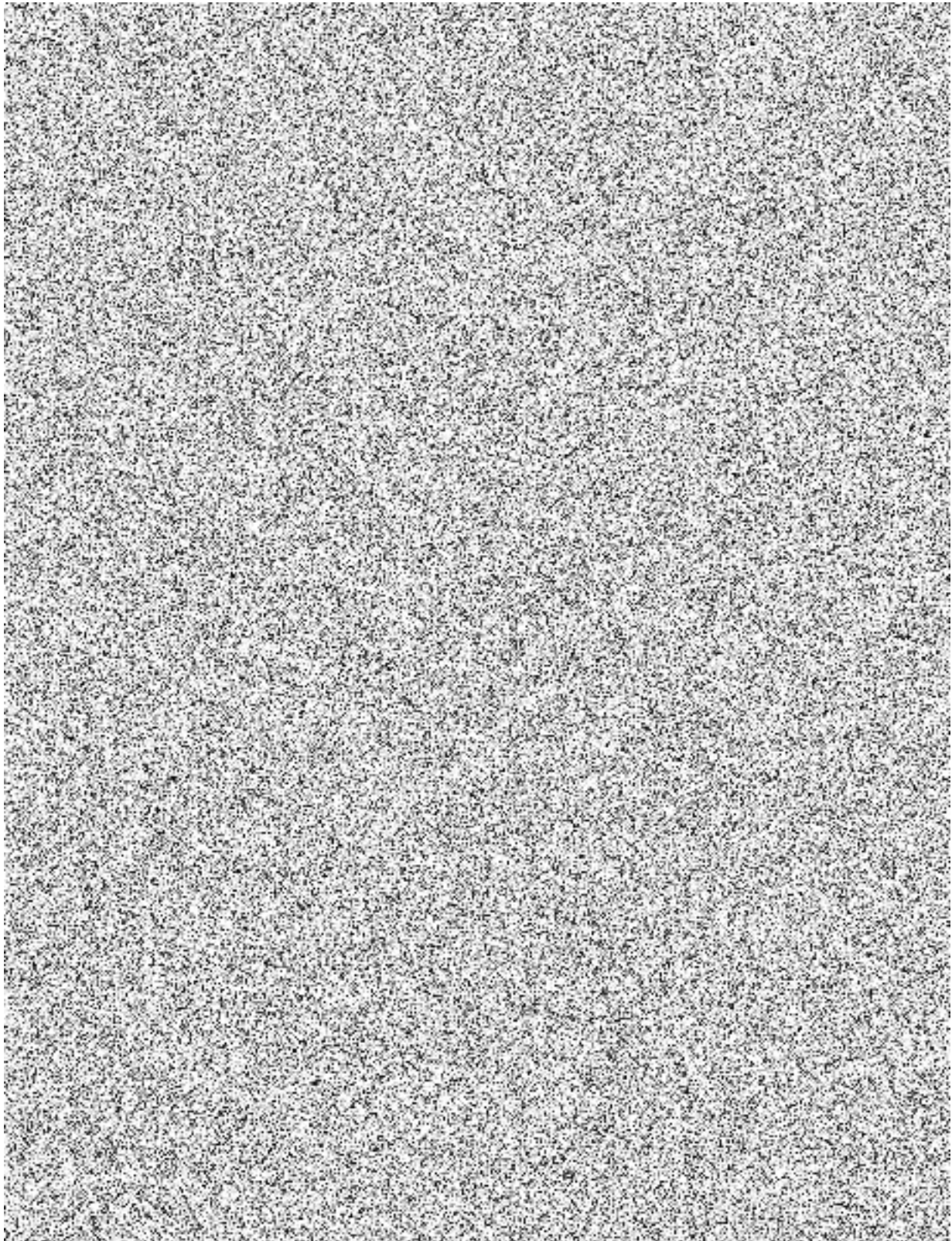


Table C.2.10 Summary of Overall Results for Stretch-out Operation at EOC



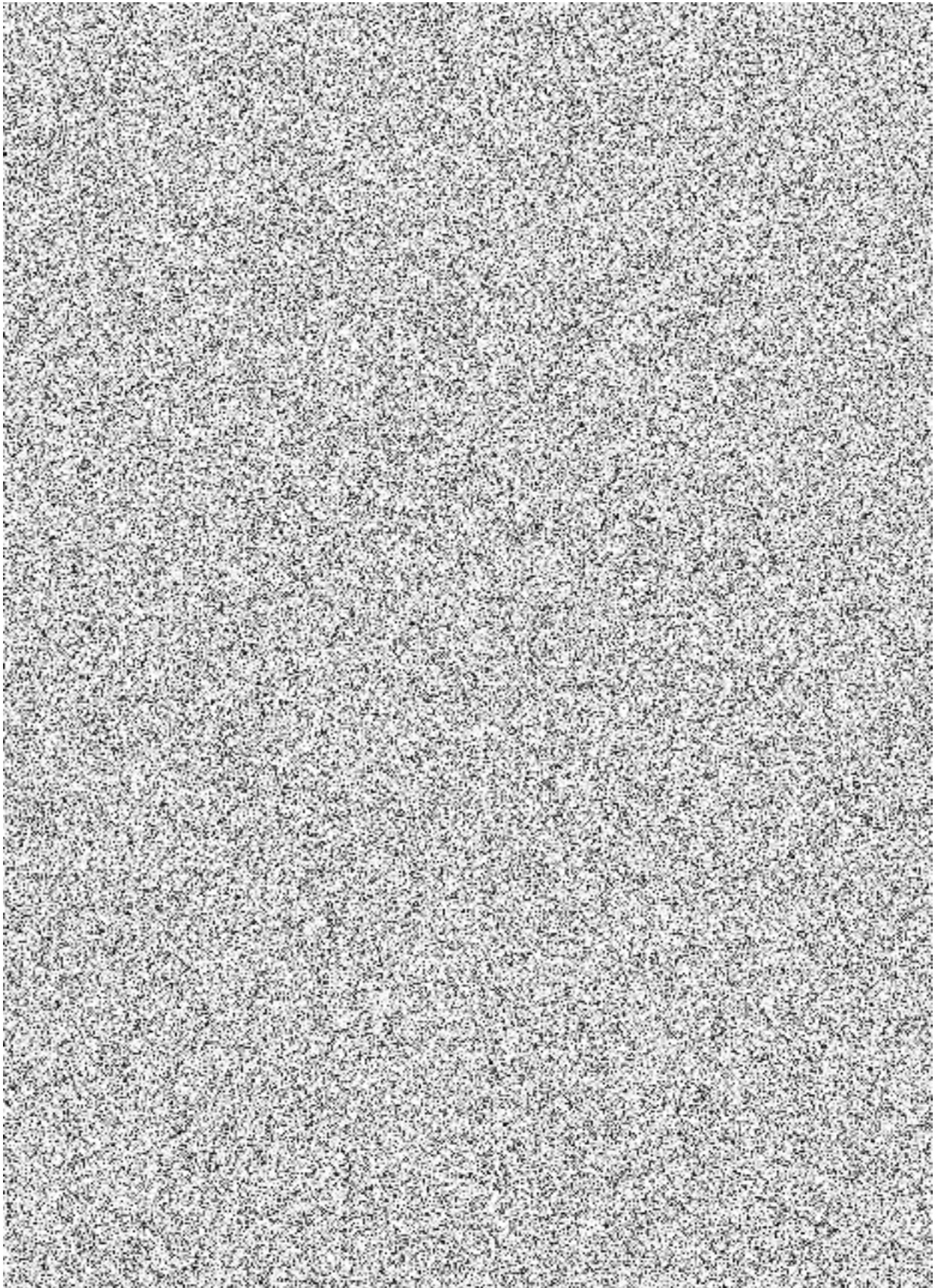


Figure C.2.1 Core Loading Patterns with FA Burn-up and Power of First Core (BOC)

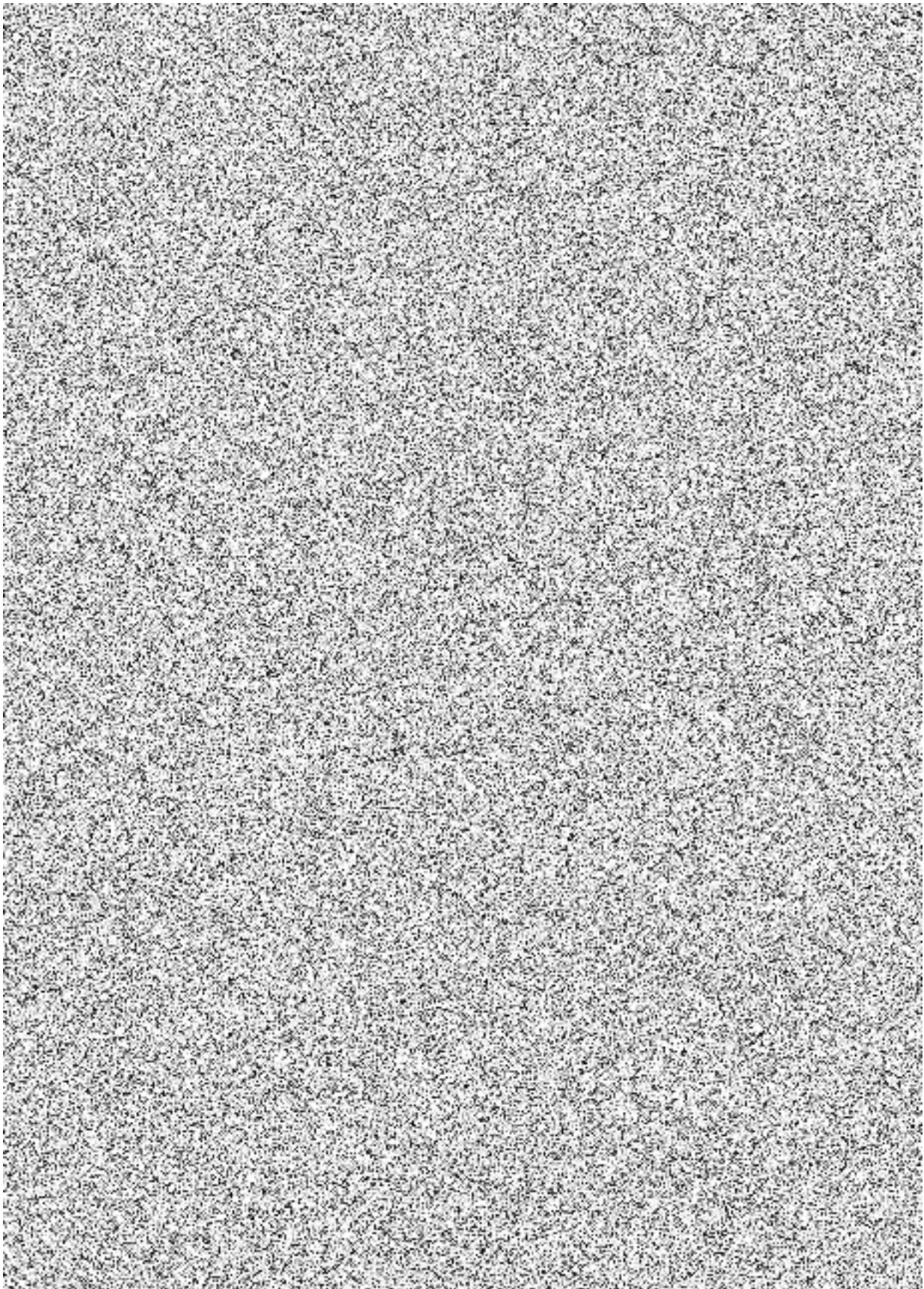


Figure C.2.1 Core Loading Patterns with FA Burn-up and Power of First Core (EOC)

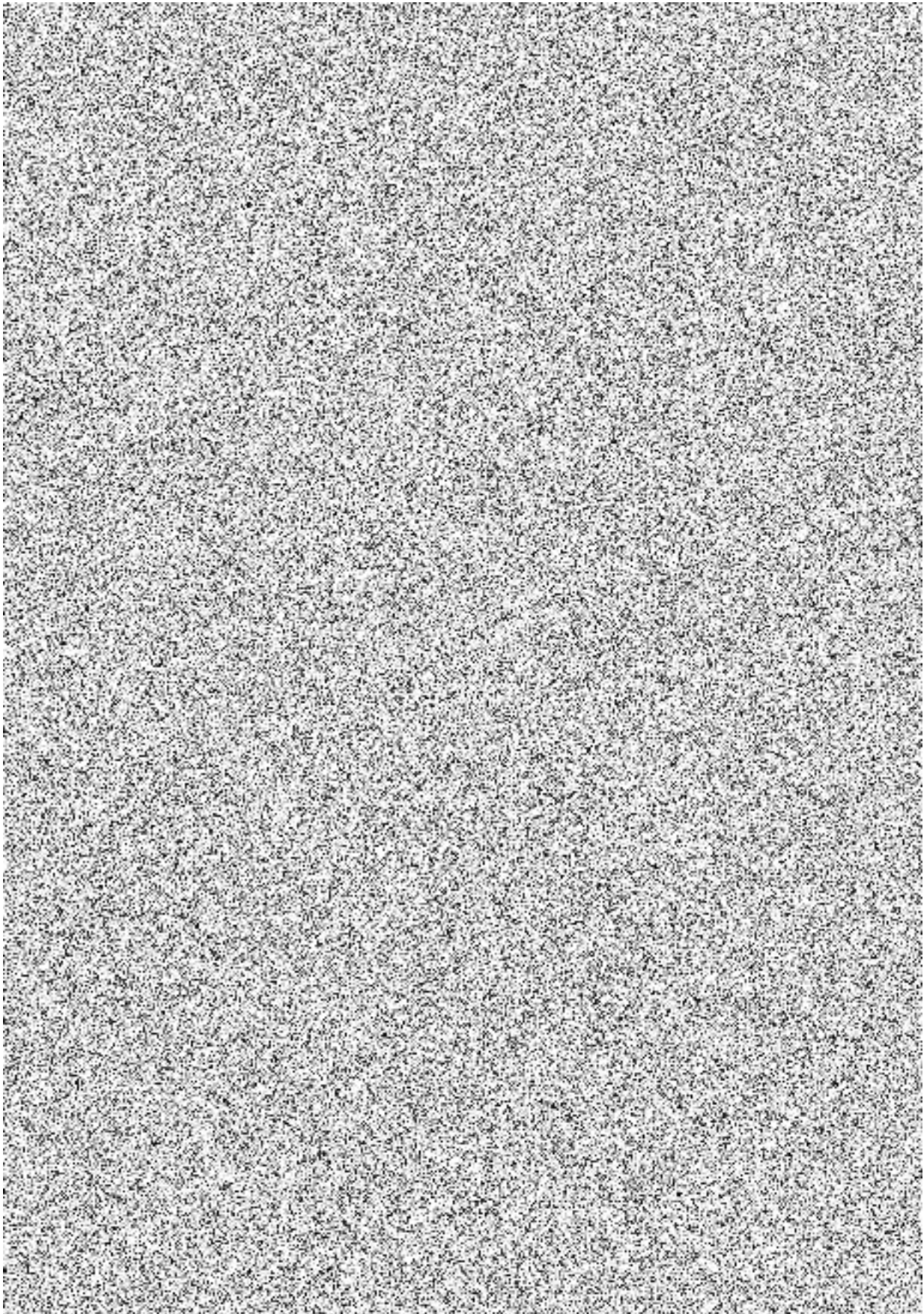


Figure C.2.2 Core Loading Patterns with FA Burn-up and Power of 2nd Cycle (BOC)

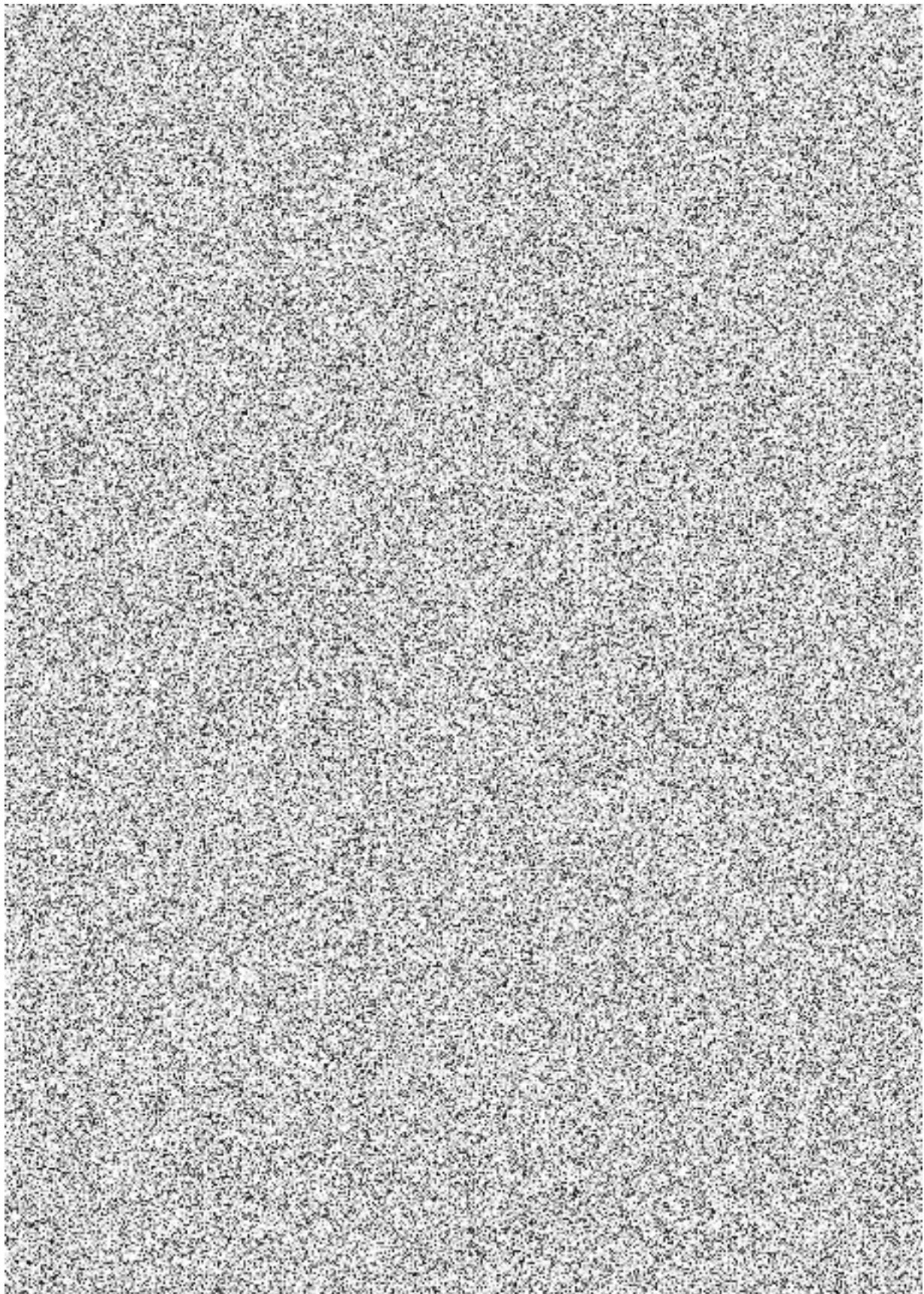


Figure C.2.2 Core Loading Patterns with FA Burn-up and Power of 2nd Cycle (EOC)

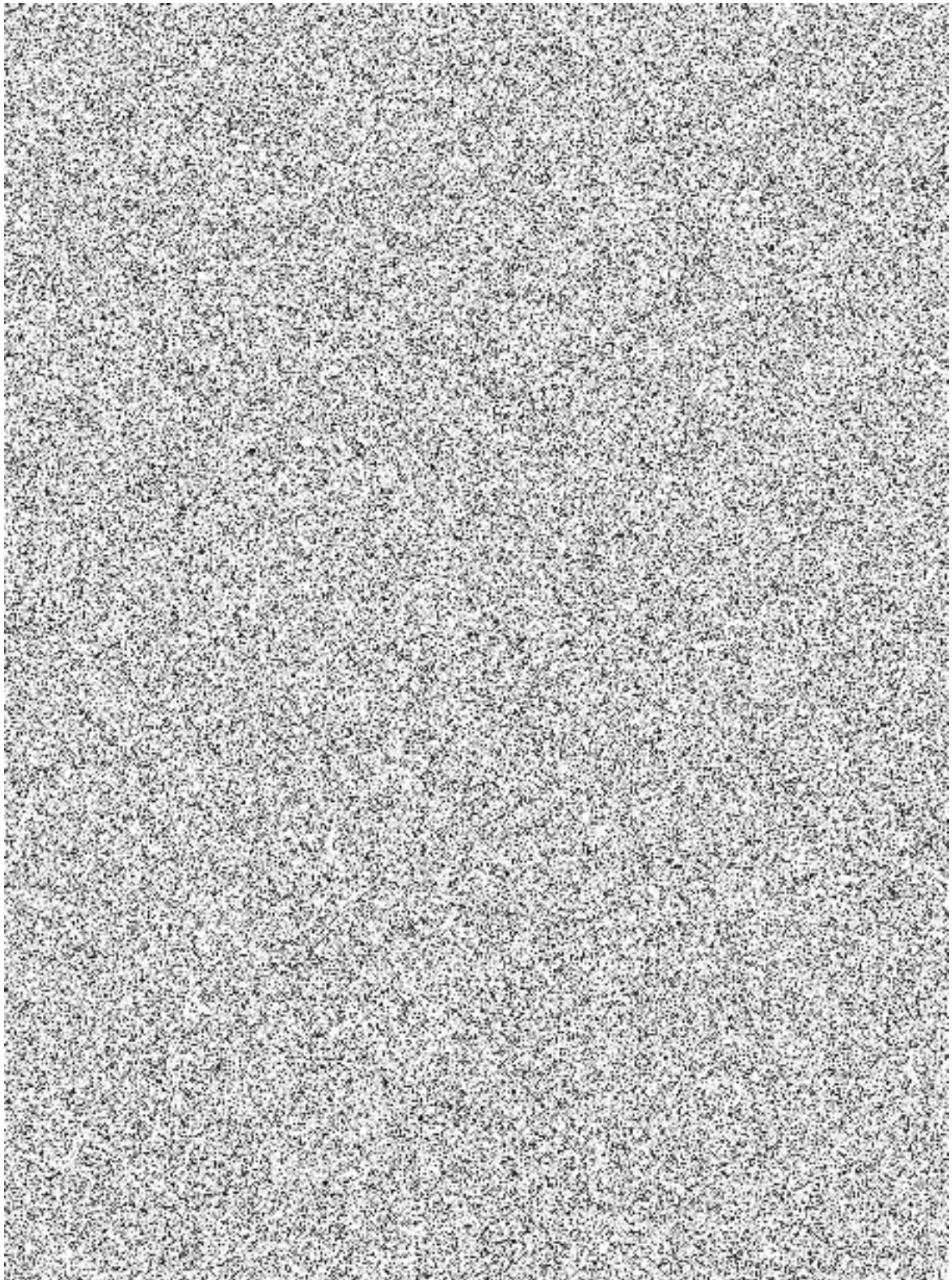


Figure C.2.3 Core Loading Patterns with FA Burn-up and Power of 3rd Cycle (BOC)

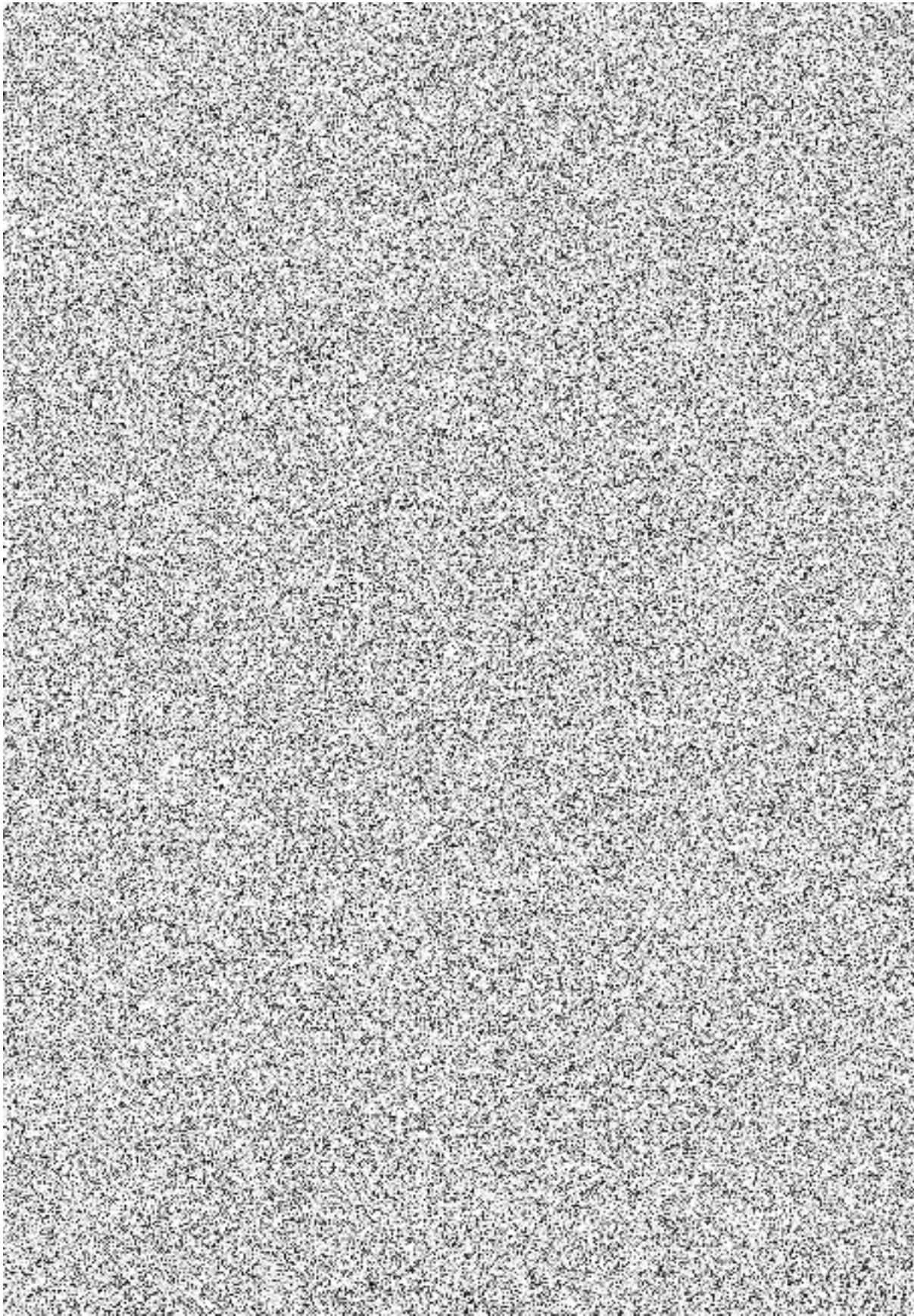


Figure C.2.3 Core Loading Patterns with FA Burn-up and Power of 3rd Cycle (EOC)

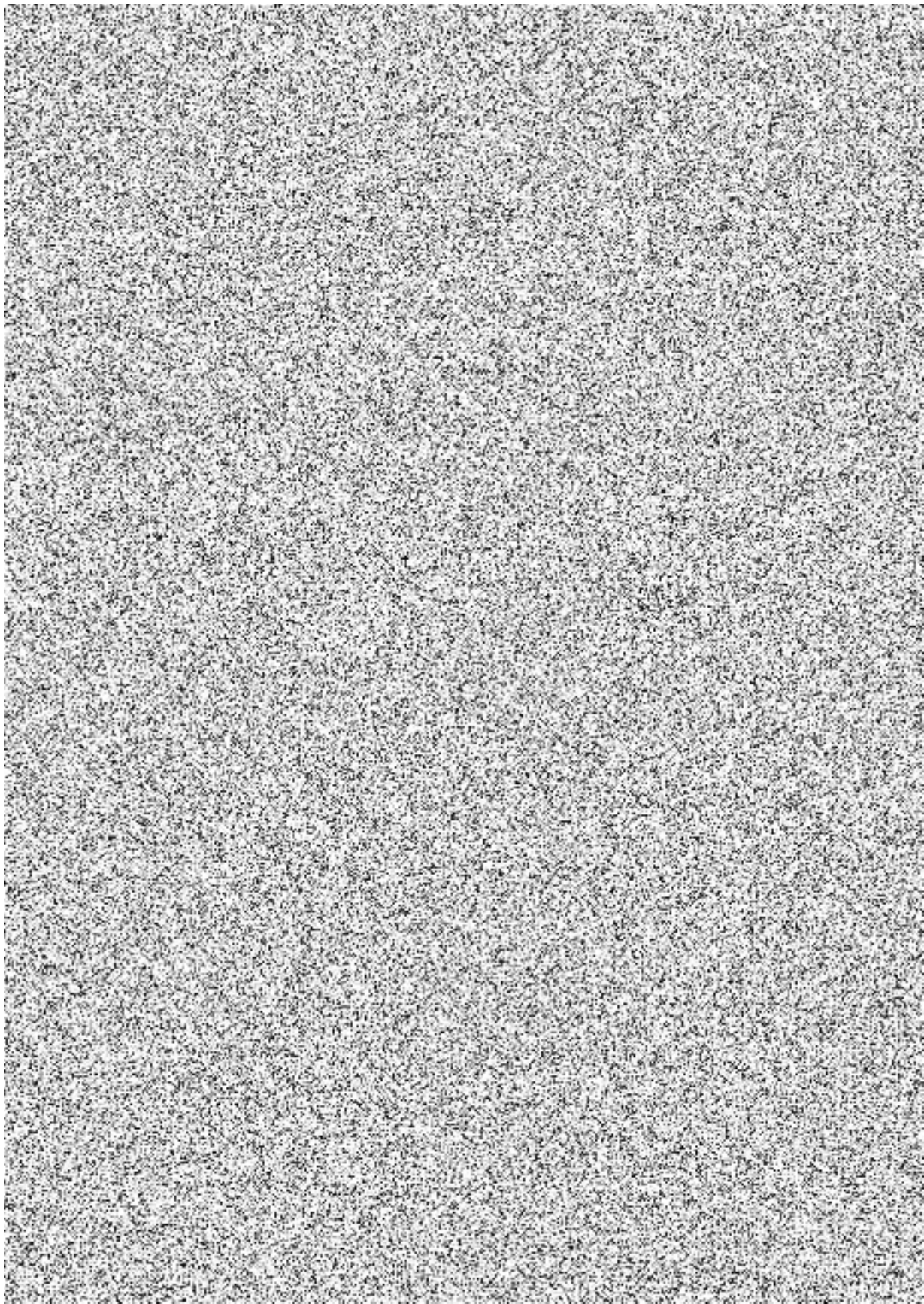


Figure C.2.4 Core Loading Patterns with FA Burn-up and Power of 4th Cycle (BOC)

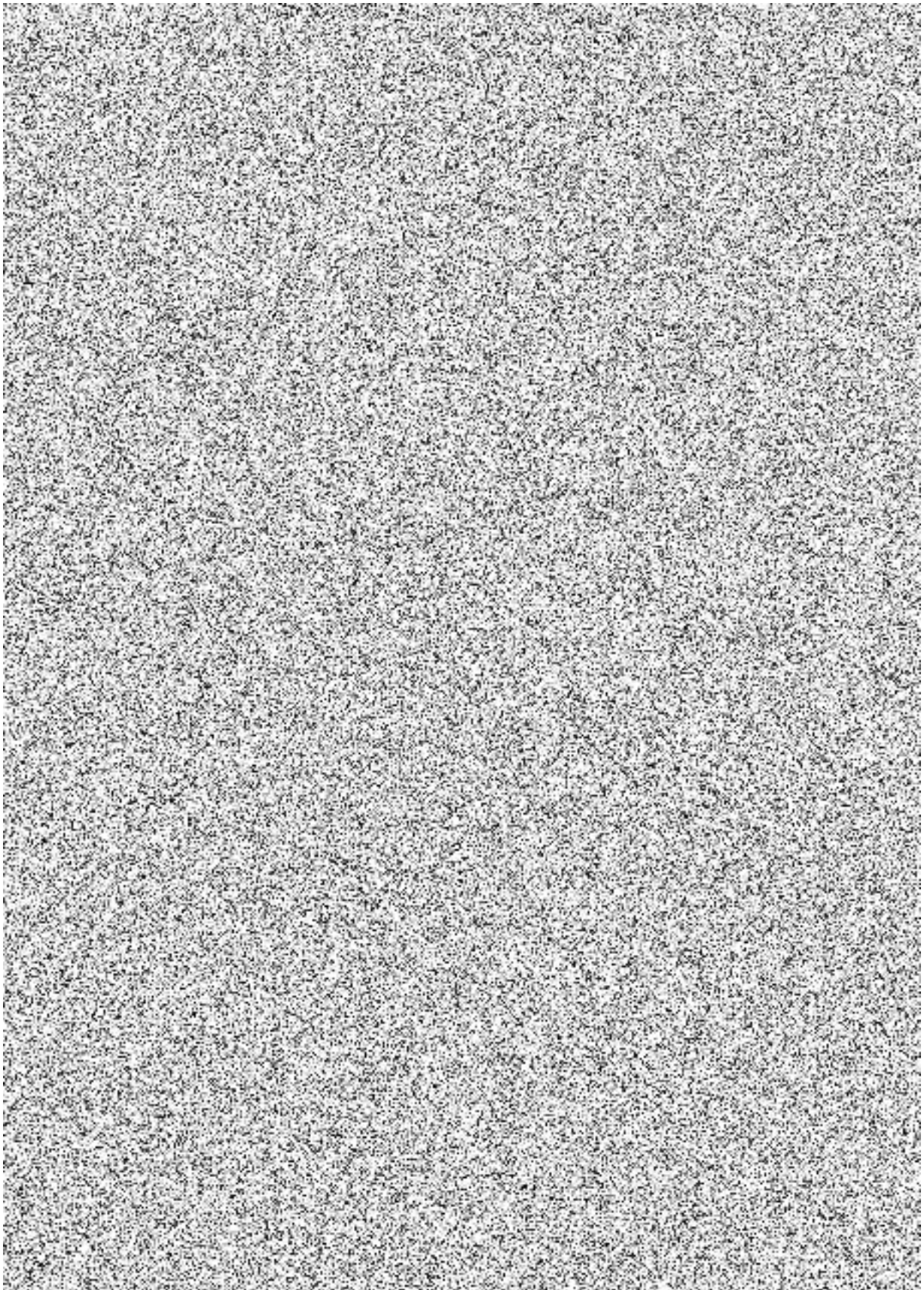


Figure C.2.4 Core Loading Patterns with FA Burn-up and Power of 4th Cycle (EOC)

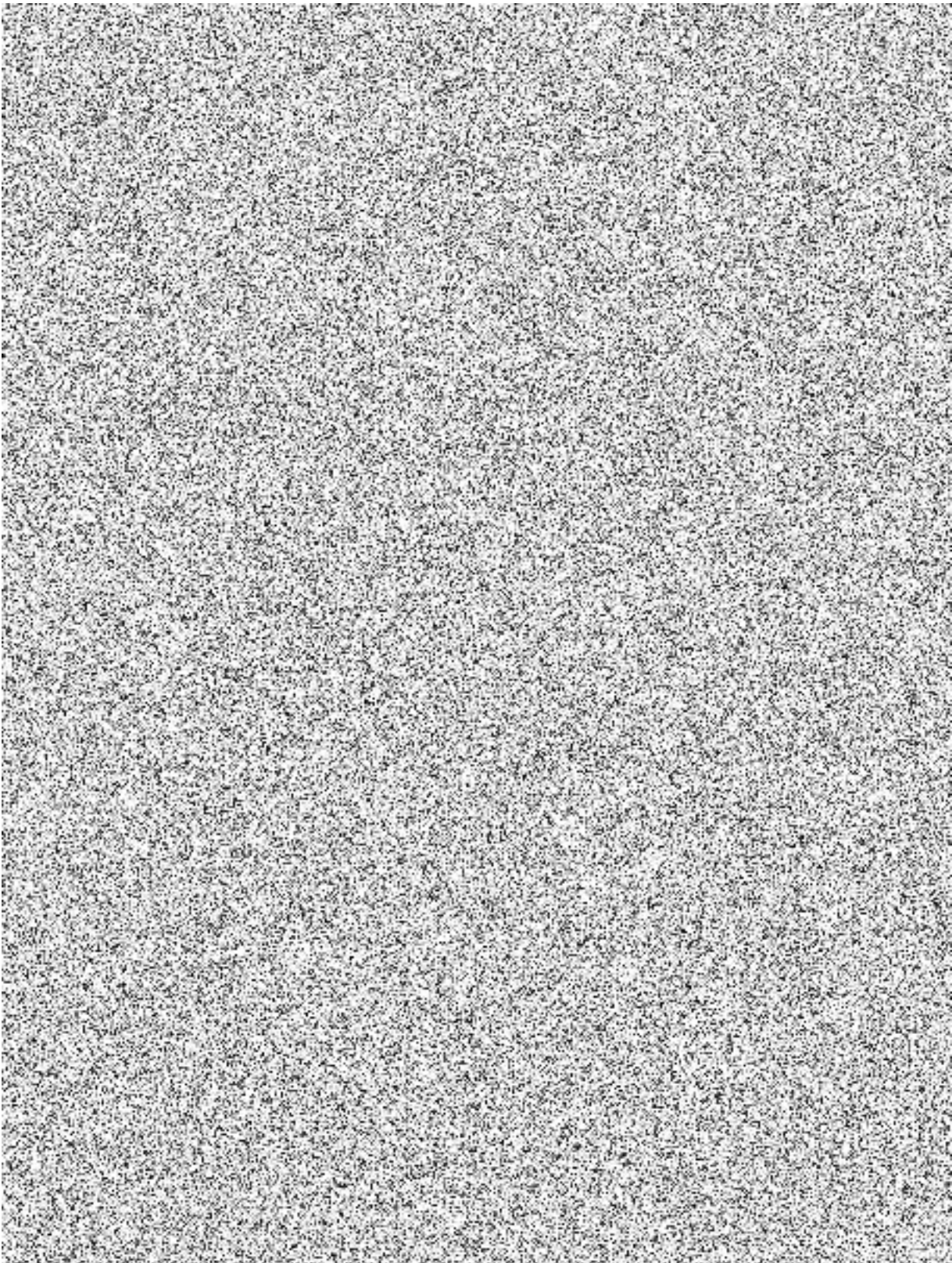


Figure C.2.5 Core Loading Patterns with FA Burn-up and Power of 5th Cycle (BOC)

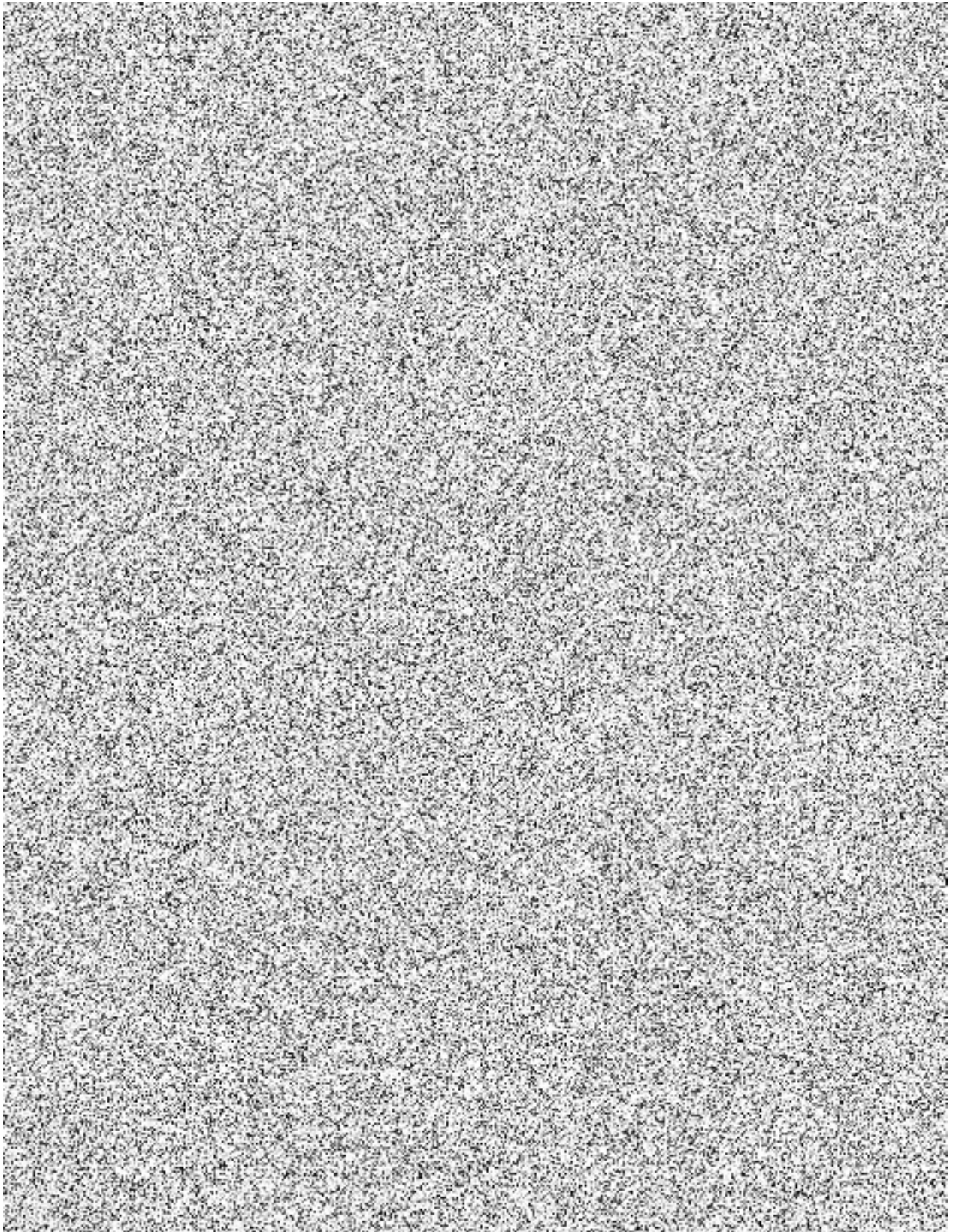


Figure C.2.5 Core Loading Patterns with FA Burn-up and Power of 5th Cycle (EOC)

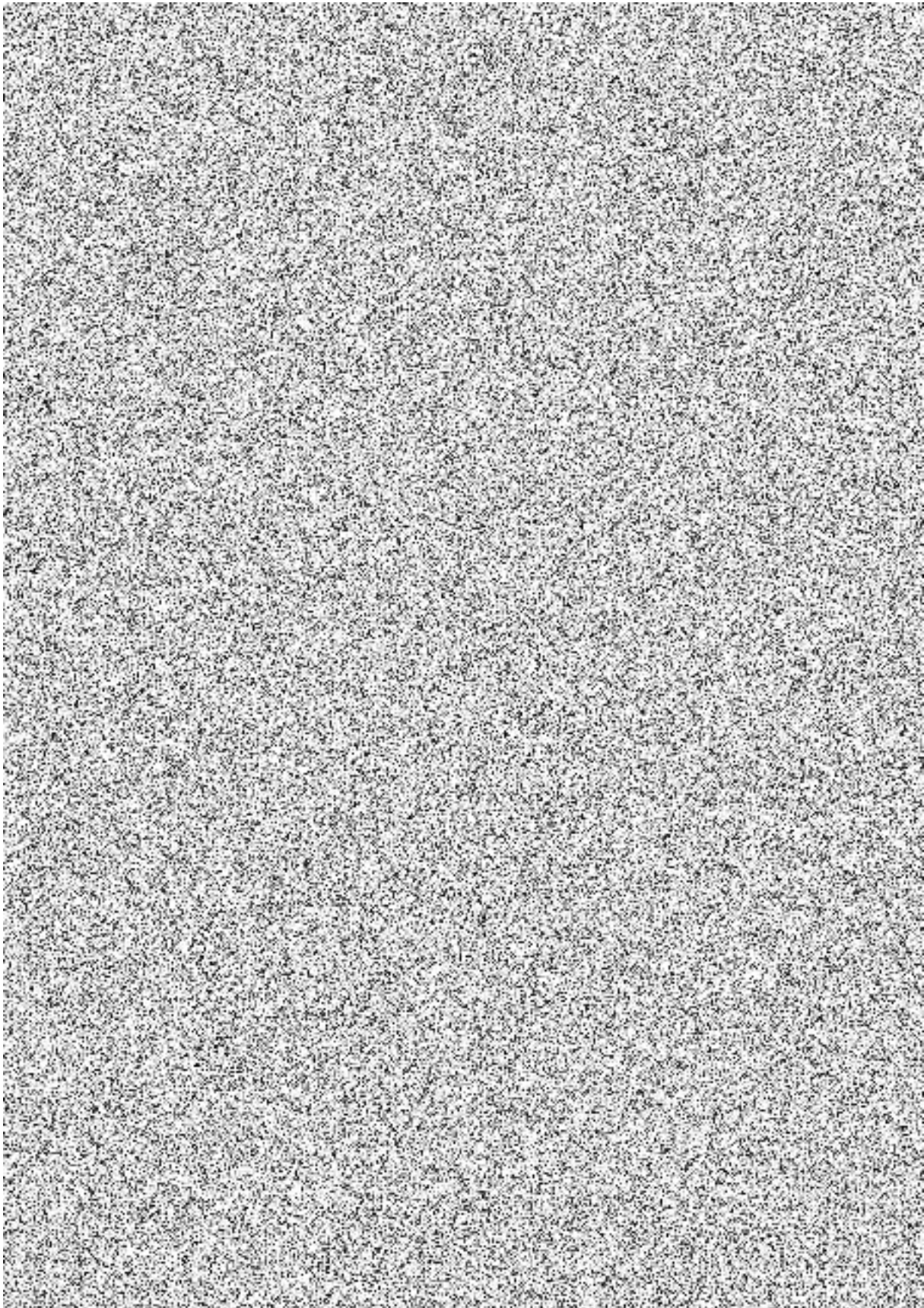


Figure C.2.6 Core Loading Patterns with FA Burn-up and Power of 6th Cycle (BOC)

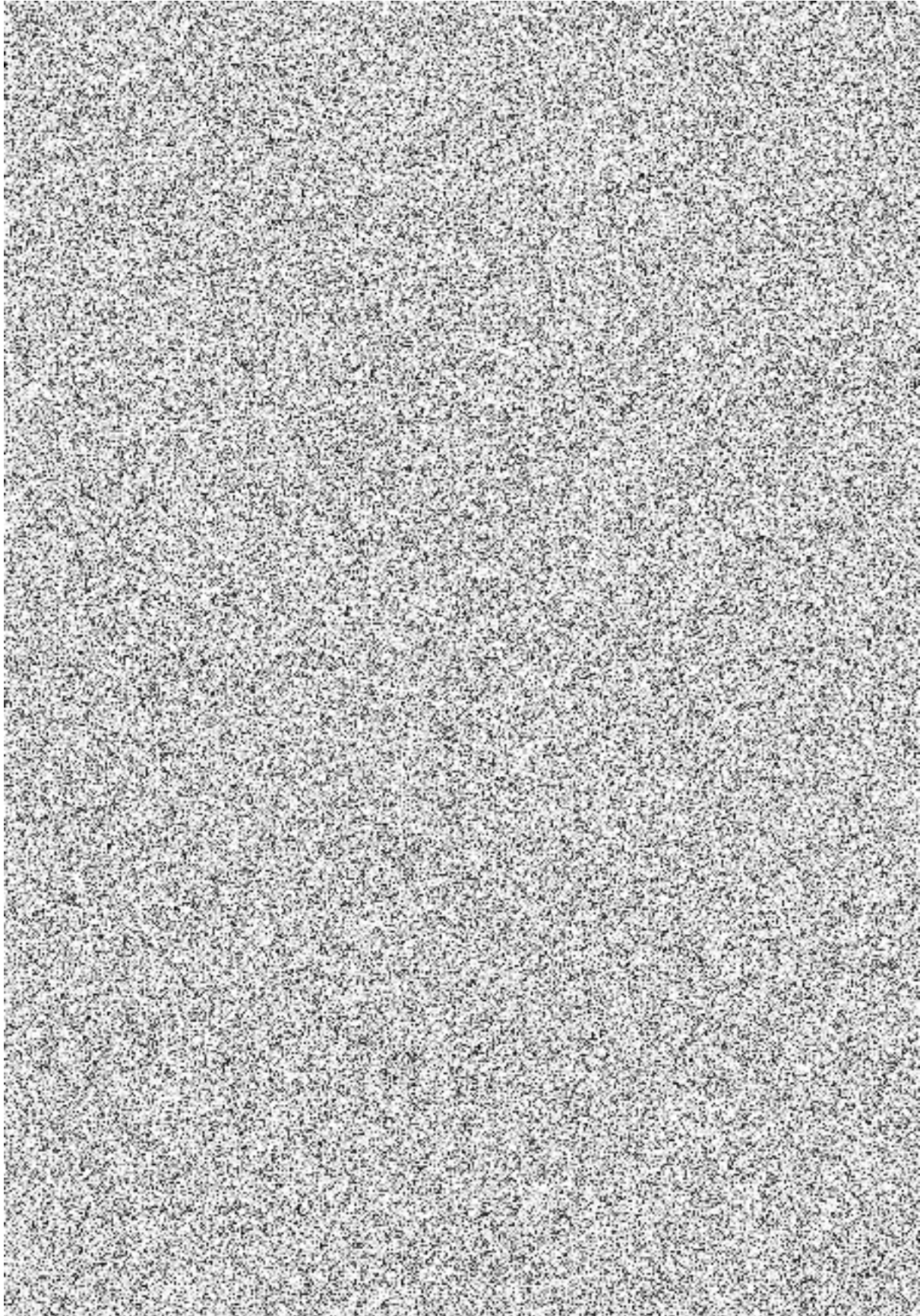


Figure C.2.6 Core Loading Patterns with FA Burn-up and Power of 6th Cycle (EOC)

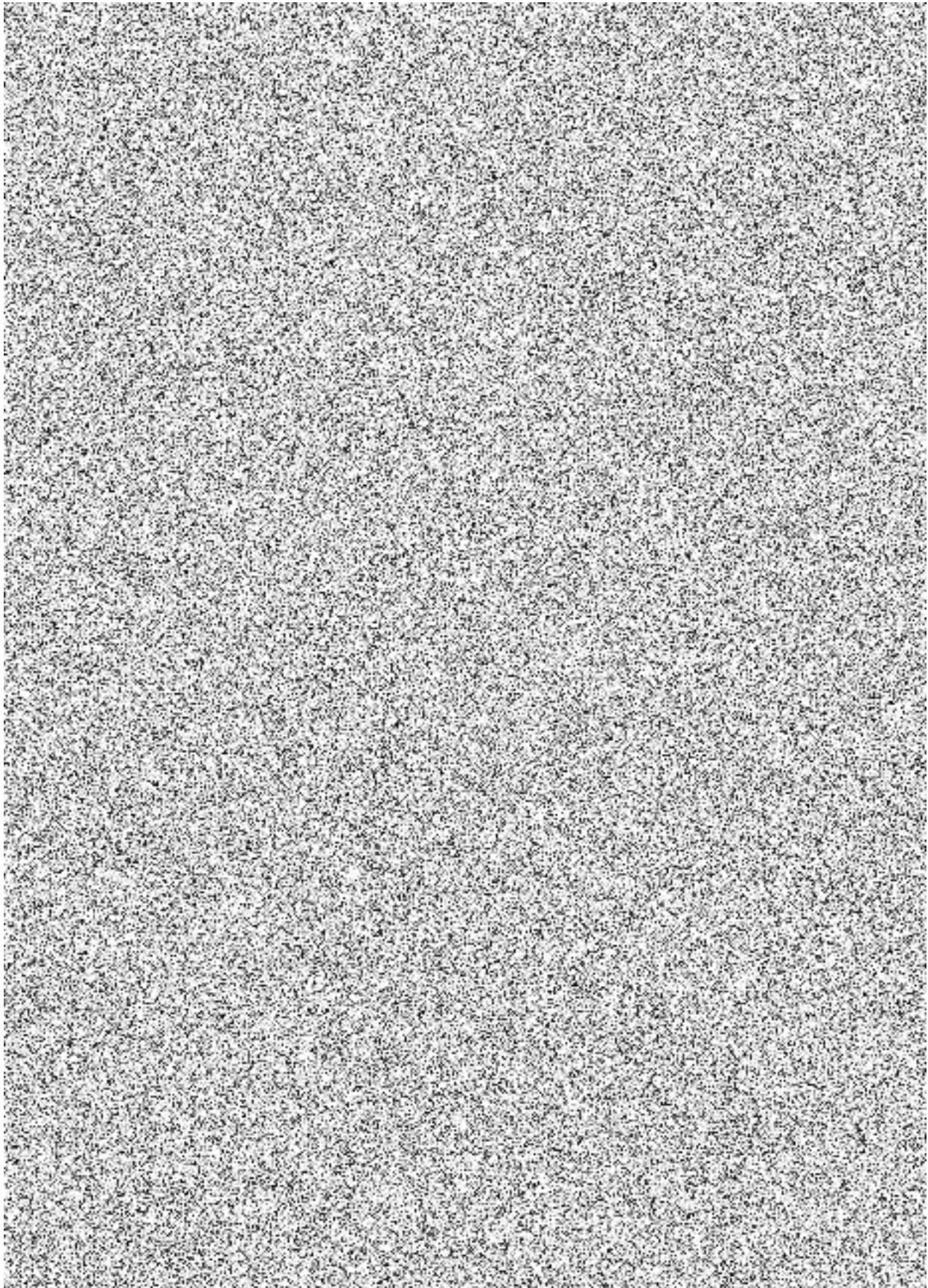


Figure C.2.7 Core Loading Patterns with FA Burn-up and Power of 7th Cycle (BOC)

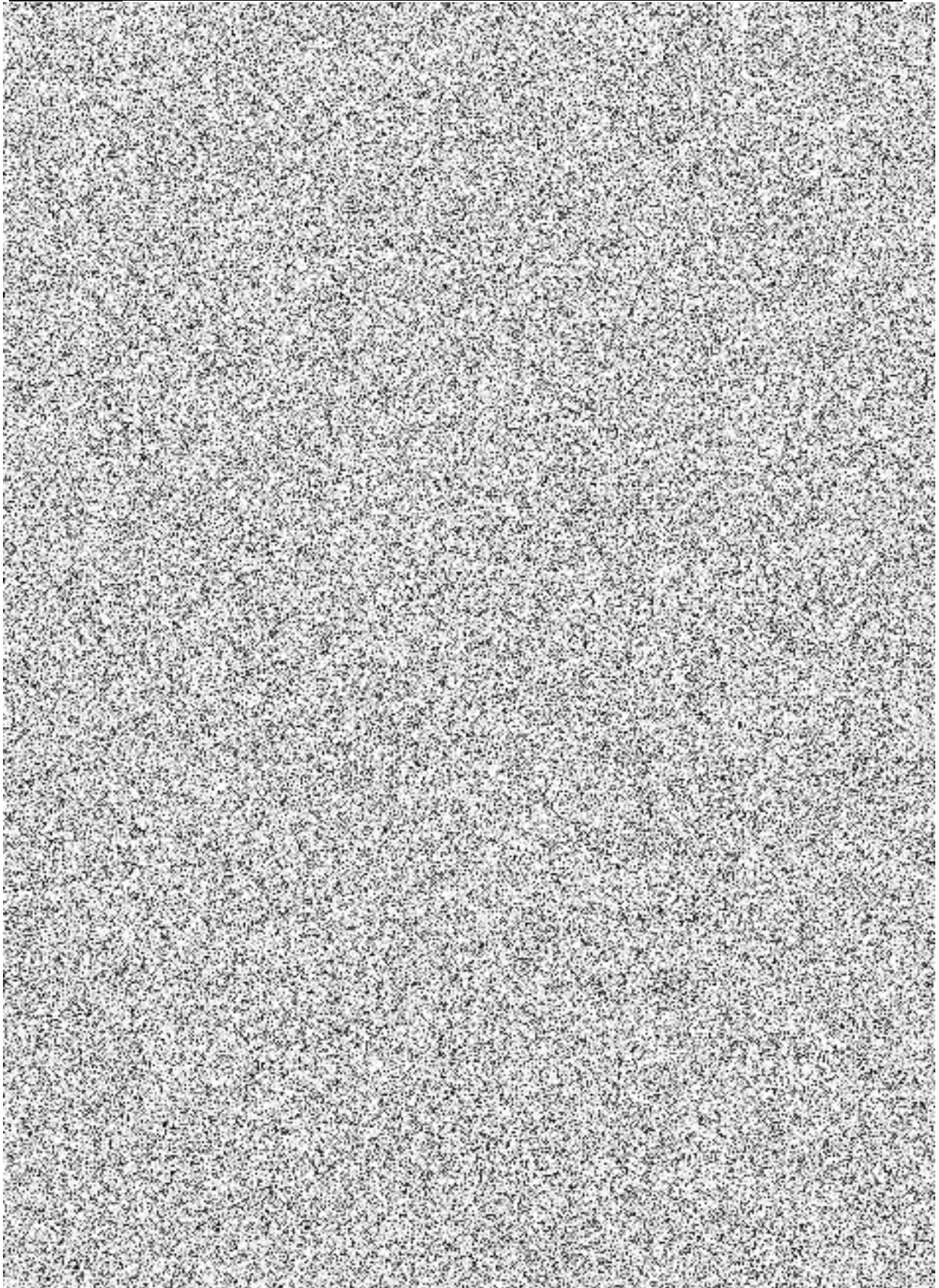


Figure C.2.7 Core Loading Patterns with FA Burn-up and Power of 7th Cycle (EOC)

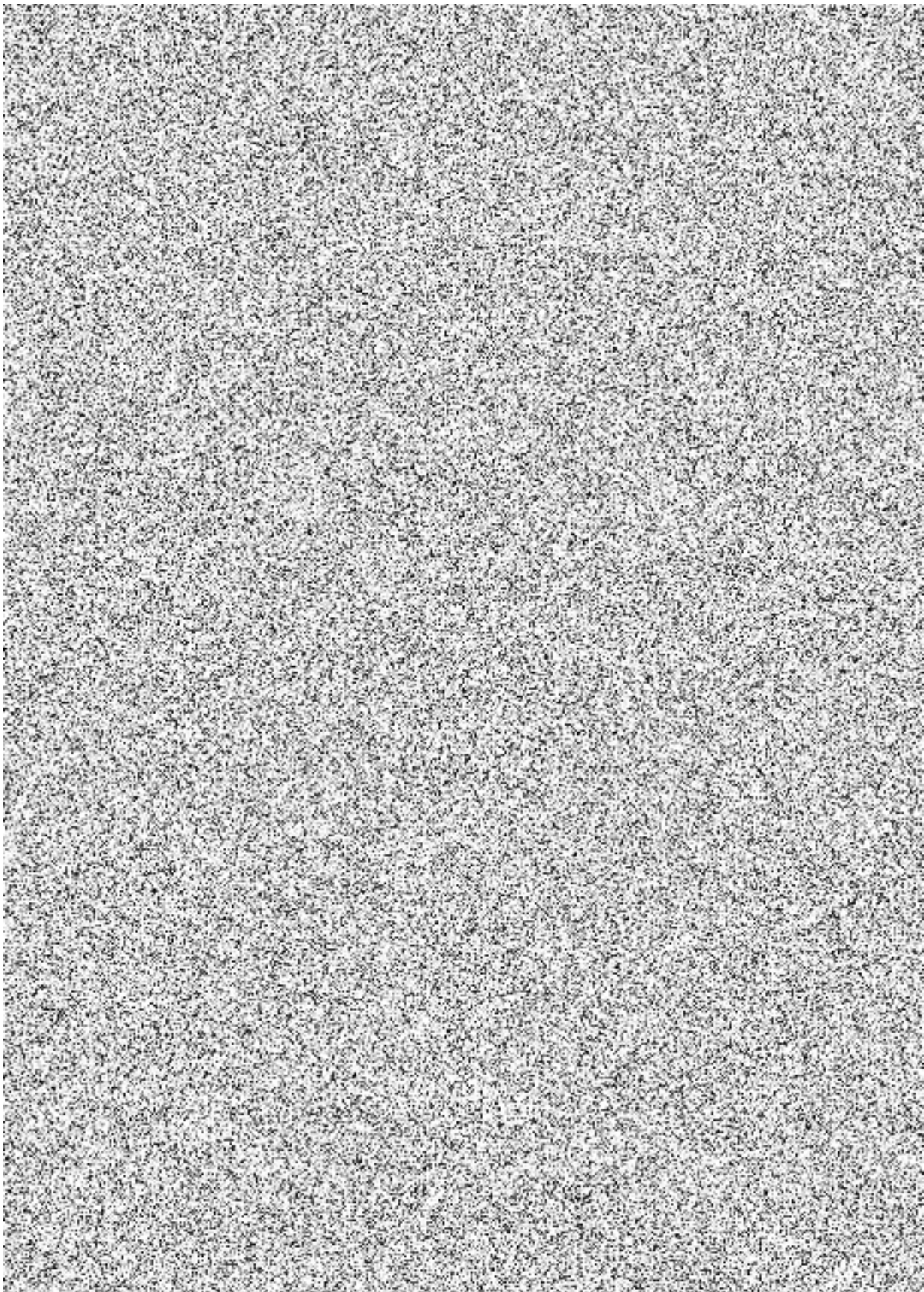


Figure C.2.8 Core Loading Patterns with FA Burn-up and Power of equilibrium Cycle (BOC)

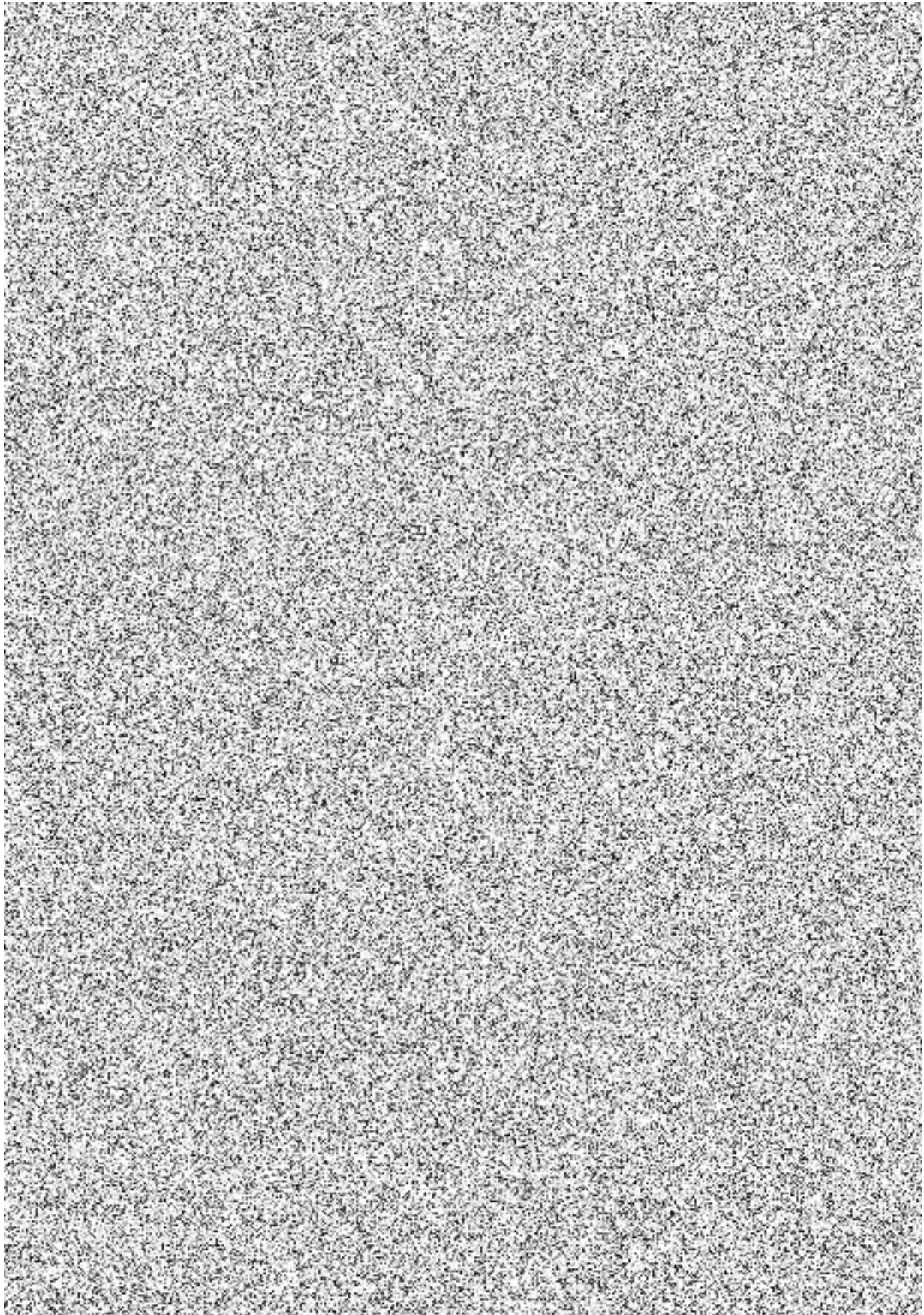


Figure C.2.8 Core Loading Patterns with FA Burn-up and Power of equilibrium Cycle (EOC)

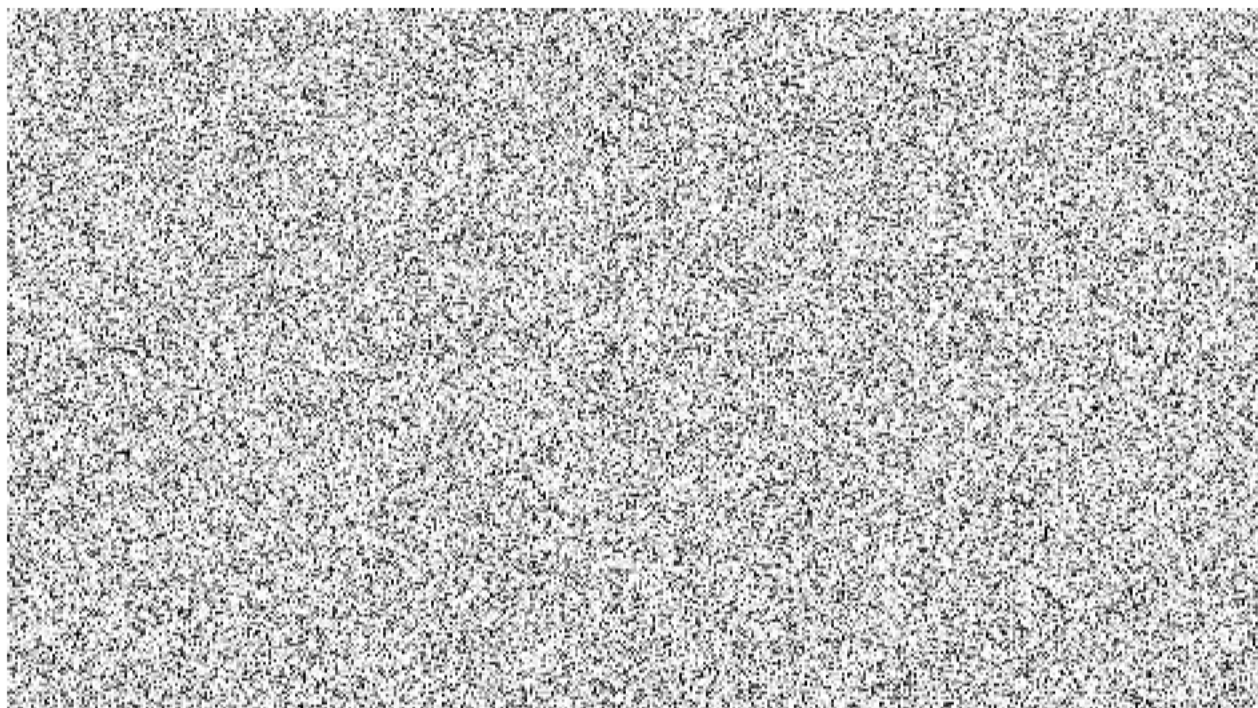


Figure C.2.9 Axial distribution of Fuel Assembly enrichments of First Core

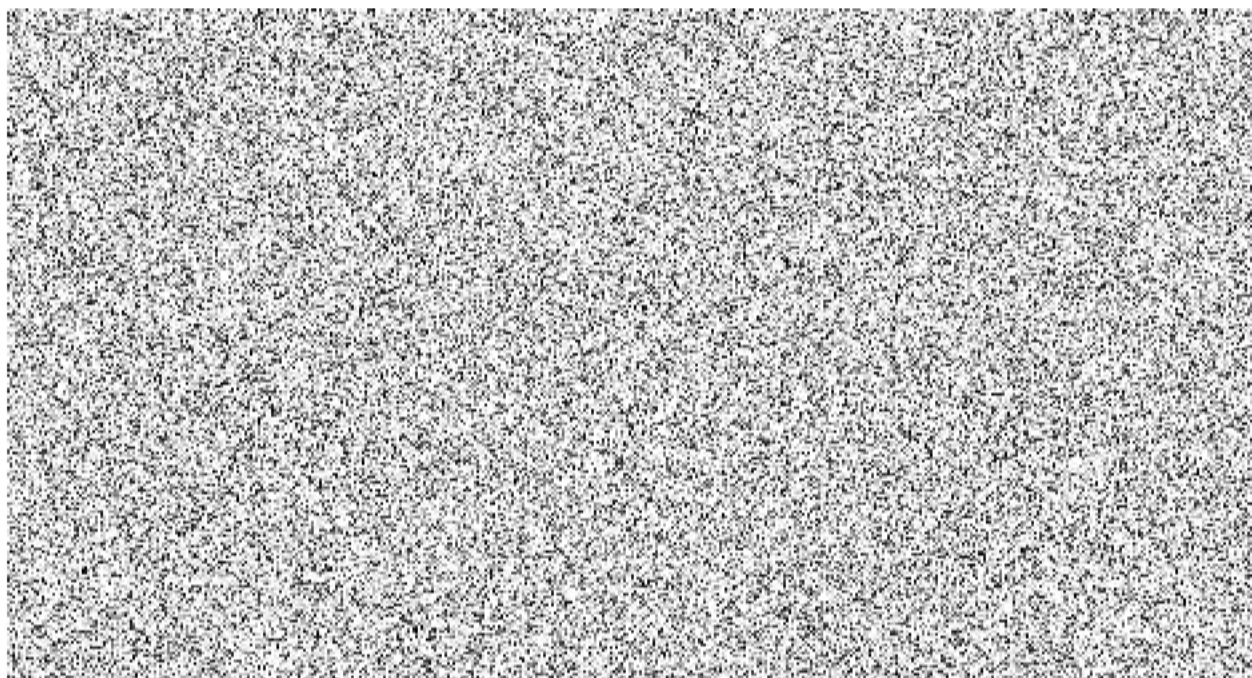


Figure C.2.10 Axial distribution of Fuel Assembly enrichments of 2nd Cycle

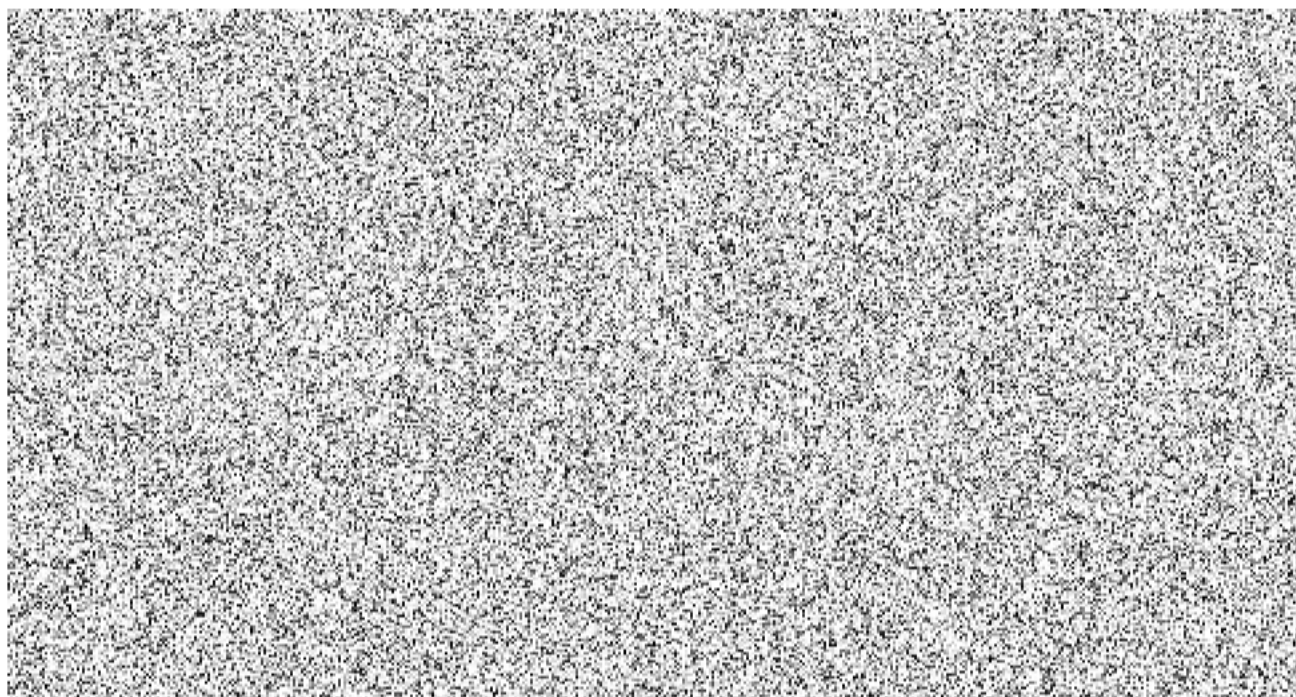


Figure C.2.11 Axial distribution of Fuel Assembly enrichments of 3rd Cycle to equilibrium Cycle

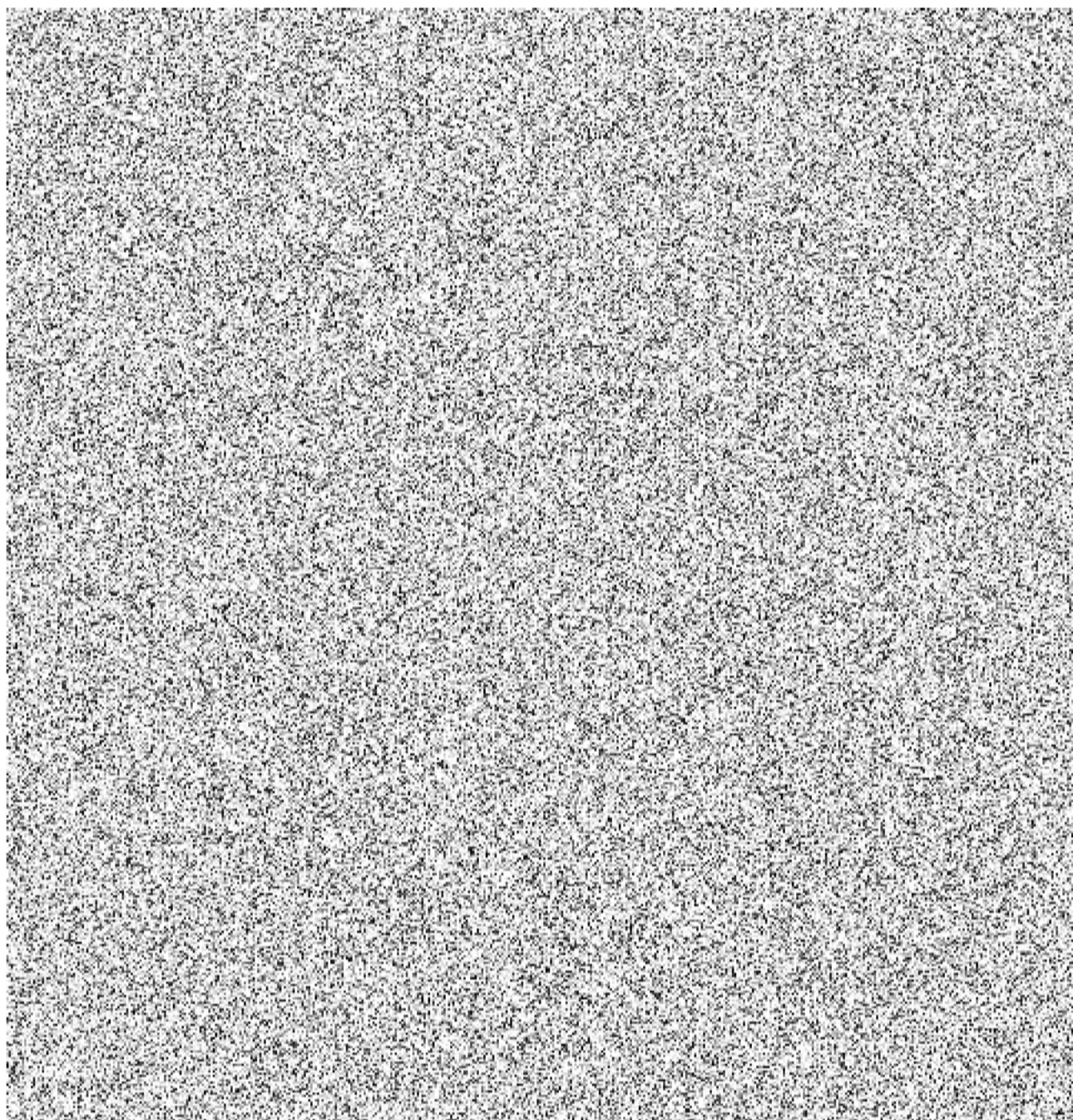


Figure C.2.12 Comparison results of measured and design values

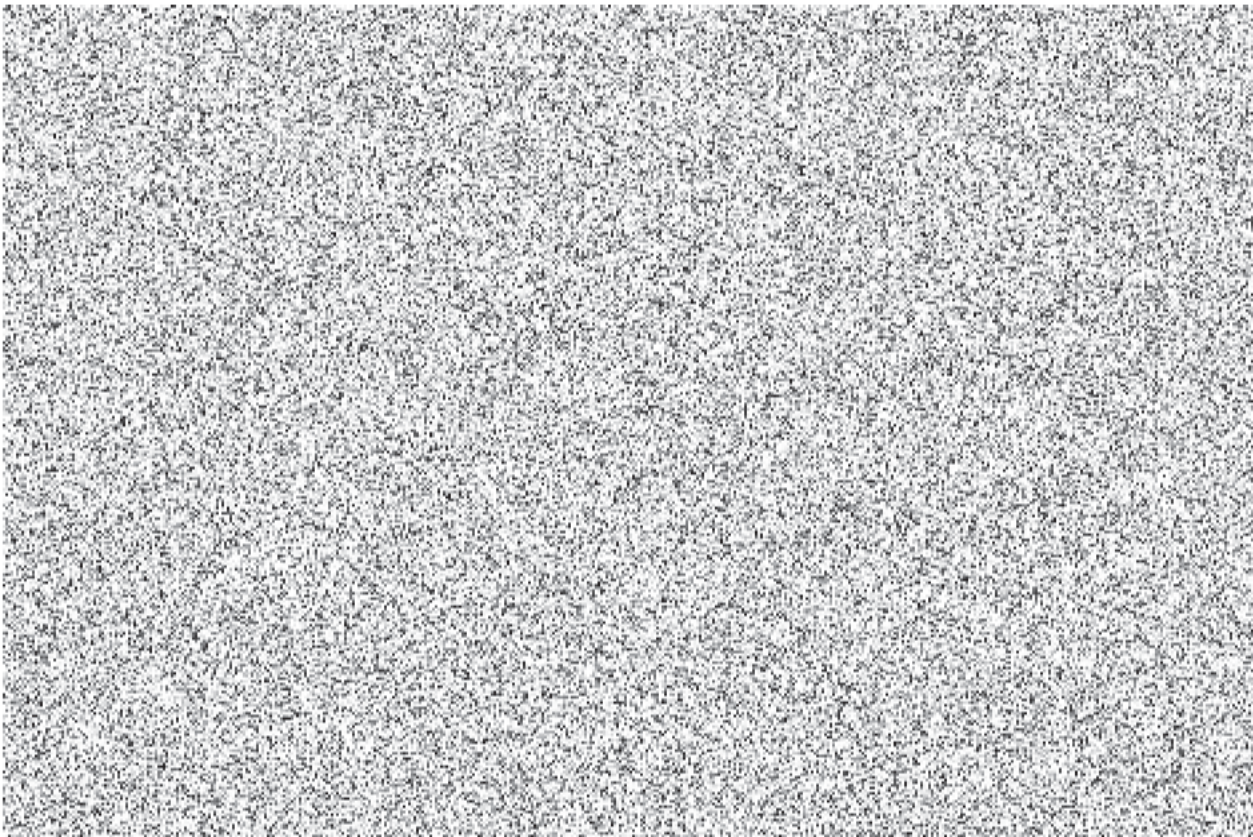


Figure C.2.13 CBC Calculation Results with [redacted]



Figure C.2.14 Load Following Calculation Results of Equilibrium Cycle (BOC)

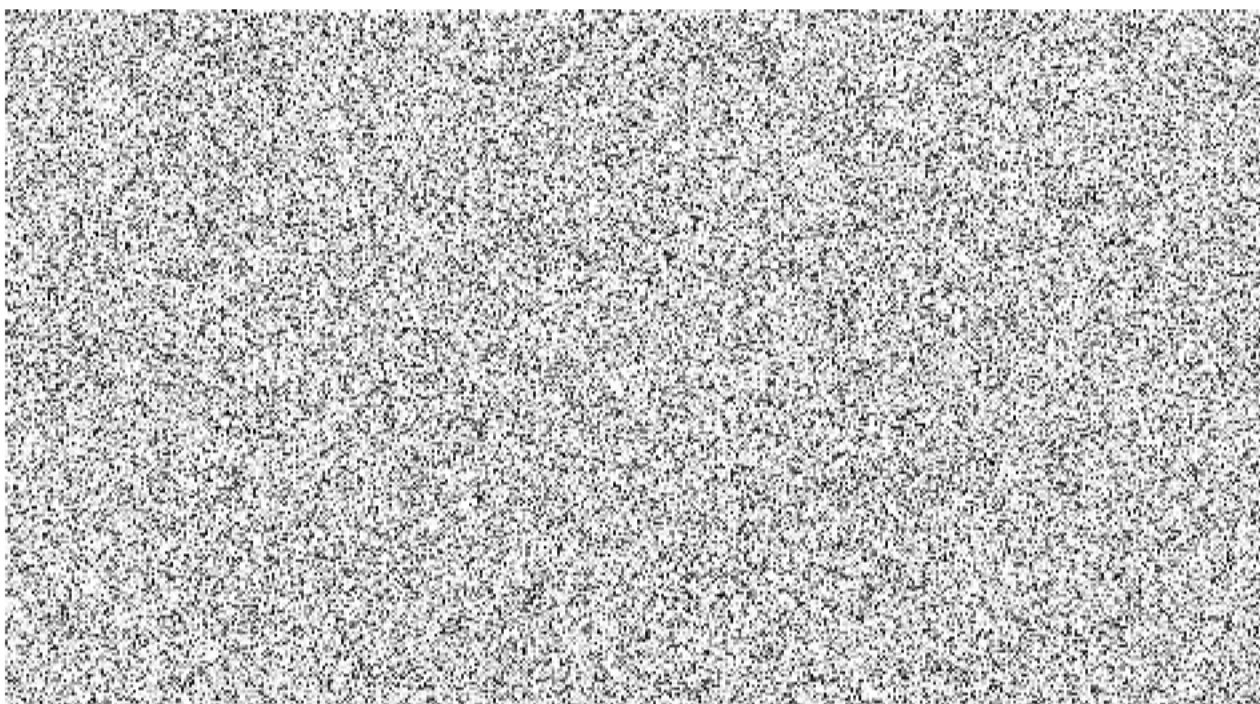


Figure C.2.15 Load Following Calculation Results of Equilibrium Cycle (MOC)

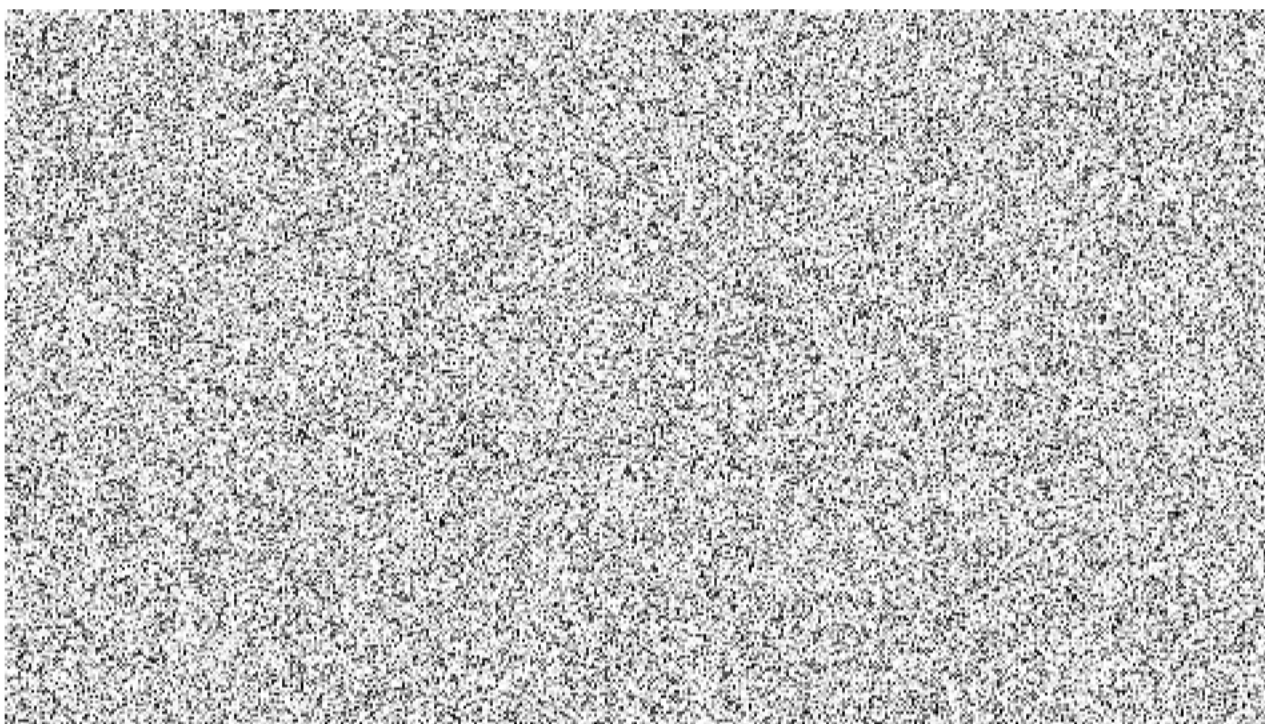
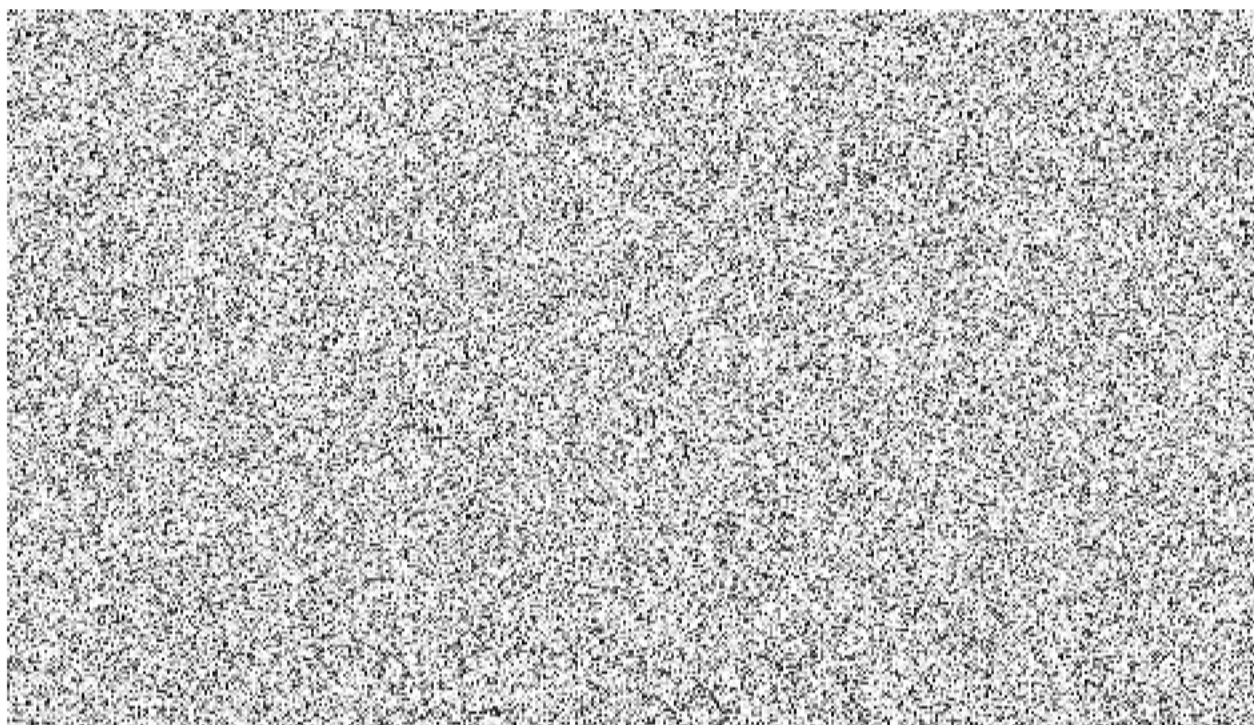
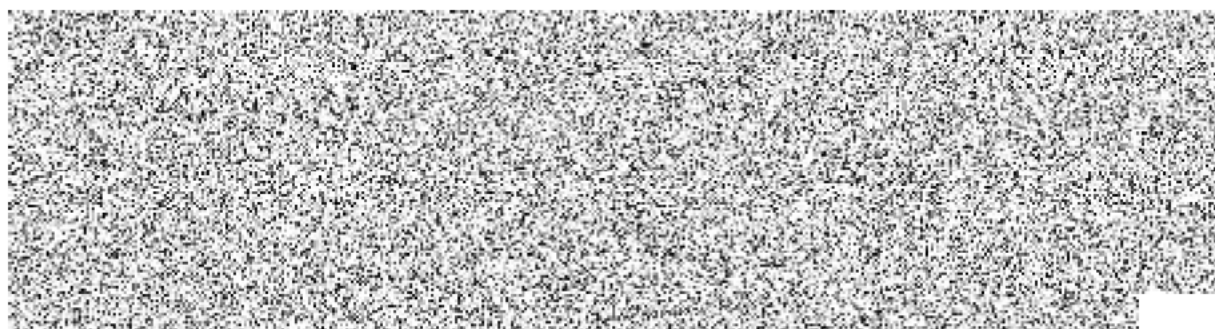


Figure C.2.16 Load Following Calculation Results of Equilibrium Cycle (EOC)



**Figure C.2.17 Load Following Calculation Results of Equilibrium Cycle (EOC) – reduced
ASI Band**



C.3 CORE DESIGN FLEXIBILITY AND CONSTRAINTS

[REDACTED]

C.3.1 GENERALLY THE CORE DESIGN AND PROVIDED CYCLING SCHEMES SHALL BE BASED ON:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

C.3.2 CORE DESIGN FLEXIBILITY:

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C.3.3 CORE DESIGN CONSTRAINTS:

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Table C.3.1 List of Thermal-Hydraulic design criteria

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

C.3.4 IMPLICATIONS OF THE FUEL ASSEMBLIES STOCKPILE:

[REDACTED]

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX D	Page 1/15
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NUCLEAR FUEL CONTRACT

APPENDIX D

DOCUMENT NAME:	NUCLEAR FUEL CONTRACT APPENDIX D
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D - OPERATIONAL MODES AND INTERFACE WITH PLANT DESIGN

The Core Components and the Fuel Assemblies shall be designed with appropriate interfaces to the Plant and appropriate materials and features to withstand all operational modes of the Plant. The Core and the Fuel Assemblies shall allow operation in load-follow modes and accommodate operational transients of the Plant as follows.

D.1 COMPATIBILITY WITH PLANT DESIGN

The compatibility of Fuel Assemblies and Core Components with Plant design is assured as described in Compatibility Report which shall be supplied under the Implementation Program. However, the following description provides basic characteristics and data proving the compatibility of the Fuel Assemblies and Core Components with the Plant.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The Fuel handling equipment is designed to be acceptable for the dimensional tolerances of Fuel Assembly such as maximum radiation-induced increase in the length, maximum Fuel bow,

maximum offset, etc. Also, related to the handling requirements, the Fuel handling equipment shall be designed to limit the permissible loading on Fuel Assemblies such as torsional load, compressive load, tensile load, transverse, and axial acceleration load during normal handling conditions.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

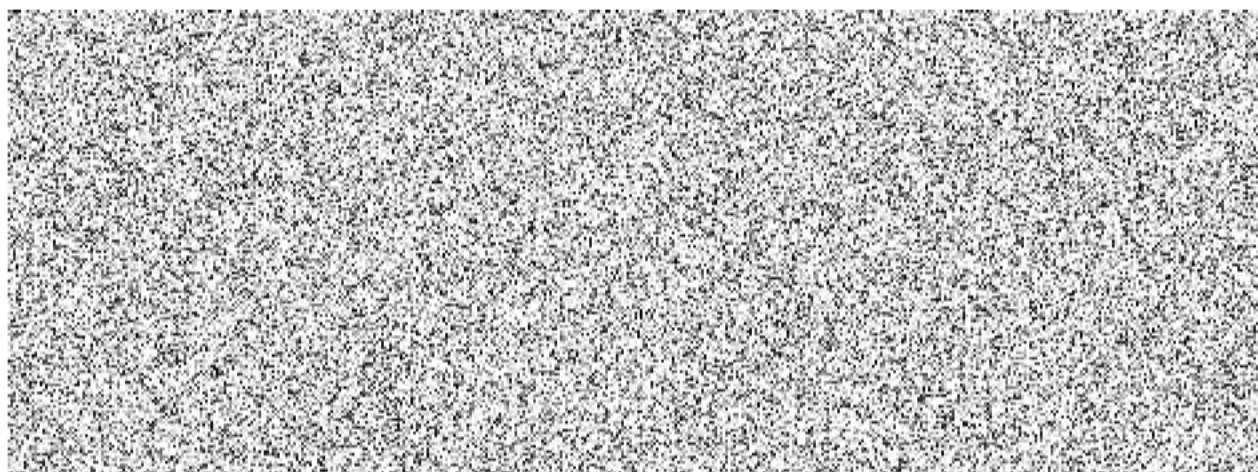


Figure D.1.1 RCS Flow Rate Acceptable Range for APR1000

[REDACTED]

[REDACTED]

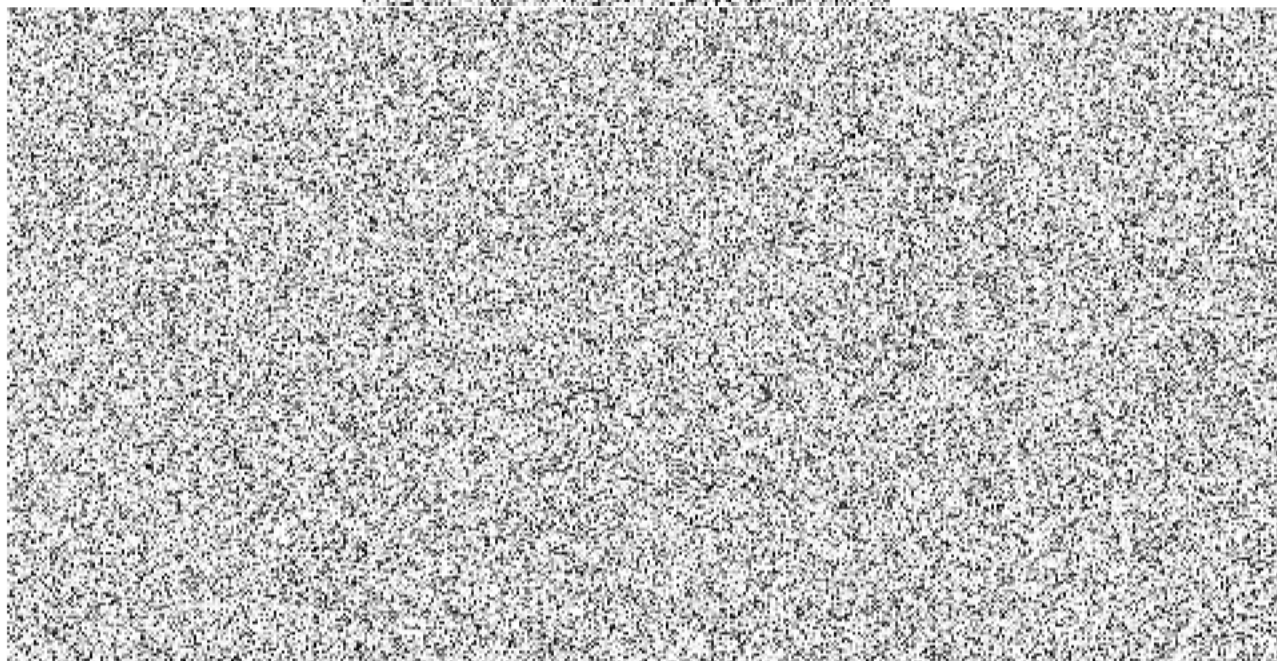
[REDACTED]

[REDACTED]

Acceptable corrosion, strength, irradiation, and dimensional stability are required to ensure satisfactory operation of Fuel Assembly including Fuel Rods throughout its expected design life. Minimizing parasitic material in high flux regions improves uranium utilization and is economically efficient. Low corrosion rates and cobalt contents in the high flux regions of the core are required to minimize plant radioactive crud build-up.

[REDACTED]

Table D.1.1 Materials of



D.2 MANOEUVRING

[REDACTED]

The load following operation strategy is as follows;

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Primary (frequency) power control

[REDACTED]

[REDACTED]

[REDACTED]

Secondary power control

[REDACTED]

Scheduled and unscheduled load-following operation

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

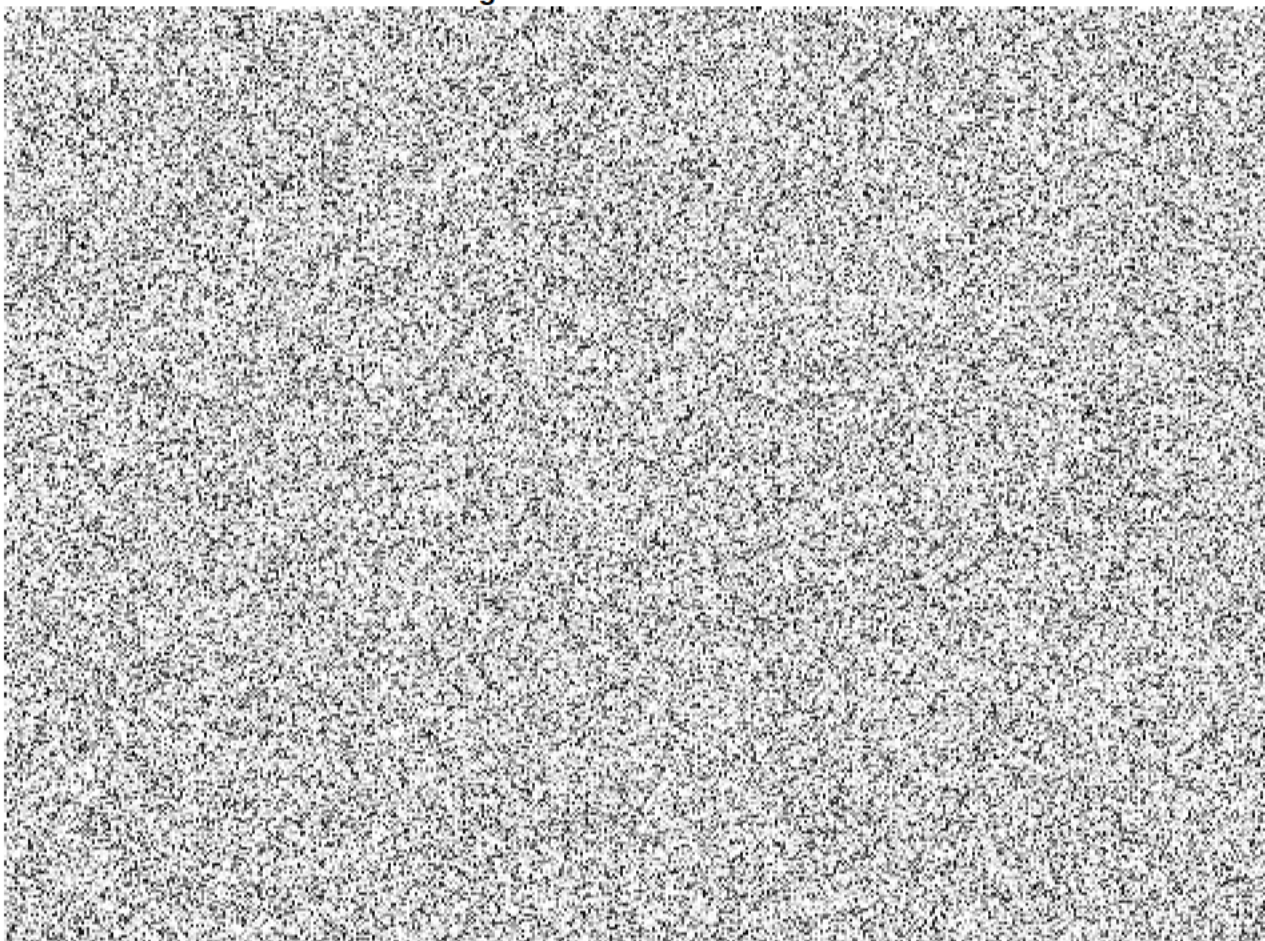
D.2.1 FUEL PRECONDITIONING GUIDELINE

[REDACTED]

[REDACTED]

[REDACTED]

Table D.2.1: Fuel Pre-Conditioning Guideline



D.3 REQUIREMENTS FOR THE MINIMUM TRANSIENT EVENTS OCCURRENCES

The Fuel Assemblies shall be designed to minimize limitation on the rate of power increase for hot start-ups, as well as for cold start-ups. On the other hand, the Fuel Assemblies shall be capable of [REDACTED] from full power to minimum load and back to full power.

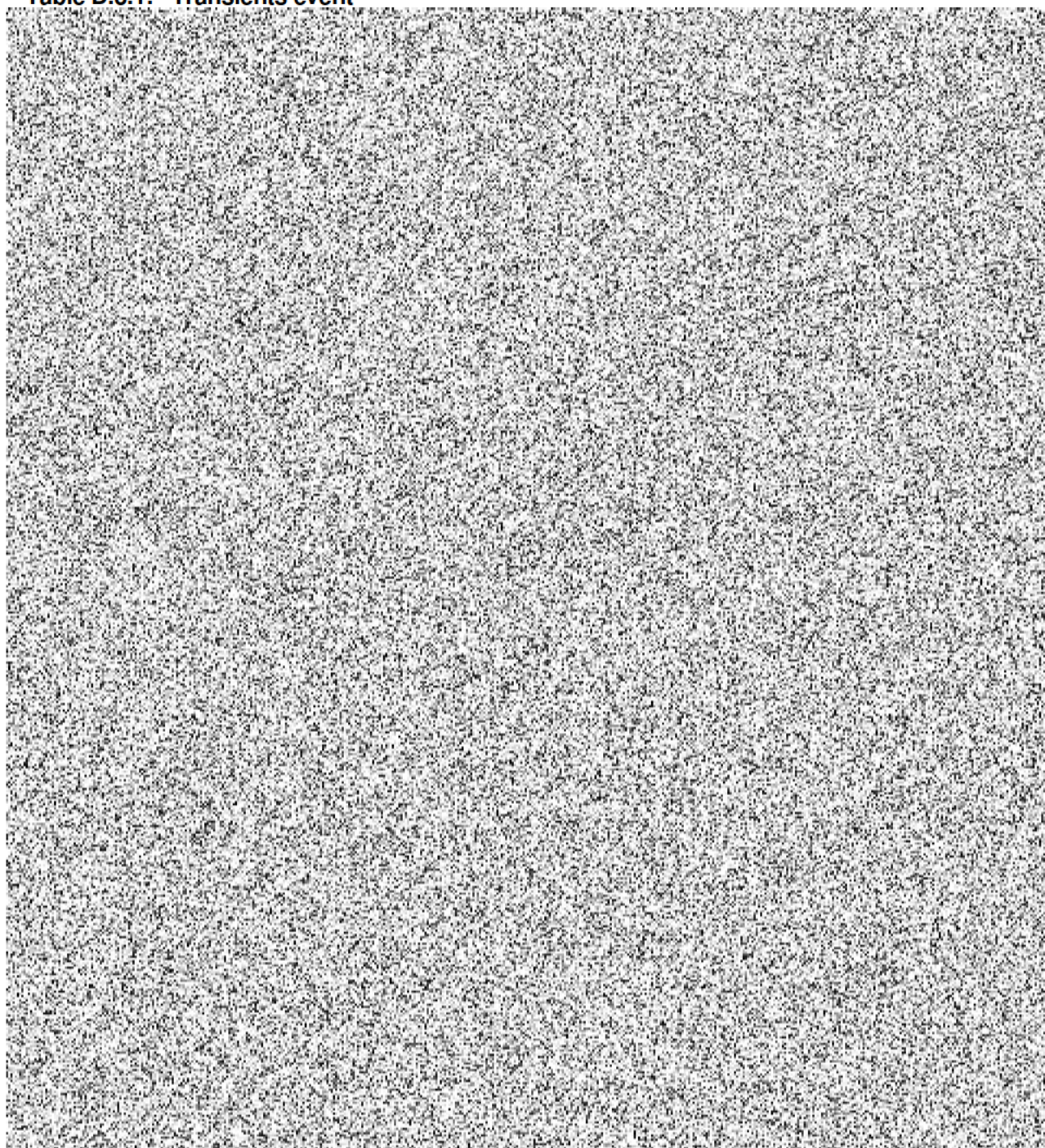
The Fuel Assembly including Fuel Rod can withstand all operation mode change requirements. Fuel Rod design is to ensure that Fuel Rods maintain their structural integrity, preventing the escape of Fuel and fission products in core operation during normal operation including a transient associated with Anticipated Operational Occurrence (AOO). The Fuel Rod structural integrity during Normal Operation (NO) including a transient has been confirmed from the evaluation of important parameters up to the specified design Burn-up. [REDACTED]

Fuel Assemblies shall be designed to withstand the events listed below during their residence time in the Core. The transient event is defined in terms of Safety Analysis.

The design transient events are defined as planned or unplanned events that must be accommodated in the plant design. The events considered in the safety analyses are selected from enveloping initiating events considering the range of possible operating mode as specified in the Technical Specifications including shutdown state and refuelling outage. These events are classified into Design Basis Accidents (DBAs) according to the frequency of occurrence. [REDACTED]

Values derived from Plant design are introduced in the Table D.3.1. Generally, these values are supported by equipment strength and lifetime calculations. Values applicable for the design life are specified within the Plant design. [REDACTED]

Table D.3.1: Transients event



D.4 POWER OSCILLATIONS

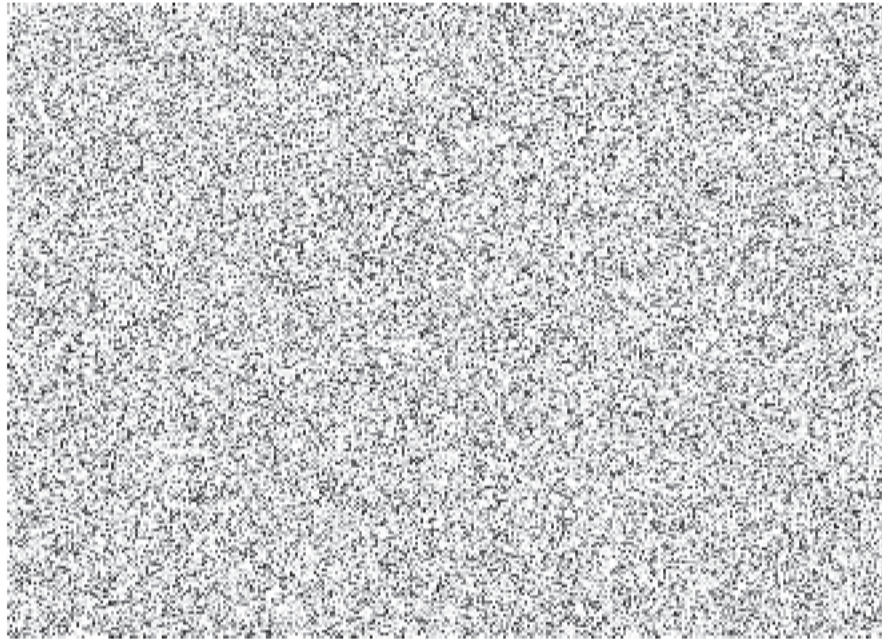


Figure D.4.1 Azimuthal Stability Index



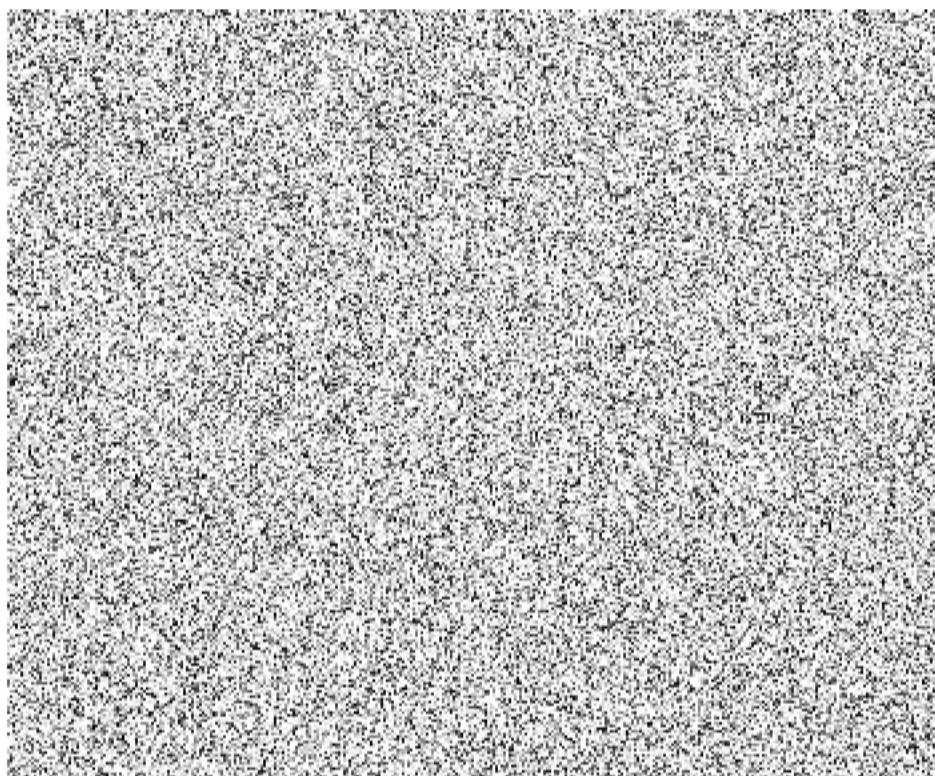


Figure D.4.2 Controlled and Uncontrolled Axial Oscillation

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

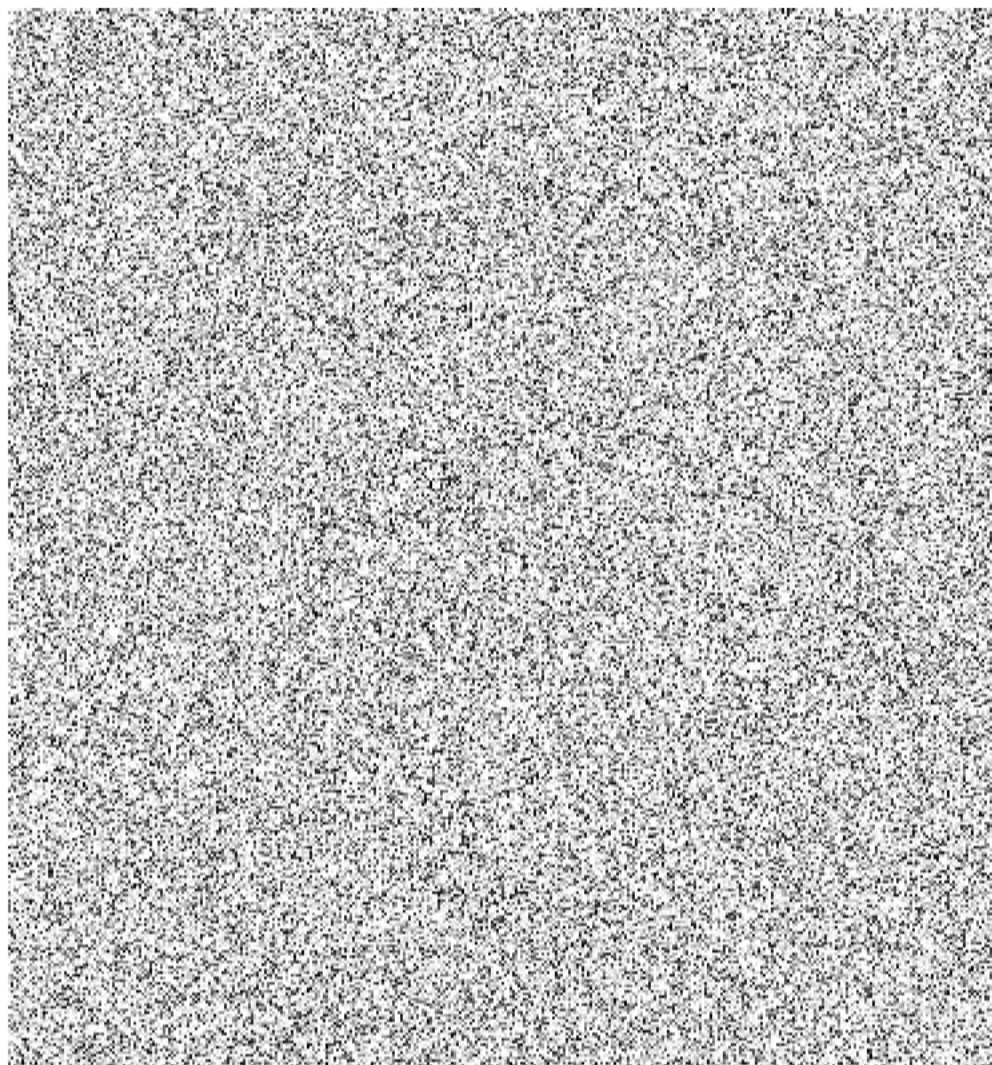


Figure D.4.3 Insertion Limits for Regulating CEA

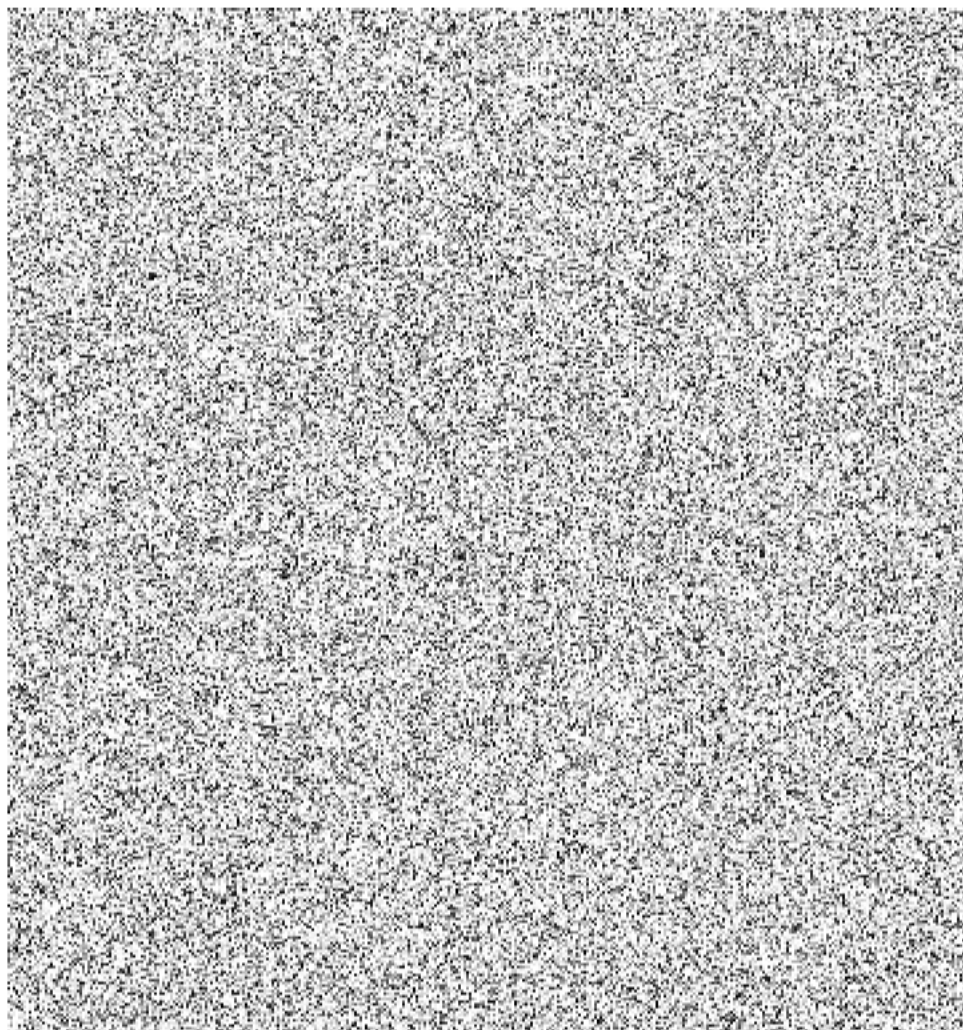


Figure D.4.4 Insertion Limits for PSCEA



The detailed analysis of Core power distribution and xenon oscillation control is performed with the Reference Cycling Scheme. Detailed analysis report will be included in Core Design report and provided to Owner in agreed format and schedules.

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 1/73
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NUCLEAR FUEL CONTRACT

APPENDIX E

DOCUMENT NAME:	NUCLEAR FUEL CONTRACT APPENDIX E
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Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 2/73
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E - GENERAL AND CYCLE SPECIFIC REPORTS AND DOCUMENTS

General principles regarding this Appendix E are stated in Part E.1. Documentation and reports to be supplied by the Supplier in accordance with the NFC are divided into two groups. The first group (Part E.2 below) consists of documentation to be supplied during the construction and the licensing stage prior to first Unit start-up. The second group (Part E.3 below) consists of Reload Batch-related documentation to be supplied for each Cycle. In the case of Fuel Assembly or Core Components design changes, both types of documentation shall be revised by the Supplier accordingly.

E.1 REQUIREMENTS

All documentation shall be written in language specified in the tables below. Delivery of any documentation by the Supplier to the Owner shall be deemed to occur after delivery in a non-editable and an editable electronic form (e.g. PDF, Word).

E.1.1 PROCESS OF REVIEW AND APPROVAL

The procedure of review and approval of documentation by the Owner shall be as follows:

- i) Review of the document/information – if a document or and information is to be provided for Owner's review according to the NFC, it shall mean that the Owner has the right to make substantiated comments on and proposals in relation to the relevant documentation/information and that the Supplier shall incorporate such comments and proposals in a content and form acceptable to the Owner into the respective documentation/information. The Supplier's full responsibility for the content of the relevant documentation/information and its implications to NFC Work shall not be affected by any Owner's comments or proposals. Documentation/ information shall be deemed to be reviewed by the Owner ~~if the Owner has not made any comments or proposals within the time period defined above~~ ~~if the Owner has not made any comments or proposals within the time period defined above~~ Owner has the right to prolong time period defined above up to ~~30 days~~ due to complexity of the documentation/information. The Owner shall provide written notice to the Supplier within ~~10 days~~ from delivery that the review period is being prolonged.
- ii) Approval of the document/information - if a document or an information is to be provided for Owner's approval according to the NFC, it shall mean that the Owner has the right to make substantiated comments on and proposals in relation to the relevant documentation/information and that the Supplier shall incorporate such comments and proposals in a content and form acceptable to the Owner into the respective documentation/information. The Supplier shall not refer to any documentation/information or use any portion thereof for subsequent NFC Work without prior written approval or conditional written consent of the Owner before the respective documentation/information is approved by the Owner. The Owner's approval or consent does not imply any reduction of the Supplier's full responsibility for the content of the relevant documentation/information and its implications to NFC Work. Documentation/ information shall be deemed to be approved by the Owner ~~if the Owner has not made any comments or proposals within the time period defined above~~ ~~if the Owner has not made any comments or proposals within the time period defined above~~

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 3/73
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XXXXXXXXXXXXXXXXXXXX The Owner has the right to prolong time period defined above up to XXXX due to complexity of documentation/information. The Owner shall provide written notice to the Supplier within XXXX from delivery that the review period is being prolonged.

After the documentation is reviewed or approved by the Owner, the Supplier shall supply revised versions of that documentation - a final version and a version that includes revision marks.

E.2 GENERAL REPORTS AND OTHER DOCUMENTS

The Supplier shall deliver the following documents and reports during the construction and licensing stage prior to first Unit start-up:

For avoidance of doubt, the documents to be provided by the Supplier to the Owner under the NFC shall be subject to review or approval procedure according to Part E.1.1 above, as specified in Table E.2.1 below. Moreover, the Owner shall have the right to provide these documents to Owner's Contractors.

Table E.2.1 Documentation delivered prior to Plant Start-up

Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
FUEL AND CORE SYSTEM DESIGN AND EVALUATION						
GENERIC	1) Compatibility information report (Fuel Assembly/Core Components - Unit interface)	EN		Article 2.2.1	Milestone 2	Milestone 5
	2) Primary water chemistry report	EN		Article 2.2.1	Milestone 2	Milestone 5

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 5/73
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Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
	6) Report on the analysis of nuclear safety during fuel handling and storage ¹⁾	EN		Article 2.2.1.2	Milestone 2	Milestone 5
	8) Safety Analyses Report inputs (inputs to relevant chapters of EPC Safety Analysis Report, e.g. chapters 4, 9, 15)* ¹⁾	EN		Article 2.2.1.3	Milestone 2	Milestone 6
	9) Fuel related TechSpecs information report ¹⁾	EN		Article 2.2.1.3	Milestone 2	Milestone 6
MECHANICAL						
	11) Fuel Rod thermal mechanical design report	EN		Article 2.2.1	Milestone 2	Milestone 3
	12) Fuel Assembly mechanical design report	EN		Article 2.2.1	Milestone 2	Milestone 3
	13) Core Components mechanical design report	EN		Article 2.2.1	Milestone 2	Milestone 3

Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
THERMAL-HYDRAULIC						
	18) Fuel Assembly hydraulic design report	EN		Article 2.2.1	Milestone 2	Milestone 4
	19) Core thermal hydraulic design report	EN		Article 2.2.1	Milestone 2	Milestone 4
NEUTRONIC						
	23) Preliminary Core Design report	EN		Article 2.2.3.1	Milestone 2	N/A
	24) Final Core (Nuclear) Design report	EN		Article 2.2.3.1	N/A	Milestone 4

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 7/73
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Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
	27) Safety Evaluation Report for the first cycle	EN		Article 2.2.3.1	Milestone 2	Milestone 5
	29) First Core CSMS input data delivery (document + electronic files)	EN		Article 2.2.3.1	N/A	LWA date +
PHYSICS START-UP AND CORE OPERATION						
	32) Start-up tests predicted data report	EN		Article 2.2.3.1	N/A	Milestone 5

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 8/73
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Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
MEANS OF FUEL MANAGEMENT	37) Computer Codes abstracts and validation reports	EN		Article 2.2.4; Appendix H	Milestone 1	Milestone 2
	38) Computer Code manuals	EN		Article 2.2.4; Appendix H	Milestone 1	Milestone 2

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 9/73
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Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
FABRICATION	43) Quality management system, quality management related manufacturing and transportation report	EN		Article 2.2.2; Chapter 2	Milestone 1	Milestone 1
OPERATION						
	48) Instructions, rules and constraints for Fuel Assembly and Core Components handling, inspection, operation and storage ¹⁾	EN		Article 2.2.4.8; Appendix H	Milestone 2	Milestone 6
	49) Instruction, rules and constraints for transport container handling, inspection and storage	EN		Article 2.2.4.8; Appendix H	Milestone 2	Milestone 6

Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 10/73
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Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
	50) Post Irradiation Inspection Program and repair document	EN		Appendix O	Milestone 2	Milestone 3
OTHER DOCUMENTATION	52) Project management documentation	EN		Article 2.2.1 Appendix Q	Milestone 3	Milestone 1

Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix R Part R.1.1.1 and Appendix P Part P.1.1 (where applicable) or other scheduled date for provision of the document	Delivery milestone according to Appendix R Part R.1.1.2 and Appendix P Part P.1.2 (where applicable) or other scheduled date for provision of the document
					N/A	
		EN		Article 2.2.1	Milestone 2	Milestone 2
		EN		Article 2.2.1	Milestone 2	Milestone 2
		EN		Article 2.2.1	Milestone 2	Milestone 2
		EN		Article 2.2.1	Milestone 2	Milestone 5
		EN		Article 2.2.1	Milestone 2	Milestone 5
		EN		Article 2.2.1	Milestone 2	Milestone 5
		EN		Article 2.2.1	Milestone 3	Milestone 5
		EN		Article 2.2.4.5	-	Milestone 5

E.3 CYCLE SPECIFIC REPORTS AND OTHER DOCUMENTS

The Supplier shall deliver the following documents and reports for each Cycle. The tables contain Cycle specific reports and documents.



Table E.3.1 Manufacturing

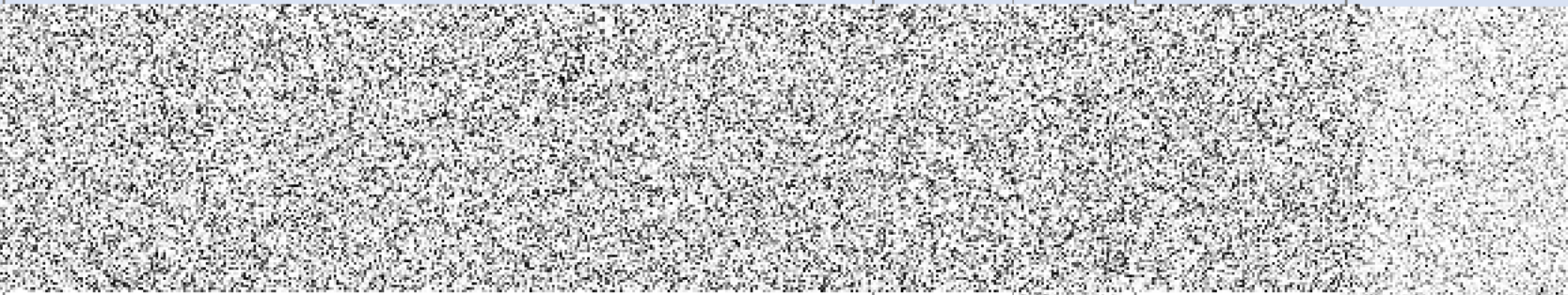
Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone according to Appendix S (where applicable) or other scheduled date for provision of the document
Manufacturing data					
Product Deviations					
Audits	60) Audits results documentation	EN		Article 20.3.4	

Table E.3.2 Core Design and Reload Safety Evaluation

Category	Report	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone (Appendix S)
Inputs					
In-core Fuel Management					
Core Loading Plan					
CSMS					
Core design report	72) Final Core (Nuclear) design report	EN		Article 2.2.3.1.1	
Reload safety evaluation	73) Reload Safety Evaluation report	EN		Article 2.2.3.1.1	

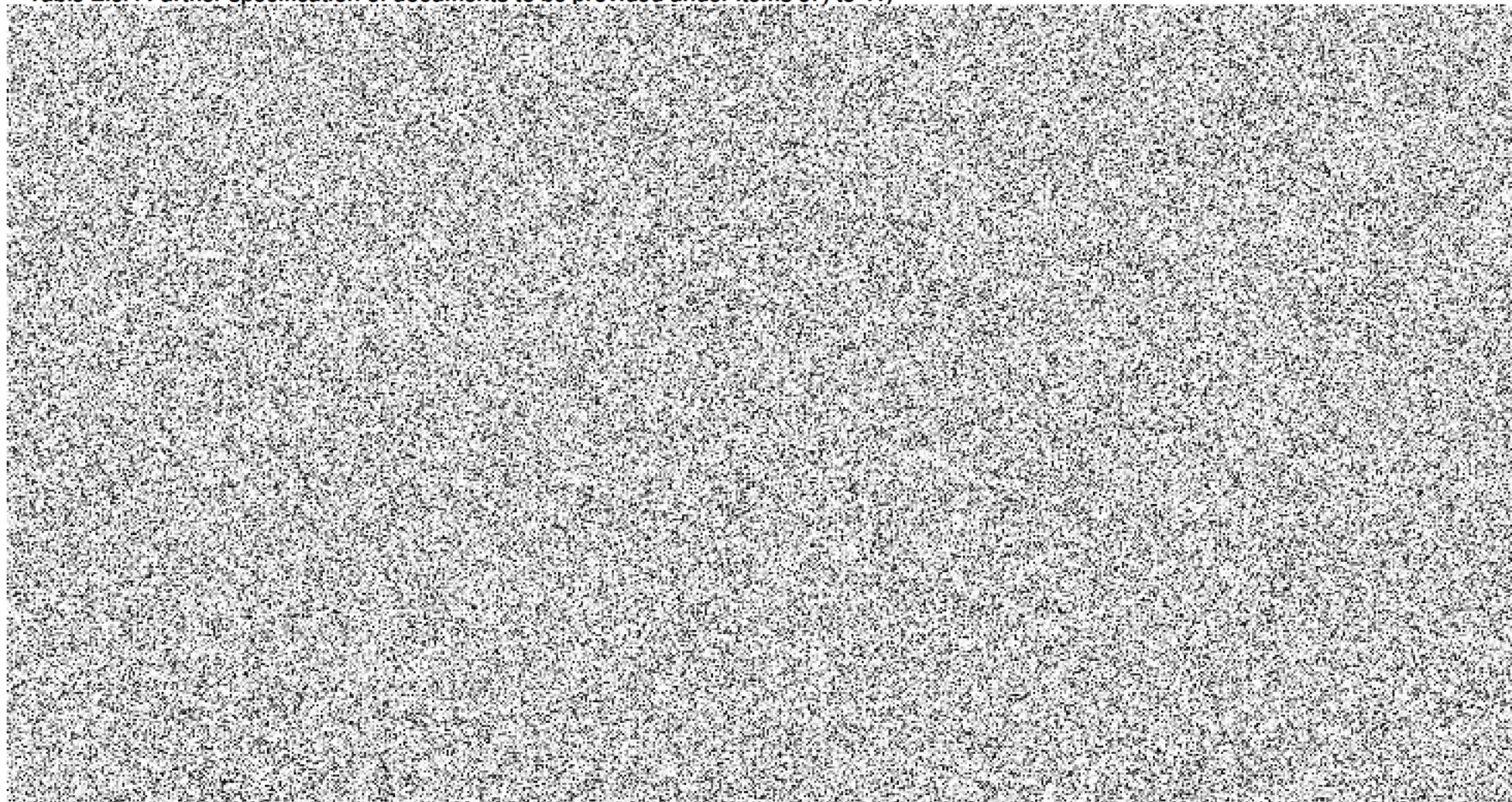
Category	Report	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone (Appendix S)
Fuel tracking					
CSMS CD	79) CSMS input data delivery	EN		Article 2.2.3.1.1	

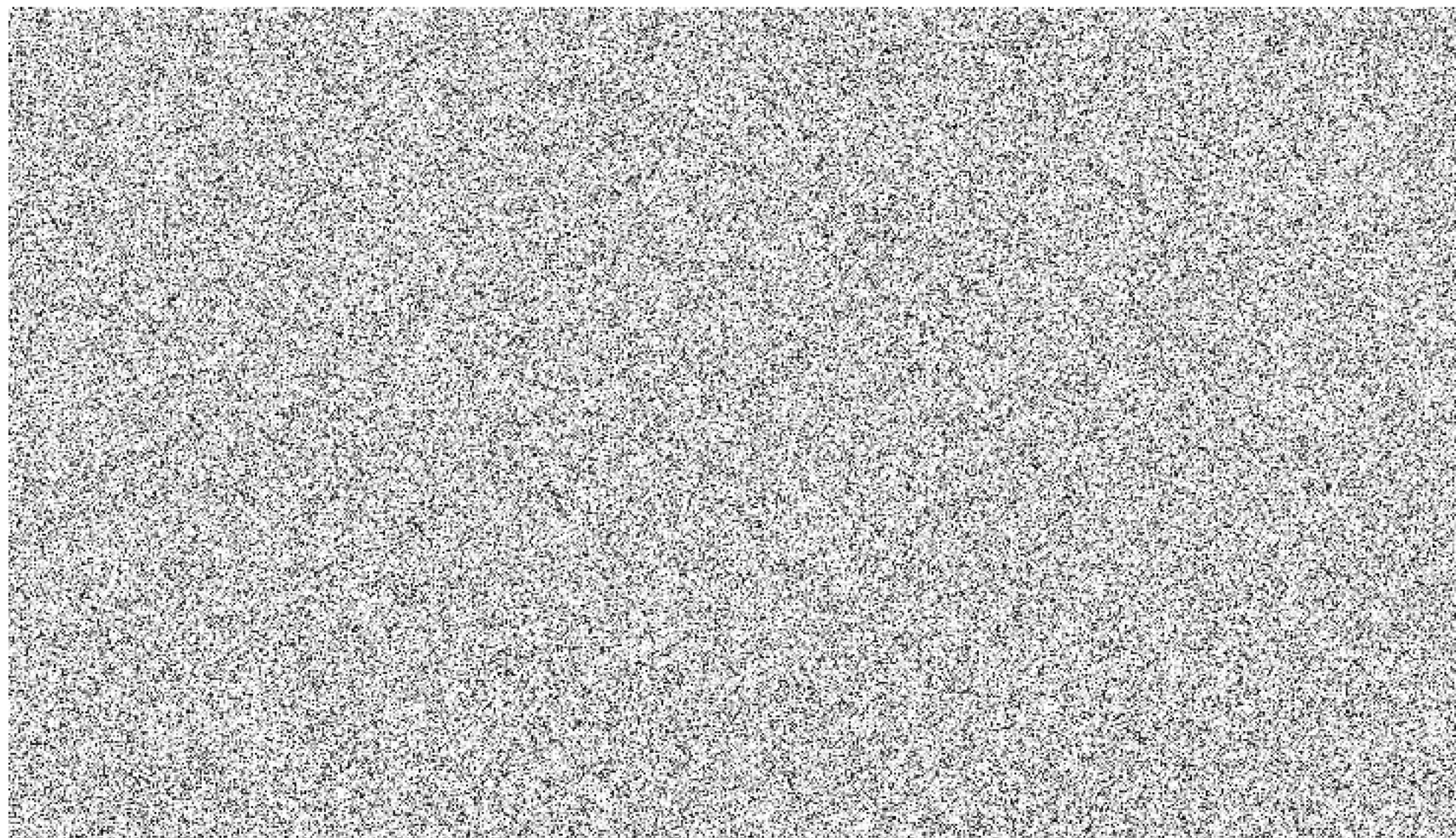
Dukovany 5&6	NUCLEAR FUEL CONTRACT APPENDIX E	Page 15/73
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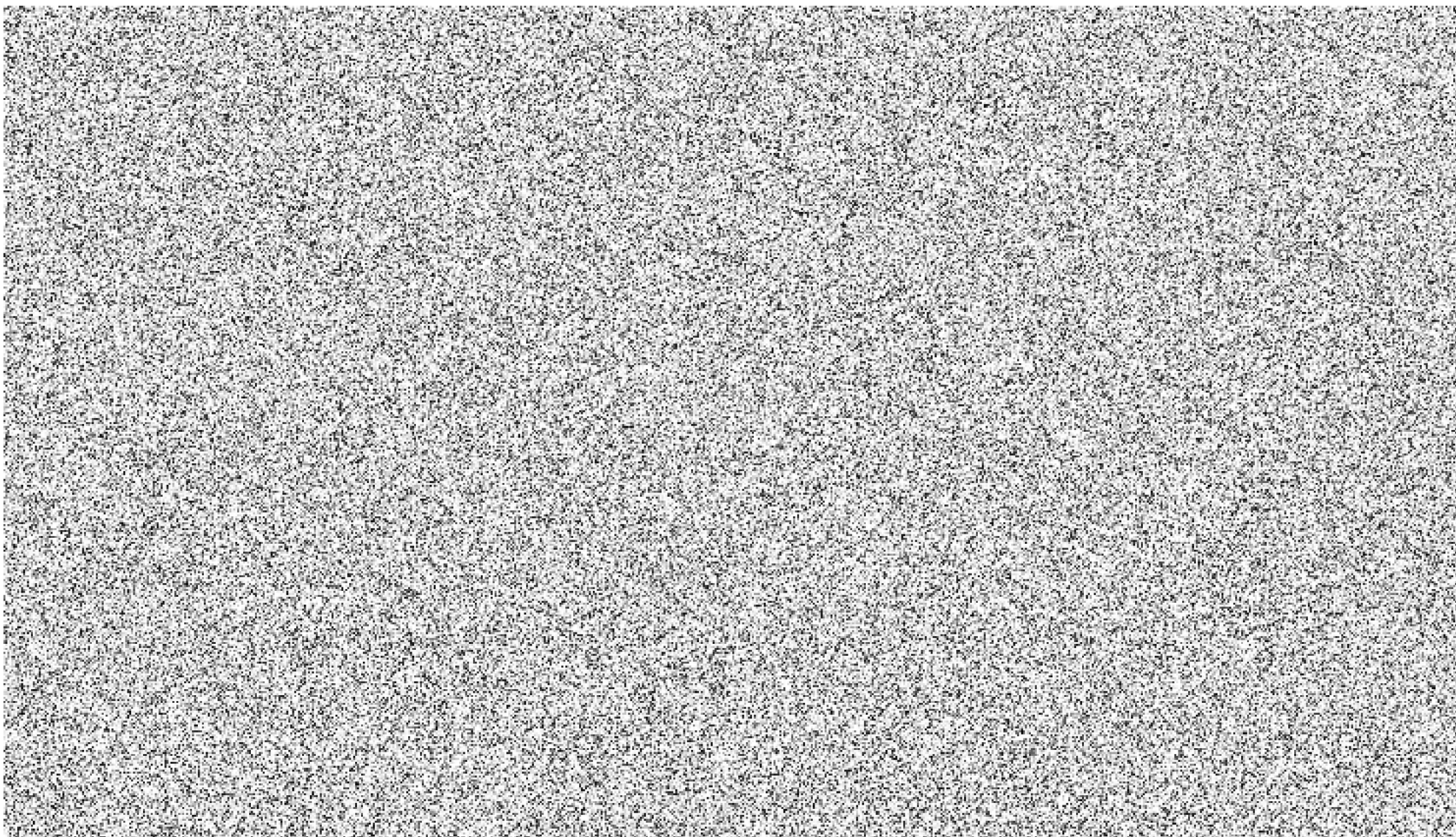
Table E.3.3 Operational

Category	Report or other document / Information	Language	Owner's Review / Approval	Reference to NFC Scope	Delivery milestone (Appendix S)
PIIP	82) PIIP and fuel operation results evaluation report	EN		Article 2.2.3.3	
Repairs Reports					
Guidelines, methodologies, procedures					
Basis for continued operation					
Technical Specification	87) Fuel and Core related cycle specific changes to Technical Specification (if any for specific reload)	EN		Article 2.2.3.1.1	

Table E.3.4 Further specification of documents to be provided under items 37) to 41)





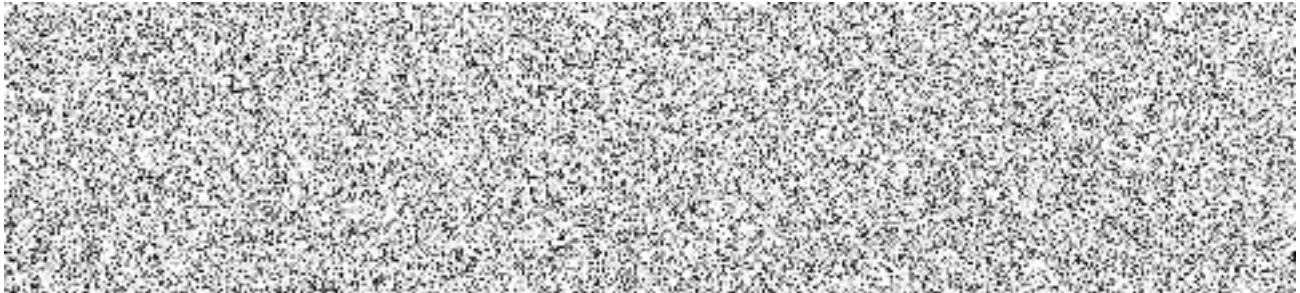


E.4 CONTENTS OF DOCUMENTS

The content of the documents listed in Parts E.2 and E.3 shall be as follows:

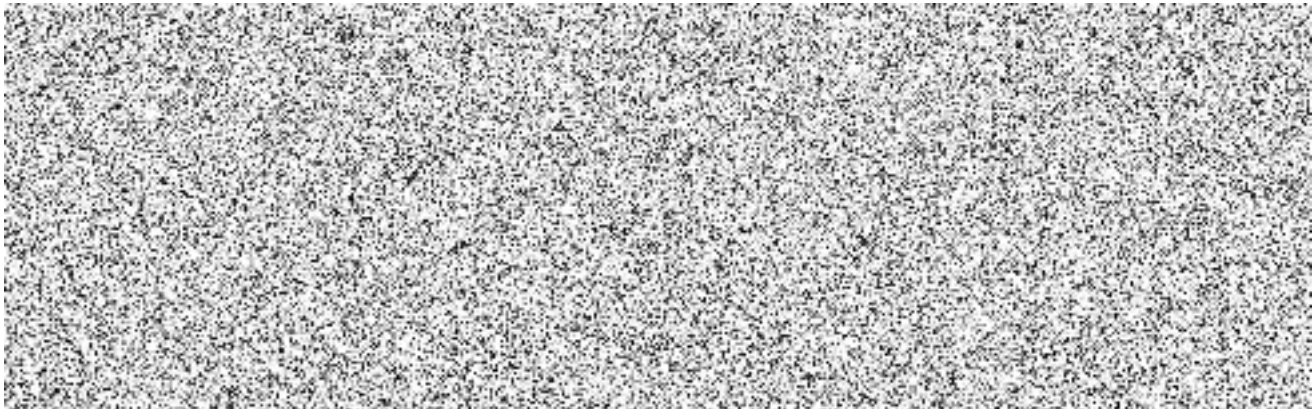
1. Compatibility information report (Fuel Assembly/Core Components - Unit interface)

Compatibility report will be provided to describe overall compatibility of Fuel Assemblies and Core Components with reactor internals and other related Plant systems.



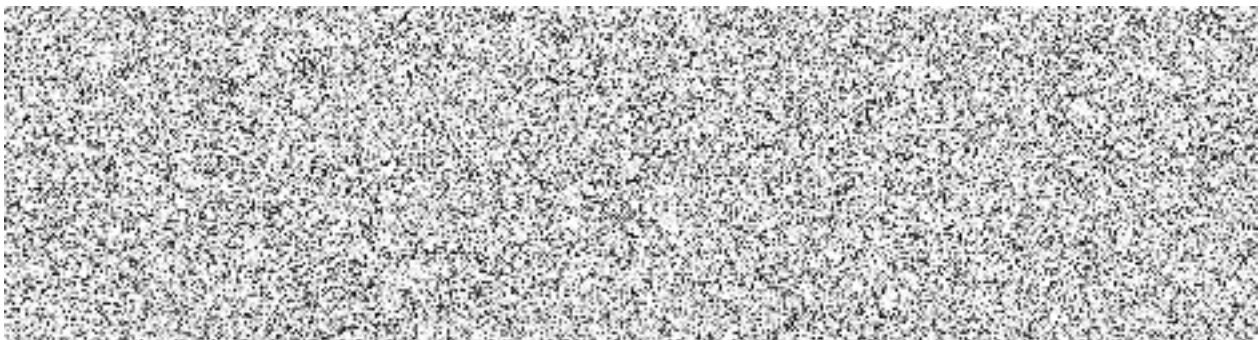
2. Primary water chemistry report

Primary water chemistry report will describe basic chemical composition of primary circuit and its overall compatibility with the Plant system and relation to Fuel Assembly and Core Components.



[Redacted text block]

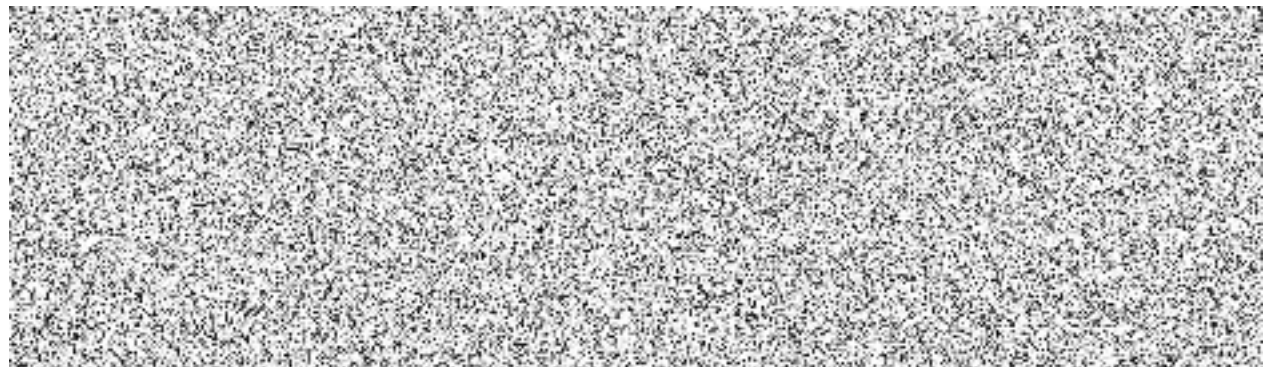
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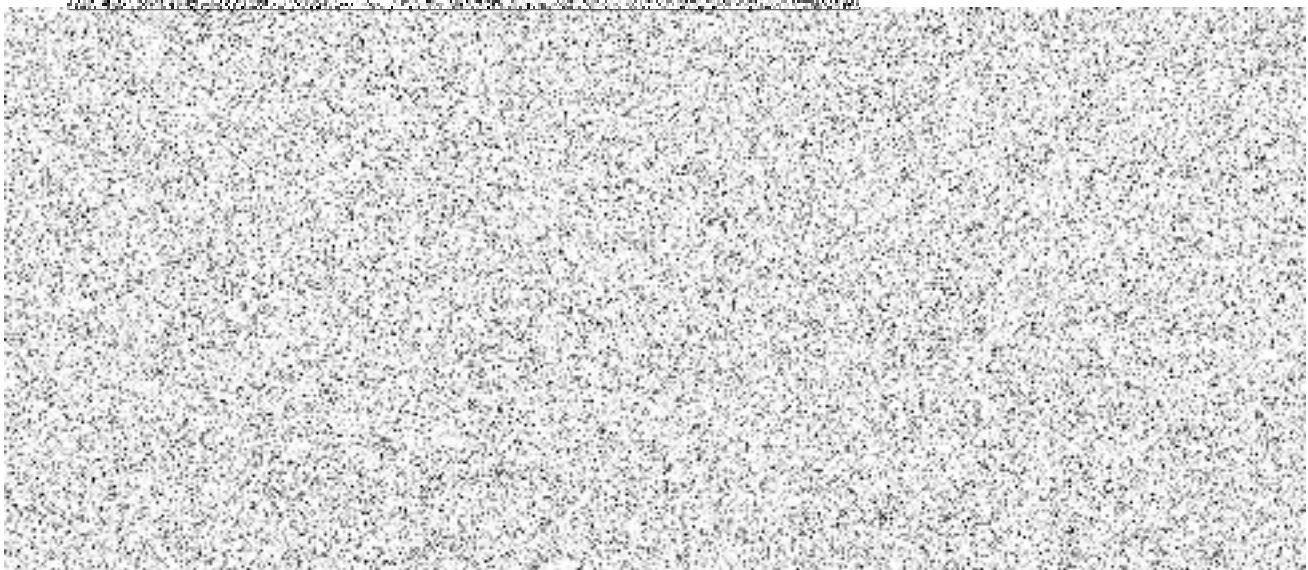


[REDACTED]

[REDACTED]



[REDACTED]



6. Report on the analysis of nuclear safety during fuel handling and storage

The report analyses and evaluates nuclear safety during Nuclear Fuel storage and handling at the Plant taking into account all design conditions and storage/handling modes. Absence of fuel system damage and violation of fundamental safety functions shall be demonstrated.

[REDACTED]



[REDACTED]

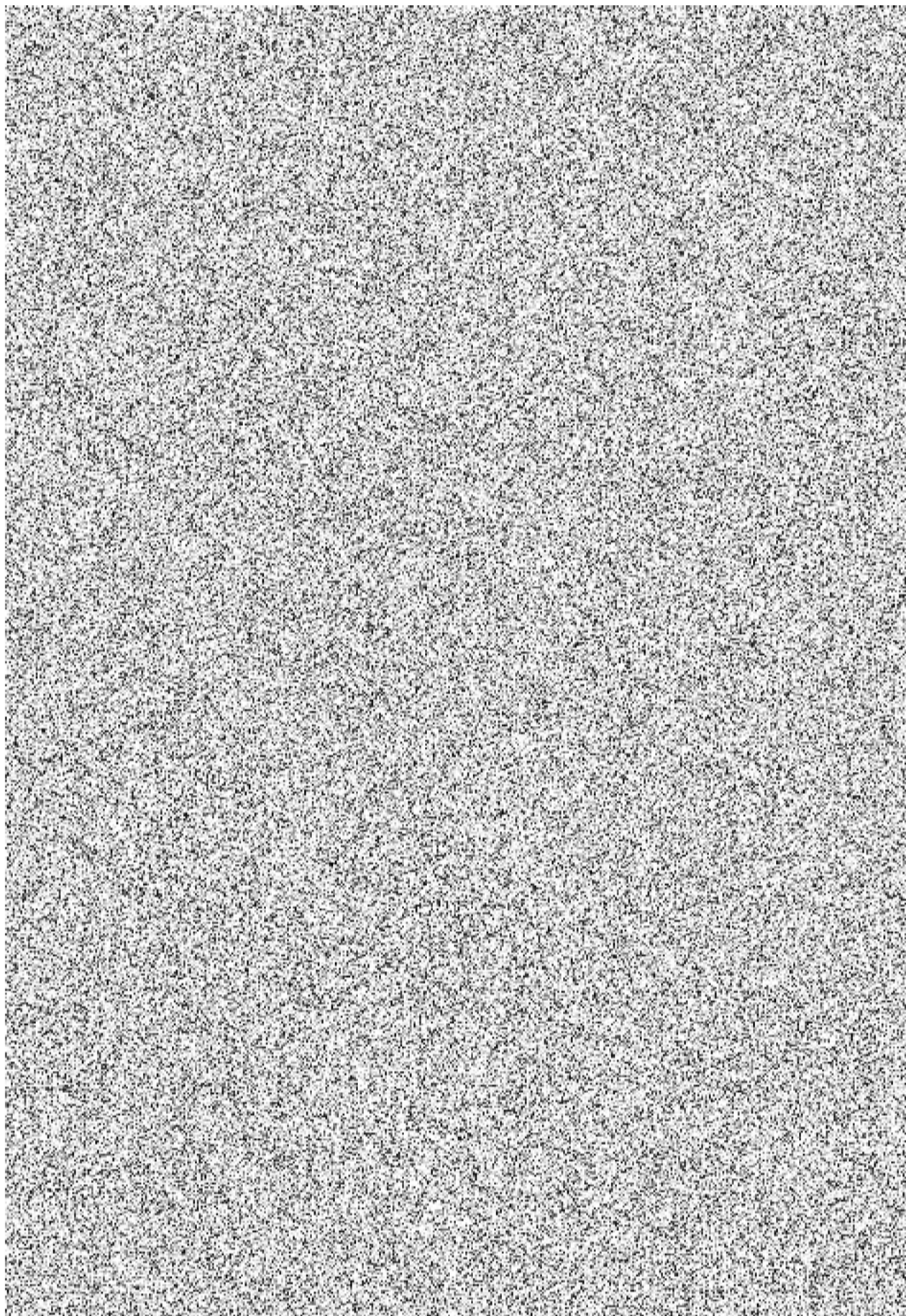
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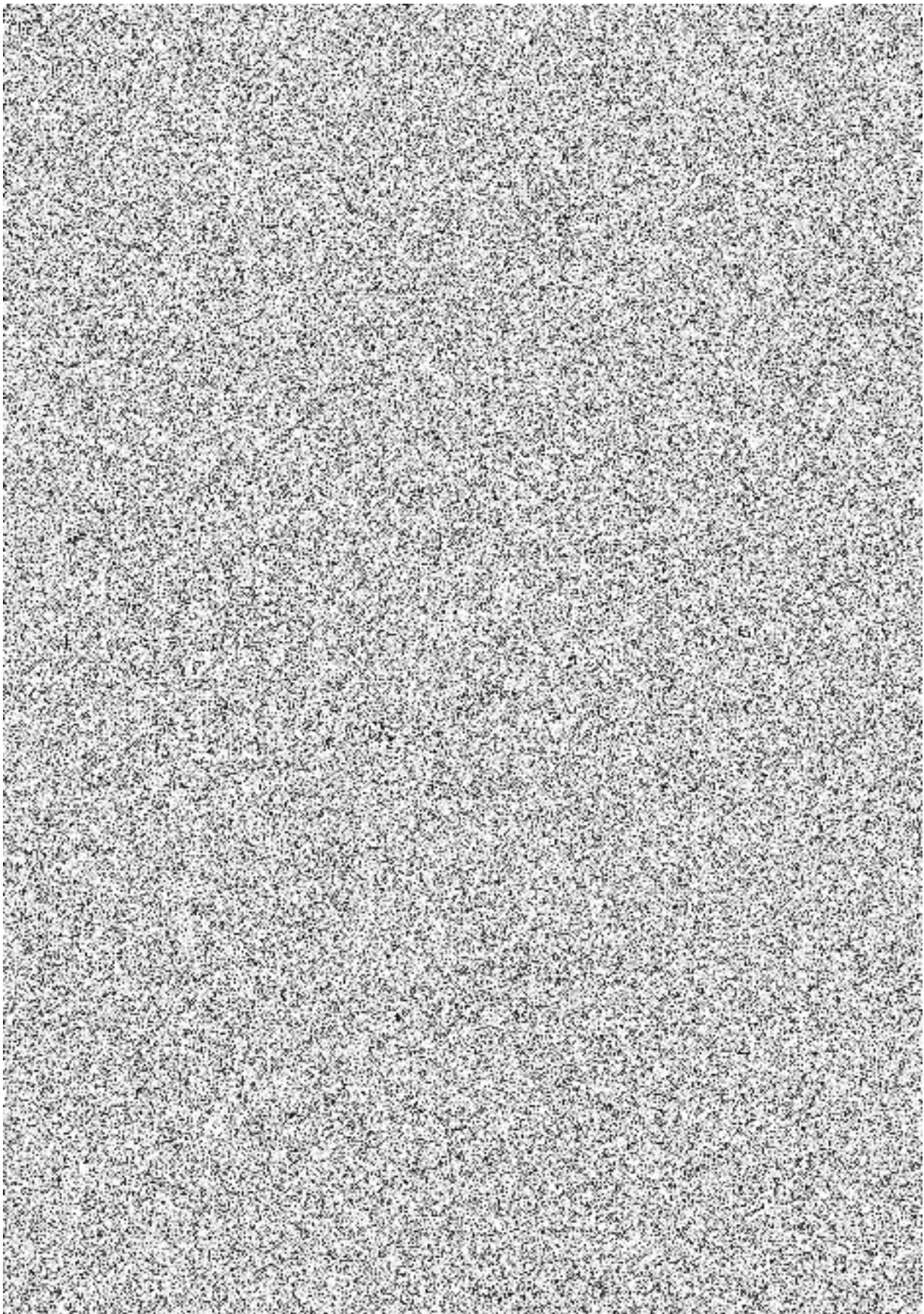
[REDACTED]

[REDACTED]

8. Safety Analyses Report inputs (inputs to relevant chapters of Safety Analysis Report, e.g. chapters 4, 9, 15)

The report will provide all   which are being prepared for compilation of Chapters 4, 9, and 15 of the Safety Analyses Report.





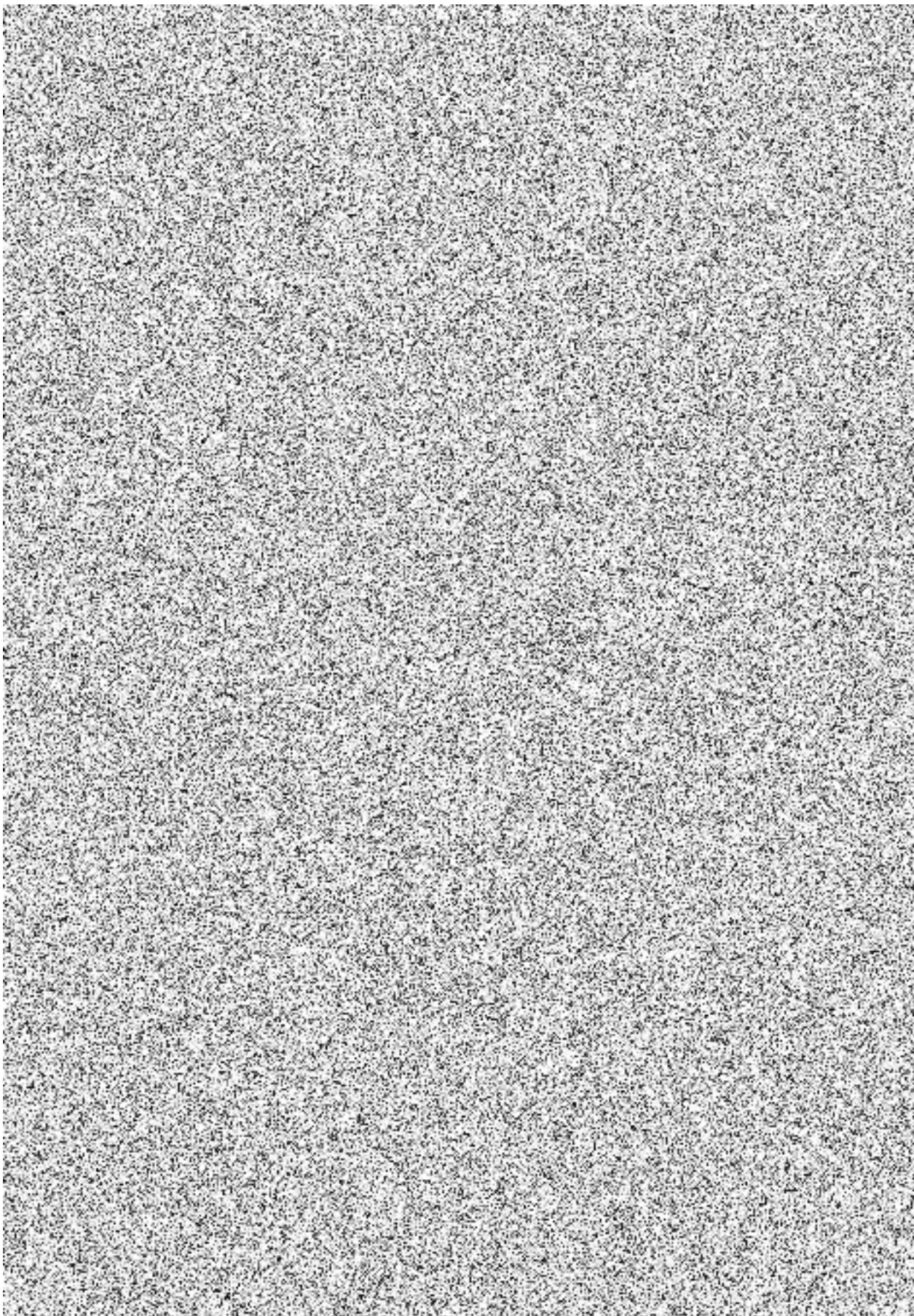
9. Fuel related TechSpecs information report

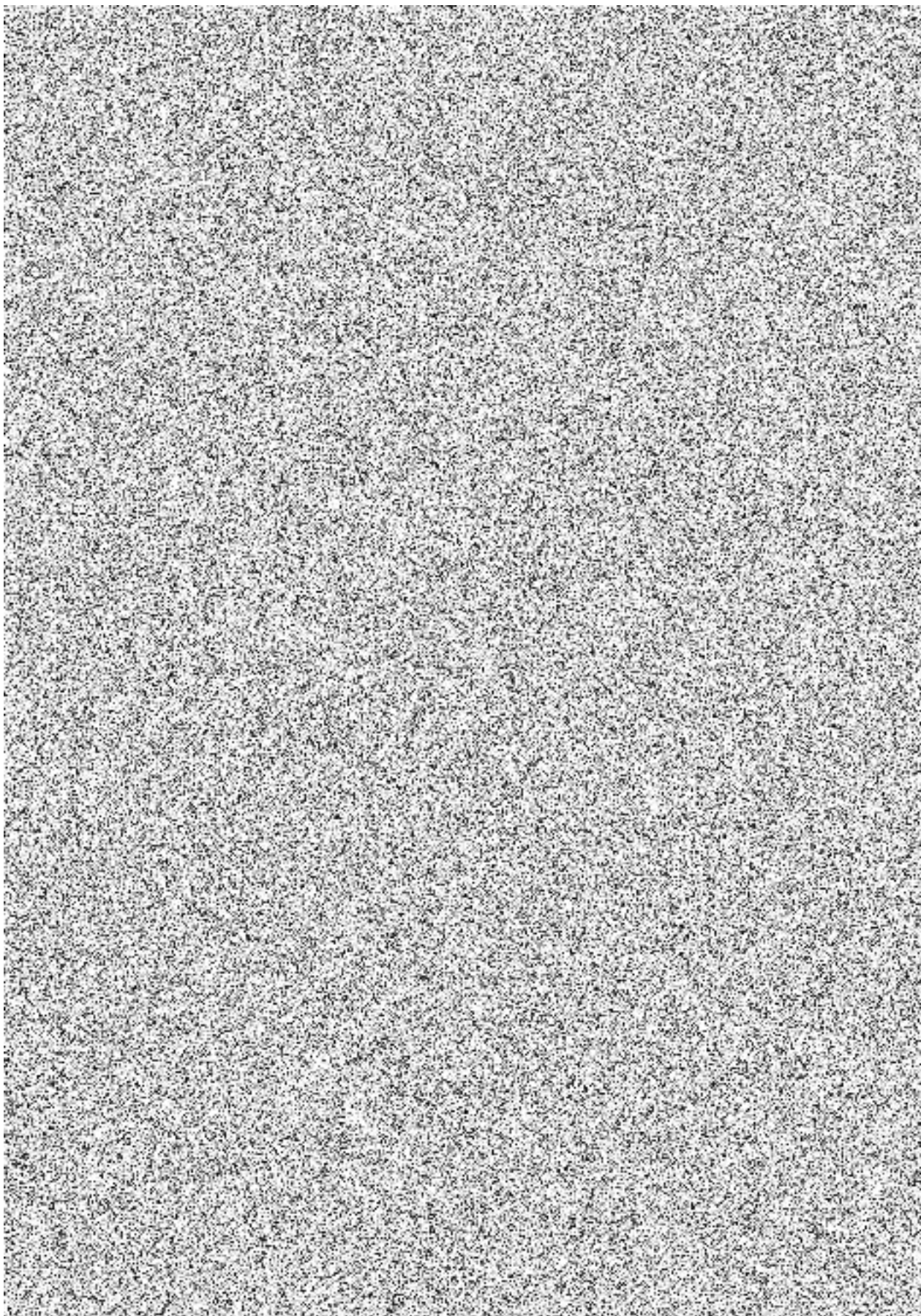
The report will contain all Fuel and Core related limiting conditions of operation and other information necessary to compile Technical Specification document of the Plant (SAR Chapter 16).

[REDACTED]

[REDACTED]

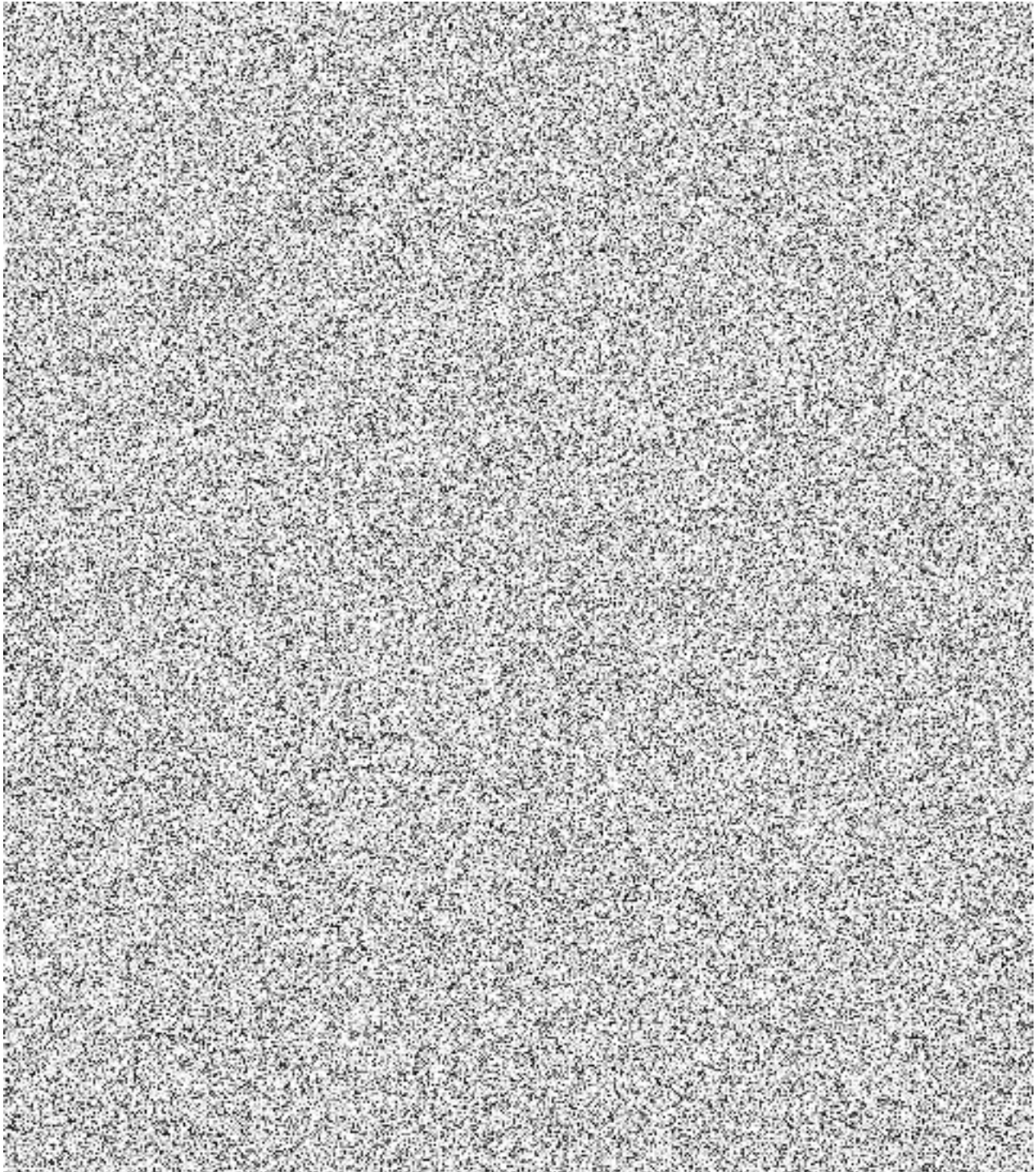
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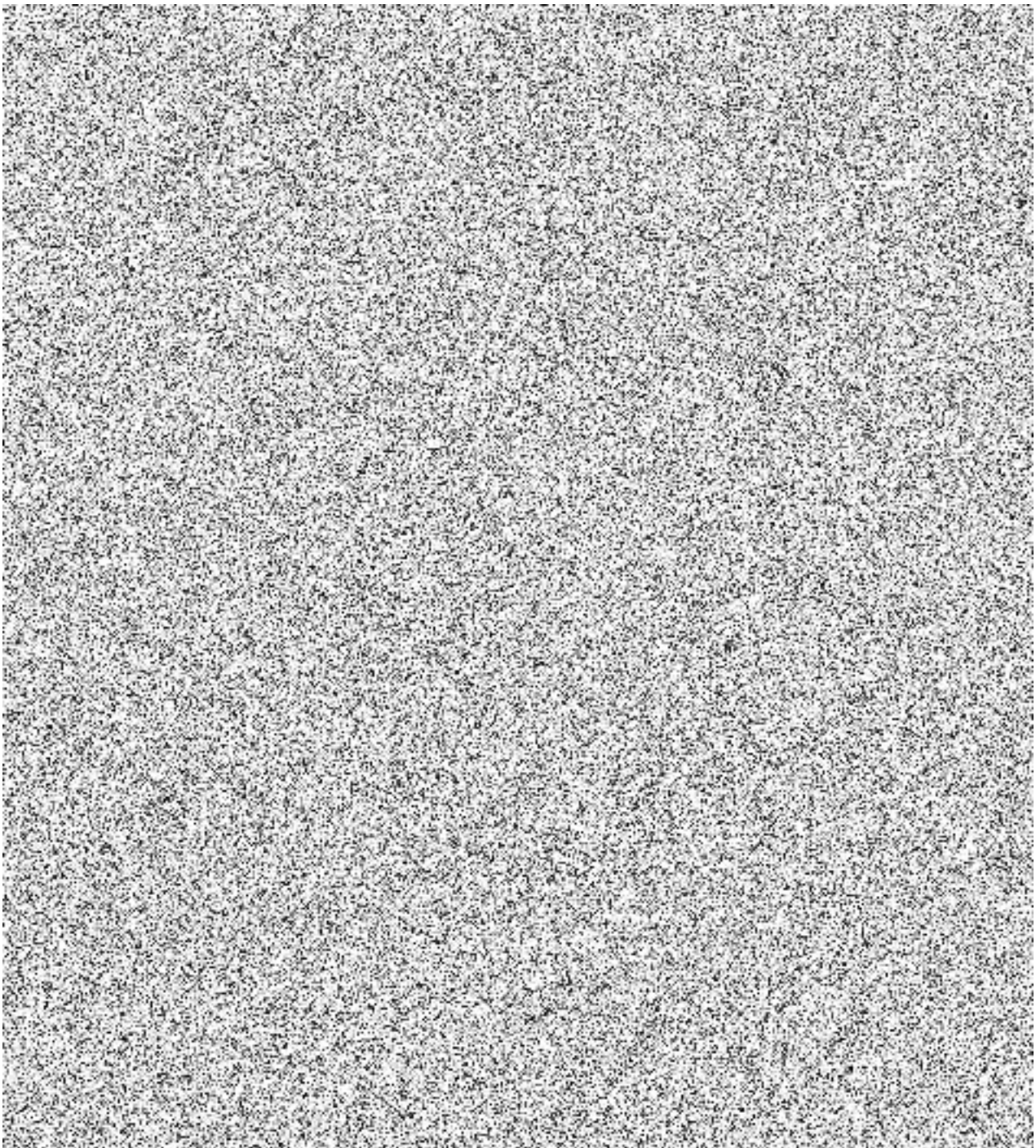






11. Fuel Rod thermal mechanical design report





[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

