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Subject: Proposed Administrative Amendment 48 to NEDE-24011-P-A-26, General Electric Standard Application for Reactor Fuel (GESTAR II)

The enclosed changes to Appendix A of the US Supplement to GESTAR II are proposed to incorporate editorial corrections to the Supplemental Reload Licensing Report (SRLR) and Fuel Bundle Information Report (FBIR) templates. These revisions reflect slight variations in the presentation of analytical results as the result of lessons learned during the generation of individual plant SRLRs and FBIRs. These changes do not affect the fundamental technical content. For clarity, all of Appendix A has been included.

If you have any questions about the information provided here, please contact me at (910) 819-6684 or Jim Harrison at (910) 620-1826.

Sincerely,

Brian R. Moore, Ph.D
General Manager, Core & Fuel Engineering
Global Nuclear Fuel – Americas, LLC

Project No. 712
Docket No. 99901376

Enclosures:

1. Proposed Amendment 48 to GESTAR II US Supplement Appendix A – Non-Proprietary Information – Class I (Public)

cc: J Golla, USNRC
JG Head, GEH/Wilmington
JF Harrison, GEH/Wilmington
PLM Specification 004N8158 R0

ENCLOSURE 1

M180106

Proposed Amendment 48 to GESTAR II US Supplement
Appendix A

Non-Proprietary Information – Class I (Public)

Appendix A

Standard Supplemental Reload Licensing Report

And

Fuel Bundle Information Report

APPENDIX A

STANDARD SUPPLEMENTAL RELOAD LICENSING REPORT

The following template provides the standard format to be used for an individual plant supplemental reload licensing report (SRLR) ~~with end-of-cycle (EOC) limits reported.~~ For plants that have chosen to use TRACG methods for analyzing pressurization transients, some adjustment of the information and format will be necessary. For plants that have met the requirements necessary to support the ~~recatagorization~~ **recategorization** of the fuel loading error, the ΔCPR results for the FLE events will not be provided, rather a statement regarding the ~~recatagorization~~ **recategorization** will be included. **Formatting and editorial adjustments, which do not affect the fundamental technical content, may be made to an individual plant SRLR.**

Additional appendices**,** ~~–~~**tables,** ~~and~~ figures**, and footnotes** can be added as necessary to address plant and cycle specific ~~issues~~**subjects**. The following ~~are typical~~**is an example** list~~s~~ of **the** appendices and figures.

EXAMPLE LIST OF APPENDICES

Analysis Conditions (will normally appear as the first appendix)
Decrease in Core Coolant Temperature Event~~s~~
Pump Seizure
Partial Arc Condition
Thermal-Mechanical Compliance
Safety/Relief Valve Setpoint Tolerance Relaxation
Expanded Operating Domain Analyses
Equipment Out Of Service Analyses
Off-Rated ~~Power and Flow~~ Limits
List of Acronyms (will normally appear as the last appendix)

EXAMPLE LIST OF FIGURES

Reference Core Loading Pattern
Plant response to Overpressurization Event ~~(if required, multiple).~~
Plant response to Limiting Power and Pressure Increase Event ~~(if required)~~

The template includes symbols (denoted in blue) which represent plant/cycle specific information to be inserted at these locations. The following is the key to these symbols.

TEMPLATE SYMBOL KEYS:

[a] Insert plant/cycle specific wording
[n] Insert plant/cycle specific numbers
{ } Replace with plant/cycle applicable description
( ) Explanative description

Provided below is a tabulation of typical examples for each of the various types of plant/cycle applicable descriptions.

Description Category	*Example*
{*Appropriate Operating Domain*}	ICF
{*Appropriate Exposure Range*}	BOC to MOC
{*Appropriate Fuel Design(s)*}	~~GE14C~~GNF2
{*Appropriate Extended Operating Domain Description*}	Maximum Extended Load Line Limit Analysis
{*Appropriate EOOS Condition Description*}	Turbine Bypass Valve Out of Service
{*Appropriate Transient Name*}	Load Rejection w/o Bypass
{*Appropriate Application Condition Name*}	Equipment in Service

~~*[{Document Number nnnn}] - [nnnn] - [nnnn] - SRLR*~~
Revision [n]
Class I (Public)
{Issue Date}

Supplemental Reload Licensing Report

for

{Plant Name}

Reload [n] Cycle [n]

{Optional} {Domain Name}

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{Optional} **This SRLR is intended for the *{Domain Name}* license for {*Plant Name*} Cycle [n]. This SRLR is applicable for the *{Domain Name}* domain with a rated power of [nnnn] MWt.**

Acknowledgement *{Optional}*

{Appropriate acknowledgement description}

The basis for this report is Reference [n]. A proprietary Fuel Bundle Information Report (FBIR) supplements this licensing report. The FBIR references the thermal-mechanical linear heat generation rate limits and provides a description of the fuel bundles to be loaded. The document number for this report is *{Document Number}*. ~~The basis for this report is *General Electric Standard Application for Reactor Fuel*, NEDE-24011-P-A-{*Rev*}, {*Issue Date*}; and U.S. Supplement, NEDE-24011-P-A-{*Rev*}, {*Issue Date*}.~~

1. Plant-unique Items

Appendix A: Analysis Conditions
Appendix B: Thermal-Mechanical Compliance
Appendix C: Decrease in Core Coolant Temperature Event
Appendix D: Off-Rated Limits
Appendix [a]: {Optional plant-specific as necessary}
Appendix [a]: List of Acronyms

2. Reload Fuel Bundles

Fuel Type	Cycle Loaded	Number
Irradiated:		
~~–~~{*Appropriate Fuel Bundle(s)*~~*Design(s)*~~}~~	[nn]	[nnn]
New:		
{*Appropriate Fuel Bundle(s)*~~ *Design(s)*~~}~~	[nn]	[nnn]
Total:		**[nnn]**

3. Reference Core Loading Pattern

	Core Average Exposure	Cycle Exposure
Nominal previous end-of-cycle exposure:	[nnnnn] MWd/MT ([nnnnn] MWd/ST)	[nnnnn] MWd/MT ([nnnnn] MWd/ST)
Minimum previous end-of-cycle exposure (for cold shutdown considerations):	[nnnnn]MWd/MT ([nnnnn] MWd/ST)	[nnnnn] MWd/MT ([nnnnn] MWd/ST)
Assumed reload beginning-of-cycle exposure:	[nnnnn] MWd/MT ([nnnnn] MWd/ST)	0 MWd/MT (0 MWd/ST)
Assumed reload end-of-cycle exposure (rated conditions):	[nnnnn] MWd/MT ([nnnnn] MWd/ST)	[nnnnn] MWd/MT ([nnnnn] MWd/ST)
Reference core loading pattern:	Figure 1	

4. Calculated Core Effective Multiplication and Control System Worth ~~– No Voids, 20°C~~

Beginning of Cycle, $k_{effective}$	
Uncontrolled **([n] °C)**	[n.nnn]
Fully controlled **([n] °C)**	[n.nnn]
Strongest control rod out **(most reactive condition, [n] °C)**	[n.nnn]
R, Maximum increase in strongest rod out reactivity during the cycle (Δk)	[n.nnn]
Cycle exposure at which R occurs	[nnnnn] MWd/MT ([nnnnn]MWd/ST)

5. Standby Liquid Control System Shutdown Capability

Boron (ppm) (at 20°C)	**Shutdown Margin (Δk) (at 160°C, Xenon Free)**	
	Analytical Requirement	**Achieved**
[nnn]	≥ [n.nnn]	[n.nnn]

6. Reload Unique ~~GETAB~~ Anticipated Operational Occurrences (AOO) Analysis Initial Condition Parameters [1]

Operating domain: {*Appropriate Operating Domain*}
Exposure range : {*Appropriate Exposure Range*} **(Application Condition:** {*Appropriate Application Condition*} **)**

	Peaking Factors						
Fuel Design	**Local**	**Radial**	**Axial**	**R-Factor**	**Bundle Power (MWt)**	**Bundle Flow (1000 lb/hr)**	**Initial MCPR**
{*Appropriate Fuel Design(s)*}	[n.nn]	[n.nn]	[n.nn]	[n.nnn]	[n.nnn]	[nnn.n]	[n.nn]

[1] Exposure range designation is defined in Table 7-1. Application condition number is defined in Section 11.

7. Selected Margin Improvement Options [2]

Recirculation pump trip: [a]

Rod withdrawal limiter: [a]

Thermal power monitor: [a]

Improved scram time: [a]

Measured scram time: [a]

Exposure dependent limits: [a]

Exposure points analyzed: [~~a~~n]

Table 7-1 Cycle Exposure Range Designation

Name	Exposure Range [3]
BOC to MOC	BOC[n] to EOR[n] - [nnnnn] MWd/MT ([nnnnn] MWd/ST)
MOC to EOC	EOR[n] - [nnnnn] MWd/MT ([nnnnn] MWd/ST) to EOC[n]
BOC to EOC	BOC[n] to EOC[n]

[2] Refer to the GESTAR basis document identified at the beginning of this report for the margin improvement options currently supported therein.
[3] End of Rated (EOR) is defined as the cycle exposure corresponding to all rods out, 100% power/100% flow, and normal feedwater temperature. For plants without mid-cycle OLMCPR points, EOR is not applicable.

8. Operating Flexibility Options [4]

The following information presents the operational domains and flexibility options which are supported by the reload licensing analysis.

Extended Operating Domain (EOD): [a]

EOD type: {*Appropriate Extended Operating Domain Description*}

Minimum core flow at rated power: [nn.n] %

Increased Core Flow: [a]

Flow point analyzed throughout cycle: [nnn.n] %

Feedwater Temperature Reduction: [a]

Feedwater temperature reduction during cycle: [nnn.n] °F

Final feedwater temperature reduction: [nnn.n] °F

ARTS Program: [a]

Single Loop Operation: [a]

Equipment Out of Service:

{*Appropriate EOOS Condition Description(s)*} [a]

[4] Refer to the GESTAR basis document identified at the beginning of this report for the operating flexibility options currently supported therein.

9. Core-wide AOO Analysis Results [5][6]

Methods used: [a]

Operating domain: *{Appropriate Operating Domain}* **Exposure range : *{Appropriated Exposure Range}* (Application Condition: [n] ~~*{Appropriate Application Condition}*~~)**				
			Uncorrected ΔCPR *{ODYN}* or Uncorrected ΔCPR/ICPR *{TRACG}*	
Event	**Flux (% rated)**	**Q/A *{ODYN}* or STP *{TRACG}* (% rated)**	*{Appropriate Fuel Design(s)}*	**Fig.**
{Appropriate Limiting Pressure and Power Increase Transient}	[nnn]	[nnn]	[n.nn]	[n]

10. ~~Local~~ Rod Withdrawal Error ~~(With Limiting Instrument Failure)~~ AOO Summary

{Appropriate cycle-specific results discussion}

[5] Exposure range designation is defined in Table 7-1. Application condition number is defined in Section 11.
[6] **The Simulated Thermal Power (STP) is provided as a reasonable estimate of Q/A (% rated). *{TRACG Only}***

11. Cycle SLMCPR and OLMCPR Summary ~~Values~~ [7] [8]

Two (or Full) loop operation safety limit: [n.nn]

Single (or Reduced) loop operation safety limit: [n.nn]

Stability MCPR Design Basis: See Section 15

ECCS MCPR Design Basis: See Section 16 (Initial MCPR)

~~SLO Pump Seizure OLMCPR: See Pump Seizure Appendix (line included if applicable)~~

Non-pressurization Events:

Exposure range: BOC to EOC	
	{*Appropriate Fuel Design(s)*}
~~Control~~ Rod Withdrawal Error ***{Optional}*** (RBM setpoint at [nnn] %)	[n.nn]
Loss of Feedwater Heating ~~(See Appendix [a])~~	[n.nn]
Fuel Loading Error (misoriented)	[n.nn] **(or "Not Limiting" or "N/A")**
Fuel Loading Error (mislocated)	[n.nn] (or~~,~~ "Not Limiting" **or "N/A (See Section 13)")**
Rated Equivalent SLO (or RLO) Pump Seizure[9]	**[n.nn] (or "Not Limiting")**

[7] Exposure range designation is defined in Table 7-1.
[8] For single loop operation, the MCPR operating limit is [n.nn] greater than the two loop value.
[9] The cycle-independent OLMCPR for the recirculation pump seizure event for {*Appropriate Fuel Design*} is [n.nn] based on the cycle-specific SLO (or RLO) SLMCPR. When adjusted for the off-rated power/flow conditions of SLO (or RLO), this limit corresponds to a rated OLMCPR of [n.nn]. This limit does not require an adjustment for the SLO (or RLO) SLMCPR.

Limiting Pressurization Events OLMCPR Summary Table: [10]

Appl. Cond.	Exposure Range	Option A	Option B
		{*Appropriate Fuel Design(s)*}	{*Appropriate Fuel Design(s)*}
[n]	{*Appropriate Application Condition Name*}		
	{*Applicable Exposure Range, e.g."BOC to MOC"*}	[n.nn]	[n.nn]
	{*Applicable Exposure Range, e.g."MOC to EOC"*}	[n.nn]	[n.nn]

Pressurization Events: [11]

Operating domain: {*Appropriate Operating Domain*}
Exposure range : {*Appropriate Exposure Range*} **(Application Condition:** [n] ~~{*Appropriate Application Condition*}~~)

	Option A	Option B
	{*Appropriate Fuel Design(s)*}	{*Appropriate Fuel Design(s)*}
{*Appropriate Transient Name*}	[n.nn]	[n.nn]

12. Overpressurization Analysis Summary

Event	Psl (psig)	Pdome (psig)	Pv (psig)	Plant Response
MSIV Closure (Flux Scram) – {*Appropriate Operating Domain*}	[nnnn]	[nnnn]	[nnnn]	Figure [n]

[10] Each application condition (Appl. Cond.) covers the entire range of licensed flow and feedwater temperature unless specified otherwise. The OLMCPR values presented apply to rated power operation based on the two **(or full)** loop operation safety limit MCPR.
[11] Application condition numbers shown for each of the following pressurization events represent the application conditions for which this event contributed in the determination of the limiting OLMCPR value.

13. Fuel Loading Error Results

Variable water gap misoriented bundle analysis: [a] [12]

Misoriented Fuel Bundle	ΔCPR
{*Appropriate Bundle Design(s)*}	[n.nn]

OR (if an Amendment 28 plant)

This plant satisfies the requirements to classify the fuel loading events (both mislocated bundle and misoriented bundle) as an Infrequent Incident; therefore, cycle specific loading event analyses are not required. NRC approval is documented in Reference 1.

14. Control Rod Drop Analysis Results

{*Appropriate Rod Drop Accident analysis description*}

15. Stability Analysis Results

{*~~Appropriate~~ Stability results description consistent with the plant's stability solution*}

16. Loss-of-Coolant Accident Results

16.1 10CFR50.46 Licensing Results

{*Appropriate ECCS methodology and results description*}

The licensing results applicable to the *{Appropriate Fuel Design(s)}* fuel type are summarized in the following table.

Table 16.1-1 Licensing Results

Fuel Type	Licensing Basis PCT (°F)	Local Oxidation (%)	Core-Wide Metal-Water Reaction (%)
{*Appropriate Fuel Design(s)* }	[nnnn]	< [n.nn]	< [n.nn]

[12] Includes a [n.nn] penalty due to variable water gap R-factor uncertainty.

The {*Appropriate methodology*} analysis results **for** ***{Appropriate Fuel Design(s)}*** are documented in Reference [n] ~~for {*Appropriate Fuel Design(s)*} in Section 16.4~~.

16.2 10CFR50.46 Error Evaluation

All reported **10CFR50.46 Notification Letters have been resolved in the analysis** ~~errors have been corrected in the evaluation~~ documented in Reference [n] for {*Appropriate Fuel Design(s)*} ~~in Section 16.4~~.

OR (if reported 10CFR50.46 Notification Letters~~ing errors~~ are applicable for this cycle)

The 10CFR50.46 ~~errors~~ **Notification Letters** applicable to the Licensing Basis PCT are shown in the table below.

Table 16.2-1 Impact on Licensing Basis Peak Cladding Temperature for {Appropriate Fuel Design(s)}

10CFR50.46 ~~Error~~ Notification Letters		
Number	**Subject**	**PCT Impact (°F)**
[n]	{*Appropriate Error Description*}	[nnn]
	Total PCT Adder (°F)	[nnn]

After accounting for the impact of the 10CFR50.46 Notification Letters, t~~T~~he {*Appropriate Fuel Design(s)*} Licensing Basis PCT **with the total PCT adder** remains below the 10CFR50.46 limit of [nnn] °F.

16.3 ECCS-LOCA Operating Limits

The ECCS-**LOCA** MAPLHGR operating limits for ~~new~~ **all** fuel bundles in this cycle are shown in the table**(**s**)** below.

Table 16.3-1 MAPLHGR Limits

Bundle Type: {*Appropriate Bundle Design(s)*}

Average Planar Exposure		MAPLHGR Limit
GWd/MT	**GWd/ST**	**kW/ft**
0.00	0.00	[nn.nn]
[nn.nn]	[nn.nn]	[nn.nn]

{For Non-MELLLA+ plants with no set down:}

The power and flow dependent LHGR multipliers are sufficient to provide adequate protection for the off-rated conditions from an ECCS-LOCA analysis perspective and there is no need for MAPLHGR multipliers, in addition to off-rated LHGR multipliers.

{For MELLLA+ plants with no set down:}

The power and flow dependent LHGR multipliers are sufficient to provide adequate protection for the off-rated conditions from an ECCS-LOCA analysis perspective. The MAPLHGR multipliers can either be set to unity or set equal to the LHGR multipliers, which remain compliant with the basis of the ECCS-LOCA analysis with no loss of ECCS-LOCA margin.

{For MELLLA+ plants with set down:}

The power and flow dependent LHGR multipliers have been determined insufficient to provide adequate protection for the off-rated conditions from an ECCS-LOCA analysis perspective. A MAPLHGR multiplier of [n.nn] for operation at or below [nn]% core flow needs to be set. MAPLHGR multipliers set consistent to these values confirm compliance with the basis of the ECCS-LOCA analysis and the 10CFR50.46 Acceptance Criteria.

The single-loop operation multiplier on LHGR and MAPLHGR, and the ECCS-**LOCA** analytical initial MCPR values applicable to *{Appropriate Fuel Design(s)}*~~each~~ fuel type in the new cycle core are shown in the table below.

Table 16.3-[n] Initial MCPR and Single Loop Operation LHGR and MAPLHGR Multiplier

Fuel Type	Initial MCPR	Single Loop Operation LHGR and MAPLHGR Multiplier
{Appropriate Fuel Design(s)}	[n.nnn]	[n.nn]

~~**16.4 References**~~

~~The SAFER/GESTR-LOCA analysis base report applicable to the new cycle core is listed below.~~

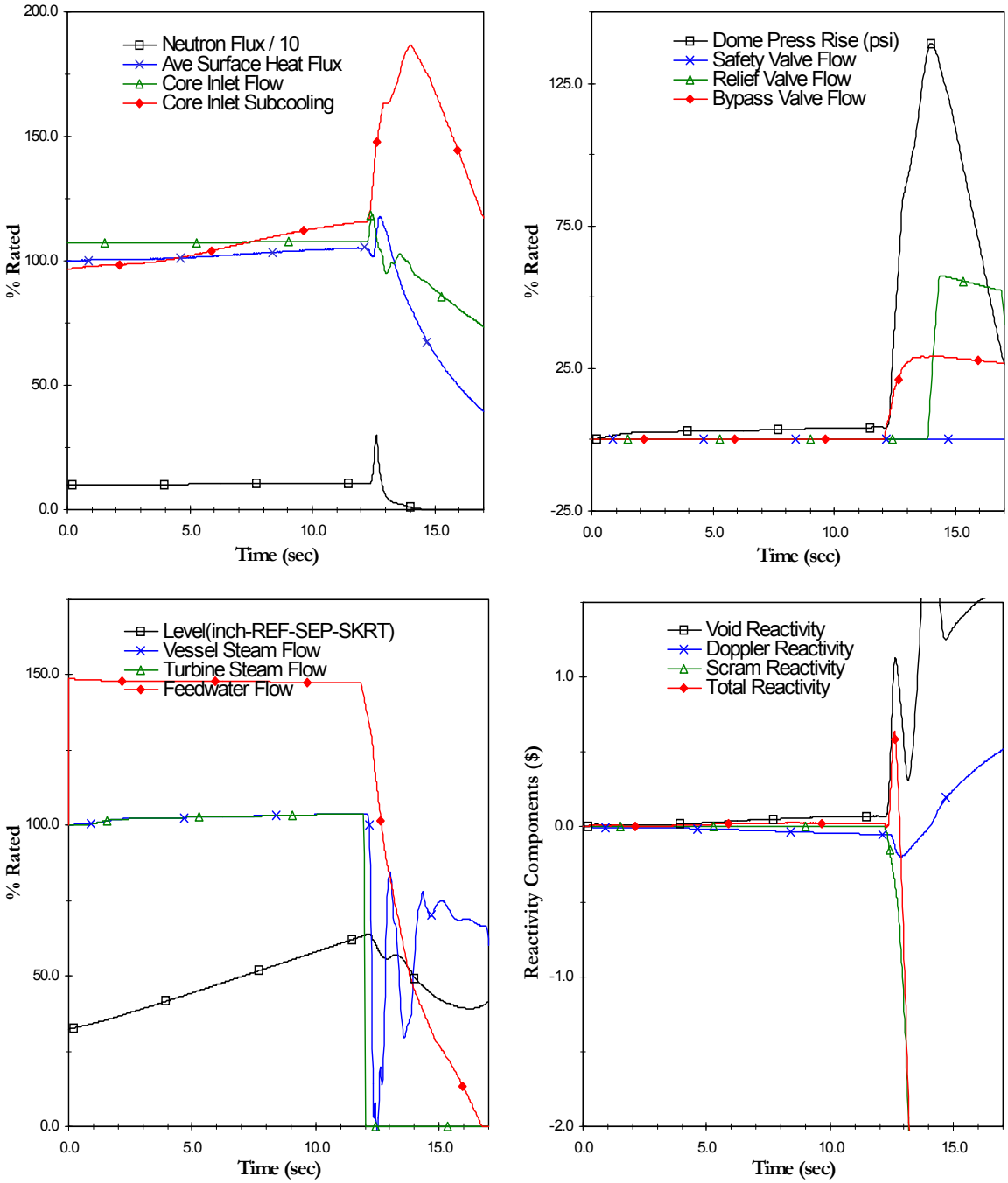
~~**References for {*Appropriate Fuel Design(s)*}**~~

~~1. {*Appropriate Reference(s) for this fuel design*}~~

{ Core Loading Map }

Fuel Type	
~~A~~1= {*Appropriate Fuel Bundle ~~Design~~(s)* ~~(~~{*Appropriate cycle*}~~)~~ ~~B~~2= ~~C~~3= ~~D~~4=	~~E~~5= ~~F~~6= ~~G~~7= ~~H~~8=

Figure 1 Reference Core Loading Pattern



Sample Figure [n] Plant Response to *{Appropriate Transient Analysis}*
(*{Appropriate Exposure Point and Operating Domain}* **)**

Appendix A
Analysis Conditions

The reactor operating conditions used in the reload licensing analysis for this plant and cycle are presented in Table A-1. The pressure relief and safety valve configuration for this plant are presented in Table A-2. Additionally, the operating flexibility options listed in Section 8 are supported by the reload licensing analysis.

Table A-1 Reactor Operating Conditions

	Analysis Value
Parameter	*{Appropriate Core Flow and Feedwater Temperature Condition(s)}*
Thermal power, MWt	[nnnn.n]
Core flow, Mlb/hr	[nnn.n]
Reactor pressure (core mid-plane), psia	[nnnn.n]
Inlet enthalpy, Btu/lb	[nnn.n]
Non-fuel power fraction ***{ODYN Plants Only}***	[n.nnn]
Steam flow, Mlb/hr	[nn.nn]
Dome pressure, psig	[nnnn.n]
Turbine pressure, psig	[nnn.n]

Table A-2 Pressure Relief and Safety Valve Configuration

Valve Type	**Number of Valves**	**Lowest Setpoint (psig)**
{Appropriate Valve Description}	[n]	[nnnn.n]

Appendix [a]
List of Acronyms

Acronym	Description
{Acronym}	{Acronym description}

References

[1] *General Electric Standard Application for Reactor Fuel.* NEDE-24011-P-A-[nn], *{Month Year}*; and the U.S. Supplement, NEDE-24011-P-A-[nn]-US, *{Month Year}*.

[n] {Reference Citation}

STANDARD FUEL BUNDLE INFORMATION REPORT

The following template provides the standard format to be used for an individual plant Fuel Bundle Information Report (FBIR). This report, which supplements the *Supplemental Reload Licensing Report*, contains thermal-mechanical linear heat generation rate (LHGR) limits for fuel designs to be loaded into the plant for the specific cycle. These LHGR limits are obtained from thermal-mechanical considerations only.

LHGR limits as a function of exposure for each bundle of the core design are given in Appendix A to the FBIR. Appendix A may reference the GESTAR II Compliance Report **or a plant-specific report** for the fuel product line as a submitted reference providing the LHGR limits.

Appendix B contains a description of the fuel bundles. Table B-1 contains a summary of bundle-specific information, and the figures provide the enrichment distribution and gadolinium distribution for the fuel bundles included in this appendix.

~~[nnnnn]P~~*{Document Number}*
Revision [n]
Class II (Internal)
{Issue Date}

GNF-A Proprietary Information
~~***– Class II (Internal)***~~

Fuel Bundle Information Report
for
{Plant Name}
Reload [n] Cycle [n]

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1. Introduction and Summary

This report, which supplements the *Supplemental Reload Licensing Report*, contains thermal-mechanical linear heat generation rate (LHGR) limits for the GNF-A fuel designs to be loaded into **{Plant Name}** for Cycle **[n]**. These LHGR limits are obtained from thermal-mechanical considerations only. Approved GNF-A calculation models documented in Reference 1 were used in performing this analysis.

LHGR limits as a function of exposure for each bundle of the core design are given in Appendix A. The LHGR values provided in Appendix A provide upper and lower exposure dependent LHGR boundaries which envelope the actual gadolinia dependent LHGR limits. The LHGRs reported have been rounded to two places past the decimal.

Appendix B contains a description of the fuel bundles. Table B-1 contains a summary of bundle-specific information, and the figures provide the enrichment distribution and gadolinium distribution for the fuel bundles included in this appendix. These bundles have been approved for use under the fuel licensing acceptance criteria of Reference 1.

2. References

1. *General Electric Standard Application for Reactor Fuel*, NEDE-24011-P-A-{*Rev*}, {*Issue Date*}; and the U.S. Supplement, NEDE-24011-P-A-{*Rev*}-US, {*Issue Date*}.

Appendix A
UO_2/Gd Thermal-Mechanical LHGR Limits

Bundle Type: {*Appropriate Fuel Design(s)*}

Bundle Number: [nnnn]

Peak Pellet Exposure	UO_2 LHGR Limit
GWd/MT (GWd/ST)	kW/ft
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]

Peak Pellet Exposure	Most Limiting Gadolinia LHGR Limit [1]
GWd/MT (GWd/ST)	kW/ft
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]
[n.nn] ([n.nn])	[nn.nn]

Note: Suitable references to other documents may also be used to define the applicable LHGR limits.

[1] Bounding gadolinia LHGR limit for all gadolinium concentrations occurring in this bundle design ([n.n]% Gd).

Appendix B
Fuel Bundle Information

Table B-1 Bundle Specific Information						
Fuel Bundle	**Bundle Number**	**Enrichment (wt% U-235)**	**Weight of UO_2 (kg)**	**Weight of U (kg)**	**Max k_∞ at 20°C[2]**	**Exposure at Max k_∞ GWd/MT (GWd/ST)**
{Appropriate Fuel ~~Design~~Bundle(s)}	[nnnn]	[n.nn]	[nnn.n]	[nnn.n]	[n.nnn]	[nn.n]([nn.n])

[2] Maximum lattice k_∞ at 20°C plus a 0.01 adder for uncertainties.

Figure B-[n] Enrichment and Gadolinium Distribution for EDB No. [nnnn]
Fuel Bundle {*Appropriate Fuel Bundle~~Design~~(s)*}