

Calculation Cover Sheet

Complete only applicable items.

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CRC Depletion Calculations for LaSalle Unit 1

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10. Remarks
 Attachments III, IV, V, and VI are contained on attachment compact disks, Reference 7.11, for this calculation. The numbers shown in Box 6 refer to the number of pages in the hard-copy listing of each file's attributes on the compact disks.

Revision History

11. Revision No.	12. Description of Revision
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1. PURPOSE

The purpose of this calculation is to document the LaSalle Unit 1 boiling water reactor (BWR) fuel depletion calculations performed as part of the commercial reactor critical (CRC) evaluation program. The CRC evaluations constitute benchmark calculations that support the development and validation of the neutronics models used for criticality analyses involving commercial spent nuclear fuel in a geologic repository. This calculation incorporates control blade effects and minor variations in the SAS2H assembly modeling.

2. METHOD

The calculation method used to perform the LaSalle Unit 1 fuel depletion calculations consisted of using the SAS2H control sequence of the SCALE, Version 4.3, code system (Reference 7.1) to deplete the necessary fuel assemblies. The various fuel assemblies were depleted through their unique operating histories such that their modified fuel isotopic compositions would be available at specific exposure times corresponding to the times (statepoints) at which detailed core reactivity calculations would be performed. The fuel assembly depletion calculations were based on core follow information for each assembly.

3. ASSUMPTIONS

- 3.1 The assumption is that the approximation of uniformly distributed non-fuel lattice cells in the Path B models of the SAS2H calculations, as described in Section 5.4, is considered acceptable within the fidelity of these calculations. The basis for this assumption is provided in Section S2.2.3.1 of Volume 1, Rev. 5 in Reference 7.1. This assumption was used throughout all of the depletion calculations documented in Section 5.
- 3.2 The assumption is that the use of the 44-group ENDF/B-V cross section library, which was originally collapsed from the 238-group ENDF/B-V cross section library using a fuel cell spectrum described by a pressurized water reactor assembly, is considered acceptable for BWR depletions. The applicability of this cross section collapsing method for BWR assemblies has not been determined. A known bias caused by inadequate plutonium cross section representation has been identified (Volume 0, Reference 7.1). The basis for this assumption is provided in Section M4.2.9 of Volume 3, Rev. 5 in Reference 7.1. Additional confirmatory sensitivity calculations can be performed to evaluate the impact of this assumption. This assumption was used throughout all of the depletion calculations documented in Section 5.
- 3.3 The assumption is that the approximations made in modeling gadolinia-bearing fuel rods (GDRs), water rods, axial and radial enrichment distributions, and two-phase moderator density profiles due to the limitations of SAS2H are considered acceptable for BWR depletion calculations. The complexity of BWR fuel designs requires unique modeling methods be made in the development of the Path B model for the SAS2H calculations described in Section 5.4. The basis for this assumption is engineering judgement. The impact of this assumption on the accuracy of the

results contained in this calculation has not been quantified. Additional confirmatory sensitivity calculations can be performed to evaluate the impact of this modeling assumption. This assumption was used throughout all of the depletion calculations documented in Section 5.

- 3.4 The assumption is that the collapsed 10 node assembly model (Reference 7.3, p. 28) used for the fuel assembly depletion calculations documented in this calculation is considered acceptable. The basis for this assumption is engineering judgement. Nodal data for LaSalle Unit 1 BWR assemblies is available in 25-node format. The averaging and combining of various node data to collapse to a 10 node format was a necessary approximation in this calculation because of time constraints and the large number of calculations required to process assemblies. The impact of this assumption on the accuracy of the results contained herein has not been quantified. Additional confirmatory sensitivity calculations can be performed to evaluate the impact of this modeling assumption. This assumption was used throughout all of the depletion calculations documented in Section 5.
- 3.5 The assumption is that the approximations required for the modeling of control blades, modeling of control blade exposure time (Reference 7.3, Section 4.2), and nodal average power for controlled nodes during the life of an assembly are considered acceptable. These approximations, described in Section 5, are required due to the limitations of both SAS2H and the software routine automation required to operate SAS2H. This assumption incorporates the fact that controlled nodes were depleted at full power in the SAS2H model without adjustment for local power decreases in the vicinity of a control blade. The basis for this assumption is engineering judgement. The impact of this assumption on the accuracy of the results contained in this calculation has not been quantified. Additional confirmatory sensitivity calculations can be performed to evaluate the impact of this modeling assumption. This assumption was used throughout all of the depletion calculations documented in Section 5.
- 3.6 The assumption is that small variations in nodal depleted fuel isotopic concentrations from one depletion calculation to the subsequent depletion calculation are inconsequential. Due to limitations in the SCALE4.3 version of SAS2H, software routine automation is required to operate SAS2H for CRC depletion calculations. The software routine automation is described in Attachments I and II of Reference 7.9. The basis for this assumption is engineering judgement. The impact of this assumption on the accuracy of the results contained in this calculation has not been quantified. Additional confirmatory sensitivity calculations can be performed to evaluate the impact of this modeling assumption. This assumption was used throughout all of the depletion calculations documented in Section 5.
- 3.7 The assumption is that the use of nodal average powers in SAS2H depletion calculations that reflect full power reactor operation without adjustment for plant capacity factor does not adversely affect the calculated isotopic concentrations. The basis for this assumption is engineering judgement. The impact of this assumption on the accuracy of the results contained in this calculation has not been quantified. Additional confirmatory sensitivity calculations can be performed to evaluate the impact of this modeling assumption. This assumption was used throughout all of the depletion calculations documented in Section 5.

4. USE OF COMPUTER SOFTWARE

4.1. SOFTWARE APPROVED FOR QA WORK

4.1.1. SAS2H

The SAS2H control module of the SCALE, Version 4.3, modular code system (Reference 7.1) was used to perform the fuel assembly depletion calculations required for the LaSalle Unit 1 CRC evaluations. The software specifications are as follows:

- Program Name: SAS2H of the SCALE Modular Code System
- Version/Revision Number: Version 4.3
- Computer Software Configuration Item (CSCI) Number: 30011 V4.3
- Computer Type: Hewlett Packard (HP) 9000 Series Workstations
- Computer Unit : CRWMS M&O 700887 (BLOOM)

The input and output files for the various SAS2H calculations were documented in the attachments to this calculation as described in Section 5, such that an independent repetition of the software use could be performed. The SAS2H software used was: (a) appropriate for the application of commercial fuel assembly depletion, (b) used only within the range of validation as documented in References 7.1 and 7.2, (c) obtained from the Software Configuration Manager in accordance with appropriate procedures.

4.2. SOFTWARE ROUTINES

The description documentation for each of the software routines identified in this section, other than the acquired software routine Excel described in Section 4.2.1, contains the following information:

- Descriptions and equations of mathematical algorithms
- Description of software routine including execution environment
- Description of test cases
- Description of test results
- Range of input parameter values for which results were verified
- Identification of any limitations on software routine applications or validity
- Reference list of all documentation relevant to the qualification
- Directory listing of executable and data files
- Computer listing of source code

4.2.1. EXCEL

- Title: Excel
- Version/Revision Number: Microsoft® Excel 97

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The Excel spreadsheet program was used for simple numeric calculations as documented in Section 5 of this calculation. The user-defined formulas, inputs, and results were documented in sufficient detail in Section 5 to allow an independent repetition of the various computations.

4.2.2. SPACE V01

- Title: System Processor and CRAFT V4C Executor (SPACE)
- Version/Revision Number: Version 01

The SPACE software routine produced the required CRAFT input files for each assembly and directed the execution of CRAFT. The SPACE and CRAFT assembly input files are documented in Attachment III (Reference 7.11) such that an independent repetition of the software routine use can be performed. The description of the SPACE, Version 01, software routine is provided in Attachments I and II of Reference 7.9.

A minor modification to the source code of SPACEV01 was made to accommodate the larger number of Path B models in LaSalle depletion calculations. The only changes made were to increase the dimensionality of the FMASS and NRODS arrays from 10 to 20. Listed below is the output of the HP-UX "sdiff" command with dallas:/home/davidh/SPACE_V01/spacev01.f and bobbi:/home/noel/SPACE_V01/spacev01.f as input arguments, respectively. The entries to the left of the vertical are from dallas:/home/davidh/SPACE_V01/spacev01.f and the entries to the right of the vertical are from bobbi:/home/noel/SPACE_V01/spacev01.f.

```

51c51
c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(10), NRODS(10) | c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(20), NRODS(20),
208c208
c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(10), NRODS(10) | c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(20), NRODS(20),
594c594
c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(10), NRODS(10) | c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(20), NRODS(20),
896c896
c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(10), NRODS(10) | c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(20), NRODS(20),
1280c1280
c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(10), NRODS(10) | c BUNDES(50,2,20), BUDAT(50,20), RICH, FMASS(20), NRODS(20),

```

4.2.3. CRAFT V4C

- Title: Commercial Reactor Assembly Follow Taskmaster (CRAFT)
- Version/Revision Number: Version 4C

The CRAFT software routine produced the input and directed the execution for the various SAS2H calculations required to deplete a commercial reactor fuel assembly to support a CRC evaluation. The outputs for SPACE-CRAFT-SAS2H depletion calculations were documented in Attachments IV, V and VI (Reference 7.11). The description of the CRAFT, Version 4C, software routine is provided in Attachments I and II of Reference 7.9.

4.3. MODELS

None.

5. CALCULATION

5.1. LASALLE UNIT 1 CRC EVALUATION DESCRIPTION

The LaSalle Unit 1 CRC evaluations were performed at five statepoints: Cycle 7 [0.0, 193.20, 306.75 Effective Full-Power Days (EFPD)], Cycle 8 [0.0 and 3.67 EFPD]. Each statepoint represented a specific time when the reactor was brought to a zero power, critical condition where the effective critical multiplication factor (k_{eff}) for the core is determined by experiment to equal 1. The CRC evaluations of each of these critical statepoints involved the use of SAS2H to deplete the various fuel assemblies and MCNP (Reference 7.4) to model the reactor core such that the k_{eff} value at each of the critical statepoints could be predicted to demonstrate the ability of the dual code system. Hence, the objective of each CRC statepoint evaluation was to predict the reactor core k_{eff} as close to measurement as possible (the measurement is always $k_{\text{eff}} = 1$). The objective of the SAS2H depletion calculations documented in this calculation was to provide the depleted fuel and burnable poison isotopic compositions to be used in the corresponding CRC reactivity calculations.

Fuel isotopic compositions were calculated with SAS2H for each depleted fuel assembly in each of the critical statepoint configurations to facilitate MCNP modeling. The LaSalle Unit 1 statepoint calculations required the depletion of fuel assemblies from nine fuel batches. Fuel assembly design characteristics may vary between each fuel batch. Section 5.2 presents the input parameters required to perform the various fuel assembly depletion calculations. Sections 5.3 through 5.6 describe how the parameters listed in Section 5.2 were utilized to perform the SAS2H depletion calculations relevant to the CRC statepoint evaluations. The information provided in Attachments I and II of Reference 7.9, the input parameters provided in Section 5.2, and the SPACE-CRAFT input files contained in Attachment III work together to provide a complete description of how all of SAS2H depletion calculations were performed.

The number of digits in the values cited herein may be the result of a calculation or may reflect the input from another source; consequently, the number of digits should not be interpreted as an indication of accuracy.

5.2. INPUT SPECIFICATIONS FOR DEPLETION CALCULATIONS

The information documented in this section describes the design specifications and irradiation histories for the fuel assemblies required for the LaSalle Unit 1 CRC evaluations. Most of the input specifications presented in this section were obtained from Reference 7.3. Initially, these inputs were not classified as "accepted data" per the retroactive procedural requirement of AP-SIII.2Q initiated by the July 27, 1999 issuance of the DOE Letter, "Accepted Data Call", from R. E. Spence to J. L. Younker (Reference 7.10). As a result, TBV-1349 was assigned to Reference 7.3. Subsequently, DOE issued a letter (Reference 7.12), approving the request to identify the inputs from Reference 7.3 as accepted data. Consequently, these inputs are hereupon considered accepted data. Inputs obtained from Reference 7.5, Reference 7.7, and Reference 7.8 are considered accepted data. Input specifications from other sources are as indicated. The LaSalle Unit 1 CRC evaluations included fuel assemblies from nine fuel types (batches) with the following fuel type identifications: A, B, C, D, E, F, G, H, and J.

During depletion calculations for LaSalle Unit 1, inputs for nodes 2 and 3 of all assembly fuel types were incorrectly specified. For these nodes, the fuel U-235 enrichment was incorrectly modeled. The depletion calculations for nodes 2 and 3 of all assembly fuel types were rerun correctly and documented in Attachment VI (Reference 7.11).

5.2.1. FUEL ASSEMBLY DESCRIPTIONS

Table 5-1 contains a description of the fuel assemblies for fuel types A, B, C, D, E, F, G, H, and J of LaSalle Unit 1. All fuel assemblies within a given fuel type have the same characteristics as presented in Table 5-1. The assemblies are modeled and depleted in a 10 node collapsed scheme as provided in Reference 7.3, p. 28. The node mass and gadolinia-bearing fuel rod smeared pellet density in Table 5-1 are calculated values and are determined by Equations 5-1 and 5-2.

Equation 5-1. Mass of Uranium in Node

$$\text{Nodemass} = \text{RLM} \cdot (\# \text{ fuelrods}) \cdot (\text{nodeheight})$$

where: *RLM* is the rod linear mass in g/cm (Reference 7.3, p. 416); *#fuelrods* is the number of fuel rods in the node; *nodeheight* is the height of the node in centimeters.

Equation 5-2. Gadolinia-Bearing Fuel Rod Smeared Pellet Density

$$\text{Density}_{\text{smeared}} = \text{RLM} \cdot \frac{1}{\pi \cdot \left(\frac{\text{cladid}}{2}\right)^2} \cdot \frac{1}{\text{wfrac}_{\text{oxygen}}}$$

where: *RLM* is the rod linear mass in g/cm; *cladid* is the inner dimension of the fuel rod clad; *wfrac* is the weight fraction of oxygen in the gadolinia-fuel mixture.

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Parameter	Fuel Type Identifier					
	A	B	C	D	E	F
Node 9						
Average Enrich. U-235	0.71	0.71	0.71	0.71	0.71	0.71
# GDRs	0	0	0	0	0	0
GDR Enrichment	0.0	0.0	0.0	0.0	0.0	0.0
Node Mass (kg)	7.2107	7.2288	7.2028	7.2246	7.2199	7.1742
Node Height (cm)	15.24	15.24	15.24	15.24	15.24	15.24
Node 10						
Average Enrich. U-235	0.71	0.71	0.71	0.71	0.71	0.71
# GDRs	0	0	0	0	0	0
GDR Enrichment	0.0	0.0	0.0	0.0	0.0	0.0
Node Mass (kg)	5.7685	5.7831	5.7623	5.7797	5.7760	5.7394
Node Height (cm)	15.24	15.24	15.24	15.24	15.24	15.24
Active Fuel Height (cm)	381.0	381.0	381.0	381.0	381.0	381.0
Fuel Pellet OD ³ (cm)	1.0439	1.0439	1.0439	1.0439	1.0439	1.0439
Fuel Rod Clad OD (cm)	1.2268	1.2268	1.2268	1.2268	1.2268	1.2268
Fuel Rod Clad ID ⁴ (cm)	1.0643	1.0643	1.0643	1.0643	1.0643	1.0643
Channel Thickness ⁵ (cm)	0.4561	0.4561	0.4561	0.4561	0.4561	0.4561
Channel Inside Width (cm)	13.4061	13.4061	13.4061	13.4061	13.4061	13.4061
Water Rod Material	Zirc4 ⁶	Zirc4	Zirc4	Zirc4	Zirc4	Zirc4
Water Rod OD (cm)	3.4036	3.4036	3.4036	3.4036	3.4036	3.4036
Water Rod ID (cm)	3.2004	3.2004	3.2004	3.2004	3.2004	3.2004
Array Size	8 x 8	8 x 8	8 x 8	8 x 8	8 x 8	8 x 8
Number of Fuel Rods ⁷	60	60	60	60	60	60
Pin Pitch (cm)	1.6256	1.6256	1.6256	1.6256	1.6256	1.6256
Assembly Pitch (cm)	15.24	15.24	15.24	15.24	15.24	15.24

Table 5-1. Fuel Assembly Descriptions for the LaSalle Unit 1 CRC Evaluations (cont.)

Parameter	Fuel Type Identifier		
	G	H	J
Assembly Average Enrich. U-235	3.22	3.42	3.43
Node 1			
Average Enrich. U-235	0.71	0.71	0.71
# GDRs	0	0	0
GDR Enrichment	0.0	0.0	0.0
Node Mass (kg)	7.1627	7.1668	7.1454
Node Height (cm)	15.24	15.24	15.24
Node 2			
Average Enrich. U-235	3.45	3.63	3.63
# GDRs	5/4	8	10
GDR Enrichment	5.0/4.0	5.0	5.0
Node Mass (kg)	21.4871	21.4995	21.4353
Node Height (cm)	45.72	45.72	45.72

Parameter	Fuel Type Identifier		
	G	H	J
Node 3			
Average Enrich. U-235	3.45	3.63	3.63
# GDRs	5/4	8	10
GDR Enrichment	5.0/4.0	5.0	5.0
Node Mass (kg)	28.6495	28.6659	28.5804
Node Height (cm)	60.96	60.96	60.96
Node 4			
Average Enrich. U-235	3.62	3.88	3.90
# GDRs	9	8	10
GDR Enrichment	4.0	4.0	5.0
Node Mass (kg)	21.4871	21.4994	21.4352
Node Height (cm)	45.72	45.72	45.72
Node 5			
Average Enrich. U-235	3.62	3.88	3.90
# GDRs	9	8	10
GDR Enrichment	4.0	4.0	5.0
Node Mass (kg)	21.4871	21.4994	21.4352
Node Height (cm)	45.72	45.72	45.72
Node 6			
Average Enrich. U-235	3.62	3.88	3.90
# GDRs	9	8	10
GDR Enrichment	4.0	4.0	5.0
Node Mass (kg)	21.4871	21.4994	21.4352
Node Height (cm)	45.72	45.72	45.72
Node 7			
Average Enrich. U-235	3.62	3.88	3.90
# GDRs	2/9	2/8	12
GDR Enrichment	5.0/4.0	5.0/4.0	5.0
Node Mass (kg)	21.4871	21.4994	21.4352
Node Height (cm)	45.72	45.72	45.72
Node 8			
Average Enrich. U-235	3.45	3.63	3.63
# GDRs	9	8	10
GDR Enrichment	4.0	4.0	5.0
Node Mass (kg)	21.4871	21.4995	21.4353
Node Height (cm)	45.72	45.72	45.72
Node 9			
Average Enrich. U-235	0.71	0.71	0.71
# GDRs	0	0	0
GDR Enrichment	0.0	0.0	0.0
Node Mass (kg)	7.1627	7.1668	7.1454
Node Height (cm)	15.24	15.24	15.24
Node 10			
Average Enrich. U-235	0.71	0.71	0.71
# GDRs	0	0	0
GDR Enrichment	0.0	0.0	0.0
Node Mass (kg)	5.7301	5.7334	5.7163
Node Height (cm)	15.24	15.24	15.24
Active Fuel Height (cm)	381.00	381.00	381.00
Fuel Pellet OD (cm)	1.0439	1.0439	1.0439
Fuel Rod Clad OD (cm)	1.2268	1.2268	1.2268
Fuel Rod Clad ID (cm)	1.0643	1.0643	1.0643

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Parameter	Fuel Type Identifier		
	G	H	J
Channel Thickness (cm)	0.4561	0.4561	0.4561
Channel Inside Width (cm)	13.4061	13.4061	13.4061
Water Rod Material	Zirc4	Zirc4	Zirc4
Water Rod OD (cm)	3.4036	3.4036	3.4036
Water Rod ID (cm)	3.2004	3.2004	3.2004
Array Size	8 x 8	8 x 8	8 x 8
Number of Fuel Rods	60	60	60
Pin Pitch (cm)	1.6256	1.6256	1.6256
Assembly Pitch (cm)	15.24	15.24	15.24

¹ U-235 enrichment is in weight percent (wt%).

² GDR = Gadolinia-bearing fuel rod; GDR enrichment is the weight percent of Gd₂O₃ in Gd₂O₃/UO₂.

³ OD = Outer diameter.

⁴ ID = Inner diameter.

⁵ For all assemblies, 0.4561 cm is used as the equivalent channel thickness. This is the perimeter average of the channel with a side thickness of 0.254 cm and a corner thickness of 0.9652 cm, assuming that there is 3.81 cm per side of the corner thickness. (Reference 7.3, p. 5).

⁶ Zirc4 = Material Zircaloy-4.

⁷ The number of fuel rods in an assembly is based on the actual number of UO₂ or UO₂/Gd₂O₃ rods that are present in each node of the active fuel.

In some cases, nodes have more than one gadolinia enrichment for GDRs and the actual number of rods for each type of GDR may vary. In these cases, the weighted average enrichment in the node for all GDRs was calculated. For example, if there are 2 GDRs at 4.0 wt% and 9 GDRs at 3.0 wt% then the number of GDR rods and weighted average enrichment would be 11 and 3.18 wt%, respectively. Typically, these different enrichment GDRs all have the same UO₂ enrichment within a node. Table 5-1 provides the specific inputs of GDR numbers and enrichments for each node that are to be used in this averaging method.

GDR material wt% is required for each GDR specification in a node. These percentages are listed in the SPACE input files and are used to define the initial GDR material in the SAS2H depletion calculation. Multiple depletion calculations are performed for each node using the SPACE-CRAFT-SAS2H combination. As the depletion calculation progresses and the gadolinia is depleted, the GDR material isotopic wt% are recalculated by the CRAFT software routine and entered into the next SAS2H calculation. This process is discussed in more detail in Section 5.5.

Equation 5-3 is used to calculate the uranium isotopic wt% that will be used in the initial GDR material specification (Reference 7.6, p. 20). The calculation of initial GDR material isotopic wt% uses Equations 5-4 through 5-10. The inputs required to calculate these percentages include the UO₂

enrichment, the average gadolinia enrichment, the number of GDRs, the atomic weight of each isotope, and the weight fraction of the gadolinia isotopes. All of the inputs necessary for calculating the initial GDR material specification are included in Tables 5-1 and 5-2. In order to calculate the initial GDR material specifications, the molecular weights of Gd_2O_3 and UO_2 are first determined. Next, the weight fractions for uranium and gadolinium are calculated. From this point the isotopic wt% for the required isotopes of uranium and gadolinium are calculated. The wt% of the total oxygen in the GDR material can also be calculated.

Equation 5-3. U-234, U-236, U-238 Isotopic wt% For Initial GDR Material Specification

$$wt\%U236 = 0.0046 \cdot (wt\%U235)$$

$$wt\%U234 = 0.007731 \cdot (wt\%U235)^{1.0837}$$

$$wt\%U238 = 100 - (wt\%U234 + wt\%U235 + wt\%U236)$$

Equation 5-4. Molecular Weight of Uranium for Initial GDR Material Specification

$$(1/mw)^{uranium} = 0.01 \cdot \sum_i \left(\frac{wt\%}{atwt} \right)_i$$

where: the term on the left-hand side of the equation is the reciprocal of the molecular weight for uranium; i is the subscript indicating each isotope of the element; $wt\%$ and $atwt$ are weight percentage and atomic weight of the i^{th} uranium isotopes, respectively.

Equation 5-5. Molecular Weight of Gadolinium for Initial GDR Material Specification

$$(1/mw)^{gadolinium} = 0.01 \cdot \sum_i \left(\frac{wt\%}{atwt} \right)_i$$

where: the term on the left-hand side of the equation is the reciprocal of the molecular weight for gadolinium; i is the subscript indicating each isotope of the element; $wt\%$ and $atwt$ are weight percent and atomic weight of the i^{th} gadolinium isotopes, respectively.

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Equation 5-6. Molecular Weight of UO_2 or Gd_2O_3 for Initial GDR Material Specification

$$(\text{mw})_X = N \cdot (\text{mw})_Y + M \cdot \text{atwt}_{\text{oxygen}}$$

where: the term on the left-hand side of the equation is the molecular weight for UO_2 or Gd_2O_3 ; X subscript denotes UO_2 or Gd_2O_3 term and Y denotes uranium or gadolinia term (calculated with Equations 5-3 and 5-4); $N=1$ for 1 atom of uranium in UO_2 and $N=2$ for 2 atoms of gadolinium in Gd_2O_3 ; $M=2$ for 2 atoms of oxygen in UO_2 and $M=3$ for 3 atoms of oxygen in Gd_2O_3 .

Equation 5-7. Weight Fraction of Uranium, Gadolinium, Or Oxygen in UO_2 or Gd_2O_3 , For Initial GDR Material Specification

$$(\text{wfrac})_J = N \cdot \left(\frac{\text{mw}_J}{\text{mw}_K} \right)$$

$$(\text{wfrac})_{\text{oxygen}} = 1 - (\text{wfrac})_J$$

where: the term on the left-hand side of the equation is weight fraction for oxygen, uranium, or gadolinium; J subscript denotes uranium or gadolinium term, K denotes UO_2 or Gd_2O_3 term; $N=1$ for 1 atom of uranium per UO_2 molecule and $N=2$ for 2 atoms of gadolinia per Gd_2O_3 molecule.

Equation 5-8. Gadolinium Isotopic wt% Used In Initial GDR Material Specification

$$(\text{wt}\% \text{Gd})_i^{\text{GDR}} = \text{enrich}^{\text{GDR}} \cdot (\text{wt}\% \text{Gd})_i \cdot (\text{wfrac})_{\text{gadolinium}}$$

where: the term on the left-hand side of the equation is $\text{wt}\%$ for the i^{th} gadolinium isotope to be used for the initial material specification of the GDR; the *enrich* term is the fractional enrichment of gadolinia in the GDR; i subscript is for the i^{th} gadolinium isotope; $\text{wt}\% \text{Gd}$ is the weight percentage for i^{th} gadolinium isotopes; *wfrac* term is the calculated gadolinium weight fraction from Equation 5-7.

Equation 5-9. Uranium Isotopic wt% Used In Initial GDR Material Specification

$$(\text{wt}\% \text{U})_i^{\text{GDR}} = (1 - \text{enrich}^{\text{GDR}}) \cdot (\text{wt}\% \text{U})_i \cdot (\text{wfrac})_{\text{uranium}}$$

where: the term on the left-hand side of the equation is $\text{wt}\%$ for the i^{th} uranium isotope to be used for the initial material specification for the GDR; the *enrich* term is the fractional enrichment of gadolinia in the GDR material; i subscript is for the i^{th} uranium isotope; $\text{wt}\% \text{U}$ is the $\text{wt}\%$ for the i^{th} uranium isotope calculated with Equation 5-3; *wfrac* term is the calculated uranium weight fraction from Equation 5-7.

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Equation 5-10. Oxygen wt% Used In Initial GDR Material Specification

$$(\text{wt}\% \text{O})^{\text{GDR}} = 100 - \sum_i [(\text{wt}\% \text{U})_i + (\text{wt}\% \text{Gd})_i]$$

where: the term on the left-hand side of the equation is wt% for the oxygen to be used for the initial material specification for the GDR; i subscript is for the i^{th} uranium or gadolinium isotope; $\text{wt}\% \text{U}$ is the wt% for the i^{th} uranium isotope and ; $\text{wt}\% \text{Gd}$ is the wt% for the i^{th} gadolinium isotope calculated with Equations 5-8 and 5-9.

Table 5-2. Atomic Weights and Weight Percents for Selected Isotopes Used in GDR Material Specification (Reference 7.7, pp. 20, 36, 46)

Element/Isotope	Atomic Weight	Weight Percent (%)
Oxygen	15.9994	--
U-234	234.0409	--
U-235	235.0439	--
U-236	236.0456	--
U-238	238.0508	--
Gd-152	151.9198	0.19
Gd-154	153.9209	2.13
Gd-155	154.9226	14.6
Gd-156	155.9221	20.30
Gd-157	156.9240	15.62
Gd-158	157.9241	24.95
Gd-160	159.9270	22.23

5.2.2. CONTROL BLADES

In the LaSalle Unit 1 depletion calculations, BWR cruciform control blade histories are tracked and included in the modeling of bladed assemblies. The blade insertion history information is obtained from Reference 7.3 and is provided in Attachment I. The control blade dimensions and composition are obtained from Reference 7.5, pp. A-9 and C-15. The BWR cruciform control blade is illustrated in Figure 5-1. The portions of the control blade that are included in the model for each assembly are shown in Figure 5-2. In the SAS2H path B model (described in Section 5.4) the outer ring of the assembly cell model contains bypass water (density = 0.7396 g/cm³) for non-bladed nodes and a homogenization of bypass water, stainless steel 304, and B₄C (density = 1.6704 g/cm³) for bladed nodes. Inputs required for determination of the homogenized control blade composition are included in Tables 5-3 and 5-4.

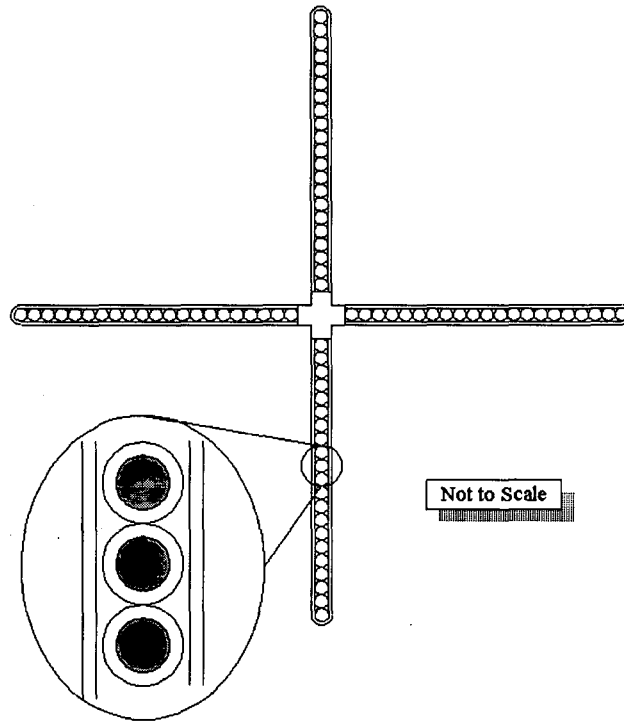


Figure 5-1. LaSalle Unit 1 Cruciform Control Blade

Table 5-3. Inputs for LaSalle Unit 1 Control Blade Homogenization

	SS304	Water	B ₄ C
Volume Fraction	0.1222	0.8289	0.0489
Density (g/cm ³)	7.94	0.7396	1.78 (70.6% theoretical)
Weight Fraction	0.5809	0.3670	0.0521
Homogenized Density	1.6704 (g/cm ³)		

Table 5-4. Composition Weight Percentages for LaSalle Unit 1 Control Blade Homogenization
(Reference 7.8, p. 20, p.85)

Element	SS304 (wt%)	Water (wt%)	B ₄ C (wt%)	Homogenized
Carbon	0.080		21.739	1.1791
Nitrogen	0.100			0.0581
Silicon	0.750			0.4357
Phosphorus	0.045			0.0261
Sulfur	0.030			0.0174
Chromium	19.00			11.037
Manganese	2.00			1.1618
Iron	68.745			39.935
Nickel	9.250			5.3734

Hydrogen		11.19		4.1070
Oxygen		88.81		32.595
Boron-10			14.424	0.7510
Boron-11			63.837	3.3259

When a node is required to be bladed for the LaSalle Unit 1 depletion calculations, the mixture description for the node contains the homogenized composition as described in Table 5-4. During the depletion calculation when there is no control blade present, the mixture description is set for bypass water. The control blade insertion history required for each bladed assembly is provided in terms of relative cycle, statepoint, and step numbers and is listed in Attachment I.

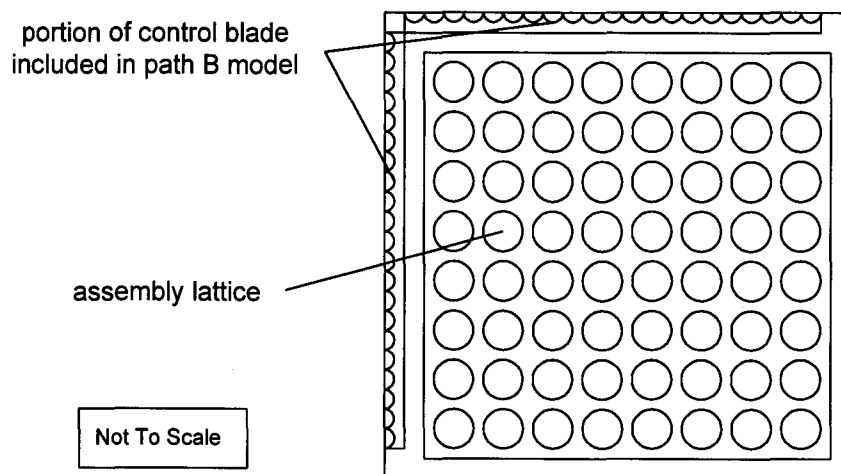


Figure 5-2. Assembly Cross Section with Control Blade Portions

Nodes with control blades present are modeled in SAS2H at full power for the depletion calculation. In an actual BWR reactor core the power in the vicinity of a control blade is significantly decreased. Thus, the neutron spectrum used in the modeled “bladed” nodes will be incorrect (see Section 3.5). This inaccuracy will result in a different distribution of depleted fuel isotopic concentrations. The effect of the modeling approximation has not been determined. Additionally, the effect of the control blade model (dimensions and composition) on the SAS2H calculation of depleted isotopics has not been determined. The appropriateness of a one dimensional “super-cell” model for BWR fuel assemblies with strong absorbers present (gadolinia-bearing rods, control blades) in a process for flux-weighting and zone-weighting cross sections to be used in fuel depletion calculations should be examined in more detail.

5.2.3. MODERATOR DENSITY PROFILES

Moderator densities are reported for each node of each assembly in Reference 7.3, p. 264. These density profiles are used in the SAS2H depletion calculations to help provide the correct neutron spectrum at different axial positions along the length of the assembly. A listing of the nodal moderator densities for each assembly is included in Attachment II.

The reference water density used in this calculation is 0.7396 g/cm^3 (Reference 7.3, p. 5). This is the saturated water density for 1020 psia.

5.2.4. REACTOR OPERATING PRESSURE

LaSalle Unit 1 is a General Electric Type 5 BWR that operates at pressure of 1020 psia (Reference 7.3, p. 5).

5.2.5. FUEL ASSEMBLY INSERTION HISTORY

The actual irradiation histories for the fuel assemblies from LaSalle Unit 1, Cycles 4-18 were used to perform the SAS2H depletion calculations relevant to the CRC evaluations. Table 5-5 identifies the following information:

- the cycles in which the various fuel assemblies were inserted
- the locations of the various fuel assemblies by core map row and column in each cycle as shown in Figure 5-3
- the assembly fuel type

Figures 5-4 through 5-8 indicate schematically the location of the tracked assemblies in Cycles 4-8 of LaSalle Unit 1 (Reference 7.3, pp. 16-20).

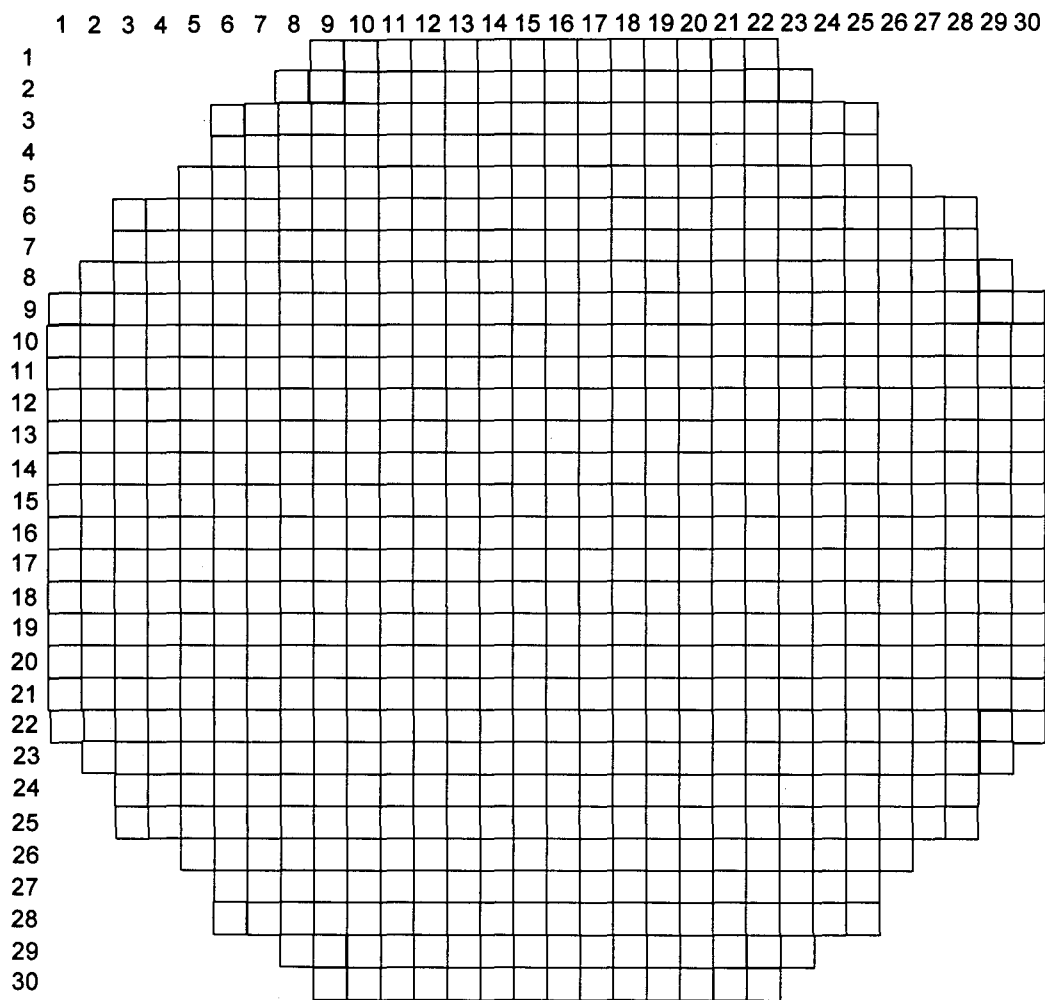


Figure 5-3. LaSalle Unit 1 Core Map Assembly Locations by Row and Column

Table 5-5. Fuel Assembly Insertion Cycles for the LaSalle Unit 1 Depletion Calculations (Reference 7.3, pp. 21-26)

SAS2H ID	Initial Insertion	Fuel Type	Cycle 4		Cycle 5		Cycle 6		Cycle 7		Cycle 8	
			i	j	i	j	i	j	i	j	i	j
A1	Cycle 4	9	18	19	20	27	20	26	21	29		
A2	Cycle 4	9	26	19	28	17	28	17	24	26		
A3	Cycle 4	9	22	24	22	24	16	24	22	28		
A4	Cycle 4	9	21	16	27	21	16	26	22	26		
A5	Cycle 4	9	18	23	17	23	20	23	17	30		
A6	Cycle 4	9	21	25	16	28	16	28	18	26		
A7	Cycle 4	9	18	21	18	20	24	25	22	29		
A8	Cycle 4	9	21	23	21	25	19	24	19	30		
A9	Cycle 4	9	20	21	20	22	18	26	23	28		
A10	Cycle 4	9	18	25	19	26	18	24	25	26		
A11	Cycle 4	9	16	25	23	26	19	23	16	30		
A12	Cycle 4	9	16	17	23	24	17	25	18	30		
B1	Cycle 4	8	21	22	18	24	16	19	25	27		
B2	Cycle 4	8	24	17	27	22	23	23	18	18		
B3	Cycle 4	8	26	17	26	18	18	22	21	30		
B4	Cycle 4	8	22	22	21	21	21	21	23	29		
B5	Cycle 4	8	22	25	16	26	19	20	24	28		
B6	Cycle 4	8	20	25	16	18	16	16	26	26		
B7	Cycle 4	8	19	22	24	25	16	22	20	30		
B8	Cycle 4	8	17	22	17	19	21	25	25	28		
B9	Cycle 4	8	17	18	16	22	17	21	22	30		
B10	Cycle 4	8	17	24	22	27	19	19	17	17		

Table 5-5. Fuel Assembly Insertion Cycles for the LaSalle Unit 1 Depletion Calculations (cont.)

SAS2H ID	Initial Insertion	Fuel Type	Cycle 4		Cycle 5		Cycle 6		Cycle 7		Cycle 8	
			i	j	i	j	i	j	i	j	i	j
C1	Cycle 5	10			26	21	23	24	20	25	22	30
C2	Cycle 5	10			25	19	28	19	24	24	18	30
C3	Cycle 5	10			24	21	28	21	23	21	24	28
C4	Cycle 5	10			23	22	27	21	27	23	16	30
C5	Cycle 5	10			23	25	18	28	16	20	17	30
C6	Cycle 5	10			22	17	17	19	18	22		
C7	Cycle 5	10			22	21	24	20	17	21		
C8	Cycle 5	10			22	23	21	27	23	27	30	16
C9	Cycle 5	10			22	25	19	21	20	27	26	26
C10	Cycle 5	10			21	18	17	23	20	20		
C11	Cycle 5	10			21	20	20	20	21	21		
C12	Cycle 5	10			21	24	21	28	21	23	28	24
C13	Cycle 5	10			20	21	24	24	22	22		
C14	Cycle 5	10			20	26	16	27	24	27	21	26
C15	Cycle 5	10			19	18	24	22	19	24		
C16	Cycle 5	10			19	22	18	20	19	27		
C17	Cycle 5	10			19	25	19	28	16	16	30	19
C18	Cycle 5	10			18	21	23	17	19	19		
C19	Cycle 5	10			18	23	23	27	16	19	19	30
C20	Cycle 5	10			18	25	16	18	16	24		
C21	Cycle 5	10			18	27	19	27	20	29	25	26
C22	Cycle 5	10			17	16	26	22	24	23	25	28
C23	Cycle 5	10			17	18	21	23	17	25		
C24	Cycle 5	10			17	20	19	25	20	23		
C25	Cycle 5	10			17	24	23	26	16	23	21	30
C26	Cycle 5	10			17	26	16	23	17	28	23	29
C27	Cycle 5	10			17	27	22	27	18	20	25	27
C28	Cycle 5	10			16	17	22	26	23	24	28	25
C29	Cycle 5	10			16	21	16	20	16	29	20	30
C30	Cycle 5	10			16	25	20	22	16	26		

Table 5-5. Fuel Assembly Insertion Cycles for the LaSalle Unit 1 Depletion Calculations (cont.)

SAS2H ID	Initial Insertion	Fuel Type	Cycle 4		Cycle 5		Cycle 6		Cycle 7		Cycle 8	
			i	j	i	j	i	j	i	j	i	j
D1	Cycle 6	11					26	21	18	16	24	24
D2	Cycle 6	11					25	18	28	20	19	20
D3	Cycle 6	11					25	23	19	17	19	23
D4	Cycle 6	11					24	17	26	23	16	16
D5	Cycle 6	11					23	25	17	19	23	19
D6	Cycle 6	11					22	25	23	25	20	28
D7	Cycle 6	11					21	22	16	28	18	29
D8	Cycle 6	11					21	26	16	18	22	22
D9	Cycle 6	11					20	25	18	24	20	29
D10	Cycle 6	11					20	27	16	22	16	28
D11	Cycle 6	11					19	26	18	29	20	23
D12	Cycle 6	11					18	17	25	25	19	19
D13	Cycle 6	11					18	23	22	27	16	19
D14	Cycle 6	11					18	25	20	28	20	19
D15	Cycle 6	11					18	27	21	27	16	24
D16	Cycle 6	11					17	18	23	23	17	17
D17	Cycle 6	11					17	22	19	28	23	24
D18	Cycle 6	11					17	24	23	26	23	23
D19	Cycle 6	11					17	26	18	28	19	28
D20	Cycle 6	11					17	27	22	24	20	27
D21	Cycle 6	11					16	21	19	23	19	29
E1	Cycle 6	12					25	16	20	24	17	29
E2	Cycle 6	12					23	22	28	21	19	24
E3	Cycle 6	12					22	19	19	21	22	29
E4	Cycle 6	12					22	23	21	28	24	19
E5	Cycle 6	12					21	18	22	20	16	29
E6	Cycle 6	12					21	24	19	29	16	20
E7	Cycle 6	12					20	17	25	24	17	25
E8	Cycle 6	12					20	21	17	23	21	29
E9	Cycle 6	12					18	19	17	29	16	23
E10	Cycle 6	12					18	21	20	22	29	16
E11	Cycle 6	12					17	20	24	25	25	17
E12	Cycle 6	12					16	17	19	20	23	28

Table 5-5. Fuel Assembly Insertion Cycles for the LaSalle Unit 1 Depletion Calculations (cont.)

SAS2H ID	Initial Insertion	Fuel Type	Cycle 4 i	Cycle 4 j	Cycle 5 i	Cycle 5 j	Cycle 6 i	Cycle 6 j	Cycle 7 i	Cycle 7 j	Cycle 8 i	Cycle 8 j
F1	Cycle 7	2							27	16	17	23
F2	Cycle 7	2							26	19	16	27
F3	Cycle 7	2							26	21	16	18
F4	Cycle 7	2							25	18	18	18
F5	Cycle 7	2							22	21	24	27
F6	Cycle 7	2							22	23	16	26
F7	Cycle 7	2							22	25	17	21
F8	Cycle 7	2							21	22	27	24
F9	Cycle 7	2							21	24	21	28
F10	Cycle 7	2							21	26	18	16
F11	Cycle 7	2							20	26	24	25
F12	Cycle 7	2							19	26	27	16
F13	Cycle 7	2							18	25	25	25
F14	Cycle 7	2							18	27	18	22
F15	Cycle 7	2							17	26	18	28
F16	Cycle 7	2							17	27	18	26
F17	Cycle 7	2							16	25	16	22
F18	Cycle 7	2							16	27	23	17
G1	Cycle 7	1							23	18	20	20
G2	Cycle 7	1							21	25	22	25
G3	Cycle 7	1							20	21	20	24
G4	Cycle 7	1							19	18	21	23
G5	Cycle 7	1							19	22	19	25
G6	Cycle 7	1							19	25	20	22
G7	Cycle 7	1							18	17	17	19
G8	Cycle 7	1							18	19	23	21
G9	Cycle 7	1							18	21	19	27
G10	Cycle 7	1							18	23	21	21
G11	Cycle 7	1							17	18	19	17
G12	Cycle 7	1							17	20	18	20
G13	Cycle 7	1							17	22	24	26
G14	Cycle 7	1							17	24	18	24
G15	Cycle 7	1							16	17	19	21
G16	Cycle 7	1							16	21	22	28

j=	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
i=16		A12 9								A11 9					
17			B9 8				B8 8		B10 8						
18				A1 9		A7 9		A5 9		A10 9					
19							B7 8								
20						A9 9				B6 8					
21	A4 9						B1 8	A8 9		A6 9					
22							B4 8		A3 9	B5 8					
23															
24		B2 8													
25															
26		B3 8		A2 9											
27															
28															
29															
30															

Fi	Fuel Assembly Designation (Ai and Bi are fresh fuel assemblies in Cycle 4)
N	

 Fuel Type (Types 8 and 9 are fresh fuel assemblies in Cycle 4)

Figure 5-4. Fuel Assembly Locations LaSalle Unit 1, Cycle 4

j=	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
i=16		C28 10	B6 8			C29 10	B9 8			C30 10	B5 8		A6 9		
17	C22 10		C23 10	B8 8	C24 10			A5 9	C25 10		C26 10	C27 10			
18					A7 9	C18 10		C19 10	B1 8	C20 10			C21 10		
19			C15 10				C16 10			C17 10	A10 9				
20						C13 10	A9 9				C14 10	A1 9			
21			C10 10		C11 10	B4 8			C12 10	A8 9					
22		C6 10				C7 10		C8 10	A3 9	C9 10			B10 8		
23							C4 10		A12 9	C5 10	A11 9				
24						C3 10				B7 8					
25				C2 10											
26			B3 8			C1 10									
27						A4 9	B2 8								
28		A2 9													
29															
30															

Fi
N

Fuel Assembly Designation (Ci are fresh fuel assemblies in Cycle 5)
 Fuel Type (Type10 are fresh fuel assemblies in Cycle 5)

Figure 5-5. Fuel Assembly Locations LaSalle Unit 1, Cycle 5

j =	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
i = 16	B6 8	E12 12	C20 10	B1 8	C29 10	D21 11	B7 8	C26 10	A3 9		A4 9	C14 10	A6 9		
17			D16 11	C6 10	E11 12	B9 8	D17 11	C10 10	D18 11	A12 9	D19 11	D20 11			
18		D12 11		E9 12	C16 10	E10 12	B3 8	D13 11	A10 9	D14 11	A9 9	D15 11	C5 10		
19				B10 8	B5 8	C9 10		A11 9	A8 9	C24 10	D11 11	C21 10	C17 10		
20		E7 12			C11 10	E8 12	C30 10	A5 9		D9 11	A1 9	D10 11			
21			E5 12			B4 8	D7 11	C23 10	E6 12	B8 8	D8 11	C8 10	C12 10		
22				E3 12				E4 12		D6 11	C28 10	C27 10			
23		C18 10					E2 12	B2 8	C1 10	D5 11	C25 10	C19 10			
24		D4 11			C7 10		C15 10		C13 10	A7 9					
25	E1 12		D2 11					D3 11							
26						D1 11	C22 10								
27						C4 10									
28		A2 9		C2 10		C3 10									
29															
30															

Fi
N

Fuel Assembly Designation (Di and Ei are fresh fuel assemblies in Cycle 6)
 Fuel Type (Types 11 and 12 are fresh fuel assemblies in Cycle 6)

Figure 5-6. Fuel Assembly Locations LaSalle Unit 1, Cycle 6

j=	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
i=16	C17 10	G15 1	D8 11	C19 10	C5 10	G16 1	D10 11	C25 10	C20 10	F17 2	C30 10	F18 2	D7 11	C29 10	A11 9
17		B10 8	G11 1	D5 11	G12 1	C7 10	G13 1	E8 12	G14 1	C23 10	F15 2	F16 2	C26 10	E9 12	A5 9
18	D1 11	G7 1	B2 8	G8 1	C27 10	G9 1	C6 10	G10 1	D9 11	F13 2	A6 9	F14 2	D19 11	D11 11	A12 9
19		D3 11	G4 1	C18 10	E12 12	E3 12	G5 1	D21 11	C15 10	G6 1	F12 2	C16 10	D17 11	E6 12	A8 9
20					C10 10	G3 1	E10 12	C24 10	E1 12	C1 10	F11 2	C9 10	D14 11	C21 10	B7 8
21						C11 10	F8 2	C12 10	F9 2	G2 1	F10 2	D15 11	E4 12	A1 9	B3 8
22					E5 12	F5 2	C13 10	F6 2	D20 11	F7 2	A4 9	D13 11	A3 9	A7 9	B9 8
23			G1 1			C3 10		D16 11	C28 10	D6 11	D18 11	C8 10	A9 9	B4 8	
24								C22 10	C2 10	E11 12	A2 9	C14 10	B5 8		
25			F4 2						E7 10	D12 11	A10 9	B1 8	B8 8		
26				F2 2		F3 2		D4 11				B6 8			
27	F1 2							C4 10							
28					D2 11	E2 12									
29															
30															

Fi	Fuel Assembly Designation (Fi and Gi are fresh fuel assemblies in Cycle 7)
N	

 Fuel Type (Types 1 and 2 are fresh fuel assemblies in Cycle 7)

Figure 5-7. Fuel Assembly Locations LaSalle Unit 1, Cycle 7

j =	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
i = 16	D4 11	H18 5	F3 2	D13 11	E6 12	J5 4	F17 2	E9 12	D15 11	J11 4	F6 2	F2 2	D10 11	E5 12	C4 10
17		D16 11	J6 4	G7 1	J12 4	F7 2	J4 4	F1 2	H10 5	E7 12	J10 4	H6 5	H7 5	E1 12	C5 10
18	F10 2		F4 2	H9 5	G12 1	J8 4	F14 2	J9 4	G14 1	H16 5	F16 2	H12 5	F15 2	D7 11	C2 10
19		G11 1		D12 11	D2 11	G15 1	J2 4	D3 11	E2 12	G5 1	H15 5	G9 1	D19 11	D21 11	C19 10
20				D14 11	G1 1	J13 4	G6 1	D11 11	G3 1	J7 4	H1 5	D20 11	D6 11	D9 11	C29 10
21						G10 1	H5 5	G4 1	J1 4	H2 5	C14 10	H11 5	F9 2	E8 12	C25 10
22							D8 11	J3 4	H13 5	G2 1	H17 5	H3 5	G16 1	E3 12	C1 10
23		F18 2		D5 11		G8 1		D18 11	D17 11	H8 5	H14 5	H4 5	E12 12	C26 10	
24				E4 12					D1 11	F11 2	G13 1	F5 2	C3 10		
25		E11 12								F13 2	C21 10	C27 10	C22 10		
26											C9 10				
27	F12 2								F8 2						
28									C12 10	C28 10					
29	E10 12														
30	C8 10			C17 10											

Fi
N

Fuel Assembly Designation (Hi and Ji are fresh fuel assemblies in Cycle 8)
 Fuel Type (Types 4 and 5 are fresh fuel assemblies in Cycle 8)

Figure 5-8. Fuel Assembly Locations LaSalle Unit 1, Cycle 8

Figure 5-9. Not Used

5.2.6. REACTOR CYCLE OPERATION HISTORY

This section contains the LaSalle Unit 1 reactor cycle summary information relevant to the CRC evaluations documented in this calculation. The calendar day duration between reactor startup and shutdown along with end-of-cycle downtimes are included in Table 5-6. Statepoint and datapoint summary information is included in Table 5-7. Table 5-8 provides the EFPD burnup steps that are used in the SAS2H depletion calculation for each cycle. The statepoints refer to times when the reactor was previously operated over a time duration that is suitable for a reactivity calculation. MCNP reactivity calculations for the CRC evaluations will be performed using the reactor startup conditions and appropriate depleted and decayed isotopics after each statepoint shutdown. The datapoints refer to times when the depletion calculations were halted to adjust various input parameters such as average fuel temperatures and in-channel moderator densities. The depletion calculations were continued after each datapoint halt without modeling any reactor downtime.

Table 5-6. Cycle Summary Information for LaSalle Unit 1 Depletion Calculations (Reference 7.3, p. 13)

Cycle	Startup Date	Shutdown Date	Cycle Length (EFPD)	Downtime at EOC ¹ (days)
4	1/5/90	2/16/91	375.32	85
5	5/12/91	10/3/92	467.14	119
6	1/30/93	2/18/94	316.01	126
7	6/24/94	1/25/96	495.23	87
8	4/21/96	N/A	N/A	N/A

¹EOC- End Of Cycle

Table 5-7. Statepoint and Datapoint Summary Information for LaSalle Unit 1 Depletion Calculations (Reference 7.3, pp. 14, 455)

Cycle	EFPD	Statepoint or Datapoint Identifier	Statepoint Downtime (days)
4	0.0	DP1 ¹	--
4	208.56	DP2	--
4	375.32		--
5	0.0	DP3	--
5	239.48	DP4	--
5	467.14		--
6	0.0	DP5	--
6	196.09	DP6	--
6	316.01		--

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Cycle	EFPD	Statepoint or Datapoint Identifier	Statepoint Downtime (days)
7	0.0	SP7 ²	126
7	193.20	SP8	5
7	306.75	SP9	5.83
7	495.23		--
8	0.0	SP10	87
8	3.67	SP11	5

¹ The letters "DP" refer to a CRC datapoint. The number immediately following the "DP" refers to the relative datapoint for the LaSalle Unit 1 CRC evaluations.

² The letters "SP" refer to a CRC statepoint. The number immediately following the "SP" refers to the relative statepoint for the LaSalle Unit 1 CRC evaluations in the BWR CRC evaluation program.

Table 5-8. EFPD Burnup Steps for LaSalle Unit 1 Depletion Calculations (Reference 7.3, p. 432)

Cycle	Total EFPD for Cycle	EFPD Burnup Steps ¹
4A ²	--	69.52
4A	--	69.52
4A	--	69.52
4B	--	55.59
4B	--	55.59
4B	375.36	55.59
5A	--	59.87
5A	--	59.87
5A	--	59.87
5A	--	59.87
5B	--	56.92
5B	--	56.92
5B	--	56.92
5B	467.14	56.92
6A	--	65.36
6A	--	65.36
6A	--	65.36
6B	--	59.96
6B	316.01	59.96
7A	--	64.40
7A	--	64.40
7A	--	64.40
7B	--	56.78
7B	--	56.78
7C	--	62.83
7C	--	62.83
7C	495.23	62.83
8A	--	3.67

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¹ The total EFPD for each cycle is divided into equal EFPD steps less than 70 EFPD. The 70 EFPD limit for each burn step is required for the SAS2H depletion calculation.

² The letters with each cycle number designate the individual SAS2H depletion steps that are required in an individual calculation for part of a cycle, i.e., 7A repeated three times signifies one SAS2H calculation with three 64.40 EFPD burnup steps for the first half of the Cycle 7 depletion.

5.2.7. BURNUP, FUEL TEMPERATURE, AND MODERATOR DENSITY

Burnup, fuel temperature, and moderator density data were required for each node of each assembly in each SAS2H depletion calculation. A set of nodal burnup data at the beginning and end of each SAS2H depletion calculation was required. A set of nodal fuel temperature and moderator density data representative of full-power operation during each depletion calculation of interest (between statepoints and/or datapoints) was required. The tabulation of this data for LaSalle Unit 1 is included in Attachment II. Attachment II contains the burnup, fuel temperature, and moderator density data required to perform all depletion calculations for each of the fuel assemblies present in the LaSalle Unit 1 CRC evaluations. The bottom of node 1 begins at the bottom of the active fuel region in each assembly. The burnup data is presented in units of gigawatt-days per metric ton of uranium (GWd/MTU). The fuel temperature data is presented in units of degrees Kelvin. The moderator density data is presented in units of grams per cubic centimeter. Each set of fuel temperature and moderator density data listed in Attachment II was applicable to the depletion calculation performed between the statepoints and/or datapoints identified above the particular data.

5.3. ASSEMBLY DEPLETION CALCULATION PROCEDURE

The procedure for performing the fuel assembly SAS2H depletion calculations documented in this analysis was based on the utilization of the SPACE, Version 01 and CRAFT, Version 4C software routines. The SPACE-CRAFT software routines used for SAS2H automation are described generally in Section 5.5. The complete detailed description of the SPACE-CRAFT software routines is provided in Attachments I and II of Reference 7.9. An overview of the operation of the software routines and script files is shown in Figure 5-10. The procedure for performing a fuel assembly depletion calculation with SPACE-CRAFT, consisted of the following steps:

- Create a SPACE input deck for the assembly depletion calculation.
- Assure that the executable files for SPACE, CRAFT, LIFTOFF, BATCH43 and SEDEXECUTE, and the SPACE input deck entitled "spacein", are in the same directory. The LIFTOFF executable file is a script that is executed by SPACE, which directs CRAFT through all of the SAS2H nodal depletion calculations for each designated assembly. The BATCH43 executable file is a script that directs the execution of SAS2H for each depletion calculation. The SEDEXECUTE executable file is a script file that is used in conjunction with the CRAFT code to create the consolidated output files described in Section 5.5.
- Execute SPACE. SPACE generates the required CRAFT input decks for the assembly depletion calculation and then calls for the LIFTOFF script to execute CRAFT in the proper sequence. CRAFT then creates and executes the required SAS2H input files for the assembly depletion calculation.

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- Check and analyze the CRAFT generated SAS2H input decks and the SAS2H isotopic results.

The various CRAFT generated and consolidated SAS2H output files contain unique filenames, which specify the following information:

- reactor identifier
- assembly insertion number in current reactor cycle
- axial node number
- reactor cycle number in which the SAS2H calculation begins
- EFPD statepoint at which the SAS2H calculation begins
- reactor cycle number in which the SAS2H calculation ends
- EFPD statepoint at which the SAS2H calculation ends.

Transfer of depleted fuel and depleted gadolinia isotopic concentrations between subsequent nodal SAS2H calculations is processed by the CRAFT Version 4C software routine automation. It is known that minor variations in isotopic concentrations occur during this process. The magnitude and impact of these variations has not been determined.

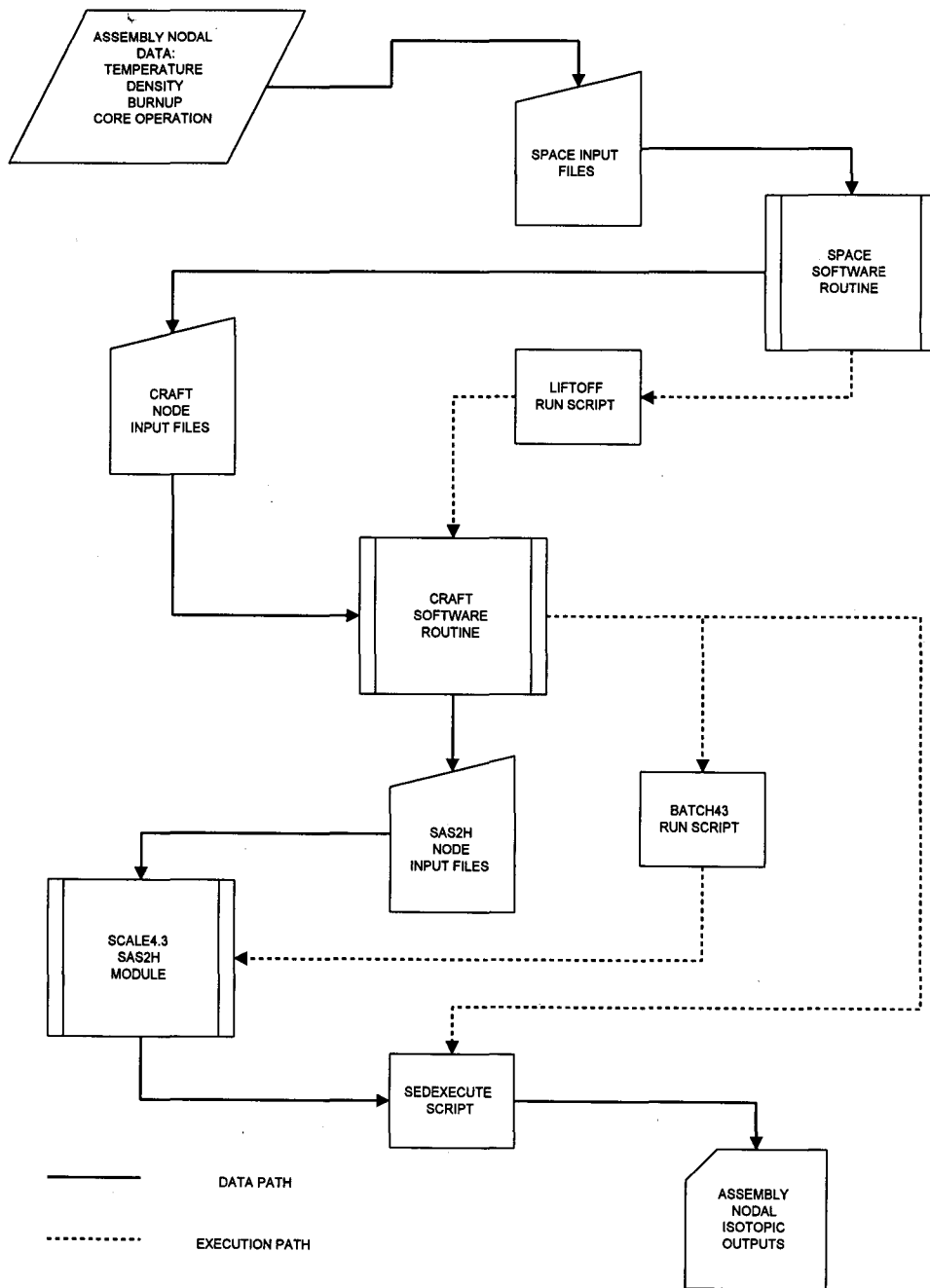


Figure 5-10. Software Routine and Script Flow Chart

5.4. PATH B MODEL DEVELOPMENT

The SAS2H control module used ORIGEN-S to perform a point depletion calculation for the fuel assembly or section of the fuel assembly described in the SAS2H input deck. The ORIGEN-S calculation module used cell-weighted cross sections based on one-dimensional (1-D) transport calculations performed by XSDRNPM. One-dimensional transport calculations were performed on two models, Path A and Path B, to calculate energy-dependent spatial neutron flux distributions necessary to perform cross-section cell-weighting calculations.

The Path A model was simply a unit cell of the fuel assembly lattice containing a fuel rod. In the Path A model, the fuel pellet and cladding were modeled explicitly. The only modification required to develop the Path A model was the conversion of the fuel assembly's square lattice unit cell perimeter to a radial perimeter conserving moderator volume within the unit cell (exterior to the fuel rod cladding). This modification was performed automatically by the SAS2H control module. A 1-D transport calculation was performed on the Path A model for each energy group, and the spatial flux distributions for each energy group were used to calculate cell-weighted cross sections for the fuel, clad, and moderator.

The Path B model was a larger representation of the assembly than the Path A model. The Path B model approximated spectral effects due to heterogeneity within the fuel assembly such as water gaps, GDRs, or control blades (CRBs).

The basic structure of the Path B model for the fuel assembly depletion calculations performed in this analysis included an inner region composed of a representation of the non-fuel (GDR or water rod) assembly lattice cell. A region containing the homogenization of the Path A model surrounded the inner region in the Path B model. The next region, representing the Zirc4 assembly channel, surrounded the homogenized region in the Path B model. The final region of the Path B model represents the bypass moderator and control blade homogenization found in the channel-to-channel spacing. The size of each radial region in the Path B model was determined by conservation of the fuel-to-moderator mass in the assembly (Reference 7.1, Section S2.2.3.1 of Volume 1, Rev. 5). The cell-weighted cross sections from the Path A model were applied to the homogenized region during the Path B model transport calculations. New cell-weighted cross sections for each energy group were then developed using the unit cell spatial flux distribution results from the Path B model transport calculations. These cell-weighted cross sections were ultimately used in point depletion calculations performed by ORIGEN-S to calculate both the depleted fuel and the depleted integral burnable poison (if present) isotopic compositions in the corresponding section of the fuel assembly. A detailed description of the calculations used to produce time-dependent cross sections by SAS2H is documented in Section S2.2.4 of Volume 1, Rev. 5 in Reference 7.1.

The following list of approximations used in the depletion and decay neutronics model provides some additional details regarding assumptions previously stated in Section 3:

1. Moderator density obtained from moderator density profiles is assumed to be uniform in all fuel rod or GDR unit cells in the node.

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2. Fuel pellet or GDR pellet density is assumed to be uniform in all rods of the assembly. Fuel pellet and GDR pellet diameters and densities are assumed to be the same.
3. The mass of the integral burnable absorber Gd_2O_3 in the node (approximately 40 grams) is not accounted for in the nodal fuel mass specified for the SAS2H calculation. It is assumed that such a small mass of additional fuel (UO_2) would have little effect when compared to the typical 7.0 kilograms of fuel mass in a node.
4. The 10 node collapsed format was used in the LaSalle Unit 1 depletion calculations. The effect of averaging nodal burnup, temperature, density, and enrichment parameters has not been examined in detail. Further investigation and confirmatory calculations may be performed to quantify these effects on isotopic depletions.
5. To protect the proprietary nature of the radial enrichment distributions in nodes of assemblies used in Cycles 4-8 of LaSalle Unit 1, average nodal enrichments were used in all depletion calculations. The effect of averaging the radial enrichment distribution in a node has not been examined in detail. Further investigation and confirmatory calculations may be performed to quantify these effects on isotopic depletions.
6. The mass of uranium in UO_2 was calculated using a mass fraction without dependence on U-235 enrichment. It was also assumed that all fuel pellets in each assembly have the same diameter. Approximations of this type for fuel mass are not expected to adversely affect this calculation.
7. Depletion calculations for assembly type F were modeled using 9 GDR instead of 7 GDR. The net result of this model is a decreased fuel mass during depletion calculations for the type F assemblies. Further investigation and confirmatory calculations may be performed to quantify these effects on isotopic depletions.

Additional discussion concerning approximations used in this calculation are listed later in this section. The above approximations and limitations inherent to the Path B model used in the SAS2H calculation can be confirmed by additional sensitivity analyses.

The Path B model development calculations for the LaSalle Unit 1 depletion calculations are presented in Tables 5-9 through 5-20 and contain the following information:

- the fuel assembly section characteristics for which the Path B model is developed
- the required Path B model development input parameters
- matrix indicating Path B models used in specific assemblies
- Path B model dimensions for GDR models

Enrichments and the number of GDRs vary axially in BWR assemblies. The number of GDRs in an axial node determines the type Path B model that should be used. Figures 5-11 through 5-19 show the 10 node axial format of each type fuel assembly used in the depletion calculation. The figures indicate which of the actual 25 nodes are collapsed into the 10-node format. Additionally, a description of the U-235 wt% enrichment in UO_2 , the number of GDRs, and the GDR enrichment in Gd_2O_3 is presented for each node. The node heights used in the SAS2H calculation are also provided. Nodes that are represented by a Path B model are indicated in Table 5-20.

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
AXIAL NODE 8	23	3.50 WT% UO ₂ / 10 - 4.40 WT% GD ₂ O ₃	45.72CM
	22		
	21		
AXIAL NODE 7	20	3.65 WT% UO ₂ / 12 - 4.50 WT% GD ₂ O ₃	45.72CM
	19		
	18		
AXIAL NODE 6	17	3.65 WT% UO ₂ / 10 - 4.40 WT% GD ₂ O ₃	45.72CM
	16		
	15		
AXIAL NODE 5	14	3.65 WT% UO ₂ / 10 - 4.40 WT% GD ₂ O ₃	45.72CM
	13		
	12		
AXIAL NODE 4	11	3.65 WT% UO ₂ / 10 - 4.40 WT% GD ₂ O ₃	45.72CM
	10		
	9		
AXIAL NODE 3	8	3.50 WT% UO ₂ / 10 - 4.70 WT% GD ₂ O ₃	60.96CM
	7		
	6		
	5		
AXIAL NODE 2	4	3.50 WT% UO ₂ / 10 - 4.70 WT% GD ₂ O ₃	45.72CM
	3		
	2		
AXIAL NODE 1	1	URANIUM BLANKET	15.24CM

Figure 5-11. LaSalle Unit 1 Axial Loading - Assembly A

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
AXIAL NODE 8	23	3.23 WT% UO ₂ / 9 - 3.00 WT% GD ₂ O ₃	45.72CM
	22		
	21		
AXIAL NODE 7	20	3.37 WT% UO ₂ / 11 - 3.18 WT% GD ₂ O ₃	45.72CM
	19		
	18		
AXIAL NODE 6	17	3.37 WT% UO ₂ / 9 - 3.00 WT% GD ₂ O ₃	45.72CM
	16		
	15		
AXIAL NODE 5	14	3.37 WT% UO ₂ / 9 - 3.00 WT% GD ₂ O ₃	45.72CM
	13		
	12		
AXIAL NODE 4	11	3.37 WT% UO ₂ / 9 - 3.00 WT% GD ₂ O ₃	45.72CM
	10		
	9		
AXIAL NODE 3	8	3.23 WT% UO ₂ / 9 - 3.56 WT% GD ₂ O ₃	60.96CM
	7		
	6		
AXIAL NODE 2	5	3.23 WT% UO ₂ / 9 - 3.56 WT% GD ₂ O ₃	45.72CM
	4		
	3		
AXIAL NODE 1	2	URANIUM BLANKET	15.24CM
	1		

Figure 5-12. LaSalle Unit 1 Axial Loading - Assembly B

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
AXIAL NODE 8	23	3.27 WT% UO ₂ / 9 - 4.44 WT% GD ₂ O ₃	45.72CM
	22		
AXIAL NODE 7	21	3.38 WT% UO ₂ / 9 - 4.44 WT% GD ₂ O ₃	45.72CM
	20		
	19		
AXIAL NODE 6	18	3.38 WT% UO ₂ / 9 - 4.44 WT% GD ₂ O ₃	45.72CM
	17		
	16		
AXIAL NODE 5	15	3.38 WT% UO ₂ / 9 - 4.44 WT% GD ₂ O ₃	45.72CM
	14		
	13		
AXIAL NODE 4	12	3.38 WT% UO ₂ / 9 - 4.44 WT% GD ₂ O ₃	45.72CM
	11		
	10		
AXIAL NODE 3	9	3.27 WT% UO ₂ / 9 - 5.00 WT% GD ₂ O ₃	60.96CM
	8		
	7		
	6		
AXIAL NODE 2	5	3.27 WT% UO ₂ / 9 - 5.00 WT% GD ₂ O ₃	45.72CM
	4		
	3		
AXIAL NODE 1	2	URANIUM BLANKET	15.24CM
	1		

Figure 5-13. LaSalle Unit 1 Axial Loading - Assembly C

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
AXIAL NODE 8	23	3.39 WT% UO ₂ / 7 - 3.29 WT% GD ₂ O ₃	45.72CM
	22		
	21		
AXIAL NODE 7	20	3.50 WT% UO ₂ / 9 - 3.44 WT% GD ₂ O ₃	45.72CM
	19		
	18		
AXIAL NODE 6	17	3.50 WT% UO ₂ / 7 - 3.29 WT% GD ₂ O ₃	45.72CM
	16		
	15		
AXIAL NODE 5	14	3.50 WT% UO ₂ / 7 - 3.29 WT% GD ₂ O ₃	45.72CM
	13		
	12		
AXIAL NODE 4	11	3.50 WT% UO ₂ / 7 - 3.29 WT% GD ₂ O ₃	45.72CM
	10		
	9		
AXIAL NODE 3	8	3.39 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	60.96CM
	7		
	6		
AXIAL NODE 2	5	3.39 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	45.72CM
	4		
	3		
AXIAL NODE 1	2	URANIUM BLANKET	15.24CM
	1		

Figure 5-14. LaSalle Unit 1 Axial Loading - Assembly D

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
	23		
AXIAL NODE 8	22	3.39 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	45.72CM
	21		
	20		
AXIAL NODE 7	19	3.50 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	18		
	17		
AXIAL NODE 6	16	3.50 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	45.72CM
	15		
	14		
AXIAL NODE 5	13	3.50 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	45.72CM
	12		
	11		
AXIAL NODE 4	10	3.50 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	45.72CM
	9		
	8		
AXIAL NODE 3	7	3.39 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	60.96CM
	6		
	5		
	4		
AXIAL NODE 2	3	3.39 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	45.72CM
	2		
AXIAL NODE 1	1	URANIUM BLANKET	15.24CM

Figure 5-15. LaSalle Unit 1 Axial Loading - Assembly E

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
AXIAL NODE 8	23	3.46 WT% UO ₂ / 7 - 4.00 WT% GD ₂ O ₃	45.72CM
	22		
	21		
AXIAL NODE 7	20	3.58 WT% UO ₂ / 9 - 4.22 WT% GD ₂ O ₃	45.72CM
	19		
	18		
AXIAL NODE 6	17	3.58 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	16		
	15		
AXIAL NODE 5	14	3.58 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	13		
	12		
AXIAL NODE 4	11	3.58 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	10		
	9		
AXIAL NODE 3	8	3.46 WT% UO ₂ / 7 - 4.57 WT% GD ₂ O ₃	60.96CM
	7		
	6		
AXIAL NODE 2	5	3.46 WT% UO ₂ / 7 - 4.57 WT% GD ₂ O ₃	45.72CM
	4		
	3		
AXIAL NODE 1	2	URANIUM BLANKET	15.24CM
	1		

Figure 5-16. LaSalle Unit 1 Axial Loading - Assembly F

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
AXIAL NODE 8	23	3.45 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	22		
	21		
AXIAL NODE 7	20	3.62 WT% UO ₂ / 11 - 4.18 WT% GD ₂ O ₃	45.72CM
	19		
	18		
AXIAL NODE 6	17	3.62 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	16		
	15		
AXIAL NODE 5	14	3.62 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	13		
	12		
AXIAL NODE 4	11	3.62 WT% UO ₂ / 9 - 4.00 WT% GD ₂ O ₃	45.72CM
	10		
	9		
AXIAL NODE 3	8	3.45 WT% UO ₂ / 9 - 4.56 WT% GD ₂ O ₃	60.96CM
	7		
	6		
AXIAL NODE 2	5	3.45 WT% UO ₂ / 9 - 4.56 WT% GD ₂ O ₃	45.72CM
	4		
	3		
AXIAL NODE 1	2	URANIUM BLANKET	15.24CM
	1		

Figure 5-17. LaSalle Unit 1 Axial Loading - Assembly G

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
	23		
AXIAL NODE 8	22	3.63 WT% UO ₂ / 8 - 4.00 WT% GD ₂ O ₃	45.72CM
	21		
	20		
AXIAL NODE 7	19	3.88 WT% UO ₂ / 10 - 4.20 WT% GD ₂ O ₃	45.72CM
	18		
	17		
AXIAL NODE 6	16	3.88 WT% UO ₂ / 8 - 4.00 WT% GD ₂ O ₃	45.72CM
	15		
	14		
AXIAL NODE 5	13	3.88 WT% UO ₂ / 8 - 4.00 WT% GD ₂ O ₃	45.72CM
	12		
	11		
AXIAL NODE 4	10	3.88 WT% UO ₂ / 8 - 4.00 WT% GD ₂ O ₃	45.72CM
	9		
	8		
AXIAL NODE 3	7	3.63 WT% UO ₂ / 8 - 5.00 WT% GD ₂ O ₃	60.96CM
	6		
	5		
	4		
AXIAL NODE 2	3	3.63 WT% UO ₂ / 8 - 5.00 WT% GD ₂ O ₃	45.72CM
	2		
AXIAL NODE 1	1	URANIUM BLANKET	15.24CM

Figure 5-18. LaSalle Unit 1 Axial Loading - Assembly H

COLLAPSED NODES USED IN SAS2H	25 ACTUAL NODES	NODE DESCRIPTION	NODE HEIGHT
AXIAL NODE 10	25	URANIUM BLANKET	15.24CM
AXIAL NODE 9	24	URANIUM BLANKET	15.24CM
AXIAL NODE 8	23	3.63 WT% UO ₂ / 10 - 5.00 WT% GD ₂ O ₃	45.72CM
	22		
	21		
AXIAL NODE 7	20	3.90 WT% UO ₂ / 12 - 5.00 WT% GD ₂ O ₃	45.72CM
	19		
	18		
AXIAL NODE 6	17	3.90 WT% UO ₂ / 10 - 5.00 WT% GD ₂ O ₃	45.72CM
	16		
	15		
AXIAL NODE 5	14	3.90 WT% UO ₂ / 10 - 5.00 WT% GD ₂ O ₃	45.72CM
	13		
	12		
AXIAL NODE 4	11	3.90 WT% UO ₂ / 10 - 5.00 WT% GD ₂ O ₃	45.72CM
	10		
	9		
AXIAL NODE 3	8	3.63 WT% UO ₂ / 10 - 5.00 WT% GD ₂ O ₃	60.96CM
	7		
	6		
	5		
AXIAL NODE 2	4	3.63 WT% UO ₂ / 10 - 5.00 WT% GD ₂ O ₃	45.72CM
	3		
	2		
AXIAL NODE 1	1	URANIUM BLANKET	15.24CM

Figure 5-19. LaSalle Unit 1 Axial Loading - Assembly J

Figure 5-20. Not Used

Figure 5-21. Not Used

Figure 5-22. Not Used

Figures 5-23 and 5-24 show general diagrams (without radial dimensions) of the Path B models required to describe the different types of nodes. In the figures, R_n refers to the radial dimensions. The general model described in Figure 5-23 is used for all nodes that have no GDRs present. Figure 5-24 shows the general Path B models for all nodes containing GDRs. A listing of the equations referenced and utilized in the development of the radial dimensions in each of the Path B models is provided in Equations 5-11 through 5-16. Fuel pellet dimensions are equivalent for fuel rod and GDR calculations. For SAS2H modeling requirements unique to BWRs, fuel rod and GDR pellet dimensions were increased to the dimensions of the inner clad diameter and the material density was adjusted (smeared) accordingly. The bypass moderator region (R_5 - R_6) contains bypass moderator at a density of 0.7396 g/cm^3 in nonbladed nodes and a homogenized control blade mixture for bladed nodes. The homogenized control blade mixture is explained in Section 5.2.2.

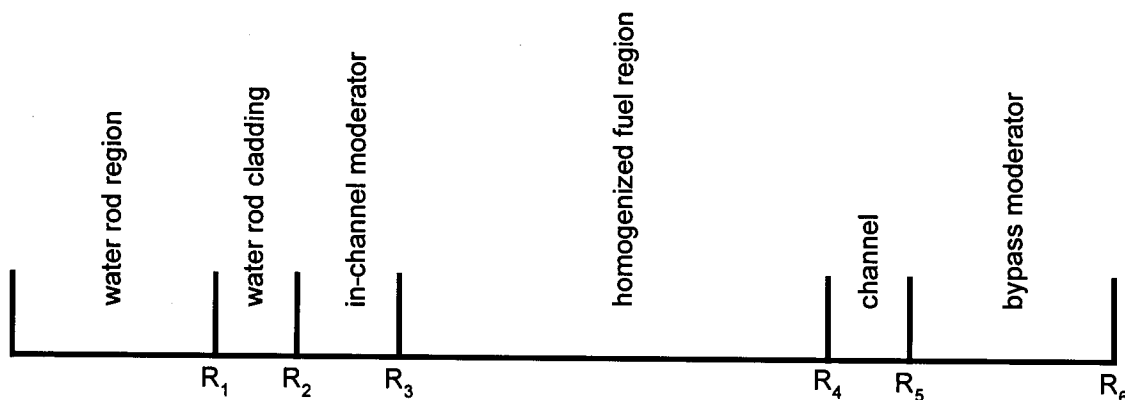


Figure 5-23. LaSalle Unit 1 SAS2H General Path B Model:
For Nodes That Do Not Contain GDRs

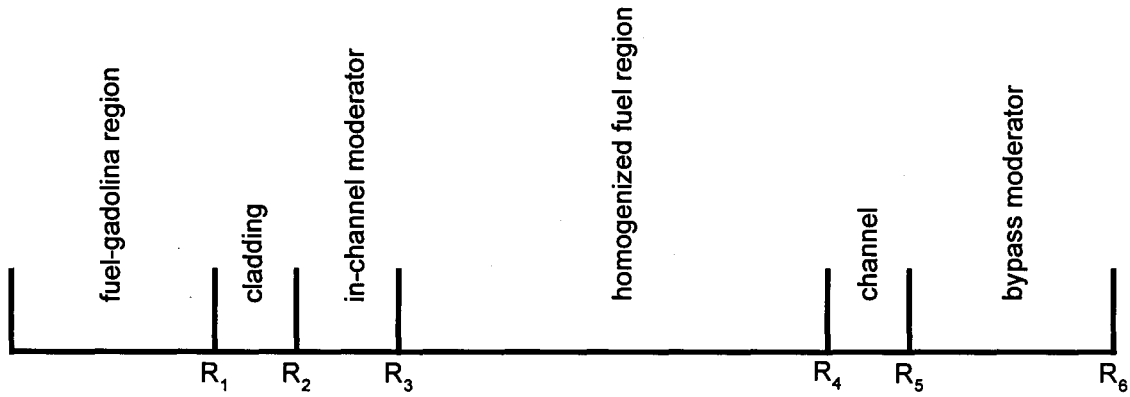


Figure 5-24. LaSalle Unit 1 SAS2H General Path B Model:
For Nodes That Contain GDRs

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**Table 5-9. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 1**

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	60
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	0
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	1.6002	Water Rod	5-11
	2	1.7018	Water Rod Cladding	5-12
	3	1.8343	In-Channel Moderator	5-13
	4	7.3372	Homogenized Fuel Region	5-14
	5	7.6022	Channel	5-15
Outer	6	8.5982	Bypass Moderator	5-16

**Table 5-10. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 2**

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	48
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	0
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	1.6002	Water Rod	5-11
	2	1.7018	Water Rod Cladding	5-12
	3	1.8343	In-Channel Moderator	5-13
	4	6.6136	Homogenized Fuel Region	5-14
	5	6.9065	Channel	5-15
Outer	6	8.5982	Bypass Moderator	5-16

Table 5-11. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations: Path B Model Description 3

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	49
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	0
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	1.6002	Water Rod	5-11
	2	1.7018	Water Rod Cladding	5-12
	3	1.8343	In-Channel Moderator	5-13
	4	6.6136 ⁽¹⁾	Homogenized Fuel Region	5-14
	5	6.9065	Channel	5-15
Outer	6	8.5982	Bypass Moderator	5-16

(1) – The correct homogenized fuel region radius for 49 fuel rods is 6.6769 and the correct channel radius is 6.9671. These errors do not significantly impact the depletion results since the correct fuel mass was used and this node is a natural uranium reflector node.

**Table 5-12. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 4**

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	50
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	0
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	1.6002	Water Rod	5-11
	2	1.7018	Water Rod Cladding	5-12
	3	1.8343	In-Channel Moderator	5-13
	4	6.6136 ⁽¹⁾	Homogenized Fuel Region	5-14
	5	6.9065	Channel	5-15
Outer	6	8.5982	Bypass Moderator	5-16

(1) – The correct homogenized fuel region radius for 50 fuel rods is 6.7396 and the correct channel radius is 7.0272. These differences do not significantly impact the depletion results since the correct fuel mass was used and this node is a natural uranium reflector node.

**Table 5-13. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 5**

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	51
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	0
Assembly channel inside width (cm):	13.4061

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Assembly channel outside width (cm): 13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	1.6002	Water Rod	5-11
	2	1.7018	Water Rod Cladding	5-12
	3	1.8343	In-Channel Moderator	5-13
	4	6.6136 ⁽¹⁾	Homogenized Fuel Region	5-14
	5	6.9065	Channel	5-15
Outer	6	8.5982	Bypass Moderator	5-16

(1) – The correct homogenized fuel region radius for 51 fuel rods is 6.8017 and the correct channel radius is 7.0868. These differences do not significantly impact the depletion results since the correct fuel mass was used and this node is a natural uranium reflector node.

Table 5-14. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 6

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	60
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	7
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	0.5321	GDR	5-11
	2	0.6134	GDR Cladding	5-12
	3	0.9171	In-Channel Moderator	5-13
	4	2.6851	Homogenized Fuel Region	5-14
	5	2.7885	Channel	5-15
Outer	6	3.2498	Bypass Moderator	5-16

**Table 5-15. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 7**

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	60
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	8
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	0.5321	GDR	5-11
	2	0.6134	GDR Cladding	5-12
	3	0.9171	In-Channel Moderator	5-13
	4	2.5117	Homogenized Fuel Region	5-14
	5	2.6084	Channel	5-15
Outer	6	3.0399	Bypass Moderator	5-16

**Table 5-16. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 8**

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	60
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	9
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	0.5321	GDR	5-11
	2	0.6134	GDR Cladding	5-12
	3	0.9171	In-Channel Moderator	5-13
	4	2.3681	Homogenized Fuel Region	5-14
	5	2.4592	Channel	5-15
Outer	6	2.8661	Bypass Moderator	5-16

Table 5-17. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
 Path B Model Description 9

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	60
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	10
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	0.5321	GDR	5-11
	2	0.6134	GDR Cladding	5-12
	3	0.9171	In-Channel Moderator	5-13
	4	2.2465	Homogenized Fuel Region	5-14
	5	2.3330	Channel	5-15
Outer	6	2.7190	Bypass Moderator	5-16

Table 5-18. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
 Path B Model Description 10

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	60
Rod pitch in assembly (cm):	1.6256

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Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	11
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	0.5321	GDR	5-11
	2	0.6134	GDR Cladding	5-12
	3	0.9171	In-Channel Moderator	5-13
	4	2.1420	Homogenized Fuel Region	5-14
	5	2.2244	Channel	5-15
Outer	6	2.5925	Bypass Moderator	5-16

**Table 5-19. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Path B Model Description 11**

Input Parameters

Number of unit cells in assembly:	64
Number of fuel rods in assembly:	60
Rod pitch in assembly (cm):	1.6256
Fuel pellet diameter (cm):	1.0439
Fuel cladding inner diameter (cm):	1.0643
Fuel cladding outer diameter (cm):	1.2268
Assembly pitch (cm):	15.24
Water rod inside diameter (cm):	3.2004
Water rod outside diameter (cm):	3.4036
Number of GDRs:	12
Assembly channel inside width (cm):	13.4061
Assembly channel outside width (cm):	13.8622

Path B Model Dimensions

	<u>Radius #</u>	<u>Outer Radius (cm)</u>	<u>Region Description</u>	<u>Equation #</u>
Inner	1	0.5321	GDR	5-11
	2	0.6134	GDR Cladding	5-12
	3	0.9171	In-Channel Moderator	5-13
	4	2.0508	Homogenized Fuel Region	5-14
	5	2.1297	Channel	5-15
Outer	6	2.4821	Bypass Moderator	5-16

**Table 5-20. LaSalle Unit 1 SAS2H Path B Model Dimension Calculations:
Matrix For Assembly Nodes Represented By Path B Model Number**

Model #	Path B Model Description ¹	Nodes Represented By Path B Model For Assembly Type								
		A	B	C	D	E	F	G	H	J
1	0GD/LCWR ²	1,9	1,9	1,9	1,9	1,9	1,9	1,9	1,9	1,9
2	48U/0GD/LCWR	10					10			10
3	49U/0GD/LCWR		10					10		
4	50U/0GD/LCWR								10	
5	51U/0GD/LCWR			10	10	10				
6	7GD/LCWR				2,3,4,5,6,8	2,3,4,5,6,8	2,3,8			
7	8GD/LCWR								2,3,4,5,6,8	
8	9GD/LCWR		2,3,4,5,6,8	2,3,4,5,6,7,8	7	7	4,5,6,7	2,3,4,5,6,8		
9	10GD/LCWR	2,3,4,5,6,8							7	2,3,4,5,6,8
10	11GD/LCWR		7					7		
11	12GD/LCWR	7								7

¹ All channels were modeled as 100mil thick/thin channels with an equivalent thickness of 0.4561 cm

² ##U = number of fuel rods (if other than 60 fuel rods)

#GD = number of GDRs in model

LCWR = 1 large central water rod (area of 4 fuel rods)

The equations listed below were derived. All distance dimensions are in centimeters. All area dimensions are in square centimeters. All other parameters are dimensionless.

Equation 5-11. Water Rod or GDR Radius in Center Zone of Path B Model

$$R_1 = ID_{clad} / 2$$

where: R_1 is the radius of the center or first Path B zone; ID_{clad} is the inner diameter of the cladding of either the GDR or the water rod.

Equation 5-12. Water Rod or GDR Cladding Radius in Second Zone of Path B Model

$$R_2 = OD_{clad} / 2$$

where: R_2 is the radius of the second Path B zone; OD_{clad} is the outer diameter of the cladding for either the water rod or GDR.

Equation 5-13. Unit Cell Moderator Radius in Third Zone of Path B Model

$$R_3 = \sqrt{\frac{\#waterrods \cdot rodpitch^2}{\pi}}$$

where: R_3 is the radius of the third Path B zone; $\#waterrods$ is 2 for 0GDR/2WR/80-100MIL Path B models, 4 for 0GDR/4WR/80-100MIL Path B models, and 1 for the #GDR/4WR/80-100MIL; $rodpitch$ is the pin pitch of the assembly.

Equation 5-14. Homogenized Fuel Radius in Fourth Zone of Path B Model

$$R_4 = \sqrt{R_3^2 + \frac{\#fuelrods - \#gdroids}{\#gdroids} \cdot \frac{rodpitch^2}{\pi}}$$

where: R_3 is the radius of the third Path B zone; R_4 is the radius of the fourth Path B zone; $\#fuelrods$ is the total number of fuel and GDRs in the assembly; $\#gdroids$ is the number of GDRs in the assembly (note: in nodes that contain no GDRs the $\#gdroids$ term is completely removed from the above equation leaving only the $\#fuelrods$ term); $rodpitch$ is the pin pitch of the assembly.

Equation 5-15. Assembly Channel Radius in Fifth Zone of Path B Model

$$R_5 = \sqrt{R_4^2 + \frac{1}{\#gdroids} \cdot \frac{outwidth^2 - inwidth^2}{\pi}}$$

where: R_4 is the radius of the fourth Path B zone; R_5 is the radius of the fifth Path B zone; $\#gdroids$ is the number of GDRs in the assembly (note: in nodes that contain no GDRs the $\#gdroids$ term is completely removed from the above equation); $outwidth$ is the outer width of the assembly channel; $inwidth$ is the inner width of the assembly channel.

Equation 5-16. Bypass Moderator Radius in Sixth Zone of Path B Model

$$R_6 = \sqrt{\frac{1}{\#gdroids} \cdot \frac{asempitch^2}{\pi}}$$

where: R_6 is the radius of the sixth Path B zone; $\#gdroids$ is the number of GDRs in the assembly (note: in nodes that contain no GDRs the $\#gdroids$ term is completely removed from the above equation); $asempitch$ is the assembly pitch of the LaSalle Unit 1 reactor.

5.5. SPACE-CRAFT SOFTWARE ROUTINE AND USAGE

SPACE is a driver software routine for CRAFT. For the LaSalle Unit 1 BWR assemblies, the CRAFT routine is operated in the one node format. This means that each time CRAFT is executed, the SAS2H files and runs are only for one node of the designated assembly. The SPACE routine operates CRAFT in a loop that processes the CRAFT and SAS2H cases for the entire assembly. The SPACE routine allows the user to input all of the required information describing an assembly into one SPACE input file "spacein".

The CRAFT software routine directed the performance of the assembly depletion and decay calculations relevant to CRC evaluations. The CRAFT software routine generated input files for the SAS2H control module of the SCALE modular code system based on user-defined nodal input, which described the fuel assembly's nodal specifications and irradiation history. Appropriate isotopic compositions relevant to the CRC evaluations containing the fuel assembly and subsequent depletion and decay calculations of the fuel assembly were extracted and stored by CRAFT as it generated and executed the SAS2H cases for the complete fuel assembly irradiation history.

The CRAFT software routine was developed with a high degree of flexibility to provide for the depletion and decay of fuel assemblies that have widely varying features under flexible core operating conditions. The following listing describes some of the capabilities and usage of CRAFT.

- The CRAFT software routine generates and executes appropriate SAS2H cases required to perform a prescribed depletion and decay sequence for a fuel node. The depletion and decay sequence is orchestrated from the beginning of cycle (BOC) statepoint calculation of the initial prescribed insertion cycle through the final statepoint calculation of the last prescribed insertion cycle. The CRAFT software routine extracts and saves fuel and GDR isotopics at each statepoint, including BOC statepoints, during the fuel node's depletion and decay sequence. A certain number of the generated isotopics in the depleted fuel composition obtained from a SAS2H calculation are not used in the initial charge composition to the next SAS2H calculation due to a lack of cross section data in the specified SAS2H master cross section library. The CRAFT software routine provides a listing of the fuel isotopics from the output of a SAS2H calculation which are not used in the initial charge to the next SAS2H calculation. The isotopics left out of the initial charge are fission products whose reactivity worth is small relative to the isotopics retained in the initial charge composition. The listing of excluded initial charge isotopics ("*.notes" files) allows for a determination of the impact upon the reactivity worth of the initial fuel composition in the subsequent depletion calculation.
- The fuel cladding, GDR cladding, or CRB cladding in the CRAFT calculation may be designated as any of the following materials: ZIRC-4, INCONEL, SS316, SS316S, SS304, SS304S.
- A fuel assembly may be inserted in a maximum of 10 reactor cycles during a CRAFT calculation.
- A maximum of 20 statepoints or datapoints (BOC is always considered a statepoint) may be specified in any given reactor cycle in a CRAFT calculation.

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- A maximum of 23 irradiation steps of variable duration may be specified in any given SAS2H depletion calculation that is generated by CRAFT.
- A maximum of 50 axial assembly nodes may be specified for use in a CRAFT calculation. Each axial node may have a unique height.

The CRAFT software routine utilizes a user-defined input format for fuel temperature, moderator density, and burnup data. The input data must be specified for each axial node in a user-defined nodal format of up to 50 nodes of arbitrary height. The total assembly active fuel height for the input data descriptions may be different than that specified for use in the CRAFT generated SAS2H depletion calculations. Nominal fuel temperature input data representing full-power reactor operation must be provided in units of degrees Kelvin for each node in each CRC statepoint depletion calculation that will be generated by CRAFT. Nominal moderator density input data representing full-power reactor operation must be provided in units of grams per cubic centimeter for each node in each statepoint calculation that will be generated by CRAFT. The nodal average burnup input data must be provided in units of GWd/MTU for each node at each statepoint or datapoint including all BOC statepoints. All burnup input data that is specified must be cumulative from the initial insertion of the fuel assembly in the reactor.

Additional information on the CRAFT software routine is provided in the CRAFT user information in Attachment I of Reference 7.9. This reference also discusses specific modeling procedures and details relevant to the SAS2H fuel assembly depletion calculations, which were generated by CRAFT.

5.6. FILENAME DESCRIPTIONS FOR SPACE-CRAFT AND SAS2H

The SPACE software routine generates CRAFT calculation input files for various types of CRAFT calculations. The CRAFT input files generated by SPACE are named with a two digit integer identical to the node number that is being processed in the CRAFT-SAS2H calculation. The filenames for these input files would be as follows:

GDR and Uranium Blanket CRAFT input files:

01, 02, 03, 04, 05, 06, 07, 08, 09, 10

When a CRAFT execution for a node is complete the CRAFT input file for the node is renamed with the ".B" extension.

The CRAFT code generated five types of files identified as either ".input", ".output", ".cut", ".msgs", or ".notes", where the "*" is the base file set identifier for the statepoint depletion calculation of interest. The ".cut" and ".notes" files were the only files that had to be retained for CRC reactivity evaluations and documentation purposes. All files were generated in the working directory in which the CRAFT calculation was performed.

All CRAFT generated filenames utilized the following format: "{Base File Set Identifier}.{suffix}", where the suffix corresponded to one of the five file types previously mentioned, and the base file set

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identifier was a 25 character name containing essential information necessary to uniquely identify each CRAFT generated SAS2H depletion calculation.

The base file set identifier for each statepoint depletion calculation contained the following information:

1. reactor identifier (three character)
2. assembly insertion number in current reactor cycle (two digit)
3. axial node number (node 1 is always the bottom node) (two digit)
4. reactor cycle number in which the SAS2H calculation starts (two character)
5. EFPD statepoint at which the SAS2H calculation starts (three digit)
6. reactor cycle number in which the SAS2H calculation ends (two character)
7. EFPD statepoint at which the SAS2H calculation ends (three digit).

The format of the base file set identifier was as follows where the numbers identified as #{number} correspond to one of the seven items previously listed-- #1 A #2 N #3 DC #4 T #5 AC #6 T #7. The letters contained in the base file set identifier were presented explicitly as shown in the previous format. The base file set identifier did not contain any spaces.

The "*.input" files each contained a CRAFT generated SAS2H input deck. The "*.output" files each contained a complete SAS2H depletion calculation output file. The "*.cut" files each contained the corresponding SAS2H input deck followed by an output extraction from the final ORIGEN-S pass of the SAS2H depletion calculation, which contained data relevant to subsequent CRC reactivity calculations. The "*.msgs" files each contained the standard run-time messages associated with the SAS2H calculations. The "*.notes" files each contained a listing of the isotopes and associated concentrations which were left behind in generating the initial charge fuel composition for the next continuation SAS2H calculation. The "*.notes" files were only created for CRAFT generated SAS2H calculations which were continuation depletion calculations. The "*.cut" and "*.notes" files contained all of the information required to perform CRC reactivity evaluations or repeat calculations as necessary for quality assurance purposes. The remainder of the CRAFT generated files were discarded once the "*.cut" and "*.notes" files were generated and retained.

In Attachment III, all SPACE and CRAFT input files are renamed and stored to a writable compact disk (WCD) (Reference 7.11). The naming method for all SPACE and CRAFT input files that are stored on the WCD is demonstrated below.

CRAFT Input Files: Naming Format: "MMANN" Example: "05J12"

where:

- MM - node number
- A - letter designation of the assembly type
- NN - assembly number

SPACE Input Files: Naming Format: "SPANN" Example: "spJ12"

where:

- SP - designation for SPACE input file
- A - letter designation of the assembly type
- NN - the assembly number

6. RESULTS

This calculation contains assumptions as listed in Section 3 that must be confirmed prior to the use of the results of this calculation to support construction, fabrication, or procurement activities

Depletion calculations for 150 fuel assemblies from LaSalle Unit 1 were documented in this analysis. The depleted fuel and depleted burnable poison isotopics for these fuel assemblies had to be calculated at a number of statepoints in Cycles 7 and 8 for use in subsequent CRC reactivity calculations. Table 5-7 identifies the CRC statepoint EFPD values in each of these cycles for which isotopic compositions were required. Table 5-7 also identifies a number of datapoints at which the depletion calculations were interrupted to update input parameters. Even though the depleted isotopics available at each of the datapoints were not required for subsequent reactivity calculations, they were retained in this calculation for completeness.

The SPACE input files for each assembly depletion were developed in accordance with the instructions presented in Attachment II of Reference 7.9. The SPACE modeling features incorporated in the depletion calculations are also described in this reference. The SPACE input files for the assembly depletions documented in this calculation are provided in Attachment III (Reference 7.11), as documented in Section 8.

The CRAFT input files for each nodal depletion were developed in accordance with the instructions presented in Attachment I of Reference 7.9. The SAS2H modeling features incorporated in the depletion calculations are also described in this reference. The CRAFT input files for the nodal depletions documented in this calculation are provided in Attachment III, as documented in Section 8.

Attachment IV (Reference 7.11) contains the CRAFT generated consolidated SAS2H output files for the depletion calculations documented in this analysis as identified in the attachment listing of Section 8. The consolidated output files contain the following information:

- time/date stamp for when the SAS2H depletion calculation was performed
- echo of the SAS2H input deck generated by CRAFT
- the output extraction of information pertinent to CRC evaluations from the final ORIGEN-S calculation of the SAS2H depletion calculation.

Between CRC statepoints or datapoints in the depletion sequence for a fuel assembly node, a new SAS2H input deck had to be created using the fuel isotopic results from the previous calculation as the initial charge. Since the 44-group master cross section library utilized in the SAS2H depletion

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calculations of this analysis had a reduced isotopic inventory relative to the ORIGEN-S cross section library, a number of isotopes present in the ORIGEN-S output could not be transferred to the initial fuel charge of the subsequent SAS2H depletion calculation. The non-propagated isotopic inventory was written to a file entitled "{depletion case identifier}.notes" to allow for subsequent analysis of the impact of excluding these isotopes in the initial charge to the continuation SAS2H depletion calculation. The "*.notes" files are contained in Attachment V (Reference 7.11) as documented in Section 8.

Isotopic results for the set of 29 principal isotopes identified in Table 6-1 were processed for each assembly node at each CRC statepoint other than beginning of life (BOC of first reactor cycle in which the assembly is inserted) statepoint.

Table 6-1. The Set of 29 Principal Isotopes

Mo-95	Tc-99	Ru-101	Rh-103	Ag-109
Nd-143	Nd-145	Sm-147	Sm-149	Sm-150
Sm-151	Sm-152	Eu-151	Eu-153	Gd-155
U-233	U-234	U-235	U-236	U-238
Np-237	Pu-238	Pu-239	Pu-240	Pu-241
Pu-242	Am-241	Am-242m	Am-243	---

7. REFERENCES

- 7.1 Oak Ridge National Laboratory 1995. *SCALE, Version 4.3: Modular Code System for Performing Standardized Computer Analyses for Licensing Evaluation*. User's Manual Volumes 0 through 3. CCC-545. Oak Ridge, Tennessee: Distributed by the Radiation Shielding Information Center. TIC: 235920.
- 7.2 CRWMS M&O (Civilian Radioactive Waste Management System Management and Operating Contractor) 1997. *Software Qualification Report for the SCALE Modular Code System Version 4.3*. CSCI: 30011 V4.3. DI: 30011-2002 REV 01. Las Vegas, Nevada: CRWMS M&O. ACC: MOL.19970731.0884.
- 7.3 CRWMS M&O 1999. *Summary Report of Commercial Reactor Criticality Data for LaSalle Unit 1*. B00000000-01717-5705-00138 REV 00. Las Vegas, Nevada: CRWMS M&O. ACC: MOL.19990923.0233.
- 7.4 Briesmeister, Judith F., ed. 1997. *MCNP, Version 4B: Monte Carlo N-Particle Transport Code System*. User Manual. LA-12625-M, Version 4B. Los Alamos, New Mexico: Los Alamos National Laboratory. TIC: 241044.
- 7.5 General Electric Company 1976. *Core Design and Operating Data for Cycles 1 and 2 of Quad Cities 1*. NP-240, Project 497-1. San Jose, California: Electric Power Research Institute. TIC: 237267.
- 7.6 Bowman, S.M.; Hermann, O.W.; and Brady, M.C. 1995. *Scale-4 Analysis of Pressurized Water Reactor Critical Configurations: Volume 2 - Sequoyah Unit 2 Cycle 3*. ORNL/TM-12294/V2. Oak Ridge, Tennessee: Oak Ridge National Laboratory. TIC: 244397.
- 7.7 General Electric Company 1989. *Nuclides and Isotopes*, Fourteenth Edition. San Jose, California: General Electric Company. TIC: 201637

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- 7.8 CRWMS M&O 1999. *Waste Package Material Properties*. BBA000000-01717-0210-00017 REV 00. Las Vegas, Nevada: CRWMS M&O. ACC: MOL.19990407.0172.
- 7.9 CRWMS M&O 1999. *CRC Depletion Calculations for Quad Cities Unit 2*. B00000000-01717-0210-00009 REV 01. Las Vegas, Nevada: CRWMS M&O. ACC: MOL.19990929.0121.
- 7.10 Spence, R.E. 1999. "Accepted Data Call." Letter from R.E. Spence (Acting Assistant Manager, Office of Project Execution, DOE/YMSCO) to J.L. Younker (Deputy Assistant General Manager, Technical, TRW Environmental Safety Systems, Inc.), July 27, 1999. ACC: MOL.19990811.0170.
- 7.11 CRWMS-M&O 1999. *Five (5) Compact Discs for CRC Depletion Calculations for LaSalle Unit 1, Attachments III, IV, V, and VI*. B00000000-01717-0210-00097 REV 00. Las Vegas, Nevada: CRWMS M&O. ACC: MOL.19990927.0469.
- 7.12 Mellington, S.P. 1999. "Office of Project Execution (OPE) Approval of LV.WP.TWD.08/99-131 as Accepted Data" Letter from S.P. Mellington (Assistant Manager, Office of Project Execution, DOE/YMSCO) to T.W. Doering (Framatome Cogema Fuels, CRWMS M&O), September 20, 1999. ACC: MOL.19990927.0472.

8. ATTACHMENTS

The attachments referenced throughout this calculation are listed in Table 8-1. Attachment I contains the control blade insertion history statements. Attachment II contains the burnup and thermal-hydraulic feedback information. Attachment III contains the SPACE-CRAFT input files for the assembly depletion calculations. Attachment IV contains the "*.cut" files for the assembly depletion calculations. Attachment V contains the "*.notes" files for the assembly depletion calculations. Attachment VI contains documentation of the corrected depletion calculations for nodes 2 and 3 of all assemblies. Attachments III through VI were written in ASCII format to an attachment writable compact disk (WCD) (Reference 7.11). Detailed listings of the content of Attachments III through VI on the WCD are provided in their corresponding hard-copy attachments in this calculation. The listing of the content of Attachments III through VI contain the following information, as appropriate, for each of the files that were written to the WCD:

- the directory and filename as taken from the HP workstation
- the corresponding filename on the attachment WCD
- the date that the file was created on the HP workstation or personal computer
- the size of the file on the HP workstation or personal computer in bytes.

The WCDs containing Attachments III through VI were written using the HP Compact Disk Writer Plus 7200e External CD-ReWritable Drive for personal computers and can be read using Microsoft's WORDPAD program.

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Table 8-1. Attachment Listing

Attachment #	# of Pages	Creation Date	Description
I	21	06/15/99	Assembly Control Blade Insertion History Statements
II	387	6/15/99	Burnup, Fuel Temperature, and Moderator Density Information for LaSalle Unit 1
III	36 (Hard-Copy Listing of WCD Content)	6/08/99 (Reference 7.11)	SPACE-CRAFT Input Files for the LaSalle Unit 1 Depletion Calculations
IV	121 (Hard-Copy Listing of WCD Content)	6/03/99 (Reference 7.11)	".cut" Consolidated Output Files for the LaSalle Unit 1 Depletion Calculations
V	98 (Hard-Copy Listing of WCD Content)	6/08/99 (Reference 7.11)	".notes" Files for the LaSalle Unit 1 Depletion Calculations
VI	35 (Hard-Copy Listing of WCD Content)	9/16/99 (Reference 7.11)	".cut" Consolidated Output Files for the Corrected Depletion Calculations for Nodes 2 and 3

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LaSalle Unit 1

Assembly Control Blade Insertion History Statements

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Control Blade Insertion History

Insertion history for controlled assemblies during the operation of LaSalle Unit 1 cycles 4-8, is provided in this attachment. The format of the insertion histories are statements that can be written into the input files of SPACE, Version 01. Description of the data given in the following table is provided for fuel assembly A3. This representative description applies to all the controlled fuel assemblies. Assembly insertion histories that are listed as "0" describe assemblies that did not meet the minimum criteria for the definition of a controlled assembly.

Fuel Assembly: A3					
Bladed Cycle: 6					
Number of Irradiation Steps: 3					
Relative Cycle for Fuel Assy	Relative DP or SP in a Cycle	Relative Step Number	Nodes Exposed to a Blade		SAS2H Material Identifier
			Bottom Node No.	Top Node No.	
3	1	1	1	6	11
3	1	2	1	6	11
3	1	3	1	7	11

ASSEMBLY: A1
 BLADED CYCLE: 5
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 0 : Number of irradiation steps with CRB inserted

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 0 : Number of irradiation steps with CRB inserted

ASSEMBLY: A3
 BLADED CYCLE: 6
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 7 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 18 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 18 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 19 11 : Insertion history statement

ASSEMBLY: A5
 BLADED CYCLE: 6
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 6 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 17 11 : Insertion history statement

ASSEMBLY: A6
 BLADED CYCLE: 5
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 0 : Number of irradiation steps with CRB inserted

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 0 : Number of irradiation steps with CRB inserted

ASSEMBLY: A8

BLADED CYCLE:6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 2 1 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 2 1 1 17 11 : Insertion history statement

ASSEMBLY: A11

BLADED CYCLE:6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 2 1 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 2 1 1 17 11 : Insertion history statement

ASSEMBLY: A12

BLADED CYCLE:5

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: B1

BLADED CYCLE:6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

2 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 2 1 1 7 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 2 2 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

2 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 2 1 1 19 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 2 2 1 18 11 : Insertion history statement

ASSEMBLY: B2

BLADED CYCLE:6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

3 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 1 1 1 3 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 1 2 1 2 11 : Insertion history statement

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1 : Number of axial sections with CRB inserted in step
 3 1 3 1 3 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 9 11 : Insertion history statement

ASSEMBLY: B5

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 2 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 20 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 24 11 : Insertion history statement

ASSEMBLY: B6

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 4 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 12 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step

3 2 2 1 24 11 : Insertion history statement

ASSEMBLY: B10

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 2 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 20 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 24 11 : Insertion history statement

ASSEMBLY: C1

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 2 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 2 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 4 11 : Insertion history statement

ASSEMBLY: C2

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

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ASSEMBLY: C2

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

6 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 4 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 7 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

6 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 12 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 20 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 20 11 : Insertion history statement

ASSEMBLY: C5

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

4 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 8 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

4 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 22 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 12 11 : Insertion history statement

ASSEMBLY: C6

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
0 : Number of irradiation steps with CRB inserted

ASSEMBLY: C7

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
2 2 1 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
2 2 1 1 17 11 : Insertion history statement

ASSEMBLY: C7

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: C9

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: C10

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 1 3 1 5 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 2 1 1 7 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 2 2 1 7 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 3 1 1 7 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 3 2 1 8 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
3 1 3 1 14 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 2 1 1 21 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 2 2 1 21 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
3 3 1 1 19 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step

3 3 2 1 22 11 : Insertion history statement

ASSEMBLY: C11

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 2 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 1 1 2 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 2 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 20 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 1 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 5 11 : Insertion history statement

ASSEMBLY: C13

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 2 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 2 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 5 11 : Insertion history statement

ASSEMBLY: C15

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step

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3 1 2 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 5 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 14 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 15 11 : Insertion history statement

ASSEMBLY: C16

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: C17

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: C17

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

3 : Number of irradiation steps with CRB inserted

1 : Number of axial sections with CRB inserted in step

3 2 1 1 9 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

3 2 2 1 9 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

3 3 1 1 9 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

3 : Number of irradiation steps with CRB inserted

1 : Number of axial sections with CRB inserted in step

3 2 1 1 24 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

3 2 2 1 24 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

3 3 1 1 24 11 : Insertion history statement

ASSEMBLY: C18

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 2 1 8 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 14 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 21 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 21 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 2 1 22 11 : Insertion history statement

ASSEMBLY: C19

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

4 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 8 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

4 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 22 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 12 11 : Insertion history statement

ASSEMBLY: C20

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 4 11 : Insertion history statement

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1 : Number of axial sections with CRB inserted in step
 3 2 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 2 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 12 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 2 1 16 11 : Insertion history statement

ASSEMBLY: C21

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: C22

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

6 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 4 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 7 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

6 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 12 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 20 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step

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3 2 2 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 19 11 : Insertion history statement

ASSEMBLY: C24

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 5 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 5 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 18 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 14 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 15 11 : Insertion history statement

ASSEMBLY: C25

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 4 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 2 1 5 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 12 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step

3 3 2 1 14 11 : Insertion history statement

ASSEMBLY: C26

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

3 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 18 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 18 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 18 11 : Insertion history statement

ASSEMBLY: C28

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

6 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 4 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 7 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

6 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 1 3 1 12 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 1 1 20 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 2 2 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 3 3 1 1 19 11 : Insertion history statement

ASSEMBLY: C29

BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

2 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step

2 2 1 1 6 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 6 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 2 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 2 1 1 18 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 18 11 : Insertion history statement

ASSEMBLY: D2
 BLADED CYCLE: 7
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 0 : Number of irradiation steps with CRB inserted

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 0 : Number of irradiation steps with CRB inserted

ASSEMBLY: D2
 BLADED CYCLE: 8
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 18 11 : Insertion history statement

ASSEMBLY: D3
 BLADED CYCLE: 8
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 4 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 12 11 : Insertion history statement

ASSEMBLY: D4
 BLADED CYCLE: 8
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 5 11 : Insertion history statement
 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 14 11 : Insertion history statement

ASSEMBLY: D5
 BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 12 11 : Insertion history statement

ASSEMBLY: D7
 BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 12 11 : Insertion history statement

ASSEMBLY: D10
 BLADED CYCLE: 6

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 0 : Number of irradiation steps with CRB inserted

ASSEMBLY: D11
 BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 12 11 : Insertion history statement

ASSEMBLY: D12
 BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 18 11 : Insertion history statement

ASSEMBLY: D13
 BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted

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1 : Number of axial sections with CRB inserted in step
 3 1 1 1 3 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement

ASSEMBLY: D14

BLADED CYCLE: 7
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 0 : Number of irradiation steps with CRB inserted
 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 0 : Number of irradiation steps with CRB inserted

ASSEMBLY: D14

BLADED CYCLE: 8
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement
 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 18 11 : Insertion history statement

ASSEMBLY: D15

BLADED CYCLE: 8
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 9 11 : Insertion history statement
 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 24 11 : Insertion history statement

ASSEMBLY: D16

BLADED CYCLE: 7
 SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):
 5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 3 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 1 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 7 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 3 1 1 7 11 : Insertion history statement

 SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):
 5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 8 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 9 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step

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2 2 1 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 20 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 3 1 1 19 11 : Insertion history statement

ASSEMBLY: D17

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: D21

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted

1 : Number of axial sections with CRB inserted in step

2 1 1 1 7 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 1 2 1 6 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 1 3 1 9 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 2 1 1 5 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 2 2 1 5 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted

1 : Number of axial sections with CRB inserted in step

2 1 1 1 19 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 1 2 1 19 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 1 3 1 24 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 2 1 1 14 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 2 2 1 15 11 : Insertion history statement

ASSEMBLY: E1

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted

1 : Number of axial sections with CRB inserted in step

2 1 1 1 7 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 1 2 1 6 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 1 3 1 9 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 2 1 1 5 11 : Insertion history statement

1 : Number of axial sections with CRB inserted in step

2 2 2 1 5 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 19 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 2 1 16 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 1 3 1 24 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 1 1 14 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 2 2 2 1 15 11 : Insertion history statement

ASSEMBLY: E2

BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 12 11 : Insertion history statement

ASSEMBLY: E4

BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 12 11 : Insertion history statement

ASSEMBLY: E6

BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 3 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 6 11 : Insertion history statement

ASSEMBLY: E9

BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 3 1 1 1 9 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted

1 : Number of axial sections with CRB inserted in step
3 1 1 1 24 11 : Insertion history statement

ASSEMBLY: E12

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

5 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
2 1 3 1 5 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 2 1 1 7 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 2 2 1 7 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 3 1 1 6 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 3 2 1 8 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

5 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
2 1 3 1 14 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 2 1 1 21 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 2 2 1 21 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 3 1 1 18 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
2 3 2 1 22 11 : Insertion history statement

ASSEMBLY: F1

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

2 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
1 2 1 1 4 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
1 2 2 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

2 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
1 2 1 1 12 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
1 2 2 1 12 11 : Insertion history statement

ASSEMBLY: F18

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

2 : Number of irradiation steps with CRB inserted
1 : Number of axial sections with CRB inserted in step
1 2 1 1 4 11 : Insertion history statement
1 : Number of axial sections with CRB inserted in step
1 2 2 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

2 : Number of irradiation steps with CRB inserted

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1 : Number of axial sections with CRB inserted in step
 1 2 1 1 12 11 : Insertion history statement
 1 : Number of axial sections with CRB inserted in step
 1 2 2 1 12 11 : Insertion history statement

ASSEMBLY: G1

BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 6 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 18 11 : Insertion history statement

ASSEMBLY: G3

BLADED CYCLE: 8

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 4 11 : Insertion history statement

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

1 : Number of irradiation steps with CRB inserted
 1 : Number of axial sections with CRB inserted in step
 2 1 1 1 12 11 : Insertion history statement

ASSEMBLY: G9

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

ASSEMBLY: G13

BLADED CYCLE: 7

SPACE INPUT-CRB INSERTION SECTION (COLLAPSED):

0 : Number of irradiation steps with CRB inserted

SPACE INPUT-CRB INSERTION SECTION (UNCOLLAPSED):

0 : Number of irradiation steps with CRB inserted

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A1

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.138	625.7	0.7396	2.348	648.5	0.7396
2	0.000		0.7396	3.882	808.7	0.7396	8.028	910.7	0.7396
3	0.000		0.7295	5.431	873.4	0.7385	11.389	1028.6	0.7300
4	0.000	Data	0.6652	6.596	959.5	0.7073	13.657	1151.3	0.6878
5	0.000	Not	0.5953	7.393	1023.7	0.6611	14.846	1198.5	0.6317
6	0.000	Required	0.5311	7.934	1069.8	0.6055	15.429	1203.7	0.5716
7	0.000		0.4777	8.297	1102.1	0.5482	15.728	1195.8	0.5150
8	0.000		0.4342	8.561	1126.1	0.4956	15.928	1188.0	0.4656
9	0.000		0.3979	8.999	1167.3	0.4496	16.474	1201.2	0.4234
10	0.000		0.3675	9.018	1169.1	0.4103	16.436	1194.2	0.3871
11	0.000		0.3424	8.907	1158.5	0.3773	16.276	1188.2	0.3565
12	0.000		0.3213	8.724	1141.3	0.3495	16.062	1184.5	0.3303
13	0.000		0.3038	8.516	1122.0	0.3259	15.853	1184.4	0.3079
14	0.000		0.2889	8.285	1101.0	0.3057	15.614	1183.4	0.2885
15	0.000		0.2761	8.022	1077.6	0.2884	15.284	1175.3	0.2716
16	0.000		0.2654	7.713	1050.7	0.2734	14.806	1155.1	0.2569
17	0.000		0.2562	7.347	1019.8	0.2604	14.167	1123.2	0.2441
18	0.000		0.2486	6.769	973.1	0.2492	13.147	1073.6	0.2329
19	0.000		0.2422	6.411	945.3	0.2396	12.425	1034.4	0.2234
20	0.000		0.2363	6.080	920.3	0.2310	11.727	996.5	0.2152
21	0.000		0.2313	5.679	891.0	0.2234	10.888	953.2	0.2079
22	0.000		0.2269	5.048	846.9	0.2168	9.625	894.3	0.2017
23	0.000		0.2233	4.348	800.7	0.2114	8.201	831.5	0.1967
24	0.000		0.2211	2.032	665.1	0.2074	3.882	680.4	0.1930
25	0.000		0.2199	1.275	625.7	0.2057	2.411	633.2	0.1915
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.826	634.7	0.7396	4.920	617.6	0.7396	6.576	663.9	0.7396
2	13.395	869.4	0.7396	17.236	782.1	0.7396	22.686	962.5	0.7396
3	18.633	937.5	0.7312	23.444	804.5	0.7340	30.112	998.9	0.7323
4	21.649	988.3	0.6911	26.886	830.1	0.6978	33.939	1032.8	0.6951
5	23.043	1002.7	0.6380	28.504	843.9	0.6496	35.584	1035.2	0.6465
6	23.656	1004.8	0.5810	29.299	855.3	0.5975	36.277	1026.1	0.5944
7	23.957	1005.0	0.5268	29.784	866.9	0.5474	36.650	1016.2	0.5446
8	24.185	1007.0	0.4791	30.207	879.5	0.5025	37.014	1011.0	0.5002
9	24.915	1020.2	0.4379	31.236	899.1	0.4628	38.121	1017.8	0.4611
10	24.896	1021.6	0.4024	31.403	911.5	0.4282	38.233	1013.0	0.4270
11	24.710	1019.7	0.3722	31.380	922.6	0.3983	38.108	1004.1	0.3976
12	24.432	1015.1	0.3462	31.251	932.8	0.3724	37.849	992.9	0.3720
13	24.126	1008.1	0.3237	31.082	942.3	0.3496	37.534	980.5	0.3496
14	23.763	999.3	0.3042	30.845	951.2	0.3296	37.141	967.4	0.3299
15	23.299	989.9	0.2872	30.492	959.0	0.3121	36.621	953.5	0.3127
16	22.702	981.6	0.2728	29.986	965.5	0.2970	35.922	937.8	0.2977
17	21.853	967.1	0.2598	29.201	970.1	0.2835	34.912	919.9	0.2844
18	20.536	947.1	0.2486	27.910	972.0	0.2719	33.376	900.7	0.2728
19	19.401	920.0	0.2385	26.667	964.2	0.2612	31.883	881.7	0.2622
20	18.177	886.6	0.2296	25.180	945.6	0.2514	30.135	862.2	0.2526
21	16.606	842.3	0.2216	23.027	905.8	0.2423	27.556	831.4	0.2438
22	14.487	793.5	0.2149	20.203	859.9	0.2349	24.198	794.4	0.2365
23	12.076	740.7	0.2092	16.805	799.7	0.2285	20.054	745.5	0.2301
24	5.618	637.8	0.2051	7.729	659.9	0.2235	9.205	640.8	0.2254
25	3.403	605.1	0.2029	4.588	616.2	0.2201	5.417	606.0	0.2222

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A1 (continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	7.566	661.5	0.7396	8.240	601.5	0.7396	8.517	588.9	0.7396
2	25.773	926.0	0.7396	27.765	688.7	0.7396	28.555	644.7	0.7396
3	33.818	947.9	0.7321	36.156	691.9	0.7336	37.071	646.6	0.7342
4	37.820	971.6	0.6952	40.333	702.5	0.6988	41.312	652.7	0.7001
5	39.475	972.9	0.6470	42.177	714.1	0.6536	43.233	660.2	0.6561
6	40.130	967.7	0.5955	43.046	727.4	0.6054	44.199	669.7	0.6092
7	40.458	961.6	0.5461	43.588	741.0	0.5593	44.847	680.3	0.5647
8	40.795	958.0	0.5020	44.121	753.6	0.5178	45.491	691.5	0.5247
9	41.940	963.1	0.4631	45.476	767.4	0.4808	46.974	704.7	0.4890
10	42.039	961.3	0.4292	45.699	775.7	0.4482	47.300	715.4	0.4576
11	41.893	958.5	0.3999	45.637	781.3	0.4196	47.332	725.4	0.4300
12	41.612	955.5	0.3743	45.403	784.5	0.3942	47.184	734.6	0.4054
13	41.273	952.3	0.3521	45.076	785.3	0.3717	46.936	743.2	0.3834
14	40.855	949.0	0.3324	44.641	784.2	0.3516	46.570	750.8	0.3637
15	40.308	945.4	0.3151	44.052	781.3	0.3337	46.036	756.8	0.3460
16	39.576	941.0	0.3001	43.254	776.9	0.3181	45.281	761.6	0.3305
17	38.519	934.8	0.2867	42.113	771.3	0.3043	44.169	764.9	0.3166
18	36.919	926.4	0.2751	40.419	765.0	0.2923	42.491	766.7	0.3047
19	35.329	913.9	0.2644	38.692	756.0	0.2812	40.746	764.7	0.2934
20	33.444	896.5	0.2547	36.623	744.1	0.2711	38.623	758.6	0.2832
21	30.600	863.9	0.2458	33.475	724.8	0.2617	35.337	743.4	0.2736
22	26.898	823.3	0.2386	29.415	702.7	0.2541	31.091	723.3	0.2659
23	22.258	768.4	0.2322	24.256	671.9	0.2470	25.613	690.2	0.2583
24	10.220	651.0	0.2275	11.078	608.2	0.2414	11.667	616.0	0.2520
25	5.986	611.4	0.2243	6.426	586.0	0.2367	6.725	589.7	0.2461
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	8.841	580.3	0.7396						
2	29.450	616.9	0.7396						
3	38.075	617.5	0.7347						
4	42.356	619.7	0.7015						
5	44.332	622.8	0.6585						
6	45.381	627.4	0.613						
7	46.144	633.9	0.5700						
8	46.922	641.5	0.5317						
9	48.576	651.4	0.4977						
10	49.066	661.0	0.4681						
11	49.276	671.5	0.4424						
12	49.317	682.9	0.4198						
13	49.267	695.0	0.3998						
14	49.101	707.4	0.3819						
15	48.769	720.2	0.3660						
16	48.211	732.9	0.3518						
17	47.289	745.3	0.3393						
18	45.792	757.4	0.3287						
19	44.168	765.5	0.3182						
20	42.083	768.1	0.3083						
21	38.668	759.4	0.2988						
22	34.188	743.8	0.2912						
23	28.177	709.5	0.2828						
24	12.789	624.0	0.2753						
25	7.289	593.3	0.2666						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A2

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.234	631.5	0.7396	2.242	633.1	0.7396
2	0.000		0.7396	4.201	832.7	0.7396	7.670	843.2	0.7396
3	0.000		0.7327	5.814	900.8	0.7369	10.831	934.9	0.7355
4	0.000	Data	0.6718	6.910	984.3	0.7037	12.947	1036.9	0.6998
5	0.000	Not	0.6048	7.558	1037.5	0.6564	14.043	1085.4	0.6494
6	0.000	Required	0.5424	7.923	1068.9	0.6008	14.543	1100.5	0.5920
7	0.000		0.4901	8.121	1086.3	0.5448	14.758	1102.4	0.5357
8	0.000		0.4474	8.241	1097.0	0.4943	14.881	1102.7	0.4860
9	0.000		0.4118	8.548	1124.9	0.4506	15.338	1119.8	0.4434
10	0.000		0.3818	8.478	1118.5	0.4135	15.239	1116.5	0.4072
11	0.000		0.3571	8.311	1103.3	0.3823	15.021	1110.6	0.3766
12	0.000		0.3362	8.077	1082.4	0.3559	14.721	1103.2	0.3506
13	0.000		0.3187	7.801	1058.3	0.3335	14.362	1093.8	0.3283
14	0.000		0.3038	7.496	1032.3	0.3144	13.955	1082.5	0.3091
15	0.000		0.2910	7.172	1005.4	0.2981	13.508	1069.0	0.2925
16	0.000		0.2801	6.833	978.1	0.2839	13.019	1052.7	0.2780
17	0.000		0.2708	6.460	949.0	0.2717	12.448	1031.7	0.2652
18	0.000		0.2628	5.916	908.2	0.2611	11.557	995.9	0.2540
19	0.000		0.2562	5.585	884.3	0.2519	10.975	970.9	0.2443
20	0.000		0.2505	5.288	863.4	0.2438	10.409	944.8	0.2358
21	0.000		0.2455	4.940	839.6	0.2365	9.707	911.6	0.2282
22	0.000		0.2415	4.392	803.5	0.2302	8.596	861.3	0.2217
23	0.000		0.2378	3.781	765.2	0.2249	7.330	806.5	0.2164
24	0.000		0.2354	1.748	650.1	0.2213	3.443	669.9	0.2126
25	0.000		0.2342	1.090	616.4	0.2197	2.117	626.2	0.2110
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.537	625.1	0.7396	4.573	614.5	0.7396	5.818	636.9	0.7396
2	12.374	824.8	0.7396	16.061	772.0	0.7396	20.227	850.3	0.7396
3	17.314	888.7	0.7367	21.967	795.3	0.7385	27.015	869.1	0.7388
4	20.193	937.6	0.7034	25.265	820.1	0.7082	30.567	888.2	0.7096
5	21.542	954.5	0.6566	26.822	832.7	0.6657	32.142	889.5	0.6688
6	22.132	960.6	0.6034	27.570	842.5	0.6171	32.850	886.5	0.6222
7	22.399	964.1	0.5506	27.998	852.5	0.5685	33.241	883.7	0.5754
8	22.578	967.9	0.5029	28.352	863.5	0.5239	33.583	882.8	0.5319
9	23.223	980.8	0.4612	29.278	861.6	0.4840	34.597	889.5	0.4927
10	23.144	982.2	0.4255	29.372	892.9	0.4494	34.681	888.7	0.4583
11	22.915	981.5	0.3949	29.299	903.3	0.4193	34.578	886.4	0.4283
12	22.573	978.5	0.3688	29.102	913.0	0.3933	34.332	882.7	0.4023
13	22.147	973.9	0.3462	28.815	922.4	0.3706	33.984	878.1	0.3795
14	21.643	967.3	0.3265	28.440	931.3	0.3506	33.543	873.2	0.3594
15	21.064	958.3	0.3093	27.971	938.9	0.3329	32.997	867.4	0.3417
16	20.398	946.4	0.2943	27.388	944.7	0.3173	32.321	860.6	0.3258
17	19.587	930.6	0.2810	26.622	947.9	0.3033	31.441	852.2	0.3118
18	18.365	909.2	0.2694	25.404	948.1	0.2914	30.103	843.5	0.2997
19	17.369	883.1	0.2591	24.286	939.6	0.2802	28.839	833.1	0.2884
20	16.304	852.8	0.2499	22.953	921.1	0.2700	27.330	820.7	0.2782
21	14.940	814.3	0.2416	21.025	883.6	0.2606	25.061	797.2	0.2688
22	13.028	770.0	0.2346	18.432	840.4	0.2529	22.041	768.7	0.2612
23	10.864	723.3	0.2287	15.318	783.7	0.2462	18.289	728.1	0.2543
24	5.032	631.3	0.2247	7.001	653.0	0.2412	8.311	631.8	0.2492
25	3.023	601.4	0.2224	4.127	612.5	0.2380	4.848	600.3	0.2457

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A2 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	6.558	634.7	0.7396	7.375	610.5	0.7396	7.719	595.9	0.7396
2	22.577	824.0	0.7396	25.121	728.2	0.7396	26.154	672.5	0.7396
3	29.799	833.0	0.7391	32.843	765.5	0.7396	34.061	694.4	0.7396
4	33.457	845.5	0.7106	36.735	750.5	0.7138	38.042	685.1	0.7152
5	35.040	846.4	0.6709	38.524	764.0	0.6767	39.918	694.0	0.6793
6	35.742	845.7	0.6256	39.446	778.6	0.6342	40.942	704.5	0.6384
7	36.136	846.1	0.5800	40.061	793.6	0.5911	41.665	715.7	0.5969
8	36.495	848.1	0.5373	40.642	809.0	0.5505	42.346	726.3	0.5577
9	37.578	856.3	0.4986	41.995	828.1	0.5130	43.816	738.9	0.5213
10	37.683	858.8	0.4645	42.276	840.9	0.4795	44.177	747.7	0.4886
11	37.594	860.5	0.4347	42.314	850.2	0.4497	44.284	755.3	0.4594
12	37.360	861.9	0.4087	42.158	855.9	0.4234	44.192	762.4	0.4334
13	37.017	862.5	0.3858	41.848	858.4	0.4000	43.942	769.2	0.4103
14	36.579	862.9	0.3656	41.400	857.6	0.3793	43.551	775.6	0.3896
15	36.031	862.6	0.3478	40.806	854.2	0.3608	43.010	781.7	0.3711
16	35.342	861.1	0.3318	40.040	848.5	0.3443	42.287	786.7	0.3545
17	34.434	857.7	0.3177	39.026	840.8	0.3296	41.306	790.5	0.3397
18	33.058	853.2	0.3055	37.523	831.6	0.3170	39.834	794.1	0.3271
19	31.727	845.2	0.2941	36.010	818.6	0.3051	38.327	794.8	0.3151
20	30.121	833.9	0.2837	34.162	801.6	0.2943	36.452	791.7	0.3043
21	27.650	810.7	0.2742	31.294	774.6	0.2844	33.462	777.6	0.2943
22	24.375	782.4	0.2665	27.556	744.2	0.2763	29.537	756.5	0.2861
23	20.226	740.4	0.2596	22.756	703.5	0.2690	24.379	717.7	0.2784
24	9.182	638.0	0.2544	10.269	620.6	0.2633	10.975	626.8	0.2723
25	5.328	603.7	0.2508	5.899	592.9	0.2590	6.263	595.5	0.2673
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	8.214	591.1	0.7396						
2	27.574	652.1	0.7396						
3	35.676	665.5	0.7396						
4	39.714	655.5	0.7169						
5	41.655	659.3	0.6824						
6	42.781	665.3	0.6433						
7	43.640	673.4	0.6038						
8	44.479	682.9	0.5666						
9	46.149	695.1	0.5322						
10	46.689	706.3	0.5013						
11	46.982	718.0	0.4739						
12	47.082	730.3	0.4494						
13	47.029	743.2	0.4275						
14	46.838	756.4	0.4079						
15	46.495	769.8	0.3901						
16	45.968	783.3	0.3741						
17	45.172	796.2	0.3596						
18	43.870	808.3	0.3473						
19	42.464	815.6	0.3353						
20	40.600	816.4	0.3241						
21	37.425	803.1	0.3136						
22	33.201	782.1	0.3052						
23	27.419	740.1	0.2968						
24	12.325	636.9	0.2902						
25	6.961	600.6	0.2837						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A3

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.059	621.0	0.7396	2.091	634.9	0.7396
2	0.000		0.7396	3.603	788.2	0.7396	7.162	851.9	0.7396
3	0.000		0.7396	5.052	899.8	0.7396	10.279	1028.9	0.7364
4	0.000	Data	0.6954	6.162	926.4	0.7151	12.578	1077.8	0.7018
5	0.000	Not	0.6348	6.941	986.7	0.6748	13.909	1140.4	0.6523
6	0.000	Required	0.5743	7.478	1030.8	0.6244	14.593	1157.7	0.5960
7	0.000		0.5205	7.833	1061.1	0.5702	14.928	1155.3	0.5402
8	0.000		0.4751	8.079	1082.6	0.5184	15.131	1150.2	0.4901
9	0.000		0.4365	8.478	1118.5	0.4721	15.647	1164.1	0.4467
10	0.000		0.4039	8.455	1116.4	0.4321	15.556	1156.0	0.4093
11	0.000		0.3768	8.296	1102.0	0.3987	15.311	1145.9	0.3777
12	0.000		0.3541	8.057	1080.6	0.3706	14.975	1134.6	0.3510
13	0.000		0.3350	7.768	1055.4	0.3469	14.577	1122.0	0.3282
14	0.000		0.3189	7.449	1028.4	0.3267	14.134	1107.8	0.3086
15	0.000		0.3051	7.109	1000.3	0.3095	13.648	1091.4	0.2917
16	0.000		0.2934	6.749	971.5	0.2948	13.113	1072.0	0.2770
17	0.000		0.2834	6.350	940.6	0.2820	12.480	1046.7	0.2641
18	0.000		0.2749	5.780	898.3	0.2711	11.520	1006.0	0.2529
19	0.000		0.2679	5.446	874.5	0.2616	10.901	977.3	0.2433
20	0.000		0.2619	5.171	855.4	0.2532	10.337	949.1	0.2349
21	0.000		0.2567	4.853	833.8	0.2457	9.648	914.2	0.2276
22	0.000		0.2524	4.324	799.2	0.2391	8.530	861.5	0.2214
23	0.000		0.2487	3.723	761.6	0.2336	7.251	804.8	0.2163
24	0.000		0.2464	1.725	648.9	0.2297	3.399	668.4	0.2124
25	0.000		0.2452	1.074	615.6	0.2280	2.093	625.7	0.2110
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.005	658.0	0.7396	5.454	637.1	0.7396	6.535	626.4	0.7396
2	14.053	980.5	0.7396	19.105	865.8	0.7396	22.632	799.1	0.7396
3	19.611	1086.9	0.7275	25.962	901.1	0.7291	30.274	816.1	0.7307
4	22.796	1157.7	0.6838	29.678	937.2	0.6876	34.272	836.0	0.6916
5	24.171	1161.4	0.6279	31.276	952.8	0.6345	35.981	844.0	0.6417
6	24.663	1145.6	0.5696	31.906	962.6	0.5788	36.669	848.2	0.5893
7	24.830	1131.9	0.5155	32.205	972.1	0.5268	37.019	851.9	0.5399
8	24.961	1126.1	0.4682	32.489	983.2	0.4809	37.364	856.3	0.4961
9	25.625	1138.1	0.4277	33.429	1003.6	0.4411	38.429	865.5	0.4572
10	25.495	1134.9	0.3926	33.451	1015.0	0.4065	38.474	867.2	0.4231
11	25.164	1128.0	0.3629	33.259	1025.6	0.3769	38.265	866.0	0.3937
12	24.706	1118.2	0.3376	32.934	1035.8	0.3515	37.899	862.9	0.3681
13	24.162	1108.6	0.3158	32.521	1046.0	0.3295	37.427	858.6	0.3458
14	23.547	1093.1	0.2970	32.031	1055.8	0.3104	36.869	853.6	0.3263
15	22.860	1077.6	0.2807	31.461	1065.1	0.2935	36.223	848.1	0.3091
16	22.083	1059.2	0.2664	30.780	1072.8	0.2786	35.467	842.7	0.2940
17	21.150	1036.9	0.2538	29.904	1077.3	0.2653	34.575	841.5	0.2808
18	19.791	1008.0	0.2428	28.550	1077.7	0.2536	33.545	865.1	0.2704
19	18.659	972.1	0.2335	27.247	1064.0	0.2434	32.853	911.6	0.2621
20	17.452	929.0	0.2255	25.661	1034.3	0.2343	31.558	934.7	0.2538
21	15.901	874.5	0.2188	23.342	976.8	0.2264	29.070	921.2	0.2458
22	13.774	814.9	0.2131	20.296	912.5	0.2200	25.458	877.6	0.2387
23	11.404	755.2	0.2087	16.728	835.4	0.2147	20.924	808.1	0.2321
24	5.285	644.6	0.2054	7.664	673.1	0.2110	9.518	661.9	0.2273
25	3.200	610.1	0.2042	4.566	624.5	0.2092	5.583	616.0	0.2242

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A3 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	7.761	687.6	0.7396	8.538	608.0	0.7396	8.875	595.2	0.7396
2	26.330	1019.2	0.7396	28.616	709.5	0.7396	29.571	663.5	0.7396
3	34.562	1029.1	0.7291	37.265	714.1	0.7310	38.376	665.6	0.7317
4	38.640	1040.8	0.6893	41.561	727.7	0.6937	42.761	674.4	0.6954
5	40.311	1035.2	0.6392	43.455	741.8	0.6467	44.751	684.0	0.6497
6	40.941	1026.7	0.5868	44.323	757.3	0.5978	45.730	695.3	0.6025
7	41.245	1020.1	0.5377	44.861	772.7	0.5517	46.385	707.4	0.5581
8	41.570	1017.2	0.4942	45.395	786.8	0.5105	47.034	719.4	0.5183
9	42.679	1023.5	0.4557	46.729	802.3	0.4735	48.499	733.4	0.4825
10	42.722	1023.3	0.4219	46.908	811.7	0.4406	48.777	744.2	0.4506
11	42.514	1023.4	0.3927	46.788	817.9	0.4117	48.746	754.0	0.4224
12	42.147	1023.3	0.3673	46.471	821.5	0.3862	48.510	763.0	0.3973
13	41.673	1023.0	0.3452	46.010	822.4	0.3636	48.123	771.3	0.3751
14	41.109	1022.1	0.3257	45.425	820.9	0.3436	47.602	778.6	0.3553
15	40.447	1019.8	0.3085	44.712	817.3	0.3259	46.940	784.5	0.3375
16	39.661	1015.5	0.2934	43.845	811.6	0.3101	46.110	788.8	0.3217
17	38.705	1006.3	0.2801	42.778	803.9	0.2962	45.063	791.1	0.3077
18	37.562	990.4	0.2696	41.485	793.5	0.2850	43.765	790.5	0.2962
19	36.687	965.1	0.2611	40.396	779.0	0.2754	42.624	784.5	0.2860
20	35.189	937.9	0.2526	38.663	763.3	0.2662	40.814	775.6	0.2765
21	32.388	897.6	0.2446	35.522	741.2	0.2576	37.520	758.4	0.2676
22	28.411	852.9	0.2374	31.162	717.1	0.2502	32.967	737.2	0.2602
23	23.356	793.2	0.2309	25.549	683.3	0.2433	27.020	701.9	0.2529
24	10.657	662.4	0.2261	11.620	613.9	0.2381	12.273	621.9	0.2474
25	6.234	618.5	0.2233	6.734	589.2	0.2339	7.071	593.1	0.2424
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	9.290	586.0	0.7396						
2	30.707	632.9	0.7396						
3	39.653	632.8	0.7325						
4	44.094	635.9	0.6972						
5	46.151	639.8	0.653						
6	47.234	645.7	0.6073						
7	48.023	653.5	0.5647						
8	48.826	662.5	0.5268						
9	50.485	674.1	0.4929						
10	50.951	685.4	0.4629						
11	51.118	697.5	0.4366						
12	51.090	710.5	0.4136						
13	50.917	724.1	0.3931						
14	50.611	738.0	0.3748						
15	50.160	752.0	0.3583						
16	49.532	765.5	0.3434						
17	48.667	778.0	0.3302						
18	47.513	787.9	0.3189						
19	46.433	792.2	0.3085						
20	44.618	791.9	0.2986						
21	41.151	779.8	0.2894						
22	36.336	761.9	0.2820						
23	29.817	724.3	0.2742						
24	13.529	631.6	0.2680						
25	7.711	597.5	0.2609						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A4

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.093	623.0	0.7396	2.270	646.0	0.7396
2	0.000		0.7396	3.728	797.3	0.7396	7.776	900.7	0.7396
3	0.000		0.7305	5.255	861.1	0.7317	11.163	1023.3	0.7317
4	0.000	Data	0.6670	6.438	947.3	0.7096	13.555	1157.9	0.6903
5	0.000	Not	0.5971	7.266	1013.1	0.6647	14.836	1213.0	0.6338
6	0.000	Required	0.5325	7.829	1060.7	0.6100	15.457	1220.2	0.5730
7	0.000		0.4787	8.205	1093.8	0.5534	15.771	1212.5	0.5161
8	0.000		0.4347	8.478	1118.5	0.5009	15.981	1204.7	0.4667
9	0.000		0.3981	8.921	1159.8	0.4548	16.535	1218.5	0.4244
10	0.000		0.3675	8.933	1161.0	0.4151	16.484	1210.6	0.3879
11	0.000		0.3422	8.797	1148.1	0.3819	16.277	1201.9	0.3573
12	0.000		0.3211	8.568	1126.8	0.3542	15.969	1192.2	0.3312
13	0.000		0.3034	8.286	1101.1	0.3308	15.595	1181.0	0.3091
14	0.000		0.2884	7.978	1073.7	0.3109	15.170	1166.9	0.2900
15	0.000		0.2758	7.664	1046.5	0.2940	14.706	1149.1	0.2737
16	0.000		0.2650	7.366	1021.4	0.2794	14.210	1126.0	0.2595
17	0.000		0.2559	7.063	996.6	0.2667	13.636	1095.2	0.2472
18	0.000		0.2483	6.568	957.4	0.2556	12.715	1048.6	0.2364
19	0.000		0.2419	6.277	935.1	0.2458	12.088	1013.3	0.2271
20	0.000		0.2361	5.984	913.2	0.2370	11.466	980.0	0.2188
21	0.000		0.2310	5.610	886.1	0.2292	10.698	941.6	0.2114
22	0.000		0.2267	4.994	843.3	0.2223	9.494	887.4	0.2051
23	0.000		0.2232	4.306	798.0	0.2166	8.122	828.4	0.2000
24	0.000		0.2209	2.018	664.4	0.2124	3.860	679.8	0.1960
25	0.000		0.2197	1.265	625.2	0.2107	2.400	633.1	0.1945
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.700	632.2	0.7396	4.716	613.4	0.7396	6.411	666.5	0.7396
2	12.991	859.0	0.7396	16.596	766.7	0.7396	22.186	975.5	0.7396
3	18.265	928.2	0.7329	22.792	787.9	0.7355	29.520	1004.1	0.7333
4	21.400	978.1	0.6940	26.324	811.2	0.7006	33.306	1026.4	0.6971
5	22.875	991.6	0.6412	28.006	823.7	0.6530	34.916	1020.0	0.6493
6	23.518	993.1	0.5841	28.827	834.5	0.6012	35.575	1005.9	0.5978
7	23.827	992.8	0.5299	29.320	845.9	0.5515	35.920	993.1	0.5486
8	24.054	994.0	0.4822	29.745	858.3	0.5069	36.253	985.2	0.5048
9	24.781	1006.2	0.4409	30.771	877.4	0.4674	37.327	989.3	0.4660
10	24.748	1007.5	0.4051	30.928	889.8	0.4329	37.434	985.0	0.4321
11	24.521	1006.1	0.3749	30.871	901.0	0.4032	37.299	978.4	0.4028
12	24.161	1002.4	0.3490	30.670	911.7	0.3775	37.003	970.5	0.3775
13	23.709	996.8	0.3268	30.367	921.8	0.3552	36.595	961.7	0.3554
14	23.182	989.7	0.3076	29.979	931.3	0.3356	36.096	952.6	0.3361
15	22.587	980.6	0.2909	29.508	939.9	0.3185	35.504	942.7	0.3191
16	21.923	969.0	0.2763	28.945	946.9	0.3033	34.802	931.5	0.3040
17	21.126	953.9	0.2635	28.214	951.6	0.2898	33.909	918.6	0.2907
18	19.907	934.1	0.2524	27.021	953.4	0.2783	32.558	906.2	0.2792
19	18.876	907.9	0.2425	25.889	946.3	0.2676	31.256	893.1	0.2685
20	17.744	876.0	0.2336	24.509	929.1	0.2576	29.679	878.2	0.2586
21	16.268	833.6	0.2254	22.477	891.7	0.2484	27.248	848.7	0.2495
22	14.228	786.4	0.2186	19.759	848.2	0.2408	24.001	811.3	0.2420
23	11.887	735.0	0.2128	16.452	790.1	0.2340	19.912	759.0	0.2354
24	5.537	635.2	0.2084	7.551	655.2	0.2285	9.101	644.9	0.2302
25	3.353	603.5	0.2061	4.476	613.3	0.2249	5.344	608.1	0.2268

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A4

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	7.550	677.8	0.7396	8.734	634.1	0.7396	9.332	623.3	0.7396
2	25.683	987.6	0.7396	29.227	804.5	0.7396	30.967	759.2	0.7396
3	33.613	1001.1	0.7320	37.913	819.8	0.7334	40.039	772.8	0.7343
4	37.496	1014.9	0.6953	42.212	849.9	0.6985	44.578	800.6	0.7005
5	39.055	1007.6	0.6474	44.092	873.9	0.6529	46.628	820.8	0.6563
6	39.641	997.3	0.5961	44.931	893.3	0.6038	47.597	836.7	0.6085
7	39.924	988.6	0.5473	45.418	909.3	0.5565	48.180	848.7	0.5621
8	40.219	983.3	0.5038	45.888	923.3	0.5135	48.732	859.0	0.5198
9	41.326	987.9	0.4653	47.209	940.7	0.4749	50.154	871.9	0.4814
10	41.418	985.8	0.4317	47.386	947.7	0.4409	50.374	877.4	0.4474
11	41.265	983.3	0.4028	47.260	949.9	0.4115	50.276	881.1	0.4178
12	40.953	981.1	0.3776	46.917	947.3	0.3857	49.957	884.2	0.3919
13	40.528	978.7	0.3556	46.421	941.5	0.3632	49.478	886.4	0.3692
14	40.009	975.9	0.3363	45.792	932.5	0.3436	48.866	888.7	0.3493
15	39.390	972.2	0.3193	45.025	920.5	0.3260	48.109	890.0	0.3317
16	38.644	966.2	0.3042	44.086	905.2	0.3106	47.160	888.7	0.3161
17	37.681	956.7	0.2908	42.880	886.3	0.2969	45.913	883.3	0.3021
18	36.242	945.0	0.2792	41.176	866.1	0.2850	44.145	875.0	0.2900
19	34.815	928.5	0.2685	39.457	844.4	0.2739	42.329	862.5	0.2788
20	33.076	907.6	0.2586	37.411	822.3	0.2640	40.158	846.8	0.2687
21	30.358	871.9	0.2496	34.252	791.5	0.2548	36.779	819.8	0.2594
22	26.758	829.9	0.2421	30.147	757.7	0.2473	32.398	787.1	0.2517
23	22.166	773.7	0.2356	24.868	714.1	0.2406	26.695	739.6	0.2449
24	10.138	653.0	0.2305	11.363	628.1	0.2357	12.208	639.9	0.2401
25	5.930	612.9	0.2272	6.599	598.1	0.2323	7.061	604.4	0.2364
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	10.221	616.5	0.7396						
2	33.405	724.9	0.7396						
3	42.871	726.6	0.7354						
4	47.571	737.0	0.7032						
5	49.736	744.5	0.6609						
6	50.844	753.8	0.6153						
7	51.605	765.7	0.5711						
8	52.353	779.1	0.5305						
9	54.017	796.0	0.4934						
10	54.439	810.4	0.4604						
11	54.539	824.8	0.4314						
12	54.415	839.2	0.4059						
13	54.132	853.9	0.3834						
14	53.707	868.2	0.3635						
15	53.126	881.9	0.3457						
16	52.339	894.8	0.3298						
17	51.227	905.6	0.3156						
18	49.562	914.0	0.3033						
19	47.752	914.4	0.2917						
20	45.470	905.4	0.2810						
21	41.739	877.5	0.2712						
22	36.861	839.5	0.2631						
23	30.343	781.0	0.2557						
24	13.921	657.9	0.2508						
25	7.992	613.4	0.2467						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A5

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.108	623.9	0.7396	2.280	645.6	0.7396
2	0.000		0.7396	3.780	801.2	0.7396	7.787	896.5	0.7396
3	0.000		0.7311	5.313	865.2	0.7395	11.100	1010.8	0.7318
4	0.000	Data	0.6681	6.493	951.6	0.7094	13.423	1136.0	0.6914
5	0.000	Not	0.5983	7.317	1017.4	0.6644	14.701	1190.1	0.6362
6	0.000	Required	0.5332	7.872	1064.4	0.6096	15.347	1201.2	0.5761
7	0.000		0.4790	8.235	1096.5	0.5529	15.682	1197.8	0.5191
8	0.000		0.4347	8.493	1119.9	0.5004	15.902	1193.1	0.4693
9	0.000		0.3980	8.918	1159.6	0.4544	16.455	1208.9	0.4268
10	0.000		0.3672	8.913	1159.1	0.4150	16.402	1203.0	0.3902
11	0.000		0.3419	8.765	1145.1	0.3820	16.196	1195.8	0.3593
12	0.000		0.3208	8.524	1122.7	0.3544	15.887	1187.5	0.3332
13	0.000		0.3032	8.226	1095.7	0.3311	15.509	1177.8	0.3109
14	0.000		0.2882	7.896	1066.5	0.3114	15.083	1166.3	0.2918
15	0.000		0.2756	7.548	1036.7	0.2947	14.620	1152.6	0.2753
16	0.000		0.2648	7.184	1006.4	0.2803	14.111	1135.6	0.2609
17	0.000		0.2557	6.786	974.4	0.2680	13.513	1112.6	0.2482
18	0.000		0.2481	6.222	930.9	0.2573	12.590	1072.5	0.2372
19	0.000		0.2417	5.921	908.6	0.2481	12.010	1042.4	0.2278
20	0.000		0.2358	5.690	891.8	0.2396	11.466	1009.7	0.2195
21	0.000		0.2308	5.394	870.8	0.2319	10.740	966.6	0.2123
22	0.000		0.2266	4.841	833.0	0.2252	9.522	903.7	0.2060
23	0.000		0.2230	4.177	789.8	0.2195	8.089	836.4	0.2010
24	0.000		0.2209	1.944	660.5	0.2154	3.808	681.3	0.1972
25	0.000		0.2197	1.213	622.6	0.2137	2.351	633.3	0.1957
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.006	647.9	0.7396	5.842	659.0	0.7396	7.551	667.5	0.7396
2	14.019	930.9	0.7396	20.269	956.4	0.7396	25.617	953.1	0.7396
3	19.541	1020.2	0.7290	27.241	995.8	0.7267	33.580	971.0	0.7262
4	22.782	1088.9	0.6859	30.954	1031.5	0.6824	37.566	994.1	0.6825
5	24.285	1106.5	0.6291	32.572	1040.4	0.6259	39.256	1000.3	0.6270
6	24.908	1104.7	0.5689	33.245	1044.3	0.5671	39.960	1003.0	0.5696
7	25.183	1100.0	0.5130	33.597	1050.3	0.5132	40.375	1008.5	0.5171
8	25.394	1099.3	0.4648	33.924	1059.4	0.4667	40.734	1011.3	0.4714
9	26.118	1112.8	0.4238	34.897	1079.4	0.4269	41.806	1020.0	0.4320
10	26.039	1110.7	0.3886	34.946	1089.8	0.3925	41.850	1019.5	0.3980
11	25.745	1103.8	0.3587	34.781	1100.3	0.3630	41.632	1014.9	0.3687
12	25.308	1093.8	0.3333	34.473	1111.0	0.3379	41.240	1007.5	0.3436
13	24.776	1081.8	0.3115	34.067	1121.6	0.3161	40.730	998.5	0.3218
14	24.175	1068.5	0.2927	33.583	1131.5	0.2971	40.125	988.1	0.3028
15	23.514	1053.5	0.2764	33.022	1140.0	0.2804	39.424	976.2	0.2860
16	22.778	1036.7	0.2621	32.359	1146.3	0.2657	38.601	962.9	0.2713
17	21.909	1016.9	0.2496	31.522	1149.0	0.2525	37.623	951.2	0.2583
18	20.649	993.0	0.2386	30.232	1146.4	0.2408	36.347	952.4	0.2475
19	19.622	962.1	0.2290	28.990	1128.1	0.2306	34.925	937.8	0.2372
20	18.517	924.8	0.2207	27.455	1092.3	0.2214	33.110	915.5	0.2280
21	17.003	875.1	0.2135	25.109	1026.4	0.2136	30.274	877.8	0.2200
22	14.864	820.5	0.2073	21.991	954.3	0.2069	26.551	833.6	0.2131
23	12.378	762.4	0.2024	18.257	870.2	0.2016	21.955	774.6	0.2075
24	5.776	648.3	0.1987	8.487	689.7	0.1979	10.177	652.7	0.2037
25	3.502	612.0	0.1972	5.088	634.8	0.1962	6.033	612.2	0.2016

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A5 (Continued)

		Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	
1	8.338	639.6	0.7396	8.977	599.3	0.7396	9.199	583.1	0.7396	
2	27.924	818.4	0.7396	29.766	678.3	0.7396	30.390	626.2	0.7396	
3	36.284	823.8	0.7273	38.460	682.3	0.7284	39.188	628.9	0.7289	
4	40.408	839.8	0.6850	42.774	693.6	0.6875	43.568	635.1	0.6887	
5	42.189	850.6	0.6313	44.733	704.4	0.6355	45.601	642.1	0.6377	
6	42.972	860.0	0.5756	45.697	715.5	0.5815	46.654	650.6	0.5847	
7	43.455	868.2	0.5243	46.346	725.8	0.5313	47.401	660.1	0.5356	
8	43.874	875.5	0.4795	46.909	734.9	0.4871	48.063	669.8	0.4922	
9	45.036	886.6	0.4404	48.223	744.6	0.4482	49.489	681.0	0.4539	
10	45.117	891.2	0.4065	48.390	750.2	0.4142	49.754	690.9	0.4204	
11	44.930	895.1	0.3773	48.261	753.9	0.3848	49.724	701.0	0.3912	
12	44.561	898.0	0.3520	47.925	756.1	0.3593	49.491	711.7	0.3659	
13	44.069	900.3	0.3301	47.439	756.5	0.3371	49.105	722.3	0.3438	
14	43.477	901.9	0.3109	46.829	755.3	0.3177	48.580	731.4	0.3243	
15	42.788	903.4	0.2941	46.097	752.5	0.3005	47.908	737.8	0.3070	
16	41.990	906.6	0.2794	45.228	747.9	0.2854	47.072	741.4	0.2916	
17	41.163	926.0	0.2668	44.290	740.8	0.2725	46.136	741.6	0.2784	
18	40.322	984.5	0.2574	43.286	730.4	0.2625	45.098	738.0	0.2680	
19	38.952	991.8	0.2470	41.757	720.4	0.2519	43.527	733.4	0.2571	
20	37.007	973.7	0.2373	39.627	709.0	0.2420	41.327	725.9	0.2469	
21	33.886	935.4	0.2287	36.232	692.4	0.2332	37.795	711.4	0.2380	
22	29.787	887.4	0.2216	31.827	674.3	0.2260	33.220	693.9	0.2306	
23	24.599	816.9	0.2155	26.229	650.7	0.2197	27.362	667.8	0.2240	
24	11.405	670.7	0.2114	12.141	601.7	0.2155	12.656	609.2	0.2197	
25	6.714	621.1	0.2087	7.109	583.7	0.2125	7.383	587.4	0.2163	

Statepoint 10 (495.2, EOC Cy 7)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	9.496	578.6	0.7396
2	31.193	610.9	0.7396
3	40.095	612.1	0.7295
4	44.527	615.0	0.6901
5	46.622	618.4	0.6402
6	47.763	623.3	0.5885
7	48.620	629.5	0.5408
8	49.412	636.9	0.4988
9	50.995	645.9	0.4617
10	51.407	654.4	0.4293
11	51.525	663.1	0.4011
12	51.440	671.8	0.3766
13	51.205	680.9	0.3551
14	50.834	690.3	0.3360
15	50.319	700.0	0.3190
16	49.637	709.6	0.3039
17	48.836	718.1	0.2908
18	47.888	723.9	0.2800
19	46.389	728.5	0.2690
20	44.206	729.6	0.2588
21	40.546	721.4	0.2496
22	35.763	708.2	0.2420
23	29.486	682.4	0.2351
24	13.633	616.0	0.2303
25	7.899	590.7	0.2259

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A6

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.121	624.7	0.7396	2.171	636.3	0.7396
2	0.000		0.7396	3.845	806.0	0.7396	7.534	864.6	0.7396
3	0.000		0.7375	5.434	873.6	0.7345	10.930	981.4	0.7345
4	0.000	Data	0.6818	6.609	960.5	0.7099	13.324	1111.2	0.6969
5	0.000	Not	0.6166	7.350	1020.1	0.6655	14.542	1166.9	0.6441
6	0.000	Required	0.5542	7.786	1057.0	0.6118	15.036	1173.8	0.5853
7	0.000		0.5012	8.026	1077.9	0.5562	15.192	1163.8	0.5288
8	0.000		0.4575	8.180	1091.6	0.5051	15.258	1153.3	0.4795
9	0.000		0.4208	8.517	1122.1	0.4602	15.681	1163.5	0.4373
10	0.000		0.3899	8.447	1115.7	0.4219	15.520	1152.7	0.4012
11	0.000		0.3644	8.256	1098.4	0.3900	15.226	1140.6	0.3708
12	0.000		0.3430	7.997	1075.4	0.3630	14.858	1128.0	0.3452
13	0.000		0.3250	7.699	1049.5	0.3403	14.442	1114.4	0.3232
14	0.000		0.3097	7.376	1022.3	0.3210	13.990	1099.8	0.3043
15	0.000		0.2966	7.038	994.5	0.3045	13.505	1083.4	0.2880
16	0.000		0.2854	6.683	966.3	0.2903	12.979	1064.6	0.2737
17	0.000		0.2759	6.289	936.0	0.2779	12.361	1040.6	0.2612
18	0.000		0.2679	5.725	894.3	0.2673	11.418	1001.2	0.2503
19	0.000		0.2612	5.403	871.5	0.2582	10.824	973.9	0.2410
20	0.000		0.2555	5.143	853.4	0.2500	10.289	947.2	0.2327
21	0.000		0.2505	4.840	832.9	0.2426	9.624	913.1	0.2255
22	0.000		0.2464	4.313	798.5	0.2361	8.510	860.7	0.2193
23	0.000		0.2430	3.711	760.9	0.2308	7.226	803.8	0.2143
24	0.000		0.2408	1.722	648.8	0.2270	3.389	668.0	0.2106
25	0.000		0.2395	1.073	615.5	0.2253	2.086	625.3	0.2092
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.547	629.3	0.7396	4.616	616.3	0.7396	5.858	636.7	0.7396
2	12.572	847.0	0.7396	16.341	777.4	0.7396	20.457	846.2	0.7396
3	17.836	915.5	0.7352	22.477	794.6	0.7372	27.370	857.6	0.7378
4	20.944	962.7	0.6994	25.906	813.5	0.7047	30.970	870.3	0.7069
5	22.341	974.9	0.6499	27.469	823.5	0.6597	32.529	870.0	0.6642
6	22.871	977.4	0.5949	28.162	833.4	0.6097	33.199	868.3	0.6166
7	23.041	978.3	0.5417	28.518	844.9	0.5608	33.543	867.4	0.5698
8	23.129	979.9	0.4943	28.805	857.3	0.5167	33.836	867.8	0.5269
9	23.710	990.9	0.4531	29.684	876.4	0.4775	34.809	874.8	0.4884
10	23.556	991.4	0.4177	29.723	888.9	0.4434	34.853	875.2	0.4546
11	23.243	990.0	0.3876	29.585	900.5	0.4140	34.704	874.4	0.4252
12	22.830	986.9	0.3620	29.335	911.4	0.3885	34.427	872.4	0.3996
13	22.345	982.1	0.3398	29.004	921.8	0.3662	34.054	869.2	0.3772
14	21.793	975.2	0.3206	28.593	931.5	0.3466	33.596	865.7	0.3574
15	21.173	965.9	0.3038	28.096	940.0	0.3294	33.042	861.5	0.3400
16	20.466	953.7	0.2890	27.485	946.7	0.3140	32.360	856.3	0.3244
17	19.602	937.3	0.2761	26.681	950.9	0.3004	31.472	850.2	0.3106
18	18.317	915.0	0.2649	25.419	952.6	0.2889	30.127	844.2	0.2989
19	17.300	888.2	0.2548	24.308	946.0	0.2781	28.895	835.5	0.2879
20	16.254	857.0	0.2459	23.008	928.3	0.2680	27.430	823.8	0.2778
21	14.918	817.7	0.2380	21.113	890.8	0.2588	25.196	800.4	0.2685
22	12.983	772.2	0.2312	18.497	847.2	0.2513	22.158	772.1	0.2609
23	10.771	723.9	0.2256	15.308	788.5	0.2447	18.327	731.1	0.2542
24	4.961	630.5	0.2216	6.947	653.9	0.2396	8.268	632.4	0.2489
25	2.981	601.0	0.2195	4.089	612.7	0.2363	4.812	600.4	0.2453

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A6 (Continued)

		Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	
1	6.571	631.8	0.7396	8.000	650.3	0.7396	8.778	643.3	0.7396	
2	22.677	807.1	0.7396	27.089	876.4	0.7396	29.427	839.8	0.7396	
3	29.943	808.9	0.7383	35.370	904.0	0.7379	38.280	867.4	0.7379	
4	33.610	816.5	0.7085	39.559	946.1	0.7079	42.799	910.8	0.7081	
5	35.182	818.0	0.6672	41.444	972.4	0.6667	44.879	937.5	0.6672	
6	35.868	819.8	0.6211	42.311	987.9	0.6205	45.846	951.5	0.6212	
7	36.241	823.1	0.5757	42.791	997.2	0.5746	46.381	959.4	0.5754	
8	36.573	827.6	0.5338	43.214	1005.2	0.5321	46.854	966.5	0.5328	
9	37.630	837.4	0.4958	44.432	1019.5	0.4937	48.171	980.9	0.4942	
10	37.711	841.7	0.4623	44.512	1019.4	0.4599	48.291	986.7	0.4602	
11	37.593	845.3	0.4331	44.321	1012.9	0.4305	48.123	990.1	0.4306	
12	37.343	848.5	0.4075	43.946	1001.8	0.4048	47.770	993.4	0.4047	
13	36.991	851.0	0.3850	43.426	987.2	0.3822	47.268	996.1	0.3820	
14	36.547	852.7	0.3651	42.778	969.7	0.3624	46.624	996.7	0.3620	
15	36.002	853.8	0.3475	41.987	949.1	0.3449	45.810	993.2	0.3443	
16	35.320	853.8	0.3318	41.006	924.6	0.3294	44.759	982.9	0.3286	
17	34.419	852.2	0.3178	39.744	896.0	0.3156	43.364	963.7	0.3147	
18	33.054	849.8	0.3060	38.007	867.5	0.3039	41.453	939.0	0.3029	
19	31.769	843.6	0.2949	36.347	839.8	0.2931	39.581	910.0	0.2920	
20	30.215	833.2	0.2846	34.451	815.3	0.2830	37.461	880.3	0.2820	
21	27.784	810.6	0.2751	31.577	784.6	0.2738	34.273	840.4	0.2728	
22	24.503	783.6	0.2675	27.813	752.6	0.2664	30.166	799.0	0.2654	
23	20.281	742.1	0.2607	22.953	712.2	0.2598	24.853	747.6	0.2589	
24	9.143	638.4	0.2552	10.367	628.1	0.2547	11.254	643.9	0.2539	
25	5.292	603.7	0.2514	5.982	599.3	0.2511	6.486	608.2	0.2505	

		Statepoint 10 (495.2, EOC Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7	
1	10.001	638.7	0.7396	
2	32.838	800.7	0.7396	
3	42.250	803.6	0.7384	
4	46.966	817.8	0.7094	
5	49.154	825.6	0.6698	
6	50.252	835.3	0.6253	
7	50.954	847.8	0.5808	
8	51.620	862.4	0.5393	
9	53.192	882.2	0.5014	
10	53.519	898.7	0.4677	
11	53.547	914.5	0.4382	
12	53.387	930.4	0.4122	
13	53.074	946.3	0.3892	
14	52.615	962.1	0.3688	
15	51.978	977.5	0.3507	
16	51.086	991.6	0.3346	
17	49.813	1002.5	0.3202	
18	47.969	1008.6	0.3078	
19	46.032	1002.7	0.2962	
20	43.699	983.7	0.2856	
21	40.016	941.0	0.2759	
22	35.258	887.8	0.2680	
23	28.991	815.7	0.2612	
24	13.216	672.6	0.2561	
25	7.588	622.9	0.2527	

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A7

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.160	627.0	0.7396	2.419	652.3	0.7396
2	0.000		0.7396	3.977	815.8	0.7396	8.327	932.0	0.7396
3	0.000		0.7311	5.606	885.8	0.7374	11.903	1064.7	0.7276
4	0.000	Data	0.6677	6.848	979.3	0.7040	14.307	1199.3	0.6818
5	0.000	Not	0.5976	7.693	1049.0	0.6547	15.535	1247.3	0.6216
6	0.000	Required	0.5325	8.248	1097.6	0.5962	16.104	1249.1	0.5587
7	0.000		0.4783	8.607	1130.4	0.5371	16.379	1238.4	0.5010
8	0.000		0.4340	8.865	1154.5	0.4842	16.557	1228.3	0.4518
9	0.000		0.3973	9.301	1196.5	0.4385	17.090	1240.5	0.4101
10	0.000		0.3665	9.298	1196.3	0.3996	17.022	1232.3	0.3744
11	0.000		0.3411	9.153	1182.1	0.3671	16.818	1224.9	0.3444
12	0.000		0.3199	8.923	1160.0	0.3400	16.534	1218.1	0.3189
13	0.000		0.3023	8.649	1134.3	0.3170	16.212	1212.1	0.2972
14	0.000		0.2873	8.346	1106.5	0.2976	15.846	1204.3	0.2784
15	0.000		0.2746	8.017	1077.1	0.2810	15.410	1191.2	0.2623
16	0.000		0.2638	7.655	1045.8	0.2667	14.873	1170.0	0.2482
17	0.000		0.2547	7.237	1010.8	0.2545	14.189	1138.5	0.2359
18	0.000		0.2471	6.619	961.3	0.2439	13.130	1088.3	0.2253
19	0.000		0.2408	6.237	932.1	0.2349	12.382	1048.3	0.2163
20	0.000		0.2349	5.900	907.0	0.2268	11.667	1008.8	0.2084
21	0.000		0.2298	5.505	878.6	0.2196	10.809	962.4	0.2016
22	0.000		0.2256	4.887	836.1	0.2133	9.519	899.3	0.1958
23	0.000		0.2221	4.199	791.2	0.2082	8.070	833.0	0.1911
24	0.000		0.2200	1.953	660.9	0.2043	3.801	680.2	0.1875
25	0.000		0.2188	1.228	623.4	0.2028	2.362	633.0	0.1861
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.231	652.5	0.7396	6.035	657.1	0.7396	6.920	614.0	0.7396
2	14.845	952.1	0.7396	20.927	943.2	0.7396	23.739	744.9	0.7396
3	20.571	1036.7	0.7255	28.035	978.5	0.7246	31.477	757.9	0.7274
4	23.829	1101.7	0.6782	31.758	1013.0	0.6776	35.561	781.5	0.6843
5	25.246	1116.6	0.6175	33.330	1024.7	0.6185	37.467	804.1	0.6299
6	25.768	1112.9	0.5551	33.955	1032.6	0.5582	38.426	827.3	0.5745
7	25.967	1106.9	0.4988	34.279	1042.3	0.5040	39.042	848.2	0.5240
8	26.125	1105.3	0.4511	34.583	1053.8	0.4578	39.573	864.8	0.4800
9	26.821	1118.2	0.4108	35.552	1075.5	0.4184	40.793	883.6	0.4415
10	26.724	1115.9	0.3762	35.604	1087.6	0.3844	40.968	892.9	0.4077
11	26.436	1109.2	0.3471	35.460	1099.3	0.3555	40.877	897.0	0.3783
12	26.032	1099.8	0.3222	35.195	1110.9	0.3307	40.606	896.5	0.3527
13	25.565	1088.5	0.3009	34.859	1121.8	0.3092	40.225	893.1	0.3303
14	25.039	1076.2	0.2825	34.451	1131.8	0.2904	39.743	887.4	0.3107
15	24.430	1063.0	0.2665	33.941	1140.2	0.2739	39.139	880.3	0.2934
16	23.707	1049.0	0.2525	33.295	1146.9	0.2594	38.374	871.4	0.2782
17	22.827	1034.5	0.2403	32.442	1149.2	0.2465	37.380	860.9	0.2647
18	21.558	1019.3	0.2296	31.147	1146.9	0.2351	35.936	850.0	0.2529
19	20.526	999.0	0.2202	29.917	1130.0	0.2250	34.534	837.7	0.2423
20	19.410	971.0	0.2120	28.406	1097.0	0.2160	32.823	823.5	0.2330
21	17.847	924.0	0.2048	26.055	1034.3	0.2081	30.121	799.2	0.2247
22	15.639	866.3	0.1986	22.911	964.7	0.2014	26.541	770.1	0.2179
23	13.057	800.4	0.1937	19.104	881.1	0.1960	22.088	728.9	0.2119
24	6.108	663.9	0.1902	8.933	695.5	0.1922	10.299	634.8	0.2078
25	3.719	621.0	0.1887	5.379	638.3	0.1905	6.125	601.7	0.2046

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A7 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	7.571	625.4	0.7396	8.028	588.0	0.7396	8.218	579.8	0.7396
2	25.701	774.5	0.7396	27.023	643.2	0.7396	27.559	616.6	0.7396
3	33.773	778.3	0.7288	35.292	644.5	0.7300	35.901	617.8	0.7305
4	37.954	788.9	0.6874	39.563	649.5	0.6902	40.204	620.8	0.6912
5	39.899	793.2	0.6351	41.618	655.8	0.6400	42.302	624.8	0.6419
6	40.889	796.6	0.5816	42.754	664.1	0.5891	43.496	630.2	0.5920
7	41.539	800.4	0.5326	43.565	673.5	0.5428	44.374	636.5	0.5467
8	42.113	805.2	0.4897	44.306	683.3	0.5025	45.188	643.4	0.5074
9	43.418	814.8	0.4518	45.806	694.9	0.4669	46.778	652.1	0.4729
10	43.637	819.8	0.4184	46.177	704.1	0.4357	47.230	659.9	0.4427
11	43.588	824.6	0.3892	46.257	712.0	0.4083	47.393	668.1	0.4165
12	43.356	829.1	0.3637	46.132	718.6	0.3841	47.352	676.4	0.3934
13	43.011	833.3	0.3414	45.865	723.5	0.3627	47.167	684.6	0.3729
14	42.560	836.9	0.3217	45.464	726.6	0.3435	46.844	692.5	0.3547
15	41.979	839.6	0.3043	44.905	728.0	0.3263	46.357	699.9	0.3383
16	41.228	841.2	0.2889	44.152	727.9	0.3109	45.665	706.2	0.3234
17	40.234	841.2	0.2754	43.130	726.1	0.2970	44.696	711.7	0.3102
18	38.778	839.8	0.2635	41.630	723.4	0.2851	43.236	715.9	0.2987
19	37.335	835.0	0.2529	40.101	718.0	0.2740	41.718	717.1	0.2878
20	35.548	826.2	0.2434	38.189	710.3	0.2640	39.784	714.8	0.2778
21	32.670	806.2	0.2349	35.084	696.5	0.2550	36.590	705.5	0.2687
22	28.858	780.6	0.2281	31.000	680.3	0.2478	32.378	692.3	0.2616
23	24.022	740.0	0.2220	25.735	655.4	0.2406	26.861	667.1	0.2540
24	11.203	641.0	0.2177	11.941	601.8	0.2349	12.430	606.8	0.2472
25	6.619	604.9	0.2138	6.988	582.3	0.2286	7.232	584.7	0.2392
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	8.443	574.2	0.7396						
2	28.177	598.9	0.7396						
3	36.585	599.8	0.731						
4	40.905	600.8	0.6924						
5	43.033	602.4	0.6438						
6	44.277	605.2	0.5948						
7	45.225	609.0	0.5506						
8	46.125	613.7	0.5124						
9	47.828	620.0	0.4790						
10	48.392	626.3	0.4501						
11	48.680	633.3	0.4253						
12	48.777	641.2	0.4039						
13	48.745	650.0	0.3852						
14	48.586	659.6	0.3688						
15	48.272	669.8	0.3544						
16	47.760	680.6	0.3416						
17	46.970	691.5	0.3303						
18	45.688	702.5	0.3210						
19	44.306	711.0	0.3118						
20	42.447	715.8	0.3031						
21	39.197	712.2	0.2948						
22	34.846	703.5	0.2885						
23	28.927	678.9	0.2804						
24	13.333	611.9	0.2720						
25	7.677	586.9	0.2606						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A8

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	0.975	616.0	0.7396	2.087	641.0	0.7396
2	0.000		0.7396	3.354	770.4	0.7396	7.218	882.0	0.7396
3	0.000		0.7384	4.777	877.6	0.7396	10.479	1085.3	0.7332
4	0.000	Data	0.6838	5.925	908.9	0.7184	12.897	1140.9	0.6949
5	0.000	Not	0.6186	6.767	972.9	0.6797	14.267	1204.3	0.6428
6	0.000	Required	0.5553	7.367	1021.5	0.6305	14.956	1215.4	0.5858
7	0.000		0.5008	7.779	1056.4	0.5768	15.297	1206.5	0.5309
8	0.000		0.4556	8.075	1082.2	0.5247	15.509	1196.2	0.4817
9	0.000		0.4176	8.517	1122.1	0.4776	16.039	1207.0	0.4390
10	0.000		0.3857	8.516	1122.0	0.4367	15.947	1195.8	0.4018
11	0.000		0.3593	8.359	1107.7	0.4025	15.688	1183.4	0.3703
12	0.000		0.3374	8.110	1085.3	0.3739	15.333	1170.6	0.3438
13	0.000		0.3189	7.808	1058.9	0.3497	14.920	1157.3	0.3211
14	0.000		0.3034	7.478	1030.8	0.3294	14.470	1143.2	0.3016
15	0.000		0.2902	7.132	1002.2	0.3120	13.993	1128.0	0.2847
16	0.000		0.2789	6.772	973.3	0.2971	13.478	1110.2	0.2701
17	0.000		0.2694	6.378	942.7	0.2844	12.879	1087.2	0.2572
18	0.000		0.2615	5.829	901.9	0.2734	11.966	1047.5	0.2459
19	0.000		0.2548	5.552	882.0	0.2639	11.424	1019.6	0.2365
20	0.000		0.2492	5.362	868.6	0.2552	10.942	989.8	0.2282
21	0.000		0.2443	5.111	851.2	0.2471	10.286	950.0	0.2211
22	0.000		0.2402	4.596	816.8	0.2400	9.120	889.5	0.2149
23	0.000		0.2365	3.960	776.2	0.2341	7.727	824.4	0.2100
24	0.000		0.2342	1.835	654.7	0.2298	3.614	675.5	0.2060
25	0.000		0.2330	1.139	618.9	0.2280	2.221	629.7	0.2045
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.923	653.8	0.7396	5.319	634.2	0.7396	7.015	666.6	0.7396
2	13.824	958.7	0.7396	18.717	854.4	0.7396	24.113	957.5	0.7396
3	19.456	1059.8	0.7276	25.640	890.0	0.7295	31.992	972.0	0.7284
4	22.779	1130.3	0.6834	29.514	927.0	0.6881	36.068	989.1	0.6872
5	24.261	1139.4	0.6270	31.236	943.6	0.6348	37.803	990.2	0.6347
6	24.814	1128.4	0.5683	31.935	953.9	0.5792	38.496	989.7	0.5801
7	25.016	1117.2	0.5143	32.268	963.2	0.5273	38.876	993.8	0.5294
8	25.170	1112.6	0.4672	32.573	974.1	0.4815	39.210	996.3	0.4845
9	25.851	1124.7	0.4267	33.526	994.0	0.4417	40.281	1006.5	0.4451
10	25.727	1122.1	0.3916	33.547	1004.8	0.4070	40.311	1007.2	0.4110
11	25.387	1115.6	0.3616	33.341	1014.9	0.3773	40.063	1003.6	0.3814
12	24.912	1106.1	0.3362	32.993	1024.5	0.3518	39.640	997.1	0.3561
13	24.353	1094.7	0.3144	32.558	1034.0	0.3297	39.108	988.8	0.3340
14	23.731	1081.4	0.2955	32.052	1043.0	0.3105	38.490	979.3	0.3148
15	23.049	1065.7	0.2792	31.476	1051.3	0.2936	37.785	968.4	0.2979
16	22.287	1047.2	0.2649	30.800	1058.1	0.2787	36.964	956.4	0.2830
17	21.380	1024.5	0.2523	29.942	1062.0	0.2655	35.981	946.2	0.2700
18	20.069	996.1	0.2413	28.627	1061.7	0.2538	34.701	949.0	0.2592
19	19.013	960.6	0.2320	27.392	1047.6	0.2436	33.312	936.6	0.2489
20	17.894	918.4	0.2240	25.890	1018.0	0.2345	31.551	915.9	0.2396
21	16.389	865.3	0.2171	23.625	962.1	0.2265	28.812	879.5	0.2314
22	14.252	808.5	0.2112	20.594	900.5	0.2199	25.190	836.2	0.2247
23	11.800	751.0	0.2067	16.988	827.1	0.2145	20.729	777.4	0.2190
24	5.462	642.9	0.2031	7.791	670.6	0.2106	9.468	652.0	0.2150
25	3.302	609.0	0.2018	4.638	623.1	0.2087	5.575	611.7	0.2129

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A8 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	7.803	639.8	0.7396	8.401	596.7	0.7396	8.626	583.4	0.7396
2	26.467	824.6	0.7396	28.242	673.7	0.7396	28.889	628.7	0.7396
3	34.740	828.9	0.7293	36.841	677.9	0.7304	37.594	631.2	0.7309
4	38.932	842.4	0.6893	41.201	687.8	0.6917	42.017	637.2	0.6929
5	40.735	850.4	0.6384	43.166	697.5	0.6424	44.053	643.9	0.6446
6	41.493	858.2	0.5853	44.089	707.5	0.5909	45.063	652.3	0.5941
7	41.931	865.2	0.5358	44.680	717.0	0.5425	45.748	661.4	0.5467
8	42.323	872.2	0.4916	45.204	725.2	0.4991	46.366	670.6	0.5041
9	43.488	883.8	0.4527	46.512	734.2	0.4603	47.780	681.2	0.4659
10	43.558	888.7	0.4187	46.664	739.4	0.4263	48.017	689.8	0.4322
11	43.341	892.6	0.3893	46.504	743.1	0.3967	47.936	697.9	0.4028
12	42.943	895.7	0.3638	46.141	745.3	0.3710	47.648	705.6	0.3772
13	42.430	898.1	0.3417	45.641	746.2	0.3486	47.219	713.0	0.3548
14	41.825	899.8	0.3223	45.027	745.6	0.3291	46.667	719.5	0.3351
15	41.130	901.0	0.3053	44.299	743.5	0.3118	45.989	724.8	0.3178
16	40.332	903.9	0.2904	43.444	739.8	0.2965	45.168	728.5	0.3024
17	39.497	922.9	0.2778	42.519	734.1	0.2836	44.256	729.9	0.2891
18	38.653	981.3	0.2683	41.535	725.2	0.2735	43.252	727.7	0.2787
19	37.315	988.4	0.2578	40.060	716.7	0.2628	41.747	724.5	0.2678
20	35.424	970.5	0.2481	38.003	706.5	0.2529	39.634	718.6	0.2576
21	32.404	932.8	0.2394	34.717	690.4	0.2440	36.223	705.5	0.2486
22	28.407	885.0	0.2323	30.418	672.6	0.2368	31.765	689.2	0.2412
23	23.363	815.8	0.2261	24.966	649.2	0.2304	26.062	664.1	0.2347
24	10.672	668.5	0.2218	11.380	600.2	0.2260	11.868	606.7	0.2301
25	6.243	620.0	0.2192	6.620	582.7	0.2230	6.878	586.0	0.2268

Statepoint 10 (495.2, EOC Cy 7)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	8.891	576.6	0.7396
2	29.624	606.5	0.7396
3	38.422	607.7	0.7314
4	42.889	610.2	0.6942
5	44.978	613.1	0.6469
6	46.070	617.6	0.5976
7	46.859	623.4	0.5515
8	47.601	630.4	0.5102
9	49.166	639.0	0.4733
10	49.544	647.1	0.4409
11	49.611	655.7	0.4125
12	49.475	664.6	0.3879
13	49.201	673.8	0.3663
14	48.804	683.2	0.3471
15	48.280	692.6	0.3301
16	47.607	701.7	0.3149
17	46.825	709.8	0.3018
18	45.914	715.7	0.2911
19	44.485	720.5	0.2801
20	42.393	721.9	0.2698
21	38.868	714.6	0.2605
22	34.214	702.3	0.2530
23	28.104	677.4	0.2461
24	12.784	612.6	0.2410
25	7.357	588.7	0.2366

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A9

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.061	621.1	0.7396	2.231	645.4	0.7396
2	0.000		0.7396	3.634	790.5	0.7396	7.647	897.1	0.7396
3	0.000		0.7356	5.121	905.4	0.7396	10.943	1099.9	0.7309
4	0.000	Data	0.6777	6.274	934.9	0.7127	13.271	1143.8	0.6902
5	0.000	Not	0.6113	7.096	999.2	0.6703	14.555	1199.3	0.6363
6	0.000	Required	0.5477	7.678	1047.7	0.6175	15.212	1208.5	0.5781
7	0.000		0.4935	8.078	1082.5	0.5614	15.556	1201.6	0.5223
8	0.000		0.4487	8.373	1108.9	0.5086	15.785	1193.5	0.4728
9	0.000		0.4110	8.831	1151.3	0.4617	16.350	1206.7	0.4300
10	0.000		0.3794	8.857	1153.8	0.4214	16.314	1199.0	0.3931
11	0.000		0.3532	8.739	1142.7	0.3876	16.140	1192.2	0.3618
12	0.000		0.3313	8.541	1124.3	0.3592	15.905	1187.6	0.3353
13	0.000		0.3130	8.312	1103.4	0.3350	15.677	1187.8	0.3123
14	0.000		0.2975	8.056	1080.6	0.3144	15.422	1187.9	0.2926
15	0.000		0.2844	7.759	1054.7	0.2969	15.077	1182.0	0.2753
16	0.000		0.2732	7.402	1024.4	0.2818	14.579	1165.1	0.2603
17	0.000		0.2637	6.982	990.0	0.2687	13.917	1136.5	0.2472
18	0.000		0.2558	6.371	942.2	0.2577	12.883	1088.4	0.2358
19	0.000		0.2492	6.007	914.9	0.2481	12.172	1050.5	0.2263
20	0.000		0.2436	5.703	892.8	0.2397	11.501	1011.9	0.2181
21	0.000		0.2385	5.348	867.6	0.2321	10.683	965.5	0.2110
22	0.000		0.2341	4.767	828.1	0.2255	9.418	901.0	0.2049
23	0.000		0.2305	4.104	785.2	0.2200	7.982	833.6	0.2001
24	0.000		0.2282	1.907	658.5	0.2160	3.750	679.9	0.1963
25	0.000		0.2270	1.192	621.5	0.2143	2.319	632.6	0.1949
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.112	656.2	0.7396	5.725	646.3	0.7396	7.421	666.6	0.7396
2	14.381	968.4	0.7396	19.895	899.7	0.7396	25.261	954.8	0.7396
3	19.941	1061.3	0.7260	26.801	935.6	0.7268	33.293	983.9	0.7269
4	23.124	1128.0	0.6804	30.505	972.5	0.6829	37.353	1014.6	0.6837
5	24.548	1139.3	0.6225	32.134	987.4	0.6272	39.017	1017.7	0.6292
6	25.121	1132.5	0.5629	32.831	996.6	0.5697	39.632	1010.5	0.5728
7	25.374	1125.1	0.5080	33.212	1006.1	0.5165	39.921	1002.5	0.5203
8	25.581	1123.4	0.4605	33.575	1017.9	0.4702	40.241	998.8	0.4746
9	26.316	1137.1	0.4199	34.588	1039.2	0.4303	41.346	1006.7	0.4351
10	26.256	1135.1	0.3848	34.683	1051.3	0.3957	41.400	1003.2	0.4009
11	26.001	1128.6	0.3549	34.576	1063.0	0.3661	41.208	995.8	0.3715
12	25.643	1118.7	0.3295	34.359	1074.3	0.3406	40.879	986.2	0.3462
13	25.257	1106.2	0.3076	34.105	1084.9	0.3185	40.495	975.2	0.3242
14	24.820	1092.0	0.2886	33.791	1095.0	0.2991	40.044	963.8	0.3050
15	24.277	1076.7	0.2720	33.367	1104.8	0.2821	39.471	951.5	0.2880
16	23.567	1060.6	0.2576	32.773	1114.4	0.2671	38.708	937.8	0.2730
17	22.663	1042.5	0.2448	31.965	1122.5	0.2538	37.691	921.1	0.2597
18	21.344	1021.6	0.2336	30.695	1126.6	0.2420	36.193	903.2	0.2479
19	20.238	993.5	0.2241	29.451	1115.0	0.2316	34.715	885.3	0.2375
20	19.038	957.0	0.2158	27.888	1085.1	0.2223	32.911	867.2	0.2284
21	17.424	904.9	0.2087	25.489	1023.3	0.2144	30.110	837.9	0.2204
22	15.210	846.7	0.2027	22.338	954.4	0.2077	26.426	800.7	0.2138
23	12.676	784.2	0.1980	18.589	872.4	0.2023	21.915	750.4	0.2082
24	5.921	657.6	0.1945	8.662	691.2	0.1986	10.205	644.5	0.2045
25	3.600	617.7	0.1931	5.201	635.5	0.1968	6.065	607.9	0.2024

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A9 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	8.517	673.1	0.7396	9.034	591.7	0.7396	9.254	582.9	0.7396
2	28.534	953.5	0.7396	29.974	651.0	0.7396	30.571	623.2	0.7396
3	37.164	970.2	0.7269	38.816	652.0	0.7282	39.494	624.2	0.7287
4	41.380	991.8	0.6842	43.159	659.2	0.6872	43.883	628.5	0.6883
5	43.050	992.6	0.6303	44.980	667.9	0.6357	45.759	633.7	0.6377
6	43.623	986.7	0.5746	45.742	678.9	0.5828	46.596	640.8	0.5860
7	43.869	980.8	0.5227	46.200	691.5	0.5342	47.136	648.6	0.5385
8	44.166	977.6	0.4774	46.713	704.6	0.4919	47.737	657.1	0.4975
9	45.314	983.5	0.4380	48.097	719.1	0.4551	49.223	667.1	0.4619
10	45.358	982.2	0.4041	48.320	730.3	0.4234	49.535	675.9	0.4313
11	45.148	979.7	0.3748	48.257	739.6	0.3957	49.558	684.5	0.4049
12	44.798	976.8	0.3497	48.018	746.7	0.3716	49.405	693.2	0.3817
13	44.390	973.5	0.3277	47.686	751.7	0.3502	49.154	701.6	0.3612
14	43.911	969.6	0.3084	47.248	754.3	0.3310	48.792	709.4	0.3428
15	43.306	965.3	0.2915	46.653	755.0	0.3139	48.268	716.9	0.3263
16	42.501	959.6	0.2764	45.833	754.0	0.2985	47.509	723.3	0.3114
17	41.418	950.7	0.2631	44.712	751.5	0.2848	46.437	728.6	0.2980
18	39.833	939.1	0.2513	43.072	748.0	0.2728	44.838	733.0	0.2864
19	38.237	923.7	0.2409	41.376	741.5	0.2619	43.155	734.4	0.2756
20	36.277	903.7	0.2317	39.270	732.2	0.2522	41.029	732.2	0.2660
21	33.199	869.3	0.2236	35.937	716.3	0.2436	37.602	722.2	0.2574
22	29.162	827.5	0.2169	31.589	697.3	0.2365	33.116	707.7	0.2505
23	24.139	770.5	0.2113	26.078	668.4	0.2299	27.328	679.4	0.2434
24	11.251	653.9	0.2075	12.093	607.4	0.2248	12.642	612.3	0.2374
25	6.655	613.2	0.2053	7.080	585.2	0.2202	7.355	587.5	0.2310

Statepoint 10 (495.2, EOC Cy 7)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	9.529	577.3	0.7396
2	31.297	605.9	0.7396
3	40.296	606.3	0.7293
4	44.713	607.8	0.6895
5	46.631	610.2	0.6399
6	47.536	613.9	0.5893
7	48.167	619.0	0.5432
8	48.873	624.8	0.5034
9	50.489	632.1	0.4692
10	50.932	639.6	0.4401
11	51.100	647.9	0.4153
12	51.105	657.1	0.3940
13	51.024	667.1	0.3753
14	50.841	677.8	0.3588
15	50.505	689.2	0.3442
16	49.938	701.1	0.3312
17	49.056	713.0	0.3197
18	47.637	724.4	0.3099
19	46.088	733.1	0.3005
20	44.031	737.6	0.2917
21	40.524	732.4	0.2836
22	35.870	721.6	0.2773
23	29.630	693.2	0.2697
24	13.663	618.4	0.2623
25	7.863	590.3	0.2526

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A10

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.254	632.7	0.7396	2.414	644.7	0.7396
2	0.000		0.7396	4.281	838.8	0.7396	8.303	898.0	0.7396
3	0.000		0.7305	5.984	913.2	0.7353	11.824	1016.3	0.7305
4	0.000	Data	0.6668	7.190	1006.9	0.6993	14.132	1137.4	0.6876
5	0.000	Not	0.5970	7.920	1068.6	0.6477	15.252	1183.7	0.6292
6	0.000	Required	0.5330	8.327	1104.8	0.5884	15.708	1189.7	0.5666
7	0.000		0.4800	8.550	1125.1	0.5303	15.885	1184.1	0.5087
8	0.000		0.4368	8.699	1138.9	0.4791	15.989	1178.7	0.4595
9	0.000		0.4010	9.043	1171.5	0.4354	16.455	1193.5	0.4180
10	0.000		0.3710	8.981	1165.6	0.3983	16.343	1187.4	0.3828
11	0.000		0.3462	8.801	1148.5	0.3672	16.101	1179.9	0.3531
12	0.000		0.3255	8.545	1124.7	0.3412	15.770	1170.8	0.3280
13	0.000		0.3081	8.241	1097.0	0.3193	15.376	1160.1	0.3066
14	0.000		0.2933	7.907	1067.5	0.3007	14.933	1147.2	0.2882
15	0.000		0.2807	7.553	1037.1	0.2848	14.446	1131.7	0.2723
16	0.000		0.2699	7.178	1005.9	0.2711	13.904	1112.5	0.2584
17	0.000		0.2607	6.763	972.6	0.2593	13.262	1086.9	0.2462
18	0.000		0.2531	6.171	927.1	0.2491	12.285	1045.0	0.2356
19	0.000		0.2466	5.816	900.9	0.2403	11.630	1013.6	0.2265
20	0.000		0.2410	5.512	879.1	0.2325	11.006	981.2	0.2184
21	0.000		0.2359	5.154	854.2	0.2254	10.234	940.9	0.2114
22	0.000		0.2316	4.580	815.7	0.2192	9.026	882.6	0.2054
23	0.000		0.2281	3.932	774.5	0.2142	7.653	820.6	0.2005
24	0.000		0.2259	1.819	653.8	0.2105	3.590	675.0	0.1969
25	0.000		0.2247	1.138	618.8	0.2089	2.218	629.6	0.1955
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.152	648.5	0.7396	5.547	634.1	0.7396	7.287	669.6	0.7396
2	14.598	935.6	0.7396	19.421	849.4	0.7396	24.892	964.5	0.7396
3	20.205	1015.9	0.7282	26.266	882.0	0.7300	32.785	986.2	0.7293
4	23.338	1077.1	0.6838	29.943	918.2	0.6886	36.751	1011.1	0.6881
5	24.657	1092.5	0.6255	31.526	936.3	0.6341	38.371	1014.3	0.6345
6	25.100	1091.5	0.5641	32.141	948.3	0.5764	38.954	1011.5	0.5779
7	25.235	1088.2	0.5079	32.426	958.9	0.5229	39.208	1008.8	0.5252
8	25.342	1088.5	0.4601	32.695	970.5	0.4767	39.482	1009.3	0.4795
9	25.990	1102.7	0.4198	33.620	990.7	0.4370	40.531	1020.1	0.4402
10	25.866	1101.7	0.3854	33.641	1001.4	0.4029	40.539	1019.0	0.4064
11	25.555	1096.3	0.3562	33.462	1011.3	0.3738	40.302	1013.9	0.3774
12	25.115	1087.9	0.3314	33.146	1020.7	0.3488	39.900	1006.4	0.3525
13	24.584	1077.3	0.3102	32.736	1029.9	0.3271	39.387	997.5	0.3309
14	23.979	1065.0	0.2918	32.245	1038.7	0.3083	38.782	987.7	0.3120
15	23.303	1050.8	0.2758	31.670	1046.6	0.2917	38.080	976.9	0.2955
16	22.535	1034.0	0.2619	30.981	1052.8	0.2771	37.251	965.2	0.2808
17	21.610	1013.5	0.2496	30.096	1056.0	0.2641	36.208	952.1	0.2678
18	20.263	987.3	0.2388	28.738	1055.1	0.2528	34.690	939.1	0.2564
19	19.119	953.8	0.2294	27.417	1041.2	0.2425	33.195	925.2	0.2462
20	17.881	913.5	0.2212	25.808	1012.8	0.2334	31.376	908.7	0.2370
21	16.281	861.9	0.2140	23.468	958.6	0.2252	28.613	876.3	0.2288
22	14.115	806.1	0.2080	20.425	898.4	0.2185	25.002	834.8	0.2221
23	11.683	748.7	0.2031	16.844	825.5	0.2129	20.584	777.3	0.2164
24	5.409	641.6	0.1997	7.721	669.8	0.2089	9.425	653.5	0.2124
25	3.272	607.8	0.1982	4.592	622.4	0.2068	5.550	612.8	0.2102

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A10 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	8.366	671.2	0.7396	8.914	593.6	0.7396	9.136	583.1	0.7396
2	28.077	940.4	0.7396	29.639	659.2	0.7396	30.256	625.4	0.7396
3	36.507	950.0	0.7292	38.328	661.6	0.7305	39.037	627.1	0.7310
4	40.611	968.7	0.6884	42.581	670.2	0.6915	43.341	631.9	0.6926
5	42.261	972.8	0.6357	44.403	680.3	0.6414	45.220	637.3	0.6434
6	42.849	973.5	0.5799	45.196	692.5	0.5888	46.089	644.5	0.5920
7	43.108	974.2	0.5278	45.683	706.3	0.5401	46.659	652.5	0.5446
8	43.397	976.2	0.4825	46.209	720.9	0.4979	47.270	660.7	0.5036
9	44.517	986.0	0.4433	47.597	737.8	0.4612	48.756	670.3	0.4681
10	44.540	988.1	0.4095	47.831	751.3	0.4296	49.072	678.5	0.4376
11	44.309	989.0	0.3806	47.775	762.8	0.4022	49.094	686.3	0.4113
12	43.910	989.4	0.3556	47.511	771.7	0.3781	48.907	694.2	0.3882
13	43.397	989.4	0.3340	47.091	777.9	0.3569	48.564	702.1	0.3677
14	42.790	989.1	0.3151	46.536	781.4	0.3379	48.085	710.0	0.3495
15	42.083	988.4	0.2984	45.846	782.6	0.3209	47.467	717.5	0.3331
16	41.246	987.3	0.2837	44.995	781.6	0.3057	46.683	724.6	0.3184
17	40.190	985.5	0.2706	43.896	778.7	0.2920	45.643	730.9	0.3052
18	38.646	981.9	0.2591	42.286	774.3	0.2802	44.091	737.2	0.2938
19	37.076	971.6	0.2487	40.597	766.4	0.2692	42.435	740.8	0.2831
20	35.113	952.0	0.2394	38.461	755.0	0.2593	40.300	740.9	0.2734
21	32.056	913.5	0.2311	35.103	735.7	0.2504	36.865	732.5	0.2646
22	28.061	865.7	0.2242	30.741	712.7	0.2432	32.370	718.4	0.2576
23	23.088	801.2	0.2185	25.223	679.9	0.2365	26.562	688.4	0.2505
24	10.592	665.0	0.2145	11.518	611.9	0.2314	12.102	615.5	0.2446
25	6.209	619.2	0.2122	6.682	587.8	0.2271	6.974	589.0	0.2386
Node No.	Statepoint 10 (495.2, EOC Cy 7)								
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	9.452	579.8	0.7396						
2	31.103	613.8	0.7396						
3	39.982	614.2	0.7316						
4	44.322	616.2	0.6941						
5	46.249	618.8	0.6459						
6	47.194	623.1	0.5958						
7	47.864	628.7	0.5498						
8	48.590	635.2	0.5104						
9	50.217	643.3	0.4764						
10	50.669	651.1	0.4475						
11	50.840	659.8	0.4229						
12	50.815	669.4	0.4016						
13	50.647	679.9	0.3831						
14	50.353	691.1	0.3667						
15	49.928	703.1	0.3521						
16	49.338	715.3	0.3391						
17	48.489	727.5	0.3273						
18	47.119	739.3	0.3174						
19	45.595	748.0	0.3076						
20	43.521	752.0	0.2986						
21	39.988	745.5	0.2900						
22	35.302	733.0	0.2834						
23	29.011	702.3	0.2758						
24	13.188	622.0	0.2690						
25	7.521	592.4	0.2601						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A11

Node	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.376	640.2	0.7396	2.637	652.3	0.7396
2	0.000		0.7396	4.677	869.6	0.7396	9.069	936.5	0.7396
3	0.000		0.7319	6.536	954.9	0.7306	12.909	1073.0	0.7253
4	0.000	Data	0.6694	7.836	1061.3	0.6877	15.295	1199.3	0.6752
5	0.000	Not	0.6002	8.577	1127.6	0.6283	16.343	1237.6	0.6096
6	0.000	Required	0.5359	8.951	1162.7	0.5639	16.704	1236.0	0.5430
7	0.000		0.4824	9.136	1180.5	0.5043	16.813	1226.4	0.4847
8	0.000		0.4389	9.253	1191.8	0.4539	16.867	1218.5	0.4365
9	0.000		0.4027	9.586	1224.8	0.4115	17.308	1232.0	0.3964
10	0.000		0.3725	9.501	1216.3	0.3758	17.168	1225.1	0.3625
11	0.000		0.3474	9.294	1195.9	0.3460	16.898	1217.2	0.3341
12	0.000		0.3266	9.010	1168.3	0.3212	16.539	1207.9	0.3102
13	0.000		0.3090	8.678	1137.0	0.3002	16.113	1196.3	0.2898
14	0.000		0.2942	8.313	1103.5	0.2826	15.627	1181.6	0.2723
15	0.000		0.2815	7.921	1068.7	0.2675	15.077	1162.6	0.2571
16	0.000		0.2707	7.501	1032.7	0.2545	14.448	1137.9	0.2439
17	0.000		0.2614	7.028	993.7	0.2434	13.688	1105.0	0.2325
18	0.000		0.2538	6.360	941.4	0.2338	12.565	1054.8	0.2226
19	0.000		0.2473	5.925	908.9	0.2256	11.762	1016.0	0.2140
20	0.000		0.2418	5.541	881.2	0.2184	11.007	978.4	0.2066
21	0.000		0.2368	5.119	851.8	0.2121	10.141	935.4	0.2001
22	0.000		0.2325	4.509	811.1	0.2065	8.887	876.5	0.1946
23	0.000		0.2290	3.862	770.2	0.2020	7.527	816.0	0.1901
24	0.000		0.2267	1.797	652.7	0.1986	3.549	673.7	0.1868
25	0.000		0.2255	1.135	618.7	0.1972	2.211	629.3	0.1854
Node	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.026	630.0	0.7396	4.959	608.9	0.7396	6.680	668.3	0.7396
2	14.101	846.6	0.7396	17.356	744.3	0.7396	22.915	972.6	0.7396
3	19.526	897.1	0.7292	23.606	762.5	0.7326	30.244	996.3	0.7302
4	22.575	939.9	0.6852	27.049	784.9	0.6935	33.947	1019.0	0.6902
5	23.879	957.0	0.6272	28.602	799.4	0.6419	35.496	1018.6	0.6385
6	24.354	964.7	0.5671	29.297	812.4	0.5880	36.138	1014.0	0.5851
7	24.528	969.1	0.5126	29.694	825.8	0.5387	36.535	1014.0	0.5366
8	24.642	973.2	0.4660	30.036	839.7	0.4957	36.868	1013.2	0.4941
9	25.274	986.5	0.4261	30.986	859.6	0.4578	37.908	1021.1	0.4565
10	25.164	988.6	0.3921	31.085	872.9	0.4250	37.996	1020.1	0.4241
11	24.884	987.9	0.3632	30.989	884.9	0.3967	37.838	1014.7	0.3959
12	24.484	985.0	0.3387	30.756	895.8	0.3722	37.516	1006.9	0.3713
13	23.990	980.3	0.3176	30.420	906.4	0.3509	37.073	997.6	0.3500
14	23.411	973.9	0.2993	29.986	916.1	0.3322	36.520	987.4	0.3313
15	22.737	965.4	0.2834	29.444	925.1	0.3158	35.845	976.2	0.3149
16	21.947	954.5	0.2696	28.762	932.5	0.3014	35.016	963.9	0.3005
17	20.975	940.3	0.2575	27.864	937.7	0.2887	33.989	953.2	0.2879
18	19.564	921.5	0.2473	26.487	940.0	0.2782	32.645	955.9	0.2778
19	18.365	896.2	0.2380	25.196	933.6	0.2680	31.199	943.3	0.2676
20	17.104	864.9	0.2295	23.697	917.3	0.2586	29.447	923.0	0.2581
21	15.546	824.1	0.2218	21.598	881.4	0.2496	26.868	885.7	0.2491
22	13.464	777.8	0.2153	18.852	839.4	0.2425	23.520	841.3	0.2417
23	11.163	728.5	0.2097	15.600	782.8	0.2358	19.408	781.8	0.2352
24	5.176	633.0	0.2056	7.130	652.3	0.2303	8.833	653.4	0.2300
25	3.135	602.2	0.2030	4.218	611.5	0.2261	5.178	613.0	0.2262

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A11 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	7.495	642.6	0.7396	8.115	598.1	0.7396	8.319	581.2	0.7396
2	25.404	842.4	0.7396	27.239	677.8	0.7396	27.828	622.3	0.7396
3	33.194	852.6	0.7308	35.362	681.8	0.7318	36.050	625.2	0.7323
4	37.040	869.8	0.6919	39.383	692.2	0.6942	40.128	630.5	0.6953
5	38.652	877.5	0.6417	41.166	702.5	0.6456	41.979	636.9	0.6476
6	39.344	883.7	0.5896	42.041	713.7	0.5950	42.937	644.8	0.5980
7	39.780	888.5	0.5419	42.645	724.2	0.5484	43.632	653.5	0.5524
8	40.156	893.9	0.4998	43.168	733.4	0.5067	44.249	662.7	0.5117
9	41.275	903.8	0.4625	44.446	743.6	0.4694	45.640	673.8	0.4750
10	41.387	906.9	0.4300	44.643	749.1	0.4367	45.938	683.9	0.4428
11	41.248	909.3	0.4017	44.561	752.8	0.4080	45.966	695.1	0.4145
12	40.940	911.1	0.3770	44.285	754.8	0.3831	45.811	707.6	0.3897
13	40.509	912.6	0.3555	43.860	755.2	0.3612	45.508	720.4	0.3680
14	39.964	913.6	0.3367	43.299	754.2	0.3420	45.048	731.2	0.3488
15	39.295	914.4	0.3201	42.589	751.5	0.3251	44.406	738.5	0.3315
16	38.488	917.2	0.3056	41.711	746.9	0.3102	43.564	742.4	0.3163
17	37.609	936.5	0.2934	40.726	740.1	0.2975	42.582	742.7	0.3032
18	36.711	997.3	0.2841	39.671	730.2	0.2877	41.491	738.8	0.2929
19	35.314	1004.2	0.2736	38.121	720.6	0.2770	39.900	734.4	0.2819
20	33.427	985.2	0.2635	36.056	709.6	0.2668	37.768	727.2	0.2713
21	30.553	945.1	0.2541	32.911	693.1	0.2573	34.487	712.8	0.2616
22	26.814	894.6	0.2465	28.872	675.4	0.2496	30.280	695.4	0.2538
23	22.106	823.1	0.2396	23.761	652.1	0.2427	24.911	669.4	0.2466
24	10.063	670.9	0.2342	10.790	601.2	0.2373	11.300	608.7	0.2411
25	5.866	621.8	0.2304	6.258	583.5	0.2333	6.529	587.1	0.2368

Node No.	Statepoint 10 (495.2, EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	8.614	578.5	0.7396
2	28.650	612.1	0.7396
3	36.979	613.3	0.7329
4	41.103	615.8	0.6967
5	43.014	619.2	0.6501
6	44.058	624.0	0.6019
7	44.859	629.9	0.5576
8	45.601	637.0	0.5181
9	47.147	645.9	0.4827
10	47.586	654.1	0.4515
11	47.757	662.5	0.4242
12	47.744	670.9	0.4002
13	47.586	679.6	0.3789
14	47.276	688.7	0.3600
15	46.790	698.3	0.3431
16	46.104	708.0	0.3281
17	45.261	716.8	0.3150
18	44.266	722.9	0.3044
19	42.751	727.8	0.2932
20	40.640	729.1	0.2825
21	37.239	721.4	0.2726
22	32.830	708.6	0.2645
23	27.050	683.3	0.2570
24	12.263	615.2	0.2512
25	7.041	590.5	0.2461

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A12

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.126	625.0	0.7396	2.435	656.2	0.7396
2	0.000		0.7396	3.821	804.2	0.7396	8.308	946.6	0.7396
3	0.000		0.7352	5.343	867.3	0.7388	11.807	1083.1	0.7274
4	0.000	Data	0.6777	6.489	951.2	0.7078	14.116	1220.1	0.6812
5	0.000	Not	0.6121	7.274	1013.8	0.6619	15.251	1264.6	0.6215
6	0.000	Required	0.5496	7.809	1059.0	0.6071	15.764	1281.8	0.5601
7	0.000		0.4962	8.176	1091.2	0.5509	16.018	1247.3	0.5045
8	0.000		0.4520	8.452	1116.1	0.4989	16.194	1234.6	0.4565
9	0.000		0.4148	8.902	1158.0	0.4532	16.731	1245.6	0.4155
10	0.000		0.3834	8.934	1161.1	0.4138	16.678	1234.8	0.3800
11	0.000		0.3573	8.831	1151.3	0.3807	16.488	1223.9	0.3501
12	0.000		0.3355	8.644	1133.8	0.3530	16.207	1212.1	0.3247
13	0.000		0.3170	8.406	1111.9	0.3295	15.860	1198.7	0.3031
14	0.000		0.3015	8.138	1087.8	0.3095	15.452	1181.6	0.2844
15	0.000		0.2882	7.851	1062.6	0.2924	14.983	1159.7	0.2684
16	0.000		0.2769	7.547	1036.6	0.2776	14.441	1131.8	0.2545
17	0.000		0.2673	7.196	1007.4	0.2647	13.772	1095.5	0.2424
18	0.000		0.2594	6.633	962.4	0.2536	12.735	1043.8	0.2318
19	0.000		0.2527	6.293	936.3	0.2440	12.018	1004.5	0.2229
20	0.000		0.2470	5.982	913.1	0.2353	11.345	968.2	0.2150
21	0.000		0.2420	5.604	885.7	0.2277	10.551	928.3	0.2080
22	0.000		0.2375	4.989	842.9	0.2210	9.334	873.6	0.2020
23	0.000		0.2337	4.306	798.0	0.2155	7.970	815.9	0.1972
24	0.000		0.2313	2.023	664.7	0.2113	3.787	674.5	0.1934
25	0.000		0.2300	1.273	625.6	0.2096	2.364	630.3	0.1919
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.258	653.1	0.7396	5.555	628.7	0.7396	7.255	666.9	0.7396
2	14.884	956.5	0.7396	19.316	822.0	0.7396	24.721	958.4	0.7396
3	20.463	1035.9	0.7250	25.955	845.8	0.7281	32.489	987.4	0.7278
4	23.498	1090.7	0.6774	29.448	874.8	0.6848	36.332	1017.8	0.6850
5	24.724	1097.8	0.6175	30.934	891.7	0.6299	37.853	1020.8	0.6312
6	25.144	1090.6	0.5570	31.562	905.6	0.5739	38.399	1013.6	0.5759
7	25.307	1083.5	0.5028	31.923	918.9	0.5228	38.666	1005.4	0.5252
8	25.450	1081.0	0.4565	32.269	932.8	0.4782	38.964	1001.3	0.4810
9	26.139	1092.7	0.4169	33.269	954.6	0.4394	40.053	1009.0	0.4424
10	26.065	1091.1	0.3826	33.381	967.8	0.4055	40.129	1005.9	0.4089
11	25.813	1086.3	0.3536	33.295	979.8	0.3765	39.964	999.0	0.3800
12	25.438	1079.1	0.3288	33.074	991.1	0.3514	39.641	990.2	0.3552
13	24.971	1069.9	0.3075	32.755	1002.1	0.3297	39.208	980.5	0.3335
14	24.420	1059.1	0.2891	32.343	1012.5	0.3107	38.675	970.4	0.3146
15	23.779	1046.2	0.2731	31.830	1022.2	0.2941	38.030	959.4	0.2980
16	23.027	1030.7	0.2592	31.185	1030.4	0.2796	37.240	947.5	0.2834
17	22.097	1011.8	0.2470	30.324	1035.7	0.2666	36.207	933.6	0.2705
18	20.731	988.6	0.2365	28.976	1037.1	0.2555	34.688	920.0	0.2593
19	19.602	960.2	0.2278	27.700	1025.8	0.2456	33.240	906.5	0.2494
20	18.346	921.6	0.2196	26.117	1001.1	0.2365	31.471	892.1	0.2402
21	16.723	869.5	0.2124	23.807	951.3	0.2281	28.771	862.9	0.2319
22	14.539	812.7	0.2062	20.793	894.6	0.2211	25.217	824.0	0.2250
23	12.082	753.0	0.2012	17.208	823.4	0.2152	20.827	769.4	0.2190
24	5.623	642.3	0.1975	7.907	668.4	0.2108	9.565	650.9	0.2147
25	3.425	608.1	0.1958	4.718	621.2	0.2082	5.650	611.5	0.2120

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly A12 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	8.445	683.5	0.7396	9.084	599.3	0.7396	9.316	584.2	0.7396
2	28.280	997.3	0.7396	30.130	678.9	0.7396	30.785	629.6	0.7396
3	36.673	1014.0	0.7271	38.862	683.1	0.7282	39.626	632.3	0.7287
4	40.655	1034.2	0.6842	43.046	695.1	0.6868	43.884	639.3	0.6880
5	42.154	1031.0	0.6305	44.736	706.7	0.6348	45.656	647.1	0.6370
6	42.638	1021.9	0.5756	45.408	718.3	0.5815	46.425	656.4	0.5849
7	42.848	1013.7	0.5252	45.788	728.9	0.5323	46.909	666.6	0.5367
8	43.113	1009.0	0.4812	46.192	737.7	0.4888	47.415	676.7	0.4941
9	44.240	1014.5	0.4429	47.462	746.9	0.4506	48.796	687.9	0.4563
10	44.302	1012.4	0.4096	47.600	751.8	0.4171	49.024	697.0	0.4232
11	44.119	1009.9	0.3810	47.466	755.0	0.3882	48.974	705.7	0.3945
12	43.778	1007.3	0.3562	47.149	756.5	0.3631	48.741	714.5	0.3694
13	43.325	1004.5	0.3346	46.697	756.6	0.3412	48.368	722.8	0.3474
14	42.771	1001.5	0.3157	46.120	755.1	0.3220	47.860	730.2	0.3282
15	42.099	997.7	0.2991	45.403	752.2	0.3051	47.194	735.7	0.3111
16	41.267	991.8	0.2845	44.501	747.6	0.2901	46.322	738.9	0.2959
17	40.168	982.6	0.2715	43.307	741.5	0.2769	45.140	740.2	0.2824
18	38.560	970.3	0.2603	41.586	734.3	0.2654	43.416	739.9	0.2707
19	36.981	952.6	0.2503	39.856	724.8	0.2551	41.649	735.9	0.2602
20	35.044	930.3	0.2410	37.731	713.1	0.2457	39.456	728.6	0.2505
21	32.046	892.2	0.2327	34.449	695.8	0.2371	36.034	713.7	0.2417
22	28.112	846.1	0.2257	30.193	676.7	0.2300	31.604	695.7	0.2344
23	23.192	785.8	0.2198	24.847	652.1	0.2239	25.991	668.9	0.2281
24	10.673	659.6	0.2155	11.403	601.4	0.2195	11.912	608.7	0.2235
25	6.280	616.7	0.2129	6.671	583.4	0.2166	6.941	587.1	0.2202

Statepoint 10 (495.2, EOC Cy 7)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	9.603	578.0	0.7396
2	31.568	609.6	0.7396
3	40.511	610.9	0.7293
4	44.823	613.9	0.6894
5	46.662	617.6	0.6396
6	47.526	622.9	0.5886
7	48.127	629.4	0.5419
8	48.766	637.0	0.5007
9	50.306	646.1	0.4642
10	50.682	654.7	0.4323
11	50.781	663.4	0.4044
12	50.698	672.3	0.3802
13	50.477	681.5	0.3588
14	50.122	690.8	0.3399
15	49.610	700.3	0.3231
16	48.890	709.8	0.3081
17	47.850	718.8	0.2948
18	46.256	727.1	0.2833
19	44.568	732.2	0.2726
20	42.386	732.9	0.2628
21	38.831	724.3	0.2537
22	34.185	710.6	0.2462
23	28.137	683.7	0.2394
24	12.876	615.2	0.2342
25	7.449	590.3	0.2299

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B1

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.016	618.6	0.7396	2.254	650.9	0.7396
2	0.000		0.7396	3.534	783.9	0.7396	8.031	948.9	0.7396
3	0.000		0.7396	5.110	905.6	0.7396	11.704	1200.9	0.7263
4	0.000	Data	0.6947	6.395	945.3	0.7112	14.133	1236.5	0.6801
5	0.000	Not	0.6330	7.316	1018.8	0.6658	15.360	1276.0	0.6209
6	0.000	Required	0.5714	7.935	1071.7	0.6102	15.907	1266.6	0.5598
7	0.000		0.5171	8.344	1108.2	0.5525	16.161	1246.6	0.5041
8	0.000		0.4711	8.658	1137.1	0.4991	16.340	1229.4	0.4558
9	0.000		0.4319	9.221	1191.0	0.4520	16.952	1235.6	0.4145
10	0.000		0.3987	9.214	1190.3	0.4115	16.861	1225.0	0.3784
11	0.000		0.3713	9.023	1171.8	0.3779	16.600	1216.2	0.3481
12	0.000		0.3483	8.735	1144.4	0.3501	16.249	1208.4	0.3225
13	0.000		0.3291	8.398	1113.1	0.3268	15.851	1200.8	0.3006
14	0.000		0.3129	8.033	1080.3	0.3072	15.416	1192.2	0.2819
15	0.000		0.2991	7.646	1046.6	0.2906	14.935	1180.8	0.2657
16	0.000		0.2874	7.236	1012.2	0.2765	14.387	1164.1	0.2517
17	0.000		0.2775	6.774	974.8	0.2645	13.719	1139.7	0.2394
18	0.000		0.2693	6.134	925.5	0.2541	12.736	1100.3	0.2285
19	0.000		0.2626	5.774	898.9	0.2453	12.053	1064.5	0.2194
20	0.000		0.2567	5.505	879.6	0.2373	11.430	1026.7	0.2116
21	0.000		0.2517	5.194	857.8	0.2300	10.641	977.9	0.2048
22	0.000		0.2475	4.630	819.8	0.2236	9.373	910.5	0.1991
23	0.000		0.2441	3.952	776.3	0.2183	7.859	836.9	0.1945
24	0.000		0.2419	1.816	653.9	0.2145	3.603	676.4	0.1912
25	0.000		0.2406	1.124	618.3	0.2129	2.203	629.7	0.1900
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.084	653.7	0.7396	5.717	647.7	0.7396	7.424	667.6	0.7396
2	14.510	950.4	0.7396	19.847	887.6	0.7396	24.938	931.0	0.7396
3	20.067	1016.1	0.7253	26.732	923.4	0.7266	32.756	946.2	0.7265
4	23.277	1074.2	0.6787	30.486	961.5	0.6823	36.776	968.2	0.6830
5	24.736	1092.1	0.6197	32.174	978.0	0.6259	38.546	975.1	0.6282
6	25.308	1094.0	0.5590	32.885	988.2	0.5678	39.295	978.3	0.5715
7	25.546	1092.8	0.5039	33.252	997.7	0.5145	39.688	980.5	0.5194
8	25.748	1094.6	0.4566	33.606	1009.1	0.4684	40.075	983.3	0.4742
9	26.531	1108.0	0.4163	34.636	1027.9	0.4287	41.209	992.2	0.4350
10	26.435	1107.6	0.3814	34.687	1039.3	0.3942	41.310	996.5	0.4012
11	26.106	1102.3	0.3518	34.498	1050.2	0.3648	41.124	996.7	0.3720
12	25.643	1093.5	0.3267	34.169	1060.8	0.3396	40.784	995.8	0.3470
13	25.100	1082.2	0.3052	33.753	1071.0	0.3179	40.402	998.7	0.3256
14	24.494	1069.1	0.2866	33.265	1080.5	0.2990	39.859	994.0	0.3065
15	23.816	1054.2	0.2705	32.695	1089.3	0.2824	39.174	984.1	0.2896
16	23.042	1037.4	0.2564	32.018	1097.3	0.2678	38.340	970.9	0.2747
17	22.110	1018.1	0.2441	31.157	1103.1	0.2548	37.284	954.6	0.2614
18	20.820	996.2	0.2333	29.887	1104.8	0.2432	35.808	937.8	0.2498
19	19.708	966.3	0.2240	28.612	1091.3	0.2330	34.292	918.6	0.2394
20	18.526	928.9	0.2158	27.044	1060.2	0.2240	32.449	897.1	0.2301
21	16.913	876.6	0.2088	24.647	999.8	0.2159	29.633	865.4	0.2223
22	14.769	824.4	0.2028	21.568	932.6	0.2093	26.113	833.3	0.2162
23	12.251	768.5	0.1982	17.858	853.9	0.2040	21.590	777.4	0.2108
24	5.586	649.2	0.1949	8.224	686.3	0.2005	9.986	657.0	0.2074
25	3.354	612.1	0.1934	4.885	632.4	0.1986	5.879	614.9	0.2052

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B1 (Continued)

Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	8.112	629.4	0.7396	8.463	581.5	0.7396	8.605	574.9	0.7396
2	26.882	772.9	0.7396	27.835	619.3	0.7396	28.214	599.8	0.7396
3	35.057	779.5	0.7278	36.161	621.7	0.7286	36.595	601.9	0.7290
4	39.227	795.9	0.6860	40.415	626.3	0.6879	40.877	604.5	0.6887
5	41.115	809.2	0.6331	42.402	631.7	0.6367	42.898	607.6	0.6380
6	41.978	822.2	0.5784	43.389	638.6	0.5839	43.930	611.7	0.5860
7	42.475	834.2	0.5279	44.031	646.8	0.5354	44.622	616.3	0.5382
8	42.951	844.7	0.4837	44.658	655.3	0.4928	45.304	621.4	0.4965
9	44.183	856.3	0.4450	46.056	664.9	0.4553	46.766	627.4	0.4598
10	44.336	862.6	0.4115	46.351	673.1	0.4227	47.117	632.6	0.4278
11	44.190	867.4	0.3824	46.329	680.4	0.3942	47.150	637.8	0.3999
12	43.878	870.9	0.3572	46.121	686.6	0.3694	46.997	643.1	0.3755
13	43.510	872.6	0.3356	45.832	691.3	0.3478	46.762	648.3	0.3542
14	42.978	873.9	0.3163	45.360	694.9	0.3284	46.345	653.6	0.3351
15	42.299	874.7	0.2993	44.722	697.4	0.3111	45.761	658.8	0.3181
16	41.460	874.0	0.2842	43.905	698.7	0.2957	44.996	663.9	0.3029
17	40.394	872.8	0.2709	42.842	698.9	0.2822	43.981	668.6	0.2895
18	38.948	876.5	0.2594	41.379	697.9	0.2704	42.562	673.0	0.2780
19	37.658	904.8	0.2498	40.025	694.0	0.2604	41.230	675.2	0.2680
20	36.032	932.8	0.2415	38.290	687.5	0.2516	39.496	675.3	0.2590
21	33.076	914.6	0.2335	35.155	676.9	0.2432	36.316	670.8	0.2506
22	29.357	889.4	0.2275	31.193	662.7	0.2368	32.267	662.2	0.2441
23	24.289	824.0	0.2215	25.765	642.3	0.2304	26.655	644.4	0.2375
24	11.283	677.5	0.2180	11.954	598.3	0.2265	12.360	599.4	0.2333
25	6.602	625.0	0.2152	6.946	581.0	0.2227	7.152	581.4	0.2287
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	8.797	572.1	0.7396						
2	28.713	591.4	0.7396						
3	37.150	592.9	0.7294						
4	41.450	593.9	0.6896						
5	43.499	595.4	0.6396						
6	44.575	597.8	0.5884						
7	45.326	601.0	0.5415						
8	46.079	604.9	0.5008						
9	47.628	609.7	0.4650						
10	48.067	614.6	0.4341						
11	48.197	620.0	0.4073						
12	48.150	625.9	0.3841						
13	48.028	632.3	0.3639						
14	47.734	639.3	0.3458						
15	47.278	646.7	0.3298						
16	46.645	654.4	0.3154						
17	45.763	662.2	0.3028						
18	44.472	669.8	0.2919						
19	43.230	675.2	0.2821						
20	41.540	677.8	0.2732						
21	38.323	675.6	0.2649						
22	34.155	668.5	0.2584						
23	28.244	650.9	0.2514						
24	13.095	602.7	0.2468						
25	7.525	583.0	0.2406						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B2

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.363	639.5	0.7396	2.694	658.1	0.7396
2	0.000		0.7396	4.757	876.9	0.7396	9.563	982.6	0.7396
3	0.000		0.7281	6.744	972.4	0.7285	13.406	1107.1	0.7215
4	0.000	Data	0.6616	8.116	1087.7	0.6822	15.602	1204.9	0.6680
5	0.000	Not	0.5896	8.878	1157.9	0.6190	16.557	1229.1	0.6003
6	0.000	Required	0.5244	9.252	1194.0	0.5522	16.907	1226.0	0.5331
7	0.000		0.4710	9.436	1212.2	0.4920	17.029	1218.2	0.4752
8	0.000		0.4279	9.560	1224.6	0.4416	17.103	1212.0	0.4276
9	0.000		0.3923	9.987	1268.3	0.3994	17.628	1224.3	0.3879
10	0.000		0.3625	9.894	1258.7	0.3637	17.505	1220.5	0.3542
11	0.000		0.3380	9.666	1235.4	0.3343	17.250	1217.1	0.3261
12	0.000		0.3177	9.354	1204.1	0.3097	16.903	1212.7	0.3025
13	0.000		0.3006	8.991	1168.7	0.2892	16.489	1206.4	0.2824
14	0.000		0.2861	8.596	1131.4	0.2719	16.023	1197.6	0.2651
15	0.000		0.2738	8.179	1093.3	0.2572	15.504	1185.1	0.2502
16	0.000		0.2633	7.742	1054.9	0.2446	14.922	1167.6	0.2372
17	0.000		0.2544	7.262	1014.3	0.2338	14.239	1143.5	0.2258
18	0.000		0.2469	6.598	961.0	0.2245	13.254	1106.4	0.2158
19	0.000		0.2407	6.180	928.9	0.2166	12.516	1070.7	0.2072
20	0.000		0.2349	5.821	902.4	0.2095	11.795	1031.8	0.1996
21	0.000		0.2300	5.415	873.3	0.2031	10.903	981.9	0.1929
22	0.000		0.2259	4.790	830.4	0.1976	9.593	916.0	0.1872
23	0.000		0.2225	4.079	784.3	0.1930	8.066	843.6	0.1826
24	0.000		0.2203	1.866	656.6	0.1896	3.710	680.3	0.1793
25	0.000		0.2192	1.163	620.2	0.1884	2.276	631.9	0.1780
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.989	625.3	0.7396	4.840	604.6	0.7396	5.885	624.3	0.7396
2	14.164	818.8	0.7396	16.988	717.9	0.7396	20.387	789.8	0.7396
3	19.294	853.3	0.7273	22.792	731.2	0.7312	27.130	818.7	0.7327
4	22.068	888.6	0.6819	25.885	748.5	0.6912	30.820	861.6	0.6952
5	23.294	905.7	0.6237	27.328	760.5	0.6396	32.925	912.0	0.6469
6	23.805	916.1	0.5646	28.052	772.5	0.5870	34.260	961.3	0.5972
7	24.049	924.0	0.5117	28.521	785.4	0.5396	35.117	994.2	0.5505
8	24.227	930.8	0.4664	28.934	799.1	0.4984	35.622	1002.1	0.5083
9	24.951	943.9	0.4269	29.965	817.4	0.4616	36.794	1014.4	0.4703
10	24.890	948.1	0.3931	30.131	831.1	0.4298	37.258	1041.0	0.4381
11	24.658	949.6	0.3644	30.105	843.9	0.4022	37.234	1041.2	0.4093
12	24.302	949.0	0.3400	29.939	855.8	0.3783	36.950	1030.6	0.3841
13	23.852	946.6	0.3190	29.665	867.0	0.3573	36.573	1021.4	0.3622
14	23.319	942.1	0.3008	29.295	877.5	0.3389	36.042	1007.2	0.3429
15	22.704	935.8	0.2849	28.824	886.9	0.3227	35.378	990.5	0.3258
16	21.990	927.1	0.2710	28.231	894.8	0.3083	34.567	972.0	0.3109
17	21.129	915.5	0.2588	27.459	900.7	0.2955	33.543	951.1	0.2976
18	19.921	901.3	0.2484	26.299	903.9	0.2848	32.125	930.2	0.2865
19	18.859	881.0	0.2388	25.178	900.0	0.2744	30.733	908.7	0.2758
20	17.714	855.1	0.2299	23.845	887.6	0.2645	29.139	888.6	0.2661
21	16.182	817.6	0.2218	21.857	858.2	0.2552	26.678	853.3	0.2569
22	14.173	778.6	0.2152	19.280	823.0	0.2479	23.508	811.1	0.2494
23	11.787	733.3	0.2095	16.050	773.4	0.2411	19.467	756.8	0.2427
24	5.343	633.4	0.2052	7.274	651.4	0.2363	8.851	646.6	0.2381
25	3.183	601.6	0.2020	4.239	610.4	0.2312	5.124	609.1	0.2335

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B2 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	6.971	672.3	0.7396	8.053	627.7	0.7396	8.780	637.8	0.7396
2	23.649	953.1	0.7396	26.766	771.7	0.7396	28.827	802.3	0.7396
3	31.020	974.1	0.7320	34.906	791.6	0.7336	37.500	828.7	0.7341
4	34.838	991.9	0.6944	39.213	825.9	0.6983	42.158	872.8	0.6997
5	36.870	981.7	0.6464	41.607	852.3	0.6531	44.752	903.1	0.6554
6	38.106	968.1	0.5970	43.142	874.8	0.6059	46.450	921.1	0.6088
7	38.884	957.3	0.5506	44.193	895.8	0.5611	47.596	934.3	0.5642
8	39.352	952.4	0.5086	44.943	918.1	0.5197	48.447	948.4	0.5228
9	40.539	954.4	0.4709	46.425	942.1	0.4819	50.053	966.1	0.4848
10	40.961	948.7	0.4388	46.950	950.7	0.4490	50.639	974.9	0.4516
11	40.925	947.1	0.4101	46.947	953.4	0.4196	50.691	983.0	0.4219
12	40.640	947.0	0.3850	46.630	950.7	0.3938	50.418	989.5	0.3958
13	40.261	946.7	0.3632	46.162	943.4	0.3712	49.967	992.0	0.3730
14	39.732	947.0	0.3440	45.516	933.8	0.3513	49.308	990.1	0.3528
15	39.066	946.7	0.3269	44.698	921.4	0.3337	48.431	981.4	0.3350
16	38.245	945.4	0.3118	43.663	904.4	0.3181	47.287	965.5	0.3192
17	37.193	941.7	0.2985	42.315	881.3	0.3043	45.779	942.8	0.3053
18	35.728	935.5	0.2872	40.501	855.0	0.2925	43.767	915.4	0.2934
19	34.248	923.9	0.2764	38.669	829.2	0.2815	41.725	887.3	0.2822
20	32.513	905.8	0.2666	36.592	805.0	0.2716	39.439	860.3	0.2723
21	29.784	872.3	0.2574	33.440	776.0	0.2622	36.025	827.6	0.2630
22	26.267	830.9	0.2499	29.448	744.7	0.2547	31.729	791.3	0.2555
23	21.724	774.7	0.2432	24.285	705.8	0.2480	26.155	744.8	0.2488
24	9.924	656.6	0.2386	11.160	628.9	0.2437	12.095	648.7	0.2445
25	5.727	614.5	0.2343	6.423	599.7	0.2395	6.963	611.6	0.2405

Statepoint 10 (495.2, EOC Cy 7)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	10.193	651.9	0.7396
2	32.556	827.8	0.7396
3	41.857	832.5	0.7347
4	46.701	846.4	0.7014
5	49.330	846.8	0.6584
6	50.990	846.2	0.613
7	52.180	849.5	0.5694
8	53.138	857.6	0.5288
9	54.922	871.3	0.4913
10	55.667	883.8	0.4584
11	55.907	898.8	0.4288
12	55.844	915.8	0.4028
13	55.607	933.5	0.3799
14	55.170	952.3	0.3597
15	54.518	971.8	0.3416
16	53.588	990.7	0.3255
17	52.256	1006.5	0.3111
18	50.360	1017.1	0.2987
19	48.317	1017.0	0.2870
20	45.874	1002.7	0.2764
21	42.037	965.2	0.2666
22	37.116	912.6	0.2586
23	30.585	837.9	0.2515
24	14.348	690.6	0.2473
25	8.255	633.8	0.2434

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B3

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.356	639.1	0.7396	2.489	642.8	0.7396
2	0.000		0.7396	4.680	870.8	0.7396	8.749	903.9	0.7396
3	0.000		0.7344	6.540	956.5	0.7309	12.255	1004.9	0.7287
4	0.000	Data	0.6756	7.766	1057.0	0.6887	14.290	1091.5	0.6841
5	0.000	Not	0.6095	8.419	1115.0	0.6306	15.204	1121.2	0.6243
6	0.000	Required	0.5472	8.726	1143.5	0.5676	15.557	1126.5	0.5612
7	0.000		0.4946	8.865	1156.6	0.5088	15.692	1126.0	0.5039
8	0.000		0.4515	8.955	1165.2	0.4590	15.778	1125.6	0.4555
9	0.000		0.4153	9.335	1202.2	0.4168	16.296	1141.6	0.4147
10	0.000		0.3850	9.234	1192.3	0.3810	16.190	1141.0	0.3801
11	0.000		0.3599	9.023	1171.8	0.3511	15.968	1139.7	0.3510
12	0.000		0.3388	8.747	1145.5	0.3263	15.671	1137.3	0.3265
13	0.000		0.3211	8.429	1116.0	0.3054	15.314	1132.7	0.3054
14	0.000		0.3059	8.081	1084.6	0.2876	14.903	1125.4	0.2874
15	0.000		0.2931	7.709	1052.0	0.2724	14.435	1114.4	0.2718
16	0.000		0.2820	7.313	1018.6	0.2593	13.899	1098.5	0.2581
17	0.000		0.2725	6.871	982.5	0.2481	13.255	1076.0	0.2461
18	0.000		0.2647	6.241	933.5	0.2384	12.300	1040.8	0.2357
19	0.000		0.2580	5.831	903.1	0.2301	11.589	1009.3	0.2266
20	0.000		0.2523	5.465	876.8	0.2227	10.898	976.5	0.2185
21	0.000		0.2474	5.058	848.5	0.2162	10.073	935.9	0.2114
22	0.000		0.2432	4.463	808.9	0.2105	8.870	880.1	0.2053
23	0.000		0.2397	3.806	767.3	0.2059	7.488	818.1	0.2003
24	0.000		0.2373	1.742	650.0	0.2025	3.449	671.0	0.1969
25	0.000		0.2361	1.083	616.2	0.2012	2.109	626.3	0.1954
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.208	647.7	0.7396	5.697	639.6	0.7396	7.484	673.0	0.7396
2	14.842	921.9	0.7396	19.755	856.7	0.7396	25.110	955.0	0.7396
3	20.183	985.2	0.7281	26.419	894.5	0.7297	32.896	984.0	0.7291
4	23.057	1045.7	0.6840	29.914	936.6	0.6880	36.779	1017.6	0.6875
5	24.260	1067.4	0.6258	31.408	957.1	0.6332	38.362	1025.5	0.6335
6	24.670	1071.8	0.5647	31.980	968.7	0.5753	38.915	1023.8	0.5765
7	24.806	1071.9	0.5088	32.244	978.0	0.5216	39.143	1020.6	0.5236
8	24.931	1074.9	0.4612	32.516	988.8	0.4755	39.401	1019.4	0.4779
9	25.637	1089.4	0.4210	33.465	1006.9	0.4357	40.426	1026.1	0.4385
10	25.531	1089.4	0.3868	33.488	1016.6	0.4017	40.418	1023.4	0.4048
11	25.241	1084.1	0.3578	33.313	1025.4	0.3727	40.179	1017.7	0.3760
12	24.828	1075.2	0.3331	33.009	1033.8	0.3478	39.789	1010.1	0.3511
13	24.330	1064.4	0.3119	32.615	1041.8	0.3263	39.294	1001.3	0.3296
14	23.754	1052.0	0.2936	32.138	1049.6	0.3076	38.703	991.5	0.3109
15	23.096	1037.8	0.2777	31.566	1056.4	0.2911	38.000	980.3	0.2944
16	22.336	1021.4	0.2638	30.866	1061.1	0.2765	37.148	967.5	0.2798
17	21.420	1001.9	0.2516	29.967	1062.5	0.2635	36.063	952.1	0.2668
18	20.138	978.9	0.2409	28.640	1058.9	0.2523	34.539	936.1	0.2555
19	18.976	948.2	0.2315	27.273	1042.8	0.2420	32.968	919.8	0.2453
20	17.707	910.3	0.2231	25.603	1012.0	0.2328	31.073	902.1	0.2361
21	16.053	858.8	0.2158	23.190	956.3	0.2247	28.244	870.5	0.2280
22	13.962	807.0	0.2096	20.197	894.4	0.2179	24.683	829.1	0.2212
23	11.577	752.4	0.2046	16.669	822.1	0.2122	20.331	772.8	0.2155
24	5.269	641.8	0.2012	7.605	671.2	0.2086	9.341	655.5	0.2120
25	3.154	607.5	0.1996	4.492	623.4	0.2066	5.474	614.3	0.2098

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B3 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	8.603	675.9	0.7396	8.955	581.6	0.7396	9.095	574.6	0.7396
2	28.272	938.2	0.7396	29.211	618.4	0.7396	29.577	598.4	0.7396
3	36.638	954.0	0.7289	37.724	620.7	0.7297	38.140	600.3	0.7300
4	40.704	979.0	0.6878	41.876	625.4	0.6896	42.323	603.1	0.6903
5	42.344	986.9	0.6345	43.621	631.2	0.6379	44.106	606.6	0.6392
6	42.920	990.1	0.5782	44.325	638.3	0.5835	44.862	611.3	0.5856
7	43.164	992.4	0.5257	44.708	646.1	0.5330	45.305	616.9	0.5359
8	43.441	995.0	0.4803	45.122	653.9	0.4892	45.785	623.0	0.4930
9	44.522	1002.9	0.4410	46.345	662.0	0.4511	47.081	629.8	0.4557
10	44.521	1003.9	0.4074	46.453	668.3	0.4184	47.258	636.3	0.4238
11	44.283	1004.1	0.3786	46.306	673.6	0.3902	47.176	642.5	0.3962
12	43.892	1003.9	0.3537	45.986	677.8	0.3656	46.920	648.6	0.3721
13	43.395	1003.7	0.3322	45.540	680.8	0.3440	46.536	654.6	0.3510
14	42.799	1002.9	0.3134	44.977	682.7	0.3251	46.031	660.3	0.3323
15	42.087	1001.7	0.2968	44.283	683.8	0.3083	45.389	665.4	0.3156
16	41.219	999.4	0.2821	43.417	683.9	0.2934	44.567	669.7	0.3008
17	40.101	994.7	0.2690	42.284	683.0	0.2801	43.471	673.4	0.2876
18	38.529	988.0	0.2576	40.684	681.4	0.2685	41.899	676.2	0.2761
19	36.863	974.8	0.2472	38.964	678.2	0.2578	40.187	677.0	0.2654
20	34.817	954.2	0.2380	36.827	672.8	0.2484	38.035	675.5	0.2559
21	31.693	915.4	0.2297	33.537	663.2	0.2399	34.679	668.9	0.2474
22	27.744	866.8	0.2228	29.374	651.0	0.2329	30.413	658.8	0.2403
23	22.831	801.4	0.2171	24.135	632.7	0.2266	24.986	640.7	0.2338
24	10.552	669.4	0.2136	11.134	593.6	0.2226	11.517	597.3	0.2295
25	6.164	622.1	0.2114	6.463	578.6	0.2194	6.658	580.4	0.2254
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	9.255	570.1	0.7396						
2	29.985	585.7	0.7396						
3	38.594	587.4	0.7303						
4	42.797	588.5	0.6911						
5	44.610	590.1	0.6405						
6	45.411	592.6	0.5876						
7	45.917	596.0	0.5388						
8	46.469	599.9	0.4968						
9	47.854	604.8	0.4605						
10	48.122	609.8	0.4297						
11	48.141	615.4	0.4032						
12	47.994	621.5	0.3804						
13	47.729	628.2	0.3605						
14	47.348	635.2	0.3430						
15	46.835	642.6	0.3275						
16	46.144	650.2	0.3136						
17	45.179	657.8	0.3013						
18	43.732	665.2	0.2906						
19	42.117	671.0	0.2806						
20	40.019	674.2	0.2714						
21	36.624	671.9	0.2631						
22	32.245	665.2	0.2563						
23	26.519	647.6	0.2493						
24	12.211	600.5	0.2444						
25	7.010	581.9	0.2385						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B4

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.027	619.2	0.7396	2.253	650.0	0.7396
2	0.000		0.7396	3.558	785.6	0.7396	8.013	944.4	0.7396
3	0.000		0.7396	5.128	907.1	0.7396	11.667	1193.6	0.7271
4	0.000	Data	0.7014	6.412	946.6	0.7108	14.092	1229.2	0.6812
5	0.000	Not	0.6422	7.346	1021.3	0.6650	15.337	1269.1	0.6220
6	0.000	Required	0.5818	7.984	1076.0	0.6090	15.914	1261.2	0.5607
7	0.000		0.5271	8.408	1114.0	0.5510	16.194	1242.6	0.5045
8	0.000		0.4804	8.732	1144.1	0.4975	16.391	1226.5	0.4560
9	0.000		0.4404	9.301	1198.8	0.4501	17.013	1233.2	0.4144
10	0.000		0.4064	9.287	1197.5	0.4096	16.918	1223.0	0.3782
11	0.000		0.3782	9.084	1177.7	0.3760	16.645	1214.2	0.3478
12	0.000		0.3547	8.781	1148.7	0.3483	16.275	1205.9	0.3222
13	0.000		0.3350	8.425	1115.6	0.3251	15.848	1197.1	0.3005
14	0.000		0.3185	8.040	1080.9	0.3057	15.378	1186.7	0.2818
15	0.000		0.3044	7.634	1045.6	0.2892	14.862	1173.4	0.2658
16	0.000		0.2924	7.208	1009.9	0.2752	14.283	1155.1	0.2518
17	0.000		0.2824	6.732	971.5	0.2633	13.587	1129.3	0.2396
18	0.000		0.2740	6.077	921.2	0.2531	12.577	1088.9	0.2288
19	0.000		0.2671	5.696	893.3	0.2443	11.863	1052.4	0.2198
20	0.000		0.2612	5.404	872.5	0.2365	11.215	1014.8	0.2121
21	0.000		0.2560	5.078	849.9	0.2294	10.418	967.3	0.2053
22	0.000		0.2517	4.514	812.2	0.2232	9.162	901.8	0.1996
23	0.000		0.2482	3.850	770.0	0.2181	7.676	830.1	0.1952
24	0.000		0.2459	1.768	651.4	0.2143	3.518	673.9	0.1919
25	0.000		0.2446	1.095	616.8	0.2129	2.150	628.2	0.1907
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.101	654.7	0.7396	5.800	651.4	0.7396	7.569	671.8	0.7396
2	14.544	954.3	0.7396	20.098	903.8	0.7396	25.406	950.7	0.7396
3	20.137	1023.8	0.7253	27.069	941.9	0.7260	33.512	981.1	0.7262
4	23.376	1084.9	0.6786	30.845	980.2	0.6808	37.710	1017.6	0.6817
5	24.839	1102.0	0.6190	32.513	995.3	0.6233	39.515	1029.8	0.6255
6	25.405	1101.1	0.5578	33.200	1004.4	0.5644	40.223	1031.7	0.5675
7	25.644	1097.9	0.5025	33.564	1013.8	0.5109	40.570	1030.1	0.5145
8	25.858	1099.2	0.4551	33.928	1025.2	0.4648	40.926	1029.4	0.4688
9	26.657	1113.2	0.4148	34.980	1044.8	0.4251	42.035	1034.5	0.4293
10	26.564	1113.4	0.3798	35.044	1057.2	0.3907	42.056	1030.7	0.3952
11	26.229	1108.4	0.3502	34.860	1069.2	0.3614	41.799	1024.2	0.3661
12	25.753	1100.1	0.3252	34.531	1081.1	0.3363	41.373	1015.6	0.3411
13	25.191	1089.5	0.3038	34.112	1092.7	0.3147	40.839	1005.5	0.3195
14	24.564	1077.4	0.2853	33.619	1103.8	0.2959	40.215	994.2	0.3007
15	23.871	1063.9	0.2693	33.048	1114.0	0.2794	39.492	981.2	0.2842
16	23.094	1049.0	0.2553	32.372	1122.4	0.2647	38.633	965.8	0.2696
17	22.176	1032.5	0.2431	31.508	1127.0	0.2517	37.547	947.4	0.2566
18	20.922	1014.8	0.2323	30.241	1125.9	0.2403	36.030	927.2	0.2451
19	19.858	989.9	0.2229	28.983	1109.6	0.2300	34.513	906.8	0.2349
20	18.726	956.6	0.2147	27.441	1076.0	0.2209	32.702	886.1	0.2258
21	17.144	905.0	0.2076	25.061	1013.6	0.2130	29.889	853.8	0.2179
22	15.006	850.6	0.2017	21.969	944.0	0.2065	26.235	813.7	0.2113
23	12.475	790.6	0.1970	18.222	862.7	0.2011	21.686	759.8	0.2058
24	5.712	658.9	0.1937	8.430	690.4	0.1977	10.094	651.5	0.2025
25	3.435	618.0	0.1923	5.023	635.1	0.1959	5.964	612.1	0.2005

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B4 (Continued)

Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	8.678	674.8	0.7396	8.964	577.6	0.7396	9.082	572.4	0.7396
2	28.536	933.4	0.7396	29.298	607.1	0.7396	29.609	592.5	0.7396
3	37.212	948.3	0.7265	38.082	609.0	0.7271	38.433	594.4	0.7274
4	41.594	973.3	0.6827	42.528	612.4	0.6843	42.902	596.5	0.6849
5	43.465	982.4	0.6273	44.478	616.7	0.6302	44.881	599.1	0.6313
6	44.205	986.9	0.5702	45.322	622.4	0.5747	45.765	602.8	0.5763
7	44.573	989.8	0.5177	45.809	628.9	0.5239	46.300	607.1	0.5264
8	44.942	991.6	0.4721	46.305	636.0	0.4801	46.846	611.7	0.4832
9	46.097	998.1	0.4328	47.601	643.8	0.4421	48.200	617.1	0.4459
10	46.121	998.6	0.3988	47.745	650.6	0.4094	48.399	622.2	0.4139
11	45.862	998.3	0.3698	47.594	656.8	0.3813	48.303	627.3	0.3865
12	45.434	998.0	0.3448	47.261	662.2	0.3570	48.027	632.6	0.3628
13	44.899	997.8	0.3232	46.804	666.7	0.3357	47.627	638.0	0.3421
14	44.271	997.3	0.3043	46.239	670.4	0.3170	47.119	643.5	0.3238
15	43.541	996.3	0.2877	45.555	673.1	0.3004	46.488	648.5	0.3076
16	42.665	993.9	0.2730	44.710	674.9	0.2855	45.694	653.5	0.2930
17	41.543	988.8	0.2599	43.601	675.7	0.2723	44.632	658.0	0.2800
18	39.966	980.5	0.2483	42.023	675.6	0.2607	43.095	662.0	0.2666
19	38.341	965.6	0.2380	40.367	673.8	0.2502	41.463	664.4	0.2582
20	36.367	943.7	0.2288	38.326	669.9	0.2408	39.425	664.7	0.2488
21	33.256	904.9	0.2207	35.068	661.4	0.2325	36.122	660.3	0.2406
22	29.216	857.2	0.2140	30.834	650.3	0.2256	31.808	652.5	0.2337
23	24.111	793.1	0.2085	25.412	632.5	0.2195	26.217	636.3	0.2273
24	11.280	667.1	0.2052	11.851	593.0	0.2154	12.209	595.0	0.2228
25	6.639	620.8	0.2031	6.926	578.0	0.2119	7.105	578.9	0.2182

Statepoint 10 (495.2, EOC Cy 7)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	9.225	569.1	0.7396
2	29.975	583.0	0.7396
3	38.836	584.7	0.7277
4	43.319	585.4	0.6856
5	45.320	586.6	0.6325
6	46.241	588.6	0.5782
7	46.826	591.3	0.5289
8	47.432	594.6	0.4866
9	48.857	598.5	0.4501
10	49.131	602.6	0.4190
11	49.118	607.1	0.3926
12	48.934	612.2	0.3700
13	48.635	617.8	0.3504
14	48.235	623.9	0.3333
15	47.720	630.4	0.3182
16	47.046	637.2	0.3048
17	46.108	644.3	0.2929
18	44.695	651.5	0.2825
19	43.166	657.5	0.2730
20	41.193	661.4	0.2642
21	37.874	660.4	0.2563
22	33.479	655.7	0.2499
23	27.630	640.7	0.2433
24	12.843	597.2	0.2377
25	7.423	580.1	0.2311

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B5

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.115	624.5	0.7396	2.106	632.0	0.7396
2	0.000		0.7396	3.851	807.1	0.7396	7.432	854.9	0.7396
3	0.000		0.7396	5.443	933.4	0.7394	10.729	962.0	0.7357
4	0.000	Data	0.6979	6.604	961.4	0.7094	12.923	1068.9	0.7001
5	0.000	Not	0.6387	7.339	1020.7	0.6647	14.058	1113.6	0.6496
6	0.000	Required	0.5797	7.775	1057.7	0.6108	14.561	1121.3	0.5924
7	0.000		0.5274	8.020	1079.2	0.5550	14.754	1115.3	0.5363
8	0.000		0.4830	8.178	1093.2	0.5038	14.859	1109.3	0.4867
9	0.000		0.4454	8.588	1130.6	0.4586	15.373	1121.2	0.4441
10	0.000		0.4133	8.509	1123.3	0.4200	15.241	1115.1	0.4075
11	0.000		0.3866	8.311	1105.2	0.3879	14.983	1108.2	0.3768
12	0.000		0.3642	8.050	1081.8	0.3610	14.658	1101.0	0.3507
13	0.000		0.3452	7.752	1055.7	0.3381	14.286	1092.7	0.3284
14	0.000		0.3291	7.428	1028.2	0.3188	13.873	1082.7	0.3093
15	0.000		0.3154	7.085	999.8	0.3023	13.418	1070.4	0.2927
16	0.000		0.3035	6.723	970.8	0.2881	12.910	1054.5	0.2782
17	0.000		0.2935	6.316	939.2	0.2757	12.302	1033.1	0.2654
18	0.000		0.2851	5.731	895.8	0.2652	11.383	998.5	0.2543
19	0.000		0.2779	5.380	870.8	0.2561	10.758	971.0	0.2448
20	0.000		0.2718	5.086	850.4	0.2481	10.187	944.1	0.2363
21	0.000		0.2665	4.756	828.1	0.2408	9.497	910.3	0.2288
22	0.000		0.2621	4.221	793.3	0.2346	8.391	859.3	0.2224
23	0.000		0.2583	3.613	755.5	0.2294	7.099	802.2	0.2173
24	0.000		0.2559	1.662	645.8	0.2258	3.274	664.6	0.2138
25	0.000		0.2547	1.027	613.4	0.2242	1.994	622.6	0.2123
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.769	644.7	0.7396	5.348	644.6	0.7396	6.353	621.7	0.7396
2	13.428	914.8	0.7396	18.685	881.7	0.7396	21.884	774.4	0.7396
3	18.593	980.8	0.7326	25.185	918.4	0.7322	29.154	793.3	0.7342
4	21.579	1037.5	0.6944	28.726	957.0	0.6945	33.032	816.5	0.6992
5	22.964	1056.1	0.6428	30.330	972.8	0.6441	34.874	833.3	0.6523
6	23.519	1060.0	0.5859	31.000	981.1	0.5890	35.901	859.1	0.6011
7	23.723	1060.8	0.5311	31.315	989.3	0.5362	36.376	871.0	0.5510
8	23.872	1064.2	0.4829	31.607	999.9	0.4896	36.735	876.0	0.5058
9	24.579	1078.9	0.4415	32.563	1018.7	0.4492	37.771	882.0	0.4657
10	24.455	1079.5	0.4060	32.577	1029.2	0.4144	37.781	881.7	0.4311
11	24.141	1075.2	0.3759	32.390	1039.0	0.3845	37.566	879.6	0.4011
12	23.712	1067.3	0.3502	32.081	1048.4	0.3589	37.210	876.1	0.3751
13	23.206	1057.2	0.3281	31.689	1057.4	0.3366	36.756	871.4	0.3526
14	22.634	1045.3	0.3090	31.220	1065.6	0.3172	36.209	865.6	0.3327
15	21.992	1031.4	0.2924	30.663	1072.4	0.3001	35.556	858.5	0.3152
16	21.261	1015.2	0.2777	29.987	1076.9	0.2850	34.763	850.0	0.2997
17	20.383	996.0	0.2649	29.113	1077.2	0.2715	33.747	839.7	0.2859
18	19.142	973.5	0.2537	27.813	1072.4	0.2596	32.303	829.4	0.2738
19	18.072	943.3	0.2439	26.518	1054.5	0.2490	30.897	821.6	0.2631
20	16.931	906.2	0.2353	24.960	1022.1	0.2396	29.404	826.2	0.2544
21	15.431	856.0	0.2279	22.683	964.5	0.2314	26.992	816.7	0.2466
22	13.451	805.2	0.2216	19.797	901.8	0.2246	23.676	787.2	0.2396
23	11.157	750.7	0.2166	16.352	828.3	0.2190	19.529	741.5	0.2335
24	5.051	639.9	0.2133	7.425	673.1	0.2155	8.886	640.2	0.2297
25	3.011	606.3	0.2119	4.373	624.5	0.2137	5.276	610.0	0.2287

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B5 (Continued)

		Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	
1	7.168	642.8	0.7396	7.519	581.5	0.7396	7.664	575.2	0.7396	
2	24.289	832.1	0.7396	25.278	621.7	0.7396	25.680	602.2	0.7396	
3	32.011	842.4	0.7343	33.162	624.2	0.7351	33.625	604.6	0.7354	
4	36.038	860.2	0.7000	37.269	628.6	0.7018	37.758	606.9	0.7025	
5	38.024	877.7	0.6544	39.340	633.3	0.6576	39.859	609.7	0.6589	
6	39.409	923.0	0.6046	40.820	638.6	0.6095	41.374	612.9	0.6114	
7	40.031	942.3	0.5552	41.574	646.0	0.5619	42.178	617.5	0.5647	
8	40.439	948.9	0.5102	42.130	654.4	0.5187	42.792	622.9	0.5222	
9	41.537	957.2	0.4702	43.394	664.0	0.4800	44.123	629.2	0.4843	
10	41.565	959.6	0.4355	43.558	671.9	0.4462	44.347	634.8	0.4513	
11	41.360	961.0	0.4055	43.470	678.7	0.4168	44.317	640.3	0.4225	
12	41.017	962.8	0.3795	43.223	684.4	0.3911	44.128	645.9	0.3972	
13	40.590	966.4	0.3568	42.870	688.8	0.3684	43.832	651.3	0.3749	
14	40.051	967.5	0.3368	42.385	692.0	0.3483	43.403	656.8	0.3552	
15	39.396	967.3	0.3191	41.765	694.1	0.3304	42.835	661.9	0.3374	
16	38.593	965.9	0.3034	40.978	695.1	0.3144	42.098	666.8	0.3216	
17	37.548	962.0	0.2893	39.935	695.2	0.3002	41.098	671.0	0.3074	
18	36.061	956.1	0.2770	38.435	694.4	0.2877	39.640	675.2	0.2951	
19	34.565	944.1	0.2661	36.890	691.5	0.2765	38.120	677.7	0.2841	
20	32.912	923.0	0.2571	35.141	685.8	0.2671	36.368	677.4	0.2745	
21	30.212	886.4	0.2489	32.260	675.1	0.2586	33.433	672.0	0.2659	
22	26.539	843.1	0.2417	28.357	661.7	0.2512	29.439	663.0	0.2585	
23	21.868	783.6	0.2354	23.328	641.4	0.2443	24.221	644.7	0.2514	
24	10.006	660.9	0.2316	10.655	597.2	0.2402	11.055	598.8	0.2469	
25	5.938	619.6	0.2310	6.267	580.2	0.2383	6.468	580.9	0.2441	
		Statepoint 10 (495.2, EOC Cy 7)								
Node	Burnup	Fuel	Mod. Dens.							
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)							
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7							
1	7.850	571.8	0.7396							
2	26.181	591.6	0.7396							
3	34.187	593.3	0.7357							
4	38.336	594.2	0.7033							
5	40.457	595.3	0.6603							
6	42.005	597.0	0.6136							
7	42.864	600.1	0.5677							
8	43.547	603.8	0.5262							
9	44.966	608.7	0.4893							
10	45.282	613.8	0.4575							
11	45.351	619.3	0.4298							
12	45.271	625.4	0.4057							
13	45.090	631.9	0.3846							
14	44.785	638.9	0.3659							
15	44.347	646.4	0.3492							
16	43.741	654.0	0.3342							
17	42.874	661.8	0.3208							
18	41.543	669.4	0.3093							
19	40.123	675.4	0.2986							
20	38.424	678.6	0.2892							
21	35.446	676.0	0.2807							
22	31.339	669.2	0.2734							
23	25.816	651.2	0.2660							
24	11.776	602.0	0.2609							
25	6.829	582.4	0.2560							

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B6

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.116	624.6	0.7396	2.178	637.4	0.7396
2	0.000		0.7396	3.888	809.9	0.7396	7.732	881.0	0.7396
3	0.000		0.7333	5.529	881.3	0.7388	11.141	994.4	0.7331
4	0.000	Data	0.6724	6.725	970.9	0.7075	13.341	1101.9	0.6945
5	0.000	Not	0.6049	7.472	1031.9	0.6611	14.439	1142.3	0.6412
6	0.000	Required	0.5418	7.903	1068.9	0.6057	14.908	1146.8	0.5823
7	0.000		0.4890	8.139	1089.7	0.5492	15.084	1139.7	0.5260
8	0.000		0.4459	8.294	1103.7	0.4978	15.181	1133.0	0.4767
9	0.000		0.4100	8.708	1141.8	0.4529	15.697	1144.9	0.4347
10	0.000		0.3798	8.633	1134.8	0.4146	15.572	1139.0	0.3986
11	0.000		0.3549	8.433	1116.3	0.3826	15.314	1132.3	0.3682
12	0.000		0.3341	8.162	1091.8	0.3559	14.980	1125.0	0.3424
13	0.000		0.3165	7.850	1064.2	0.3334	14.595	1116.6	0.3205
14	0.000		0.3016	7.513	1035.3	0.3143	14.176	1107.2	0.3016
15	0.000		0.2890	7.165	1006.3	0.2980	13.736	1096.8	0.2853
16	0.000		0.2782	6.810	977.7	0.2840	13.270	1084.4	0.2709
17	0.000		0.2690	6.427	947.7	0.2719	12.740	1068.2	0.2583
18	0.000		0.2612	5.889	907.3	0.2614	11.935	1039.4	0.2471
19	0.000		0.2547	5.611	887.2	0.2524	11.437	1016.3	0.2374
20	0.000		0.2491	5.408	872.8	0.2441	10.976	990.0	0.2288
21	0.000		0.2444	5.143	854.3	0.2364	10.325	951.9	0.2212
22	0.000		0.2403	4.614	818.7	0.2297	9.181	894.4	0.2147
23	0.000		0.2368	3.952	776.3	0.2242	7.759	828.5	0.2094
24	0.000		0.2344	1.809	653.6	0.2203	3.561	674.0	0.2057
25	0.000		0.2332	1.113	617.7	0.2186	2.164	627.9	0.2042
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.413	675.9	0.7396	6.112	651.4	0.7396	7.386	639.0	0.7396
2	15.562	1056.9	0.7396	20.980	893.6	0.7396	24.780	821.4	0.7396
3	21.059	1135.2	0.7212	27.731	923.9	0.7231	32.369	840.0	0.7250
4	23.904	1188.9	0.6725	31.091	959.9	0.6765	36.110	867.9	0.6809
5	24.996	1188.3	0.6128	32.452	979.3	0.6195	37.680	883.6	0.6268
6	25.288	1173.4	0.5527	32.955	994.8	0.5619	38.364	897.4	0.5721
7	25.317	1161.1	0.4984	33.189	1010.2	0.5095	38.902	921.2	0.5223
8	25.339	1154.9	0.4522	33.408	1025.1	0.4643	39.292	934.8	0.4784
9	25.966	1164.1	0.4130	34.320	1047.2	0.4255	40.436	953.7	0.4400
10	25.792	1160.0	0.3792	34.320	1061.0	0.3919	40.835	987.2	0.4074
11	25.453	1153.3	0.3506	34.142	1073.9	0.3631	40.784	998.1	0.3781
12	25.012	1144.5	0.3263	33.854	1086.3	0.3384	40.564	1004.0	0.3528
13	24.505	1134.6	0.3053	33.489	1097.9	0.3170	40.476	1028.4	0.3315
14	23.946	1123.3	0.2872	33.058	1108.5	0.2983	40.047	1028.6	0.3118
15	23.345	1110.4	0.2713	32.561	1117.2	0.2817	39.419	1017.0	0.2942
16	22.694	1095.8	0.2574	31.983	1123.4	0.2670	38.657	1000.9	0.2786
17	21.946	1078.9	0.2451	31.264	1125.8	0.2538	37.679	978.7	0.2646
18	20.889	1059.7	0.2339	30.191	1124.5	0.2420	36.310	954.0	0.2521
19	20.011	1031.4	0.2245	29.161	1111.7	0.2315	34.961	928.1	0.2411
20	19.023	993.6	0.2162	27.859	1085.8	0.2223	33.344	903.3	0.2315
21	17.531	936.2	0.2092	25.682	1031.5	0.2143	30.686	866.7	0.2232
22	15.451	876.5	0.2031	22.738	967.1	0.2074	27.157	824.4	0.2160
23	12.912	810.5	0.1982	19.001	884.8	0.2019	22.595	768.3	0.2100
24	5.911	666.2	0.1949	8.834	700.9	0.1983	10.567	655.4	0.2066
25	3.545	622.2	0.1936	5.252	640.7	0.1966	6.239	614.5	0.2046

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B6 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	8.295	652.9	0.7396	8.625	580.2	0.7396	8.758	573.9	0.7396
2	27.359	855.4	0.7396	28.266	616.4	0.7396	28.622	597.3	0.7396
3	35.453	869.6	0.7257	36.516	619.4	0.7266	36.926	599.8	0.7269
4	39.392	894.1	0.6828	40.547	624.5	0.6848	40.988	602.6	0.6855
5	41.058	906.3	0.6300	42.320	630.4	0.6336	42.796	605.8	0.6350
6	41.800	913.7	0.5763	43.188	637.3	0.5818	43.709	609.9	0.5838
7	42.367	917.4	0.5273	43.892	645.0	0.5347	44.459	614.1	0.5374
8	42.792	922.0	0.4839	44.470	653.7	0.4930	45.089	618.9	0.4965
9	43.998	930.1	0.4458	45.849	663.6	0.4561	46.526	624.3	0.4603
10	44.390	929.1	0.4132	46.379	671.6	0.4244	47.104	628.8	0.4293
11	44.351	930.7	0.3841	46.476	679.6	0.3960	47.250	633.4	0.4013
12	44.139	931.8	0.3588	46.382	686.6	0.3710	47.209	638.4	0.3768
13	44.027	928.6	0.3373	46.354	691.6	0.3494	47.227	642.8	0.3556
14	43.595	928.2	0.3176	45.997	696.1	0.3296	46.924	648.0	0.3362
15	42.965	928.0	0.3000	45.426	699.7	0.3118	46.409	653.4	0.3187
16	42.187	925.9	0.2843	44.685	702.0	0.2960	45.724	658.8	0.3030
17	41.175	921.5	0.2702	43.688	702.9	0.2817	44.781	664.1	0.2889
18	39.760	915.5	0.2576	42.269	702.6	0.2690	43.413	669.1	0.2765
19	38.328	904.9	0.2465	40.791	699.8	0.2575	41.973	672.9	0.2652
20	36.582	888.6	0.2367	38.951	694.1	0.2474	40.150	674.6	0.2551
21	33.681	858.9	0.2282	35.859	682.7	0.2384	37.021	670.9	0.2462
22	29.836	821.7	0.2209	31.768	668.3	0.2308	32.852	663.2	0.2386
23	24.793	768.3	0.2147	26.344	646.5	0.2240	27.246	645.6	0.2316
24	11.658	658.2	0.2113	12.351	599.5	0.2200	12.759	599.6	0.2272
25	6.892	618.8	0.2098	7.245	581.5	0.2173	7.451	581.4	0.2235
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	8.942	571.6	0.7396						
2	29.105	590.4	0.7396						
3	37.468	592.2	0.7274						
4	41.553	593.5	0.6865						
5	43.392	595.1	0.6366						
6	44.349	597.5	0.5863						
7	45.156	600.7	0.5408						
8	45.853	604.3	0.5008						
9	47.376	609.1	0.4655						
10	48.031	613.3	0.4354						
11	48.267	618.3	0.4086						
12	48.323	623.7	0.3851						
13	48.442	629.4	0.3648						
14	48.254	636.0	0.3464						
15	47.863	643.1	0.3298						
16	47.308	650.6	0.3151						
17	46.497	658.3	0.3018						
18	45.262	666.2	0.2900						
19	43.929	672.6	0.2793						
20	42.169	676.3	0.2695						
21	39.010	674.5	0.2607						
22	34.738	668.4	0.2533						
23	28.843	651.4	0.2460						
24	13.493	602.7	0.2409						
25	7.823	583.0	0.2353						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B7

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.075	622.1	0.7396	2.292	649.3	0.7396
2	0.000		0.7396	3.769	801.0	0.7396	8.150	936.5	0.7396
3	0.000		0.7315	5.399	872.1	0.7389	11.681	1064.8	0.7279
4	0.000	Data	0.6686	6.658	965.7	0.7073	13.930	1178.7	0.6840
5	0.000	Not	0.5988	7.527	1036.5	0.6597	15.086	1214.0	0.6263
6	0.000	Required	0.5339	8.097	1086.0	0.6024	15.639	1211.9	0.5653
7	0.000		0.4800	8.460	1118.8	0.5440	15.912	1200.7	0.5085
8	0.000		0.4359	8.723	1143.2	0.4910	16.093	1190.6	0.4594
9	0.000		0.3992	9.234	1192.3	0.4447	16.690	1201.2	0.4177
10	0.000		0.3685	9.215	1190.4	0.4051	16.622	1195.2	0.3814
11	0.000		0.3433	9.042	1173.6	0.3722	16.412	1190.6	0.3511
12	0.000		0.3222	8.782	1148.8	0.3447	16.121	1186.8	0.3253
13	0.000		0.3047	8.474	1120.1	0.3217	15.787	1183.7	0.3033
14	0.000		0.2898	8.139	1089.7	0.3022	15.416	1179.3	0.2844
15	0.000		0.2773	7.782	1058.3	0.2857	15.003	1172.5	0.2680
16	0.000		0.2665	7.404	1026.1	0.2716	14.526	1160.7	0.2538
17	0.000		0.2575	6.985	991.7	0.2595	13.950	1142.1	0.2413
18	0.000		0.2499	6.397	945.4	0.2491	13.084	1109.9	0.2301
19	0.000		0.2436	6.082	921.6	0.2401	12.496	1079.3	0.2207
20	0.000		0.2380	5.846	904.2	0.2318	11.934	1043.9	0.2125
21	0.000		0.2330	5.545	882.5	0.2243	11.158	994.5	0.2053
22	0.000		0.2288	4.970	842.5	0.2176	9.898	927.7	0.1991
23	0.000		0.2254	4.254	795.4	0.2121	8.345	852.5	0.1941
24	0.000		0.2232	1.949	661.0	0.2082	3.831	682.9	0.1905
25	0.000		0.2220	1.203	622.2	0.2067	2.338	633.3	0.1891
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.717	632.1	0.7396	4.643	608.7	0.7396	6.338	666.8	0.7396
2	13.211	849.4	0.7396	16.306	734.7	0.7396	21.642	953.3	0.7396
3	18.168	889.9	0.7311	22.024	750.7	0.7345	28.513	985.0	0.7327
4	20.992	926.7	0.6917	25.204	770.5	0.6995	32.042	1015.2	0.6968
5	22.353	940.2	0.6398	26.785	783.1	0.6533	33.644	1017.1	0.6499
6	22.994	946.1	0.5840	27.627	794.8	0.6033	34.403	1009.8	0.5998
7	23.331	950.4	0.5311	28.180	807.5	0.5554	34.867	1002.0	0.5519
8	23.584	955.2	0.4842	28.664	821.3	0.5124	35.308	998.3	0.5091
9	24.369	968.0	0.4431	29.761	840.4	0.4738	36.471	1004.0	0.4709
10	24.354	971.6	0.4076	29.972	854.6	0.4399	36.655	1001.7	0.4375
11	24.156	972.5	0.3774	29.978	867.5	0.4106	36.605	996.8	0.4085
12	23.843	970.9	0.3515	29.853	879.7	0.3852	36.398	989.8	0.3833
13	23.458	967.4	0.3291	29.641	891.0	0.3628	36.091	981.7	0.3611
14	23.009	962.1	0.3098	29.351	901.5	0.3431	35.694	972.6	0.3417
15	22.486	954.7	0.2929	28.970	911.1	0.3258	35.194	962.7	0.3244
16	21.865	945.0	0.2780	28.467	919.1	0.3103	34.561	951.9	0.3091
17	21.102	932.6	0.2649	27.786	924.7	0.2967	33.747	941.1	0.2955
18	20.004	917.5	0.2537	26.724	927.2	0.2849	32.576	932.3	0.2837
19	19.077	895.8	0.2434	25.714	921.5	0.2737	31.460	923.8	0.2726
20	18.067	868.1	0.2342	24.480	906.3	0.2634	30.075	911.9	0.2623
21	16.612	827.7	0.2259	22.520	873.1	0.2537	27.732	882.3	0.2528
22	14.618	786.3	0.2189	19.905	834.0	0.2460	24.557	841.0	0.2451
23	12.179	739.1	0.2132	16.579	781.3	0.2393	20.385	782.3	0.2384
24	5.525	636.2	0.2091	7.533	655.2	0.2348	9.317	658.2	0.2340
25	3.285	603.3	0.2065	4.395	612.9	0.2307	5.400	615.5	0.2304

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B7 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	7.494	680.0	0.7396	7.981	589.9	0.7396	8.170	579.7	0.7396
2	25.024	971.3	0.7396	26.404	647.3	0.7396	26.923	614.9	0.7396
3	32.493	986.6	0.7317	34.126	651.1	0.7327	34.730	617.5	0.7331
4	36.162	1006.4	0.6951	37.932	658.9	0.6976	38.583	621.9	0.6985
5	37.763	1006.2	0.6480	39.668	666.7	0.6522	40.373	626.9	0.6540
6	38.497	1002.7	0.5979	40.552	675.5	0.6038	41.328	633.6	0.6066
7	38.942	1000.0	0.5501	41.146	684.3	0.5576	42.001	641.1	0.5614
8	39.377	999.1	0.5074	41.717	692.4	0.5160	42.654	648.9	0.5207
9	40.583	1005.2	0.4695	43.062	700.8	0.4785	44.087	657.5	0.4838
10	40.772	1005.9	0.4362	43.339	706.2	0.4454	44.438	664.7	0.4513
11	40.720	1005.7	0.4074	43.352	710.2	0.4165	44.522	671.7	0.4227
12	40.512	1005.5	0.3822	43.188	712.9	0.3911	44.425	678.4	0.3976
13	40.202	1005.1	0.3601	42.904	714.5	0.3687	44.204	684.7	0.3752
14	39.799	1004.2	0.3407	42.506	714.8	0.3489	43.862	690.4	0.3554
15	39.286	1002.4	0.3234	41.981	714.0	0.3313	43.385	695.3	0.3377
16	38.627	998.7	0.3080	41.293	712.3	0.3157	42.733	699.0	0.3220
17	37.764	991.8	0.2944	40.382	709.3	0.3017	41.847	701.6	0.3079
18	36.525	982.3	0.2825	39.080	705.4	0.2896	40.559	703.1	0.2956
19	35.301	967.4	0.2713	37.759	699.5	0.2781	39.229	702.1	0.2840
20	33.761	946.5	0.2610	36.083	691.3	0.2676	37.516	698.3	0.2732
21	31.131	909.0	0.2515	33.233	678.2	0.2578	34.567	688.2	0.2633
22	27.587	863.1	0.2439	29.424	662.8	0.2499	30.627	675.0	0.2552
23	22.875	800.3	0.2372	24.343	641.8	0.2431	25.324	653.2	0.2481
24	10.525	669.1	0.2328	11.189	598.0	0.2385	11.637	603.2	0.2434
25	6.089	622.0	0.2294	6.437	581.2	0.2346	6.671	583.9	0.2391
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	8.386	573.6	0.7396						
2	27.502	596.5	0.7396						
3	35.385	598.4	0.7336						
4	39.269	600.1	0.6995						
5	41.099	602.2	0.6557						
6	42.115	605.6	0.6093						
7	42.871	610.2	0.5653						
8	43.621	615.5	0.5258						
9	45.172	622.1	0.4901						
10	45.640	628.7	0.4587						
11	45.848	635.7	0.4314						
12	45.883	643.3	0.4073						
13	45.800	651.3	0.3860						
14	45.599	659.5	0.3670						
15	45.262	667.8	0.3500						
16	44.749	676.2	0.3347						
17	43.996	684.2	0.3210						
18	42.830	691.7	0.3090						
19	41.583	696.8	0.2974						
20	39.902	698.8	0.2865						
21	36.877	694.1	0.2765						
22	32.775	684.1	0.2683						
23	27.118	662.9	0.2607						
24	12.464	607.8	0.2557						
25	7.097	585.9	0.2502						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B8

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.263	633.4	0.7396	2.605	659.0	0.7396
2	0.000		0.7396	4.404	849.1	0.7396	9.232	985.1	0.7396
3	0.000		0.7306	6.254	934.5	0.7321	12.999	1116.6	0.7225
4	0.000	Data	0.6668	7.602	1042.9	0.6906	15.228	1222.4	0.6708
5	0.000	Not	0.5965	8.443	1117.2	0.6320	16.274	1248.4	0.6050
6	0.000	Required	0.5314	8.936	1163.4	0.5673	16.728	1243.4	0.5388
7	0.000		0.4774	9.232	1192.1	0.5067	16.945	1233.4	0.4808
8	0.000		0.4334	9.449	1213.5	0.4547	17.097	1225.1	0.4326
9	0.000		0.3968	9.949	1264.4	0.4106	17.690	1236.9	0.3921
10	0.000		0.3662	9.907	1260.0	0.3733	17.614	1232.6	0.3576
11	0.000		0.3410	9.714	1240.2	0.3424	17.395	1229.3	0.3287
12	0.000		0.3200	9.428	1211.4	0.3167	17.080	1225.7	0.3044
13	0.000		0.3024	9.088	1178.0	0.2953	16.700	1220.6	0.2837
14	0.000		0.2876	8.716	1142.6	0.2772	16.266	1212.9	0.2660
15	0.000		0.2750	8.325	1106.5	0.2618	15.776	1200.6	0.2507
16	0.000		0.2643	7.914	1069.8	0.2486	15.218	1182.6	0.2374
17	0.000		0.2552	7.459	1030.8	0.2373	14.549	1156.9	0.2258
18	0.000		0.2477	6.808	977.5	0.2275	13.566	1118.1	0.2155
19	0.000		0.2415	6.399	945.6	0.2192	12.821	1080.2	0.2068
20	0.000		0.2356	6.040	918.5	0.2117	12.090	1039.9	0.1991
21	0.000		0.2306	5.626	888.2	0.2050	11.179	988.5	0.1923
22	0.000		0.2264	4.981	843.3	0.1993	9.851	922.3	0.1866
23	0.000		0.2230	4.246	794.9	0.1946	8.296	849.0	0.1820
24	0.000		0.2207	1.949	661.0	0.1911	3.823	682.3	0.1786
25	0.000		0.2196	1.215	622.9	0.1896	2.352	633.4	0.1773
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.710	668.7	0.7396	6.411	651.5	0.7396	8.014	660.7	0.7396
2	16.502	1011.5	0.7396	21.875	890.2	0.7396	26.603	898.9	0.7396
3	22.203	1078.8	0.7195	28.836	921.2	0.7219	34.618	926.7	0.7237
4	25.157	1136.1	0.6662	32.318	958.0	0.6719	38.579	965.8	0.6763
5	26.327	1146.2	0.6004	33.759	977.8	0.6101	40.244	984.6	0.6174
6	26.697	1139.4	0.5356	34.330	992.3	0.5487	40.915	993.2	0.5581
7	26.820	1131.7	0.4793	34.645	1006.6	0.4947	41.269	996.6	0.5050
8	26.924	1127.9	0.4327	34.936	1020.8	0.4492	41.599	999.9	0.4597
9	27.642	1138.0	0.3937	35.929	1042.0	0.4104	42.701	1009.4	0.4207
10	27.529	1135.0	0.3603	35.985	1055.3	0.3772	42.742	1008.1	0.3873
11	27.231	1128.6	0.3322	35.843	1067.7	0.3490	42.530	1002.0	0.3588
12	26.811	1120.1	0.3084	35.571	1079.6	0.3248	42.155	993.1	0.3343
13	26.308	1110.3	0.2881	35.209	1091.1	0.3040	41.666	982.3	0.3132
14	25.735	1099.4	0.2705	34.764	1101.6	0.2858	41.079	970.3	0.2948
15	25.090	1087.3	0.2552	34.226	1110.5	0.2698	40.383	957.1	0.2785
16	24.356	1073.7	0.2418	33.576	1117.6	0.2557	39.547	941.9	0.2642
17	23.486	1058.4	0.2301	32.742	1120.6	0.2432	38.489	923.9	0.2514
18	22.278	1041.6	0.2197	31.526	1119.9	0.2321	37.018	903.8	0.2402
19	21.197	1017.0	0.2107	30.308	1108.4	0.2221	35.535	883.5	0.2301
20	19.989	983.2	0.2027	28.795	1083.3	0.2132	33.746	862.8	0.2211
21	18.284	929.5	0.1956	26.409	1029.4	0.2053	30.938	832.2	0.2131
22	16.055	872.4	0.1897	23.309	964.7	0.1986	27.297	794.6	0.2064
23	13.409	808.2	0.1849	19.459	882.3	0.1931	22.682	744.4	0.2006
24	6.184	666.7	0.1816	9.102	700.6	0.1896	10.656	645.4	0.1974
25	3.734	622.3	0.1802	5.439	640.6	0.1878	6.308	608.2	0.1951

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B8 (Continued)

		Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	
1	8.991	660.3	0.7396	9.180	571.7	0.7396	9.257	568.2	0.7396	
2	29.343	877.6	0.7396	29.842	590.7	0.7396	30.043	581.0	0.7396	
3	37.903	894.5	0.7247	38.475	593.1	0.7252	38.703	583.3	0.7254	
4	42.077	921.7	0.6788	42.696	595.6	0.6799	42.940	584.8	0.6803	
5	43.825	932.6	0.6216	44.499	598.5	0.6236	44.761	586.4	0.6244	
6	44.519	935.6	0.5636	45.266	602.4	0.5668	45.554	588.7	0.5679	
7	44.878	936.2	0.5112	45.714	607.2	0.5157	46.033	591.5	0.5174	
8	45.215	937.2	0.4663	46.153	612.7	0.4721	46.507	594.7	0.4743	
9	46.363	943.3	0.4274	47.421	619.2	0.4345	47.813	598.1	0.4371	
10	46.416	944.9	0.3940	47.587	625.3	0.4026	48.018	601.7	0.4057	
11	46.201	944.5	0.3654	47.480	631.3	0.3754	47.952	605.4	0.3791	
12	45.819	943.5	0.3409	47.197	636.8	0.3521	47.713	609.4	0.3563	
13	45.323	942.6	0.3196	46.789	641.7	0.3317	47.351	613.6	0.3366	
14	44.727	941.4	0.3011	46.267	645.9	0.3137	46.877	618.1	0.3192	
15	44.019	939.8	0.2847	45.619	649.3	0.2977	46.277	622.5	0.3039	
16	43.164	937.3	0.2702	44.809	651.8	0.2834	45.515	627.0	0.2901	
17	42.071	932.7	0.2574	43.747	653.6	0.2707	44.500	631.4	0.2779	
18	40.547	925.8	0.2461	42.239	654.5	0.2595	43.036	635.6	0.2672	
19	38.974	914.1	0.2358	40.654	653.8	0.2492	41.484	638.7	0.2572	
20	37.048	896.7	0.2267	38.683	651.2	0.2398	39.527	640.0	0.2481	
21	33.981	864.7	0.2185	35.501	644.7	0.2315	36.322	637.8	0.2399	
22	29.996	824.0	0.2117	31.357	635.8	0.2245	32.123	632.6	0.2330	
23	24.873	767.6	0.2058	25.969	621.2	0.2178	26.606	620.6	0.2262	
24	11.724	656.1	0.2027	12.210	588.5	0.2138	12.496	588.6	0.2216	
25	6.906	614.0	0.2001	7.150	575.7	0.2096	7.292	575.6	0.2163	

Statepoint 10 (495.2, EOC Cy 7)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	9.357	566.4	0.7396
2	30.298	576.1	0.7396
3	38.986	578.2	0.7256
4	43.234	578.8	0.6809
5	45.071	579.6	0.6253
6	45.890	581.0	0.5693
7	46.404	582.9	0.5193
8	46.919	585.2	0.4767
9	48.277	588.0	0.4402
10	48.535	590.8	0.4094
11	48.528	594.1	0.3836
12	48.356	597.7	0.3616
13	48.069	601.8	0.3428
14	47.680	606.5	0.3265
15	47.173	611.6	0.3123
16	46.512	617.2	0.2998
17	45.603	623.1	0.2889
18	44.248	629.3	0.2796
19	42.787	634.4	0.2707
20	40.893	638.0	0.2626
21	37.685	637.9	0.2550
22	33.427	634.5	0.2487
23	27.710	623.2	0.2418
24	12.994	589.8	0.2363
25	7.540	576.2	0.2288

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B9

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.186	628.8	0.7396	2.541	660.0	0.7396
2	0.000		0.7396	4.150	829.6	0.7396	9.026	990.4	0.7396
3	0.000		0.7276	5.895	907.8	0.7350	12.715	1125.2	0.7233
4	0.000	Data	0.6616	7.156	1005.6	0.6977	14.846	1230.4	0.6732
5	0.000	Not	0.5908	7.943	1072.4	0.6442	15.790	1250.5	0.6101
6	0.000	Required	0.5269	8.414	1114.6	0.5834	16.162	1237.8	0.5467
7	0.000		0.4744	8.702	1141.3	0.5246	16.318	1221.1	0.4904
8	0.000		0.4318	8.919	1161.8	0.4729	16.424	1207.3	0.4428
9	0.000		0.3964	9.410	1209.6	0.4283	16.979	1215.2	0.4027
10	0.000		0.3665	9.390	1207.6	0.3902	16.896	1207.4	0.3681
11	0.000		0.3419	9.235	1192.4	0.3587	16.694	1201.6	0.3391
12	0.000		0.3213	9.005	1170.0	0.3322	16.420	1196.2	0.3144
13	0.000		0.3040	8.732	1144.1	0.3099	16.098	1190.1	0.2934
14	0.000		0.2893	8.435	1116.5	0.2910	15.728	1181.2	0.2753
15	0.000		0.2768	8.126	1088.6	0.2749	15.303	1167.2	0.2596
16	0.000		0.2662	7.808	1060.6	0.2609	14.811	1146.6	0.2460
17	0.000		0.2572	7.454	1030.3	0.2488	14.211	1117.9	0.2342
18	0.000		0.2497	6.891	984.1	0.2384	13.298	1078.5	0.2237
19	0.000		0.2434	6.546	956.9	0.2292	12.615	1041.9	0.2148
20	0.000		0.2377	6.221	932.0	0.2210	11.940	1005.3	0.2068
21	0.000		0.2327	5.819	902.2	0.2137	11.091	960.6	0.1998
22	0.000		0.2284	5.169	856.1	0.2074	9.828	902.8	0.1937
23	0.000		0.2249	4.417	805.9	0.2022	8.326	837.0	0.1888
24	0.000		0.2226	2.034	665.5	0.1984	3.856	678.8	0.1852
25	0.000		0.2214	1.265	625.4	0.1968	2.370	631.4	0.1839
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	4.409	655.8	0.7396	6.272	660.8	0.7396	8.044	672.0	0.7396
2	15.604	957.9	0.7396	21.508	930.5	0.7396	26.691	939.3	0.7396
3	21.176	1023.2	0.7231	28.391	961.9	0.7233	34.675	967.7	0.7241
4	24.112	1083.6	0.6738	31.804	996.7	0.6752	38.532	1005.6	0.6775
5	25.294	1102.1	0.6118	33.183	1011.4	0.6154	40.060	1018.7	0.6194
6	25.669	1102.4	0.5493	33.696	1021.9	0.5553	40.594	1020.5	0.5607
7	25.776	1098.5	0.4939	33.948	1033.1	0.5017	40.827	1018.8	0.5077
8	25.872	1097.7	0.4472	34.198	1045.0	0.4563	41.075	1018.7	0.4626
9	26.564	1108.5	0.4077	35.138	1064.6	0.4174	42.094	1025.7	0.4238
10	26.446	1105.7	0.3739	35.167	1076.5	0.3840	42.098	1023.5	0.3904
11	26.154	1098.7	0.3452	35.015	1087.8	0.3554	41.890	1018.5	0.3620
12	25.754	1088.8	0.3208	34.750	1098.9	0.3310	41.545	1011.4	0.3374
13	25.281	1077.2	0.3000	34.406	1109.6	0.3098	41.106	1003.2	0.3161
14	24.744	1064.4	0.2819	33.986	1119.4	0.2913	40.574	993.5	0.2976
15	24.134	1050.5	0.2662	33.475	1127.8	0.2751	39.931	982.2	0.2812
16	23.434	1035.0	0.2525	32.849	1134.1	0.2607	39.142	968.4	0.2667
17	22.594	1017.5	0.2406	32.035	1136.3	0.2480	38.128	951.8	0.2539
18	21.402	997.6	0.2300	30.810	1133.5	0.2367	36.681	933.8	0.2425
19	20.329	970.4	0.2207	29.548	1117.5	0.2266	35.192	915.7	0.2324
20	19.142	935.9	0.2124	27.975	1085.5	0.2176	33.381	897.2	0.2233
21	17.512	885.8	0.2052	25.576	1024.8	0.2095	30.570	866.0	0.2154
22	15.388	833.9	0.1990	22.512	955.4	0.2028	26.949	825.7	0.2086
23	12.860	776.1	0.1939	18.747	871.7	0.1972	22.368	770.1	0.2029
24	5.913	652.6	0.1904	8.716	694.7	0.1937	10.479	657.1	0.1995
25	3.559	613.8	0.1888	5.191	637.2	0.1918	6.189	615.1	0.1974

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B9 (Continued)

Node No.	Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7
1	9.138	673.2	0.7396	9.366	574.0	0.7396	9.459	569.8	0.7396
2	29.724	919.3	0.7396	30.322	596.8	0.7396	30.559	584.7	0.7396
3	38.279	935.6	0.7247	38.965	599.1	0.7253	39.234	587.0	0.7255
4	42.353	964.7	0.6790	43.096	602.2	0.6803	43.385	588.8	0.6808
5	43.974	977.4	0.6221	44.783	605.7	0.6245	45.097	591.1	0.6254
6	44.555	984.0	0.5643	45.450	610.3	0.5679	45.798	594.1	0.5694
7	44.820	988.4	0.5118	45.814	615.7	0.5170	46.202	597.8	0.5190
8	45.094	992.1	0.4668	46.194	621.5	0.4736	46.626	601.8	0.4761
9	46.174	1000.7	0.4281	47.392	627.9	0.4362	47.873	606.2	0.4394
10	46.189	1002.2	0.3947	47.509	633.6	0.4042	48.039	610.7	0.4080
11	45.982	1002.4	0.3662	47.395	638.7	0.3767	47.976	615.4	0.3812
12	45.635	1002.1	0.3416	47.131	643.4	0.3530	47.764	620.2	0.3582
13	45.190	1001.2	0.3203	46.757	647.4	0.3322	47.443	625.1	0.3381
14	44.649	1000.0	0.3016	46.273	650.6	0.3139	47.012	630.1	0.3203
15	43.990	997.7	0.2851	45.656	653.0	0.2976	46.445	634.8	0.3045
16	43.174	993.9	0.2705	44.868	654.6	0.2831	45.704	639.3	0.2903
17	42.111	987.0	0.2576	43.820	655.5	0.2701	44.699	643.4	0.2776
18	40.600	978.1	0.2461	42.311	655.6	0.2586	43.227	646.9	0.2665
19	39.014	964.8	0.2358	40.700	654.1	0.2483	41.637	648.9	0.2563
20	37.062	945.8	0.2267	38.693	651.0	0.2389	39.630	648.9	0.2470
21	33.974	909.6	0.2186	35.483	644.1	0.2306	36.380	645.1	0.2387
22	29.982	863.4	0.2117	31.327	635.0	0.2235	32.153	638.3	0.2316
23	24.848	799.2	0.2060	25.927	620.3	0.2171	26.607	624.6	0.2250
24	11.708	671.1	0.2026	12.185	588.0	0.2129	12.489	590.2	0.2203
25	6.890	623.1	0.2003	7.128	575.4	0.2091	7.279	576.4	0.2155
Statepoint 10 (495.2, EOC Cy 7)									
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)						
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7						
1	9.565	566.8	0.7396						
2	30.828	576.9	0.7396						
3	39.532	579.0	0.7257						
4	43.696	579.7	0.6814						
5	45.428	580.8	0.6263						
6	46.160	582.4	0.5708						
7	46.605	584.7	0.5210						
8	47.077	587.3	0.4788						
9	48.385	590.6	0.4427						
10	48.612	593.9	0.4121						
11	48.617	597.6	0.3862						
12	48.482	601.8	0.3640						
13	48.246	606.5	0.3449						
14	47.907	611.5	0.3283						
15	47.440	617.1	0.3137						
16	46.806	623.1	0.3007						
17	45.910	629.2	0.2893						
18	44.549	635.5	0.2795						
19	43.054	640.9	0.2704						
20	41.109	644.5	0.2619						
21	37.850	644.0	0.2541						
22	33.556	640.1	0.2477						
23	27.791	627.7	0.2408						
24	13.023	591.8	0.2351						
25	7.543	577.1	0.2281						

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B10

Node No.	Datapoint 1 (BOC Cy 4)			Datapoint 2 (208.6 EFPD Cy 4)			Datapoint 3 (BOC Cy 5)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 4	0.00 Cy 4	0.00 Cy 4	208.6 Cy 4	208.6 Cy 4	208.6 Cy 4	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5
1	0.000		0.7396	1.354	639.0	0.7396	2.676	657.4	0.7396
2	0.000		0.7396	4.725	874.4	0.7396	9.500	979.2	0.7396
3	0.000		0.7284	6.700	969.0	0.7288	13.331	1103.6	0.7219
4	0.000	Data	0.6623	8.068	1083.4	0.6829	15.530	1201.9	0.6687
5	0.000	Not	0.5903	8.835	1153.8	0.6201	16.496	1226.8	0.6013
6	0.000	Required	0.5252	9.217	1190.6	0.5534	16.856	1224.0	0.5342
7	0.000		0.4718	9.408	1209.4	0.4932	16.988	1216.6	0.4762
8	0.000		0.4286	9.541	1222.7	0.4428	17.070	1210.3	0.4285
9	0.000		0.3929	9.975	1267.1	0.4004	17.606	1223.0	0.3887
10	0.000		0.3631	9.890	1258.3	0.3646	17.492	1219.4	0.3549
11	0.000		0.3385	9.669	1235.7	0.3349	17.246	1216.2	0.3267
12	0.000		0.3180	9.364	1205.1	0.3103	16.909	1212.2	0.3030
13	0.000		0.3009	9.007	1170.2	0.2897	16.506	1206.5	0.2828
14	0.000		0.2864	8.617	1133.3	0.2723	16.048	1198.1	0.2654
15	0.000		0.2740	8.205	1095.6	0.2575	15.537	1186.0	0.2505
16	0.000		0.2635	7.772	1057.5	0.2448	14.962	1168.8	0.2375
17	0.000		0.2545	7.294	1017.0	0.2339	14.284	1145.0	0.2260
18	0.000		0.2470	6.631	963.6	0.2246	13.303	1108.2	0.2159
19	0.000		0.2408	6.214	931.5	0.2166	12.567	1072.6	0.2073
20	0.000		0.2349	5.854	904.8	0.2095	11.845	1033.6	0.1996
21	0.000		0.2300	5.443	875.2	0.2030	10.946	983.4	0.1929
22	0.000		0.2259	4.813	831.9	0.1975	9.629	917.2	0.1872
23	0.000		0.2225	4.096	785.4	0.1930	8.093	844.5	0.1826
24	0.000		0.2203	1.874	657.0	0.1896	3.722	680.5	0.1793
25	0.000		0.2191	1.167	620.4	0.1883	2.283	632.1	0.1780
Node No.	Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6
1	3.970	625.2	0.7396	4.821	604.6	0.7396	5.812	620.8	0.7396
2	14.101	818.8	0.7396	16.927	718.0	0.7396	20.126	774.4	0.7396
3	19.222	853.5	0.7276	22.724	731.4	0.7314	26.747	797.0	0.7337
4	22.000	888.9	0.6824	25.821	748.7	0.6916	30.226	823.4	0.6972
5	23.234	905.8	0.6244	27.271	760.7	0.6403	31.927	841.3	0.6499
6	23.753	916.0	0.5654	28.001	772.6	0.5877	33.003	866.6	0.6010
7	24.003	923.6	0.5125	28.474	785.4	0.5403	33.606	876.3	0.5553
8	24.187	930.3	0.4670	28.892	799.0	0.4989	34.060	879.0	0.5145
9	24.918	943.2	0.4274	29.928	817.1	0.4621	35.164	884.2	0.4774
10	24.865	947.3	0.3936	30.100	830.8	0.4301	35.320	883.0	0.4451
11	24.641	948.7	0.3649	30.081	843.4	0.4025	35.264	880.2	0.4170
12	24.294	948.1	0.3403	29.922	855.2	0.3785	35.051	876.1	0.3925
13	23.852	945.5	0.3193	29.656	866.4	0.3575	34.719	871.1	0.3709
14	23.328	941.1	0.3010	29.293	876.8	0.3391	34.274	865.0	0.3518
15	22.720	934.6	0.2851	28.828	886.1	0.3227	33.710	857.7	0.3350
16	22.013	926.0	0.2711	28.242	894.0	0.3083	32.998	848.5	0.3201
17	21.158	914.5	0.2588	27.474	899.8	0.2955	32.073	837.2	0.3069
18	19.954	900.3	0.2485	26.319	903.1	0.2848	30.756	825.7	0.2957
19	18.895	880.0	0.2388	25.199	899.0	0.2743	29.511	816.9	0.2851
20	17.751	854.4	0.2299	23.867	886.6	0.2645	28.242	821.3	0.2757
21	16.215	817.1	0.2217	21.877	857.4	0.2551	26.119	812.0	0.2666
22	14.201	778.2	0.2152	19.298	822.4	0.2478	23.123	783.6	0.2590
23	11.808	733.0	0.2095	16.063	773.0	0.2410	19.211	739.6	0.2519
24	5.353	633.3	0.2051	7.280	651.3	0.2363	8.741	640.2	0.2472
25	3.188	601.5	0.2020	4.242	610.3	0.2311	5.150	610.3	0.2435

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly B10 (Continued)

		Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	
1	6.617	641.8	0.7396	7.711	628.5	0.7396	8.455	639.7	0.7396	
2	22.566	836.7	0.7396	25.769	778.4	0.7396	27.907	812.8	0.7396	
3	29.697	853.5	0.7338	33.712	800.5	0.7352	36.425	843.4	0.7355	
4	33.357	875.4	0.6981	37.890	837.3	0.7016	40.975	891.1	0.7025	
5	35.202	893.3	0.6519	40.117	865.6	0.6579	43.443	923.6	0.6594	
6	36.629	938.5	0.6042	41.797	884.9	0.6121	45.232	938.7	0.6140	
7	37.356	955.1	0.5587	42.793	905.9	0.5678	46.317	951.2	0.5698	
8	37.834	958.3	0.5176	43.549	928.1	0.5271	47.166	964.5	0.5290	
9	38.984	964.5	0.4804	45.001	953.0	0.4894	48.746	983.1	0.4911	
10	39.140	964.5	0.4478	45.302	965.2	0.4563	49.126	994.8	0.4575	
11	39.081	964.1	0.4195	45.270	967.5	0.4270	49.150	1003.2	0.4279	
12	38.871	964.5	0.3947	45.005	962.8	0.4014	48.915	1007.7	0.4020	
13	38.556	966.9	0.3729	44.576	953.3	0.3789	48.495	1009.1	0.3793	
14	38.112	967.0	0.3537	43.976	940.3	0.3590	47.869	1005.1	0.3592	
15	37.538	965.6	0.3366	43.199	923.8	0.3414	47.019	994.2	0.3414	
16	36.805	962.8	0.3214	42.207	903.1	0.3258	45.901	975.7	0.3256	
17	35.842	957.6	0.3078	40.917	877.7	0.3118	44.428	949.4	0.3116	
18	34.474	950.7	0.2963	39.179	849.9	0.3000	42.467	918.4	0.2996	
19	33.136	938.4	0.2854	37.475	823.3	0.2889	40.529	887.1	0.2885	
20	31.705	917.2	0.2758	35.683	798.0	0.2791	38.492	855.4	0.2787	
21	29.295	880.9	0.2666	32.843	768.8	0.2699	35.355	818.7	0.2696	
22	25.944	838.2	0.2588	29.020	738.0	0.2621	31.203	779.9	0.2619	
23	21.524	780.8	0.2517	23.994	700.3	0.2550	25.760	733.5	0.2549	
24	9.854	660.3	0.2469	11.051	626.8	0.2505	11.930	643.4	0.2505	
25	5.813	619.7	0.2439	6.482	598.2	0.2474	6.985	608.2	0.2474	
		Statepoint 10 (495.2, EOC Cy 7)								
Node	Burnup	Fuel	Mod. Dens.							
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)							
	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7							
1	9.961	658.3	0.7396							
2	31.931	852.9	0.7396							
3	41.129	858.6	0.7357							
4	45.861	872.7	0.7033							
5	48.312	871.3	0.6612							
6	50.035	866.2	0.6166							
7	51.129	866.9	0.5732							
8	52.058	873.1	0.5330							
9	53.801	885.9	0.4956							
10	54.348	899.2	0.4623							
11	54.562	914.7	0.4330							
12	54.531	931.5	0.4071							
13	54.326	949.7	0.3843							
14	53.929	969.4	0.3639							
15	53.312	990.0	0.3458							
16	52.412	1009.6	0.3296							
17	51.111	1025.4	0.3151							
18	49.249	1034.6	0.3026							
19	47.275	1031.2	0.2909							
20	45.025	1011.6	0.2805							
21	41.409	968.9	0.2708							
22	36.589	912.5	0.2627							
23	30.163	835.9	0.2555							
24	14.166	689.5	0.2508							
25	8.263	633.0	0.2478							

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C1

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.543	638.0	0.7396	2.776	625.1	0.7396
2	0.000		0.7396	5.182	856.3	0.7396	9.387	806.2	0.7396
3	0.000		0.7342	7.196	933.8	0.7342	13.258	881.6	0.7364
4	0.000	Data	0.6972	8.386	1015.6	0.6972	15.477	951.3	0.7023
5	0.000	Not	0.6468	8.829	1048.0	0.6468	16.313	979.4	0.6552
6	0.000	Required	0.5913	8.896	1052.9	0.5913	16.513	989.1	0.6030
7	0.000		0.5380	8.853	1049.7	0.5380	16.540	994.3	0.5522
8	0.000		0.4910	8.860	1050.3	0.4910	16.648	1001.8	0.5067
9	0.000		0.4502	9.200	1075.9	0.4502	17.289	1024.4	0.4663
10	0.000		0.4151	9.173	1073.9	0.4151	17.361	1032.0	0.4312
11	0.000		0.3850	9.063	1065.5	0.3850	17.323	1037.6	0.4009
12	0.000		0.3592	8.910	1054.0	0.3592	17.231	1042.3	0.3746
13	0.000		0.3370	8.730	1040.6	0.3370	17.110	1046.9	0.3516
14	0.000		0.3178	8.526	1025.7	0.3178	16.959	1051.1	0.3315
15	0.000		0.3009	8.294	1009.0	0.3009	16.765	1054.1	0.3136
16	0.000		0.2862	8.023	989.8	0.2862	16.504	1054.8	0.2977
17	0.000		0.2732	7.697	967.3	0.2732	16.135	1051.5	0.2835
18	0.000		0.2619	7.296	940.4	0.2619	15.601	1041.1	0.2709
19	0.000		0.2519	6.804	908.4	0.2519	14.831	1019.7	0.2596
20	0.000		0.2434	6.205	871.1	0.2434	13.752	984.0	0.2498
21	0.000		0.2362	5.362	821.3	0.2362	12.077	925.2	0.2415
22	0.000		0.2304	4.486	772.7	0.2304	10.171	857.5	0.2346
23	0.000		0.2258	3.618	727.4	0.2258	8.153	788.1	0.2291
24	0.000		0.2228	1.599	631.6	0.2228	3.659	657.3	0.2255
25	0.000		0.2214	0.963	603.8	0.2214	2.150	616.2	0.2237
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	3.734	618.5	0.7396	4.763	665.6	0.7396	6.044	640.4	0.7396
2	12.818	791.3	0.7396	16.272	980.4	0.7396	20.456	856.6	0.7396
3	17.920	840.5	0.7367	22.151	1020.1	0.7341	27.487	896.4	0.7347
4	20.875	895.1	0.7042	25.261	1042.7	0.6998	31.220	946.4	0.7014
5	22.471	955.4	0.6598	26.763	1029.0	0.6546	33.060	974.8	0.6570
6	23.368	1014.6	0.6100	27.531	1010.4	0.6049	34.009	990.3	0.6078
7	23.831	1053.6	0.5597	27.888	995.4	0.5554	34.485	1000.7	0.5583
8	24.023	1061.3	0.5127	28.025	987.7	0.5095	34.753	1012.2	0.5124
9	24.799	1073.8	0.4713	28.810	988.9	0.4690	35.713	1027.9	0.4717
10	25.171	1102.1	0.4365	29.120	980.3	0.4349	35.999	1025.7	0.4371
11	25.103	1099.2	0.4050	29.024	976.5	0.4041	35.834	1019.5	0.4063
12	24.846	1083.6	0.3775	28.753	974.5	0.3772	35.448	1009.3	0.3793
13	24.579	1070.0	0.3539	28.470	972.3	0.3540	35.000	994.8	0.3561
14	24.218	1050.6	0.3331	28.097	970.7	0.3334	34.429	977.7	0.3356
15	23.782	1028.9	0.3147	27.647	968.8	0.3154	33.742	957.7	0.3176
16	23.257	1005.6	0.2986	27.096	965.2	0.2993	32.902	933.9	0.3016
17	22.595	980.5	0.2843	26.389	959.2	0.2852	31.843	905.7	0.2876
18	21.747	954.4	0.2717	25.471	949.8	0.2726	30.537	875.7	0.2751
19	20.675	929.9	0.2606	24.301	936.8	0.2616	29.010	849.0	0.2642
20	19.305	907.0	0.2512	22.786	917.9	0.2521	27.171	825.5	0.2549
21	17.121	868.4	0.2429	20.335	884.2	0.2437	24.311	796.8	0.2467
22	14.513	817.9	0.2360	17.357	839.7	0.2367	20.823	762.5	0.2399
23	11.551	754.8	0.2304	13.854	778.8	0.2311	16.635	718.8	0.2343
24	5.132	640.6	0.2268	6.139	650.2	0.2274	7.376	628.7	0.2308
25	2.973	605.7	0.2250	3.534	610.6	0.2256	4.223	599.2	0.2290

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C1 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.810	641.9	0.7396	8.192	649.4	0.7396	8.196	572.9	0.7396
2	22.894	853.6	0.7396	26.931	852.8	0.7396	26.943	598.8	0.7396
3	30.615	895.4	0.7349	35.374	861.5	0.7350	35.388	601.7	0.735
4	34.728	947.2	0.7018	39.673	875.9	0.7024	39.689	607.3	0.7025
5	36.743	972.2	0.6576	41.734	879.5	0.6594	41.752	613.0	0.6594
6	37.745	979.8	0.6086	42.798	884.3	0.6118	42.817	615.8	0.6118
7	38.234	981.7	0.5593	43.403	893.5	0.5640	43.424	621.5	0.5641
8	38.526	985.3	0.5134	43.861	906.8	0.5195	43.885	630.2	0.5197
9	39.546	994.1	0.4728	45.101	924.8	0.4797	45.127	636.0	0.4798
10	39.819	992.2	0.4381	45.533	938.0	0.4454	45.561	641.9	0.4456
11	39.637	989.7	0.4074	45.523	952.6	0.4148	45.553	647.8	0.4151
12	39.241	988.2	0.3805	45.305	967.9	0.3881	45.336	650.7	0.3883
13	38.794	988.3	0.3573	45.027	982.6	0.3646	45.059	653.7	0.3649
14	38.258	993.5	0.3368	44.651	996.8	0.3440	44.684	656.7	0.3442
15	37.633	1002.7	0.3187	44.168	1009.6	0.3256	44.202	659.7	0.3258
16	36.829	1008.1	0.3027	43.487	1020.9	0.3093	43.520	656.7	0.3095
17	35.722	1000.9	0.2885	42.470	1029.2	0.2947	42.503	656.7	0.2949
18	34.270	979.4	0.2759	41.048	1032.0	0.2818	41.081	656.7	0.2820
19	32.545	951.0	0.2649	39.255	1025.7	0.2702	39.287	653.7	0.2704
20	30.477	919.2	0.2554	36.972	1006.0	0.2602	37.004	653.7	0.2604
21	27.302	877.4	0.2472	33.322	964.1	0.2514	33.352	647.8	0.2517
22	23.428	828.9	0.2403	28.768	907.2	0.2441	28.794	636.0	0.2443
23	18.729	768.9	0.2346	23.063	829.6	0.2380	23.084	621.5	0.2382
24	8.325	649.8	0.2311	10.338	675.5	0.2343	10.347	587.8	0.2345
25	4.757	610.9	0.2292	5.884	624.2	0.2323	5.889	576.7	0.2324

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C2

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.704	646.6	0.7396	3.158	637.3	0.7396
2	0.000		0.7396	5.654	889.0	0.7396	10.612	858.6	0.7396
3	0.000		0.7298	7.763	971.8	0.7298	14.787	946.5	0.7306
4	0.000	Data	0.6870	8.996	1060.4	0.6870	17.064	1022.8	0.6889
5	0.000	Not	0.6299	9.461	1096.1	0.6299	17.889	1050.7	0.6336
6	0.000	Required	0.5692	9.542	1102.4	0.5692	18.070	1058.5	0.5752
7	0.000		0.5135	9.512	1100.1	0.5135	18.088	1062.3	0.5214
8	0.000		0.4660	9.532	1101.6	0.4660	18.190	1068.9	0.4751
9	0.000		0.4257	9.890	1130.1	0.4257	18.818	1090.7	0.4352
10	0.000		0.3912	9.855	1127.3	0.3912	18.873	1098.0	0.4009
11	0.000		0.3617	9.725	1116.9	0.3617	18.816	1104.1	0.3715
12	0.000		0.3367	9.543	1102.5	0.3367	18.701	1109.6	0.3461
13	0.000		0.3154	9.330	1085.9	0.3154	18.548	1114.6	0.3241
14	0.000		0.2969	9.090	1067.5	0.2969	18.360	1119.0	0.3048
15	0.000		0.2809	8.822	1047.4	0.2809	18.131	1122.2	0.2878
16	0.000		0.2668	8.516	1025.0	0.2668	17.850	1124.3	0.2727
17	0.000		0.2545	8.161	999.5	0.2545	17.481	1123.2	0.2592
18	0.000		0.2438	7.738	970.1	0.2438	16.959	1114.9	0.2471
19	0.000		0.2344	7.223	935.6	0.2344	16.176	1092.7	0.2364
20	0.000		0.2263	6.592	895.0	0.2263	15.038	1052.1	0.2271
21	0.000		0.2195	5.705	841.2	0.2195	13.232	982.5	0.2191
22	0.000		0.2139	4.789	789.1	0.2139	11.173	902.8	0.2126
23	0.000		0.2096	3.892	741.4	0.2096	9.008	822.4	0.2074
24	0.000		0.2066	1.743	638.1	0.2066	4.105	672.1	0.2040
25	0.000		0.2053	1.060	608.0	0.2053	2.444	625.3	0.2024
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.364	634.3	0.7396	5.065	630.5	0.7396	5.870	609.7	0.7396
2	14.801	851.9	0.7396	17.108	818.1	0.7396	19.758	735.7	0.7396
3	20.126	890.6	0.7326	22.932	835.3	0.7338	26.246	752.6	0.7354
4	22.824	923.3	0.6945	25.797	854.9	0.6976	29.441	774.3	0.7018
5	23.759	932.0	0.6438	26.788	861.6	0.6494	30.680	791.1	0.6572
6	23.941	932.1	0.5896	26.999	865.1	0.5976	31.117	806.7	0.6095
7	23.923	929.2	0.5385	27.003	867.8	0.5486	31.331	821.4	0.5639
8	23.986	926.1	0.4935	27.083	869.9	0.5048	31.630	837.2	0.5228
9	24.644	928.5	0.4540	27.791	876.0	0.4657	32.785	870.2	0.4861
10	24.651	924.7	0.4198	27.808	877.2	0.4319	33.803	949.4	0.4554
11	24.526	919.3	0.3904	27.686	877.6	0.4024	34.029	978.7	0.4248
12	24.332	913.1	0.3651	27.487	876.9	0.3770	33.921	986.5	0.3974
13	24.115	908.1	0.3432	27.262	876.0	0.3549	33.917	1005.8	0.3746
14	23.829	900.5	0.3237	26.967	874.9	0.3353	33.585	1002.5	0.3530
15	23.478	891.2	0.3062	26.603	873.3	0.3176	33.083	990.5	0.3337
16	23.056	880.5	0.2906	26.157	870.4	0.3019	32.548	982.8	0.3170
17	22.523	868.2	0.2768	25.586	865.7	0.2878	31.755	963.9	0.3016
18	21.821	855.0	0.2644	24.829	859.1	0.2753	30.714	940.3	0.2881
19	20.850	841.4	0.2536	23.789	850.9	0.2644	29.390	917.3	0.2764
20	19.496	826.0	0.2444	22.336	839.2	0.2551	27.567	888.3	0.2663
21	17.325	800.7	0.2368	19.972	817.0	0.2475	24.665	847.8	0.2580
22	14.759	767.0	0.2305	17.134	786.6	0.2413	21.175	801.3	0.2512
23	11.874	721.4	0.2250	13.826	741.7	0.2357	17.005	743.9	0.2451
24	5.368	629.1	0.2210	6.228	636.9	0.2313	7.582	635.2	0.2402
25	3.139	598.9	0.2183	3.608	602.7	0.2282	4.333	601.1	0.2367

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C2 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.173	591.6	0.7396	6.943	608.7	0.7396	6.952	589.0	0.7396
2	20.731	665.4	0.7396	23.016	713.4	0.7396	23.041	642.7	0.7396
3	27.464	676.1	0.7363	30.157	717.5	0.7377	30.186	644.8	0.7377
4	30.802	690.4	0.7041	33.648	727.3	0.7075	33.679	650.7	0.7075
5	32.166	703.3	0.6616	35.143	735.7	0.6678	35.177	659.7	0.6679
6	32.726	716.1	0.6163	35.870	746.7	0.6255	35.907	668.8	0.6256
7	33.051	727.8	0.5730	36.390	759.7	0.5850	36.430	678.0	0.5851
8	33.447	738.3	0.5337	36.987	773.3	0.5479	37.030	687.3	0.5481
9	34.685	747.3	0.4981	38.434	787.7	0.5136	38.479	693.6	0.5137
10	35.717	748.9	0.4676	39.571	795.1	0.4834	39.618	700.0	0.4835
11	35.978	752.7	0.4376	39.993	806.5	0.4540	40.041	703.2	0.4541
12	35.908	756.9	0.4106	40.104	819.5	0.4275	40.152	703.2	0.4276
13	35.924	759.2	0.3877	40.277	831.0	0.4046	40.325	703.2	0.4047
14	35.624	762.7	0.3663	40.159	844.5	0.3833	40.207	703.2	0.3833
15	35.153	766.2	0.3471	39.876	858.8	0.3639	39.925	706.4	0.3641
16	34.634	768.0	0.3303	39.528	871.9	0.3469	39.576	703.2	0.3470
17	33.848	768.8	0.3149	38.905	884.6	0.3313	38.953	703.2	0.3315
18	32.804	768.5	0.3012	37.997	895.4	0.3175	38.044	700.0	0.3176
19	31.471	767.5	0.2896	36.764	903.4	0.3057	36.809	693.6	0.3057
20	29.721	775.7	0.2803	35.003	902.5	0.2958	35.048	693.6	0.2959
21	27.165	816.2	0.2747	32.137	878.0	0.2890	32.178	681.1	0.2891
22	23.573	804.0	0.2685	28.100	843.9	0.2821	28.136	665.8	0.2822
23	18.965	753.9	0.2616	22.701	786.8	0.2747	22.731	647.8	0.2748
24	8.427	639.8	0.2559	10.123	656.8	0.2688	10.137	601.7	0.2689
25	4.802	605.0	0.2521	5.729	613.1	0.2649	5.736	582.2	0.2649

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C3

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.827	653.2	0.7396	3.266	636.5	0.7396
2	0.000		0.7396	6.103	921.0	0.7396	11.026	856.1	0.7396
3	0.000		0.7253	8.379	1015.1	0.7253	15.258	936.4	0.7284
4	0.000	Data	0.6770	9.606	1107.4	0.6770	17.419	1003.6	0.6843
5	0.000	Not	0.6145	9.951	1135.0	0.6145	18.091	1028.3	0.6270
6	0.000	Required	0.5513	9.903	1131.1	0.5513	18.158	1037.2	0.5682
7	0.000		0.4958	9.785	1121.7	0.4958	18.114	1042.9	0.5151
8	0.000		0.4498	9.747	1118.6	0.4498	18.181	1051.1	0.4699
9	0.000		0.4110	10.070	1144.7	0.4110	18.788	1073.7	0.4309
10	0.000		0.3777	10.017	1140.3	0.3777	18.845	1082.5	0.3973
11	0.000		0.3495	9.883	1129.5	0.3495	18.805	1090.2	0.3684
12	0.000		0.3254	9.705	1115.3	0.3254	18.714	1097.3	0.3435
13	0.000		0.3048	9.498	1099.0	0.3048	18.587	1103.9	0.3218
14	0.000		0.2870	9.264	1080.8	0.2870	18.427	1110.0	0.3028
15	0.000		0.2715	9.001	1060.8	0.2715	18.229	1115.4	0.2860
16	0.000		0.2579	8.701	1038.5	0.2579	17.979	1119.6	0.2710
17	0.000		0.2460	8.348	1012.8	0.2460	17.640	1120.8	0.2576
18	0.000		0.2355	7.925	983.0	0.2355	17.146	1114.9	0.2457
19	0.000		0.2263	7.408	947.8	0.2263	16.391	1095.2	0.2351
20	0.000		0.2185	6.773	906.5	0.2185	15.278	1056.7	0.2257
21	0.000		0.2118	5.872	851.1	0.2118	13.484	988.7	0.2178
22	0.000		0.2064	4.934	797.1	0.2064	11.414	909.2	0.2112
23	0.000		0.2022	4.009	747.4	0.2022	9.212	827.7	0.2060
24	0.000		0.1992	1.794	640.4	0.1992	4.193	673.9	0.2026
25	0.000		0.1980	1.094	609.5	0.1980	2.496	626.1	0.2008
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.255	620.5	0.7396	4.796	613.9	0.7396	6.086	641.0	0.7396
2	14.437	789.8	0.7396	16.223	752.7	0.7396	20.454	860.6	0.7396
3	19.582	816.7	0.7320	21.759	765.2	0.7338	27.141	900.0	0.7344
4	22.129	844.0	0.6933	24.458	781.6	0.6976	30.466	950.4	0.6992
5	22.992	857.8	0.6427	25.398	790.0	0.6502	31.786	982.5	0.6530
6	23.177	866.5	0.5901	25.645	796.8	0.6007	32.266	1002.8	0.6037
7	23.210	872.2	0.5415	25.734	803.1	0.5546	32.504	1016.0	0.5568
8	23.324	875.8	0.4986	25.898	808.7	0.5134	32.794	1027.3	0.5143
9	24.013	881.9	0.4600	26.659	816.8	0.4757	33.748	1044.8	0.4757
10	24.060	881.2	0.4263	26.740	820.7	0.4425	33.889	1050.4	0.4418
11	23.988	878.7	0.3970	26.693	823.6	0.4134	33.821	1048.4	0.4122
12	23.842	874.6	0.3714	26.566	825.8	0.3878	33.604	1040.2	0.3863
13	23.643	869.3	0.3490	26.381	827.4	0.3653	33.278	1027.4	0.3635
14	23.398	863.0	0.3293	26.144	828.3	0.3453	32.855	1010.7	0.3435
15	23.098	855.5	0.3117	25.847	828.6	0.3275	32.326	990.4	0.3257
16	22.729	846.8	0.2960	25.472	827.9	0.3116	31.661	965.6	0.3099
17	22.253	837.0	0.2820	24.979	826.0	0.2973	30.808	935.7	0.2958
18	21.607	826.2	0.2695	24.305	822.8	0.2846	29.741	904.3	0.2834
19	20.692	815.1	0.2586	23.345	817.6	0.2736	28.405	875.2	0.2726
20	19.389	802.0	0.2494	21.972	809.7	0.2643	26.683	849.1	0.2635
21	17.270	780.1	0.2418	19.695	792.1	0.2569	23.953	816.5	0.2559
22	14.750	750.8	0.2356	16.947	767.4	0.2509	20.656	778.7	0.2499
23	11.896	710.3	0.2299	13.718	728.4	0.2451	16.689	730.6	0.2443
24	5.376	624.8	0.2257	6.178	631.8	0.2404	7.496	633.2	0.2398
25	3.139	596.2	0.2223	3.571	599.5	0.2361	4.305	601.6	0.2360

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C3 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.831	639.5	0.7396	8.230	650.5	0.7396	8.238	585.8	0.7396
2	22.808	841.7	0.7396	26.849	853.1	0.7396	26.873	639.3	0.7396
3	30.132	877.4	0.7347	34.866	859.6	0.7349	34.894	641.9	0.7349
4	33.813	924.8	0.7002	38.743	874.7	0.7012	38.774	650.7	0.7012
5	35.335	953.0	0.6547	40.355	881.7	0.6570	40.390	662.7	0.6571
6	35.917	967.5	0.6058	41.046	890.3	0.6095	41.084	671.9	0.6097
7	36.198	973.7	0.5588	41.468	901.6	0.5638	41.508	678.0	0.5640
8	36.512	977.2	0.5161	41.943	914.6	0.5220	41.987	690.5	0.5222
9	37.517	984.7	0.4773	43.163	932.3	0.4837	43.209	696.8	0.4839
10	37.659	984.8	0.4432	43.477	946.8	0.4499	43.525	703.2	0.4500
11	37.573	982.2	0.4135	43.557	961.0	0.4201	43.606	706.4	0.4203
12	37.345	980.6	0.3875	43.497	975.5	0.3940	43.547	709.6	0.3941
13	37.028	981.9	0.3646	43.346	990.2	0.3708	43.396	709.6	0.3710
14	36.650	988.5	0.3445	43.125	1004.2	0.3503	43.174	706.4	0.3505
15	36.198	999.9	0.3266	42.813	1016.9	0.3320	42.861	703.2	0.3322
16	35.588	1008.1	0.3106	42.327	1028.3	0.3156	42.374	700.0	0.3158
17	34.710	1004.4	0.2964	41.549	1037.6	0.3009	41.595	696.8	0.3010
18	33.525	986.9	0.2837	40.414	1042.3	0.2878	40.458	690.5	0.2879
19	32.018	962.1	0.2728	38.863	1038.2	0.2762	38.905	684.2	0.2763
20	30.095	933.8	0.2634	36.752	1020.8	0.2661	36.792	678.0	0.2663
21	27.068	893.6	0.2557	33.271	980.0	0.2578	33.307	665.8	0.2578
22	23.396	845.5	0.2493	28.930	923.1	0.2507	28.962	653.7	0.2509
23	18.909	783.3	0.2436	23.436	843.9	0.2446	23.462	636.0	0.2447
24	8.506	655.6	0.2392	10.633	682.4	0.2401	10.644	593.3	0.2401
25	4.872	613.9	0.2356	6.071	628.3	0.2366	6.077	579.5	0.2368

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C4

		Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	
1	0.000		0.7396	1.788	651.1	0.7396	3.261	638.4	0.7396	
2	0.000		0.7396	5.916	907.5	0.7396	10.907	861.0	0.7396	
3	0.000		0.7270	8.083	994.0	0.7270	15.048	942.4	0.7290	
4	0.000	Data	0.6810	9.297	1083.4	0.6810	17.221	1011.9	0.6855	
5	0.000	Not	0.6206	9.700	1114.9	0.6206	17.961	1037.7	0.6285	
6	0.000	Required	0.5583	9.721	1116.6	0.5583	18.103	1047.1	0.5695	
7	0.000		0.5027	9.659	1111.6	0.5027	18.126	1053.7	0.5160	
8	0.000		0.4560	9.664	1112.0	0.4560	18.249	1063.1	0.4704	
9	0.000		0.4165	10.017	1140.3	0.4165	18.900	1087.0	0.4310	
10	0.000		0.3826	9.985	1137.8	0.3826	18.988	1096.8	0.3971	
11	0.000		0.3537	9.866	1128.1	0.3537	18.972	1105.3	0.3680	
12	0.000		0.3292	9.699	1114.8	0.3292	18.900	1113.2	0.3428	
13	0.000		0.3082	9.500	1099.1	0.3082	18.789	1120.6	0.3210	
14	0.000		0.2900	9.274	1081.6	0.2900	18.642	1127.2	0.3018	
15	0.000		0.2742	9.019	1062.2	0.2742	18.452	1132.7	0.2848	
16	0.000		0.2603	8.728	1040.5	0.2603	18.199	1135.9	0.2697	
17	0.000		0.2481	8.387	1015.6	0.2481	17.843	1134.7	0.2562	
18	0.000		0.2375	7.976	986.6	0.2375	17.320	1125.2	0.2441	
19	0.000		0.2282	7.469	951.9	0.2282	16.537	1102.2	0.2335	
20	0.000		0.2202	6.839	910.7	0.2202	15.401	1061.2	0.2242	
21	0.000		0.2133	5.934	854.8	0.2133	13.589	991.9	0.2163	
22	0.000		0.2079	4.989	800.2	0.2079	11.500	911.3	0.2098	
23	0.000		0.2035	4.056	749.9	0.2035	9.276	828.7	0.2045	
24	0.000		0.2005	1.817	641.4	0.2005	4.227	674.5	0.2010	
25	0.000		0.1992	1.107	610.1	0.1992	2.517	626.5	0.1993	
		Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	
1	4.628	644.8	0.7396	5.419	640.0	0.7396	6.261	612.0	0.7396	
2	15.662	899.8	0.7396	18.273	858.5	0.7396	20.942	737.1	0.7396	
3	21.144	950.3	0.7300	24.370	885.7	0.7310	27.635	749.4	0.7336	
4	23.846	994.6	0.6887	27.290	913.1	0.6914	30.861	769.5	0.6974	
5	24.732	1007.2	0.6347	28.240	921.4	0.6396	32.076	787.3	0.6502	
6	24.866	1006.5	0.5782	28.386	922.9	0.5851	32.488	805.6	0.6005	
7	24.827	1001.1	0.5259	28.340	922.0	0.5342	32.691	823.1	0.5536	
8	24.892	996.1	0.4808	28.397	921.0	0.4897	32.964	838.6	0.5117	
9	25.570	998.5	0.4415	29.112	925.8	0.4507	33.897	854.6	0.4738	
10	25.581	991.9	0.4077	29.111	924.2	0.4170	34.019	863.7	0.4404	
11	25.452	982.2	0.3787	28.963	921.8	0.3879	33.941	869.0	0.4110	
12	25.247	971.0	0.3536	28.736	918.9	0.3627	33.738	870.8	0.3852	
13	24.991	959.0	0.3317	28.460	916.4	0.3408	33.446	869.6	0.3625	
14	24.689	946.3	0.3125	28.136	913.5	0.3214	33.072	865.8	0.3423	
15	24.330	932.7	0.2955	27.751	910.2	0.3043	32.605	859.7	0.3243	
16	23.888	917.7	0.2803	27.275	905.9	0.2890	32.017	851.4	0.3082	
17	23.313	900.6	0.2668	26.648	899.3	0.2754	31.249	841.1	0.2938	
18	22.545	881.9	0.2548	25.807	890.2	0.2632	30.238	828.8	0.2810	
19	21.522	864.0	0.2443	24.694	879.0	0.2525	28.926	814.7	0.2699	
20	20.128	845.2	0.2351	23.183	864.8	0.2434	27.169	797.5	0.2603	
21	17.910	816.4	0.2275	20.744	838.5	0.2358	24.360	772.5	0.2524	
22	15.260	778.4	0.2212	17.781	802.7	0.2294	20.930	741.9	0.2459	
23	12.256	728.4	0.2158	14.307	752.0	0.2239	16.796	700.9	0.2398	
24	5.541	631.9	0.2120	6.442	640.6	0.2199	7.490	618.4	0.2349	
25	3.243	600.6	0.2098	3.738	604.9	0.2172	4.281	591.4	0.2309	

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C4 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.629	598.4	0.7396	7.118	590.7	0.7396	7.126	585.8	0.7396
2	22.067	683.2	0.7396	23.498	652.7	0.7396	23.521	635.8	0.7396
3	28.992	690.0	0.7345	30.654	654.8	0.7357	30.682	641.9	0.7357
4	32.346	703.1	0.6999	34.096	659.9	0.7028	34.126	647.8	0.7028
5	33.680	715.5	0.6549	35.522	665.4	0.6601	35.555	656.7	0.6602
6	34.219	729.0	0.6076	36.186	672.8	0.6154	36.221	662.7	0.6156
7	34.544	742.2	0.5631	36.666	682.1	0.5737	36.705	674.9	0.5739
8	34.930	754.6	0.5230	37.227	692.8	0.5363	37.268	681.1	0.5365
9	35.982	767.9	0.4863	38.491	705.9	0.5022	38.535	690.5	0.5023
10	36.188	777.4	0.4537	38.891	718.1	0.4720	38.937	696.8	0.4722
11	36.178	785.2	0.4249	39.079	730.8	0.4454	39.127	703.2	0.4455
12	36.033	792.0	0.3993	39.135	743.9	0.4216	39.183	703.2	0.4218
13	35.791	797.8	0.3765	39.094	757.3	0.4003	39.143	706.4	0.4005
14	35.462	803.1	0.3562	38.963	770.6	0.3811	39.012	706.4	0.3812
15	35.032	807.5	0.3381	38.724	783.8	0.3637	38.773	706.4	0.3639
16	34.469	810.4	0.3218	38.344	796.6	0.3480	38.392	703.1	0.3481
17	33.713	811.9	0.3072	37.754	808.4	0.3336	37.802	703.1	0.3338
18	32.698	811.4	0.2943	36.874	818.1	0.3208	36.922	703.2	0.3209
19	31.360	808.3	0.2829	35.618	824.1	0.3095	35.664	696.8	0.3095
20	29.543	801.2	0.2732	33.798	823.8	0.2995	33.843	693.6	0.2996
21	26.590	784.4	0.2653	30.665	810.8	0.2915	30.707	684.2	0.2915
22	22.940	759.5	0.2588	26.683	787.3	0.2849	26.721	671.9	0.2850
23	18.427	718.4	0.2525	21.514	742.9	0.2781	21.545	650.7	0.2782
24	8.187	625.9	0.2469	9.528	636.3	0.2716	9.542	601.7	0.2716
25	4.640	595.0	0.2419	5.326	599.9	0.2646	5.333	582.2	0.2647

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C5

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.519	636.8	0.7396	2.661	620.2	0.7396
2	0.000		0.7396	5.082	849.6	0.7396	8.947	783.4	0.7396
3	0.000		0.7353	6.991	920.4	0.7353	12.536	848.7	0.7382
4	0.000	Data	0.7004	8.084	994.1	0.7004	14.596	911.4	0.7073
5	0.000	Not	0.6528	8.482	1022.5	0.6528	15.394	938.7	0.6643
6	0.000	Required	0.6000	8.548	1027.3	0.6000	15.628	950.5	0.6156
7	0.000		0.5483	8.517	1025.0	0.5483	15.707	958.3	0.5672
8	0.000		0.5021	8.533	1026.2	0.5021	15.861	968.1	0.5228
9	0.000		0.4613	8.869	1050.9	0.4613	16.532	992.5	0.4824
10	0.000		0.4260	8.851	1049.6	0.4260	16.637	1001.6	0.4470
11	0.000		0.3958	8.757	1042.6	0.3958	16.633	1008.3	0.4163
12	0.000		0.3696	8.624	1032.8	0.3696	16.579	1014.3	0.3894
13	0.000		0.3470	8.464	1021.2	0.3470	16.494	1020.0	0.3658
14	0.000		0.3274	8.282	1008.1	0.3274	16.377	1024.9	0.3450
15	0.000		0.3102	8.071	993.2	0.3102	16.218	1028.9	0.3266
16	0.000		0.2951	7.822	975.9	0.2951	15.992	1030.7	0.3102
17	0.000		0.2818	7.521	955.4	0.2818	15.661	1028.3	0.2955
18	0.000		0.2702	7.150	930.8	0.2702	15.171	1019.3	0.2825
19	0.000		0.2600	6.690	901.2	0.2600	14.453	999.9	0.2709
20	0.000		0.2512	6.120	865.9	0.2512	13.434	967.1	0.2607
21	0.000		0.2437	5.302	817.9	0.2437	11.826	912.2	0.2520
22	0.000		0.2377	4.443	770.4	0.2377	9.982	848.4	0.2448
23	0.000		0.2330	3.581	725.5	0.2330	8.004	781.7	0.2390
24	0.000		0.2298	1.575	630.6	0.2298	3.576	654.5	0.2353
25	0.000		0.2284	0.944	603.0	0.2284	2.090	614.3	0.2334
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	3.913	637.3	0.7396	4.669	636.3	0.7396	5.339	601.2	0.7396
2	13.306	866.0	0.7396	15.854	850.0	0.7396	18.118	707.8	0.7396
3	18.258	920.3	0.7377	21.396	874.9	0.7378	24.353	758.7	0.7396
4	20.787	958.1	0.7069	24.111	897.9	0.7078	27.519	758.7	0.7124
5	21.657	964.0	0.6647	25.011	901.7	0.6667	28.790	783.4	0.6751
6	21.828	958.8	0.6173	25.170	900.2	0.6206	29.278	806.0	0.6333
7	21.814	951.2	0.5699	25.140	898.2	0.5744	29.540	826.6	0.5909
8	21.894	945.2	0.5263	25.210	896.9	0.5316	29.875	845.8	0.5508
9	22.588	947.0	0.4868	25.939	901.3	0.4925	30.867	865.2	0.5131
10	22.629	941.8	0.4520	25.975	900.7	0.4579	31.023	874.3	0.4790
11	22.540	935.0	0.4218	25.876	899.4	0.4279	30.939	875.4	0.4483
12	22.390	927.3	0.3954	25.710	897.4	0.4017	30.718	871.3	0.4211
13	22.200	919.0	0.3722	25.503	895.3	0.3785	30.408	863.5	0.3968
14	21.969	910.1	0.3517	25.254	893.0	0.3580	30.018	853.0	0.3753
15	21.683	900.2	0.3336	24.944	890.0	0.3398	29.532	840.1	0.3560
16	21.313	889.2	0.3173	24.541	885.9	0.3234	28.909	824.3	0.3388
17	20.813	876.4	0.3028	23.991	879.8	0.3089	28.088	805.2	0.3234
18	20.134	862.4	0.2898	23.244	871.4	0.2959	27.035	784.2	0.3096
19	19.223	848.3	0.2784	22.249	861.3	0.2844	25.750	764.8	0.2976
20	17.983	832.5	0.2685	20.898	848.0	0.2744	24.155	748.9	0.2873
21	15.995	805.9	0.2601	18.701	823.7	0.2659	21.769	736.8	0.2792
22	13.609	769.6	0.2531	16.022	790.8	0.2589	18.748	715.4	0.2722
23	10.882	722.2	0.2472	12.850	743.3	0.2529	15.142	689.0	0.2664
24	4.837	629.0	0.2434	5.694	636.7	0.2490	6.706	616.5	0.2622
25	2.789	599.1	0.2412	3.260	602.9	0.2466	3.897	596.4	0.2613

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C5 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.944	624.0	0.7396	7.483	660.2	0.7396	7.491	585.8	0.7396
2	20.087	788.9	0.7396	24.655	899.6	0.7396	24.678	635.8	0.7396
3	26.873	865.4	0.7392	32.244	909.7	0.7377	32.272	641.9	0.7377
4	30.350	856.9	0.7118	35.889	923.5	0.7092	35.920	650.7	0.7092
5	31.817	882.1	0.6748	37.348	922.8	0.6716	37.381	656.7	0.6717
6	32.428	898.3	0.6333	37.954	922.4	0.6301	37.990	665.8	0.6302
7	32.776	909.8	0.5915	38.343	925.8	0.5886	38.383	678.0	0.5887
8	33.189	920.3	0.5519	38.844	933.1	0.5493	38.887	687.3	0.5495
9	34.310	938.1	0.5144	40.134	947.3	0.5124	40.179	693.6	0.5125
10	34.648	963.8	0.4804	40.602	958.4	0.4786	40.650	703.2	0.4788
11	34.650	976.2	0.4495	40.769	972.6	0.4479	40.818	706.4	0.4481
12	34.618	1004.1	0.4222	40.903	987.2	0.4207	40.953	709.6	0.4208
13	35.001	1113.8	0.3985	41.382	995.8	0.3968	41.432	709.6	0.3970
14	34.770	1140.8	0.3759	41.339	1012.7	0.3743	41.389	709.6	0.3744
15	34.200	1126.5	0.3555	40.989	1033.0	0.3538	41.039	709.6	0.3540
16	33.409	1098.4	0.3375	40.409	1052.8	0.3355	40.459	709.6	0.3357
17	32.363	1062.0	0.3215	39.537	1069.5	0.3192	39.586	706.4	0.3194
18	31.045	1020.7	0.3074	38.316	1078.9	0.3046	38.364	703.1	0.3047
19	29.487	980.0	0.2951	36.745	1077.6	0.2917	36.792	700.0	0.2919
20	27.609	939.6	0.2847	34.690	1060.5	0.2806	34.735	693.6	0.2808
21	24.860	890.5	0.2763	31.459	1015.5	0.2714	31.501	684.2	0.2716
22	21.431	838.5	0.2692	27.323	953.1	0.2635	27.361	671.9	0.2637
23	17.299	776.1	0.2634	22.131	867.1	0.2571	22.161	647.8	0.2573
24	7.673	651.5	0.2591	9.934	690.6	0.2524	9.948	601.7	0.2526
25	4.441	611.8	0.2581	5.725	633.1	0.2512	5.733	585.0	0.2513

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C6

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.775	650.4	0.7396	3.644	660.7	0.7396
2	0.000		0.7396	5.945	909.6	0.7396	12.304	964.5	0.7396
3	0.000		0.7265	8.193	1001.8	0.7265	16.807	1065.4	0.7208
4	0.000	Data	0.6791	9.468	1096.6	0.6791	18.977	1139.2	0.6679
5	0.000	Not	0.6173	9.898	1130.7	0.6173	19.583	1154.3	0.6032
6	0.000	Required	0.5540	9.921	1132.6	0.5540	19.600	1153.8	0.5406
7	0.000		0.4980	9.844	1126.4	0.4980	19.526	1154.1	0.4869
8	0.000		0.4512	9.830	1125.3	0.4512	19.564	1158.6	0.4423
9	0.000		0.4118	10.166	1152.5	0.4118	20.155	1181.0	0.4043
10	0.000		0.3781	10.104	1147.4	0.3781	20.180	1188.7	0.3717
11	0.000		0.3497	9.949	1134.8	0.3497	20.102	1195.6	0.3439
12	0.000		0.3256	9.748	1118.7	0.3256	19.973	1202.1	0.3199
13	0.000		0.3050	9.521	1100.8	0.3050	19.813	1208.1	0.2992
14	0.000		0.2872	9.277	1081.8	0.2872	19.622	1212.9	0.2809
15	0.000		0.2717	9.014	1061.8	0.2717	19.393	1216.0	0.2648
16	0.000		0.2581	8.727	1040.4	0.2581	19.106	1216.0	0.2505
17	0.000		0.2462	8.403	1016.8	0.2462	18.723	1210.6	0.2376
18	0.000		0.2356	8.020	989.6	0.2356	18.181	1196.3	0.2261
19	0.000		0.2263	7.549	957.3	0.2263	17.391	1168.0	0.2159
20	0.000		0.2183	6.958	918.3	0.2183	16.254	1121.1	0.2071
21	0.000		0.2115	6.083	863.7	0.2115	14.417	1043.3	0.1995
22	0.000		0.2060	5.145	809.0	0.2060	12.257	952.7	0.1934
23	0.000		0.2017	4.187	756.7	0.2017	9.893	858.8	0.1885
24	0.000		0.1985	1.870	643.8	0.1985	4.508	685.9	0.1849
25	0.000		0.1973	1.138	611.4	0.1973	2.698	633.5	0.1835
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.498	677.1	0.7396	6.526	665.5	0.7396	7.714	634.3	0.7396
2	18.484	1031.6	0.7396	21.713	946.4	0.7396	25.293	807.1	0.7396
3	24.499	1090.9	0.7188	28.442	979.5	0.7198	32.976	836.2	0.7227
4	27.190	1141.4	0.6651	31.410	1018.5	0.6677	36.602	885.3	0.6746
5	27.879	1149.7	0.6005	32.216	1035.5	0.6047	37.946	927.7	0.6163
6	27.822	1142.3	0.5383	32.215	1043.8	0.5437	38.377	963.3	0.5588
7	27.648	1132.4	0.4850	32.066	1047.5	0.4908	38.555	991.3	0.5075
8	27.604	1124.4	0.4409	32.029	1048.5	0.4466	38.779	1014.2	0.4634
9	28.213	1126.1	0.4035	32.669	1053.1	0.4091	39.696	1039.2	0.4253
10	28.158	1118.3	0.3715	32.598	1050.8	0.3770	39.764	1051.9	0.3927
11	27.984	1109.0	0.3442	32.405	1047.9	0.3495	39.552	1050.2	0.3642
12	27.743	1098.3	0.3206	32.143	1044.8	0.3259	39.181	1040.2	0.3393
13	27.456	1086.2	0.3002	31.833	1041.4	0.3054	38.711	1025.7	0.3176
14	27.116	1072.3	0.2823	31.467	1037.6	0.2873	38.146	1007.9	0.2986
15	26.701	1055.1	0.2664	31.022	1033.2	0.2713	37.458	986.7	0.2819
16	26.184	1034.3	0.2524	30.463	1027.1	0.2571	36.598	961.0	0.2670
17	25.517	1009.2	0.2398	29.739	1018.8	0.2444	35.501	930.3	0.2538
18	24.656	981.8	0.2286	28.805	1008.4	0.2331	34.138	896.2	0.2420
19	23.554	955.8	0.2187	27.617	996.2	0.2231	32.542	865.0	0.2316
20	22.096	929.8	0.2100	26.032	978.5	0.2144	30.573	836.7	0.2227
21	19.772	891.8	0.2027	23.435	941.6	0.2069	27.510	803.7	0.2152
22	16.954	843.0	0.1966	20.216	890.2	0.2008	23.735	766.0	0.2089
23	13.671	779.6	0.1918	16.343	819.8	0.1957	19.160	721.0	0.2039
24	6.210	653.3	0.1884	7.430	669.8	0.1922	8.728	632.1	0.2004
25	3.665	613.3	0.1868	4.356	622.0	0.1904	5.087	601.4	0.1984

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C6 (Continued)

Node	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
No.	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	8.463	640.0	0.7396	9.892	652.6	0.7396
2	27.509	822.4	0.7396	31.408	841.0	0.7396
3	35.817	858.2	0.7239	40.394	847.7	0.7255
4	39.879	915.3	0.6776	44.703	866.5	0.6812
5	41.532	958.2	0.6211	46.477	875.9	0.6271
6	42.153	985.7	0.5647	47.219	885.4	0.5729
7	42.440	1001.8	0.5138	47.658	897.4	0.5236
8	42.739	1013.1	0.4695	48.137	911.9	0.4804
9	43.756	1028.4	0.4309	49.387	931.1	0.4423
10	43.852	1032.7	0.3978	49.687	948.2	0.4094
11	43.643	1033.1	0.3690	49.673	964.9	0.3806
12	43.269	1032.7	0.3439	49.493	981.8	0.3554
13	42.797	1032.4	0.3220	49.216	999.2	0.3333
14	42.233	1032.5	0.3028	48.842	1016.4	0.3137
15	41.538	1031.4	0.2858	48.329	1033.2	0.2965
16	40.633	1024.5	0.2708	47.590	1048.7	0.2811
17	39.420	1006.9	0.2573	46.509	1061.3	0.2673
18	37.868	979.0	0.2453	45.022	1067.5	0.2550
19	36.046	946.6	0.2349	43.160	1063.7	0.2440
20	33.832	912.9	0.2258	40.748	1044.9	0.2344
21	30.453	871.2	0.2181	36.899	1001.6	0.2261
22	26.297	823.7	0.2119	32.043	940.7	0.2193
23	21.226	765.8	0.2067	25.912	855.9	0.2136
24	9.703	652.3	0.2034	11.965	690.6	0.2102
25	5.645	613.1	0.2012	6.934	633.4	0.2079

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C7

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.791	651.3	0.7396	3.407	646.4	0.7396
2	0.000		0.7396	5.959	910.6	0.7396	11.467	898.8	0.7396
3	0.000		0.7266	8.169	1000.1	0.7266	15.793	989.6	0.7262
4	0.000	Data	0.6798	9.407	1091.9	0.6798	17.993	1063.1	0.6791
5	0.000	Not	0.6185	9.823	1124.7	0.6185	18.695	1086.1	0.6187
6	0.000	Required	0.5554	9.850	1126.9	0.5554	18.788	1091.5	0.5576
7	0.000		0.4993	9.789	1122.0	0.4993	18.776	1095.5	0.5035
8	0.000		0.4525	9.796	1122.5	0.4525	18.872	1102.8	0.4579
9	0.000		0.4129	10.157	1151.8	0.4129	19.512	1126.1	0.4190
10	0.000		0.3790	10.121	1148.8	0.3790	19.587	1135.5	0.3855
11	0.000		0.3502	9.994	1138.5	0.3502	19.559	1144.0	0.3568
12	0.000		0.3258	9.817	1124.2	0.3258	19.472	1151.7	0.3321
13	0.000		0.3050	9.608	1107.6	0.3050	19.350	1159.3	0.3106
14	0.000		0.2870	9.376	1089.5	0.2870	19.195	1166.0	0.2918
15	0.000		0.2713	9.121	1069.9	0.2713	19.005	1171.7	0.2751
16	0.000		0.2575	8.838	1048.6	0.2575	18.763	1175.3	0.2602
17	0.000		0.2454	8.517	1025.0	0.2454	18.430	1174.2	0.2469
18	0.000		0.2347	8.138	997.9	0.2347	17.941	1164.6	0.2351
19	0.000		0.2254	7.670	965.5	0.2254	17.194	1140.5	0.2246
20	0.000		0.2172	7.076	926.0	0.2172	16.083	1097.1	0.2154
21	0.000		0.2103	6.190	870.2	0.2103	14.265	1023.4	0.2075
22	0.000		0.2047	5.244	814.6	0.2047	12.134	937.2	0.2011
23	0.000		0.2003	4.289	762.1	0.2003	9.828	848.4	0.1960
24	0.000		0.1971	1.934	646.7	0.1971	4.500	682.2	0.1925
25	0.000		0.1958	1.182	613.3	0.1958	2.694	631.3	0.1909
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.150	669.6	0.7396	5.960	642.0	0.7396	7.123	632.7	0.7396
2	17.343	1002.0	0.7396	19.928	855.0	0.7396	23.518	807.9	0.7396
3	23.082	1053.4	0.7227	26.242	877.6	0.7240	30.811	838.8	0.7265
4	25.721	1094.3	0.6739	29.092	903.9	0.6772	34.313	887.5	0.6831
5	26.474	1099.1	0.6134	29.934	915.2	0.6192	35.669	928.1	0.6291
6	26.521	1094.8	0.5534	30.029	921.4	0.5614	36.167	961.3	0.5742
7	26.504	1094.3	0.5010	30.038	924.7	0.5105	36.481	987.3	0.5245
8	26.567	1091.2	0.4566	30.117	926.8	0.4668	36.818	1009.8	0.4807
9	27.242	1094.5	0.4185	30.836	932.6	0.4288	37.818	1035.1	0.4422
10	27.257	1088.8	0.3857	30.853	932.8	0.3961	37.978	1048.2	0.4090
11	27.114	1078.0	0.3575	30.707	932.4	0.3677	37.823	1047.3	0.3798
12	26.880	1064.3	0.3332	30.467	931.7	0.3433	37.481	1038.0	0.3543
13	26.591	1049.0	0.3121	30.170	930.6	0.3220	37.029	1023.9	0.3320
14	26.257	1032.9	0.2936	29.825	929.2	0.3033	36.486	1006.3	0.3124
15	25.871	1015.5	0.2774	29.427	927.6	0.2869	35.842	984.9	0.2953
16	25.412	996.7	0.2629	28.974	928.4	0.2724	35.081	958.7	0.2802
17	24.875	979.3	0.2503	28.570	945.9	0.2604	34.273	925.5	0.2675
18	24.324	974.1	0.2398	28.441	1003.8	0.2514	33.623	884.5	0.2576
19	23.348	955.0	0.2298	27.499	1008.7	0.2413	32.259	852.7	0.2471
20	21.920	929.4	0.2207	25.921	987.5	0.2316	30.306	825.5	0.2375
21	19.591	889.6	0.2129	23.300	947.8	0.2235	27.238	794.2	0.2294
22	16.779	839.3	0.2065	20.071	893.9	0.2168	23.481	758.8	0.2228
23	13.530	774.6	0.2012	16.199	819.5	0.2110	18.938	716.2	0.2171
24	6.137	649.7	0.1975	7.324	666.8	0.2069	8.584	630.0	0.2131
25	3.611	610.6	0.1956	4.268	619.0	0.2043	4.979	600.3	0.2105

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C7 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	7.898	642.9	0.7396	9.367	655.3	0.7396
2	25.862	840.3	0.7396	29.963	858.3	0.7396
3	33.821	879.9	0.7274	38.651	867.0	0.7284
4	37.762	938.9	0.6851	42.817	884.5	0.6877
5	39.408	980.3	0.6323	44.542	890.7	0.6367
6	40.078	1005.7	0.5782	45.280	896.1	0.5844
7	40.484	1019.6	0.5284	45.786	904.2	0.5360
8	40.891	1030.3	0.4842	46.334	915.6	0.4928
9	41.998	1047.0	0.4453	47.650	932.8	0.4544
10	42.195	1052.8	0.4118	48.026	947.9	0.4210
11	42.061	1056.1	0.3824	48.075	963.5	0.3917
12	41.739	1059.3	0.3566	47.944	980.2	0.3660
13	41.298	1061.0	0.3341	47.701	997.7	0.3433
14	40.742	1058.9	0.3144	47.348	1016.1	0.3234
15	40.040	1049.8	0.2971	46.851	1035.0	0.3058
16	39.165	1032.0	0.2818	46.164	1052.7	0.2902
17	38.170	1003.6	0.2688	45.300	1065.2	0.2767
18	37.245	963.4	0.2586	44.378	1065.5	0.2656
19	35.637	929.1	0.2481	42.723	1061.0	0.2545
20	33.444	896.7	0.2384	40.344	1043.4	0.2444
21	30.073	857.4	0.2304	36.515	1001.2	0.2358
22	25.954	812.9	0.2238	31.706	941.2	0.2287
23	20.943	758.9	0.2181	25.647	857.3	0.2226
24	9.532	649.7	0.2143	11.803	691.2	0.2187
25	5.525	612.0	0.2117	6.825	634.0	0.2160

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C8

		Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	
1	0.000		0.7396	1.788	651.1	0.7396	3.262	638.4	0.7396	
2	0.000		0.7396	5.921	907.9	0.7396	10.917	861.3	0.7396	
3	0.000		0.7271	8.091	994.6	0.7271	15.063	942.9	0.7291	
4	0.000	Data	0.6812	9.308	1084.2	0.6812	17.239	1012.5	0.6857	
5	0.000	Not	0.6210	9.714	1116.0	0.6210	17.983	1038.3	0.6288	
6	0.000	Required	0.5588	9.736	1117.7	0.5588	18.128	1047.9	0.5698	
7	0.000		0.5032	9.675	1112.9	0.5032	18.153	1054.6	0.5164	
8	0.000		0.4564	9.680	1113.3	0.4564	18.276	1063.9	0.4708	
9	0.000		0.4169	10.034	1141.7	0.4169	18.928	1087.9	0.4314	
10	0.000		0.3829	10.001	1139.0	0.3829	19.016	1097.8	0.3975	
11	0.000		0.3540	9.882	1129.4	0.3540	19.000	1106.3	0.3683	
12	0.000		0.3295	9.714	1116.0	0.3295	18.927	1114.2	0.3431	
13	0.000		0.3085	9.514	1100.2	0.3085	18.816	1121.6	0.3213	
14	0.000		0.2903	9.288	1082.7	0.2903	18.668	1128.2	0.3021	
15	0.000		0.2744	9.033	1063.2	0.2744	18.478	1133.7	0.2851	
16	0.000		0.2606	8.741	1041.4	0.2606	18.225	1137.1	0.2700	
17	0.000		0.2484	8.400	1016.6	0.2484	17.869	1135.8	0.2565	
18	0.000		0.2377	7.988	987.4	0.2377	17.344	1126.2	0.2444	
19	0.000		0.2285	7.480	952.6	0.2285	16.560	1103.2	0.2338	
20	0.000		0.2204	6.849	911.3	0.2204	15.424	1062.3	0.2245	
21	0.000		0.2136	5.943	855.3	0.2136	13.610	992.8	0.2166	
22	0.000		0.2081	4.997	800.7	0.2081	11.518	912.0	0.2100	
23	0.000		0.2037	4.062	750.2	0.2037	9.291	829.3	0.2048	
24	0.000		0.2007	1.819	641.5	0.2007	4.232	674.6	0.2012	
25	0.000		0.1995	1.108	610.1	0.1995	2.520	626.6	0.1996	
		Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	
1	4.625	644.5	0.7396	5.414	639.8	0.7396	6.257	612.1	0.7396	
2	15.657	898.5	0.7396	18.264	858.0	0.7396	20.939	737.6	0.7396	
3	21.140	948.7	0.7302	24.362	885.2	0.7312	27.631	749.7	0.7337	
4	23.848	993.2	0.6890	27.288	912.6	0.6917	30.863	769.7	0.6977	
5	24.741	1006.1	0.6352	28.244	920.7	0.6401	32.084	787.5	0.6507	
6	24.882	1005.7	0.5787	28.397	922.3	0.5857	32.502	805.8	0.6010	
7	24.847	1000.5	0.5266	28.356	921.5	0.5349	32.709	823.2	0.5543	
8	24.915	995.8	0.4814	28.417	920.6	0.4904	32.985	838.7	0.5124	
9	25.595	998.2	0.4422	29.133	925.3	0.4513	33.920	854.7	0.4745	
10	25.608	991.8	0.4084	29.137	924.1	0.4176	34.047	863.9	0.4411	
11	25.481	982.3	0.3793	28.990	921.5	0.3886	33.971	869.2	0.4117	
12	25.276	971.2	0.3542	28.765	918.9	0.3634	33.770	871.0	0.3859	
13	25.021	959.2	0.3322	28.490	916.4	0.3414	33.479	869.8	0.3631	
14	24.719	946.6	0.3130	28.166	913.5	0.3220	33.106	866.1	0.3429	
15	24.360	933.0	0.2960	27.782	910.3	0.3048	32.639	859.9	0.3249	
16	23.917	917.9	0.2808	27.305	906.0	0.2895	32.051	851.7	0.3088	
17	23.342	900.8	0.2673	26.679	899.6	0.2758	31.284	841.4	0.2943	
18	22.573	882.2	0.2552	25.836	890.3	0.2637	30.272	829.2	0.2815	
19	21.550	864.4	0.2447	24.724	879.3	0.2530	28.960	814.9	0.2704	
20	20.156	845.5	0.2356	23.212	864.9	0.2439	27.203	797.9	0.2607	
21	17.935	816.7	0.2279	20.772	838.9	0.2362	24.392	772.7	0.2529	
22	15.283	778.7	0.2216	17.807	803.1	0.2299	20.960	742.2	0.2463	
23	12.275	728.7	0.2162	14.328	752.2	0.2243	16.821	701.1	0.2403	
24	5.547	632.0	0.2124	6.449	640.7	0.2203	7.498	618.5	0.2353	
25	3.247	600.6	0.2101	3.741	604.9	0.2176	4.286	591.5	0.2313	

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C8 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.626	598.6	0.7396	7.116	590.8	0.7396	7.124	585.8	0.7396
2	22.066	683.4	0.7396	23.498	652.8	0.7396	23.521	635.8	0.7396
3	28.991	690.3	0.7347	30.653	654.8	0.7359	30.680	638.9	0.7359
4	32.349	703.3	0.7002	34.098	659.9	0.7030	34.128	647.8	0.7031
5	33.689	715.7	0.6554	35.530	665.3	0.6605	35.562	653.7	0.6606
6	34.233	729.0	0.6082	36.200	672.8	0.6160	36.235	662.7	0.6161
7	34.563	742.3	0.5636	36.684	682.0	0.5743	36.722	671.9	0.5744
8	34.952	754.7	0.5235	37.247	692.6	0.5370	37.288	681.1	0.5371
9	36.006	768.0	0.4868	38.514	705.8	0.5027	38.558	690.5	0.5029
10	36.216	777.4	0.4544	38.919	718.1	0.4726	38.965	696.8	0.4728
11	36.208	785.2	0.4255	39.109	730.8	0.4459	39.157	703.2	0.4461
12	36.065	792.0	0.3999	39.168	744.0	0.4222	39.216	703.2	0.4223
13	35.825	797.9	0.3771	39.129	757.3	0.4009	39.178	706.4	0.4010
14	35.497	803.2	0.3568	38.999	770.7	0.3817	39.048	706.4	0.3818
15	35.068	807.7	0.3386	38.762	783.9	0.3643	38.811	706.4	0.3644
16	34.505	810.7	0.3223	38.382	796.7	0.3485	38.431	706.4	0.3486
17	33.750	812.1	0.3077	37.793	808.5	0.3342	37.841	703.2	0.3343
18	32.734	811.6	0.2948	36.913	818.3	0.3213	36.961	703.2	0.3215
19	31.396	808.5	0.2834	35.658	824.3	0.3099	35.704	696.8	0.3100
20	29.579	801.4	0.2737	33.838	824.1	0.3000	33.883	693.6	0.3001
21	26.624	784.7	0.2657	30.704	811.2	0.2919	30.746	684.2	0.2920
22	22.972	759.7	0.2593	26.720	787.7	0.2853	26.758	671.9	0.2855
23	18.454	718.6	0.2529	21.545	743.2	0.2785	21.576	650.7	0.2786
24	8.197	626.1	0.2474	9.539	636.4	0.2720	9.553	601.7	0.2721
25	4.644	594.9	0.2423	5.331	600.0	0.2650	5.338	582.2	0.2652

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C9

Node	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.646	643.5	0.7396	2.955	629.3	0.7396
2	0.000		0.7396	5.521	879.6	0.7396	10.014	825.9	0.7396
3	0.000		0.7310	7.663	965.0	0.7310	14.107	906.8	0.7333
4	0.000	Data	0.6895	8.899	1053.2	0.6895	16.366	978.1	0.6950
5	0.000	Not	0.6341	9.309	1084.3	0.6341	17.143	1005.2	0.6433
6	0.000	Required	0.5751	9.314	1084.7	0.5751	17.261	1013.7	0.5879
7	0.000		0.5206	9.221	1077.5	0.5206	17.223	1017.8	0.5358
8	0.000		0.4740	9.201	1076.0	0.4740	17.294	1024.8	0.4904
9	0.000		0.4340	9.529	1101.4	0.4340	17.909	1046.9	0.4506
10	0.000		0.3997	9.486	1098.0	0.3997	17.962	1054.4	0.4163
11	0.000		0.3705	9.359	1088.2	0.3705	17.907	1060.1	0.3867
12	0.000		0.3455	9.190	1075.2	0.3455	17.801	1065.1	0.3611
13	0.000		0.3239	8.995	1060.4	0.3239	17.667	1070.0	0.3387
14	0.000		0.3053	8.778	1044.2	0.3053	17.504	1074.3	0.3192
15	0.000		0.2891	8.532	1026.1	0.2891	17.298	1077.5	0.3018
16	0.000		0.2749	8.247	1005.6	0.2749	17.025	1078.5	0.2863
17	0.000		0.2623	7.907	981.8	0.2623	16.642	1075.0	0.2725
18	0.000		0.2514	7.491	953.4	0.2514	16.089	1064.1	0.2603
19	0.000		0.2419	6.982	919.9	0.2419	15.290	1041.3	0.2495
20	0.000		0.2337	6.360	880.6	0.2337	14.168	1003.2	0.2400
21	0.000		0.2267	5.488	828.5	0.2267	12.427	940.6	0.2319
22	0.000		0.2211	4.580	777.7	0.2211	10.441	868.7	0.2252
23	0.000		0.2168	3.685	730.8	0.2168	8.345	795.4	0.2200
24	0.000		0.2138	1.629	633.0	0.2138	3.744	660.0	0.2165
25	0.000		0.2126	0.984	604.7	0.2126	2.206	617.8	0.2147
Node	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.725	671.4	0.7396	5.849	676.0	0.7396	7.193	644.6	0.7396
2	16.106	1023.0	0.7396	19.739	1008.3	0.7396	23.918	856.2	0.7396
3	21.868	1097.4	0.7272	26.278	1046.3	0.7257	31.427	882.0	0.7274
4	24.669	1150.4	0.6836	29.302	1079.9	0.6812	34.953	921.3	0.6854
5	25.483	1154.1	0.6280	30.163	1087.1	0.6251	36.170	950.4	0.6322
6	25.479	1141.9	0.5706	30.164	1087.9	0.5676	36.434	972.5	0.5772
7	25.302	1128.2	0.5186	29.982	1087.1	0.5157	36.430	987.7	0.5264
8	25.249	1116.1	0.4742	29.910	1084.2	0.4714	36.473	997.7	0.4821
9	25.839	1113.7	0.4361	30.513	1086.2	0.4335	37.194	1008.1	0.4438
10	25.769	1101.8	0.4032	30.410	1081.1	0.4009	37.081	1007.2	0.4106
11	25.578	1088.9	0.3748	30.188	1076.4	0.3728	36.791	1001.2	0.3819
12	25.323	1074.9	0.3504	29.905	1072.1	0.3485	36.395	991.4	0.3571
13	25.028	1060.0	0.3291	29.584	1068.2	0.3274	35.927	978.7	0.3355
14	24.691	1044.1	0.3104	29.220	1064.1	0.3088	35.384	963.5	0.3164
15	24.295	1027.1	0.2939	28.792	1059.3	0.2923	34.744	945.8	0.2996
16	23.801	1007.6	0.2793	28.258	1053.3	0.2777	33.960	925.4	0.2847
17	23.159	985.4	0.2662	27.556	1044.4	0.2645	32.965	902.1	0.2714
18	22.328	962.1	0.2545	26.636	1031.3	0.2529	31.734	878.1	0.2596
19	21.265	940.5	0.2441	25.447	1013.1	0.2424	30.262	856.8	0.2494
20	19.872	918.8	0.2349	23.872	987.4	0.2331	28.356	832.6	0.2402
21	17.665	882.9	0.2270	21.339	943.1	0.2251	25.367	800.4	0.2322
22	15.007	833.7	0.2204	18.242	886.8	0.2183	21.718	763.2	0.2255
23	11.972	769.6	0.2152	14.598	814.6	0.2131	17.347	716.8	0.2201
24	5.360	648.5	0.2119	6.536	665.7	0.2097	7.733	626.5	0.2166
25	3.126	610.8	0.2104	3.797	620.2	0.2081	4.445	597.0	0.2145

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C9 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU) 306.8 Cy 7	Fuel Temp. (K) 306.8 Cy 7	Mod. Dens. (g/cm ³) 306.8 Cy 7	Burnup (GWd/MTU) 0.00 Cy 8	Fuel Temp. (K) 0.00 Cy 8	Mod. Dens. (g/cm ³) 0.00 Cy 8	Burnup (GWd/MTU) 3.67 Cy 8	Fuel Temp. (K) 3.67 Cy 8	Mod. Dens. (g/cm ³) 3.67 Cy 8
1	7.856	630.4	0.7396	8.740	616.1	0.7396	8.748	585.8	0.7396
2	25.893	789.7	0.7396	28.372	727.8	0.7396	28.395	635.8	0.7396
3	33.862	808.4	0.7286	36.766	731.0	0.7304	36.794	641.9	0.7304
4	37.660	841.4	0.6882	40.749	743.1	0.6922	40.778	644.8	0.6922
5	39.087	867.9	0.6370	42.348	754.4	0.6439	42.381	656.7	0.644
6	39.520	889.8	0.5838	42.983	768.0	0.5939	43.017	659.7	0.594
7	39.645	906.9	0.5342	43.337	783.8	0.5472	43.375	671.9	0.5474
8	39.788	920.5	0.4904	43.725	800.9	0.5059	43.765	678.0	0.5061
9	40.618	935.5	0.4520	44.834	821.0	0.4692	44.876	684.2	0.4693
10	40.559	943.0	0.4186	45.014	838.6	0.4370	45.059	693.6	0.4371
11	40.297	946.9	0.3896	44.978	855.6	0.4087	45.024	696.8	0.4089
12	39.921	949.7	0.3645	44.829	873.0	0.3839	44.877	703.2	0.3841
13	39.468	951.8	0.3426	44.649	894.5	0.3623	44.697	703.2	0.3625
14	38.934	953.1	0.3232	44.326	911.4	0.3427	44.374	703.2	0.3429
15	38.287	952.1	0.3061	43.856	926.0	0.3252	43.904	703.2	0.3253
16	37.469	947.3	0.2910	43.193	938.9	0.3095	43.241	703.2	0.3097
17	36.401	937.1	0.2773	42.249	949.3	0.2955	42.296	700.0	0.2956
18	35.058	921.7	0.2653	40.975	955.2	0.2829	41.021	696.8	0.2830
19	33.441	902.1	0.2548	39.339	953.6	0.2718	39.384	693.6	0.2720
20	31.362	879.4	0.2454	37.121	941.8	0.2618	37.164	687.4	0.2619
21	28.108	845.7	0.2373	33.501	911.5	0.2531	33.541	678.0	0.2533
22	24.123	804.9	0.2306	28.954	867.0	0.2460	28.989	662.7	0.2461
23	19.278	750.7	0.2250	23.208	800.5	0.2398	23.236	641.9	0.2400
24	8.594	641.3	0.2214	10.378	661.9	0.2360	10.391	598.9	0.2361
25	4.914	605.0	0.2192	5.877	615.1	0.2329	5.883	579.5	0.2330

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C10

		Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	
1	0.000		0.7396	1.732	648.1	0.7396	3.532	656.8	0.7396	
2	0.000		0.7396	5.768	897.0	0.7396	11.867	944.0	0.7396	
3	0.000		0.7281	7.926	983.1	0.7281	16.254	1042.9	0.7233	
4	0.000	Data	0.6831	9.180	1074.4	0.6831	18.448	1118.8	0.6729	
5	0.000	Not	0.6236	9.646	1110.6	0.6236	19.136	1137.6	0.6103	
6	0.000	Required	0.5616	9.719	1116.4	0.5616	19.232	1139.5	0.5485	
7	0.000		0.5055	9.682	1113.5	0.5055	19.220	1141.7	0.4946	
8	0.000		0.4584	9.696	1114.6	0.4584	19.306	1147.8	0.4494	
9	0.000		0.4183	10.051	1143.1	0.4183	19.933	1171.5	0.4108	
10	0.000		0.3841	10.006	1139.5	0.3841	19.988	1180.3	0.3777	
11	0.000		0.3552	9.867	1128.2	0.3552	19.937	1188.2	0.3494	
12	0.000		0.3306	9.680	1113.3	0.3306	19.829	1195.2	0.3250	
13	0.000		0.3096	9.465	1096.4	0.3096	19.687	1201.8	0.3038	
14	0.000		0.2915	9.233	1078.4	0.2915	19.513	1207.0	0.2852	
15	0.000		0.2757	8.983	1059.5	0.2757	19.302	1210.6	0.2688	
16	0.000		0.2619	8.716	1039.6	0.2619	19.037	1210.7	0.2541	
17	0.000		0.2496	8.424	1018.3	0.2496	18.688	1205.6	0.2410	
18	0.000		0.2388	8.093	994.7	0.2388	18.201	1191.5	0.2294	
19	0.000		0.2292	7.691	966.9	0.2292	17.487	1164.0	0.2190	
20	0.000		0.2209	7.170	932.1	0.2209	16.433	1118.4	0.2100	
21	0.000		0.2137	6.338	879.2	0.2137	14.661	1042.5	0.2022	
22	0.000		0.2078	5.414	824.3	0.2078	12.543	953.9	0.1958	
23	0.000		0.2031	4.450	770.7	0.2031	10.198	861.5	0.1908	
24	0.000		0.1997	2.012	650.2	0.1997	4.687	687.7	0.1872	
25	0.000		0.1984	1.228	615.3	0.1984	2.815	634.8	0.1856	
		Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
Node	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	
1	5.266	669.0	0.7396	6.485	686.6	0.7396	7.593	629.1	0.7396	
2	17.716	999.5	0.7396	21.539	1038.6	0.7396	24.933	792.4	0.7396	
3	23.578	1056.6	0.7222	28.164	1072.7	0.7208	32.425	816.7	0.7232	
4	26.270	1103.3	0.6720	31.046	1102.1	0.6703	35.851	856.1	0.6760	
5	27.008	1108.1	0.6101	31.781	1101.6	0.6086	37.023	889.1	0.6185	
6	27.000	1098.1	0.5491	31.725	1094.1	0.5481	37.326	917.3	0.5615	
7	26.870	1086.9	0.4958	31.551	1087.3	0.4953	37.434	940.1	0.5111	
8	26.888	1080.5	0.4512	31.537	1082.4	0.4510	37.648	959.0	0.4680	
9	27.554	1084.2	0.4132	32.220	1085.0	0.4134	38.550	977.6	0.4305	
10	27.535	1077.2	0.3806	32.178	1081.4	0.3811	38.577	983.5	0.3980	
11	27.371	1066.7	0.3527	31.990	1077.8	0.3534	38.366	981.5	0.3696	
12	27.128	1054.3	0.3287	31.722	1074.0	0.3296	38.015	974.4	0.3450	
13	26.838	1040.9	0.3078	31.408	1070.3	0.3088	37.594	965.3	0.3235	
14	26.508	1026.9	0.2895	31.053	1066.5	0.2905	37.230	964.6	0.3052	
15	26.133	1012.4	0.2733	30.645	1061.5	0.2744	37.227	999.4	0.2905	
16	25.695	997.4	0.2589	30.163	1054.9	0.2600	36.742	999.1	0.2758	
17	25.168	982.2	0.2460	29.567	1044.7	0.2472	35.833	972.1	0.2617	
18	24.511	968.0	0.2346	28.805	1029.3	0.2357	34.651	937.1	0.2490	
19	23.659	956.5	0.2244	27.810	1008.7	0.2255	33.259	905.3	0.2381	
20	22.425	941.8	0.2155	26.383	981.6	0.2166	31.397	871.7	0.2285	
21	20.237	908.8	0.2079	23.870	937.7	0.2089	28.337	831.4	0.2202	
22	17.459	858.9	0.2015	20.661	882.7	0.2025	24.516	788.6	0.2136	
23	14.145	790.9	0.1963	16.750	812.2	0.1972	19.814	736.5	0.2079	
24	6.452	656.8	0.1927	7.643	667.1	0.1936	9.031	637.1	0.2041	
25	3.805	614.5	0.1908	4.482	620.7	0.1918	5.249	603.3	0.2017	

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C10 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	8.019	604.6	0.7396	8.985	621.5	0.7396
2	26.232	703.9	0.7396	28.956	746.3	0.7396
3	34.116	724.7	0.7248	37.365	753.6	0.7269
4	37.832	756.3	0.6798	41.309	769.0	0.6848
5	39.245	783.5	0.6251	42.887	780.3	0.6334
6	39.739	805.8	0.5709	43.555	792.4	0.5822
7	39.993	823.3	0.5225	44.004	806.2	0.5363
8	40.325	837.7	0.4807	44.543	821.1	0.4962
9	41.339	851.7	0.4437	45.800	839.0	0.4601
10	41.422	858.7	0.4111	46.094	854.9	0.4282
11	41.241	862.5	0.3825	46.116	870.4	0.3999
12	40.907	864.7	0.3575	45.980	885.9	0.3748
13	40.495	865.8	0.3357	45.759	901.1	0.3528
14	40.124	864.9	0.3168	45.561	915.1	0.3335
15	40.061	857.3	0.3014	45.601	923.6	0.3171
16	39.522	850.5	0.2863	45.195	934.6	0.3014
17	38.537	841.1	0.2718	44.346	946.0	0.2867
18	37.243	827.3	0.2588	43.166	955.7	0.2734
19	35.733	813.1	0.2475	41.795	967.7	0.2621
20	33.812	806.0	0.2380	39.900	969.9	0.2522
21	30.702	800.1	0.2301	36.687	961.0	0.2446
22	27.046	819.8	0.2252	32.555	921.0	0.2389
23	22.090	789.7	0.2202	26.697	850.0	0.2332
24	10.112	662.5	0.2165	12.344	688.8	0.2294
25	5.857	617.7	0.2136	7.146	633.4	0.2266

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C11

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.581	640.1	0.7396	3.263	650.1	0.7396
2	0.000		0.7396	5.274	862.6	0.7396	10.929	909.9	0.7396
3	0.000		0.7331	7.264	938.3	0.7331	15.084	1004.1	0.7282
4	0.000	Data	0.6945	8.455	1020.5	0.6945	17.268	1081.3	0.6840
5	0.000	Not	0.6421	8.954	1057.3	0.6421	18.046	1104.1	0.6268
6	0.000	Required	0.5846	9.097	1068.1	0.5846	18.243	1108.6	0.5680
7	0.000		0.5298	9.121	1069.9	0.5298	18.310	1112.2	0.5145
8	0.000		0.4819	9.179	1074.3	0.4819	18.456	1119.5	0.4686
9	0.000		0.4406	9.559	1103.7	0.4406	19.132	1144.7	0.4289
10	0.000		0.4051	9.546	1102.7	0.4051	19.230	1154.2	0.3947
11	0.000		0.3749	9.439	1094.4	0.3749	19.223	1162.9	0.3653
12	0.000		0.3491	9.280	1082.1	0.3491	19.156	1171.0	0.3398
13	0.000		0.3270	9.088	1067.4	0.3270	19.051	1178.6	0.3177
14	0.000		0.3079	8.876	1051.5	0.3079	18.913	1185.2	0.2983
15	0.000		0.2912	8.646	1034.4	0.2912	18.739	1190.2	0.2810
16	0.000		0.2766	8.399	1016.5	0.2766	18.517	1192.4	0.2657
17	0.000		0.2638	8.134	997.6	0.2638	18.220	1189.6	0.2519
18	0.000		0.2524	7.854	978.1	0.2524	17.806	1177.7	0.2398
19	0.000		0.2422	7.533	956.2	0.2422	17.186	1151.6	0.2289
20	0.000		0.2332	7.109	928.1	0.2332	16.237	1107.1	0.2195
21	0.000		0.2254	6.359	880.5	0.2254	14.559	1033.0	0.2113
22	0.000		0.2189	5.483	828.3	0.2189	12.515	947.1	0.2046
23	0.000		0.2138	4.536	775.4	0.2138	10.221	857.5	0.1994
24	0.000		0.2101	2.060	652.4	0.2101	4.709	686.4	0.1956
25	0.000		0.2086	1.253	616.4	0.2086	2.823	634.0	0.1939
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.296	623.3	0.7396	5.161	647.9	0.7396	6.548	647.4	0.7396
2	14.579	808.4	0.7396	17.434	892.3	0.7396	21.854	876.7	0.7396
3	19.875	849.8	0.7316	23.397	923.2	0.7307	29.013	918.5	0.7314
4	22.590	889.3	0.6923	26.327	951.5	0.6916	32.614	973.9	0.6933
5	23.668	912.4	0.6411	27.550	971.1	0.6413	34.233	1008.3	0.6440
6	24.239	942.2	0.5872	28.500	1024.5	0.5886	35.347	1022.9	0.5915
7	24.401	949.9	0.5360	28.770	1040.2	0.5375	35.780	1037.6	0.5403
8	24.520	947.7	0.4905	28.879	1038.8	0.4918	36.061	1053.4	0.4944
9	25.201	948.1	0.4504	29.574	1040.8	0.4518	36.965	1073.0	0.4539
10	25.220	941.7	0.4158	29.559	1035.8	0.4173	36.999	1077.6	0.4190
11	25.114	933.7	0.3859	29.423	1031.4	0.3876	36.819	1073.5	0.3890
12	24.934	924.7	0.3601	29.220	1028.1	0.3618	36.506	1063.1	0.3630
13	24.706	915.0	0.3375	28.988	1027.5	0.3393	36.123	1049.1	0.3404
14	24.436	904.7	0.3176	28.699	1024.8	0.3194	35.654	1032.6	0.3205
15	24.115	893.4	0.3000	28.351	1020.8	0.3017	35.092	1013.4	0.3028
16	23.723	880.5	0.2841	27.921	1015.4	0.2858	34.377	988.4	0.2870
17	23.225	865.5	0.2699	27.363	1006.8	0.2716	33.442	956.4	0.2730
18	22.596	849.7	0.2572	26.644	994.1	0.2588	32.288	920.8	0.2604
19	21.814	838.1	0.2463	25.734	976.3	0.2478	30.947	886.9	0.2495
20	20.907	841.1	0.2377	24.628	949.4	0.2389	29.414	854.7	0.2406
21	19.075	830.1	0.2304	22.472	907.2	0.2313	26.742	817.3	0.2330
22	16.529	795.4	0.2237	19.519	857.0	0.2244	23.200	776.8	0.2263
23	13.451	744.1	0.2176	15.877	792.2	0.2183	18.817	728.7	0.2204
24	6.143	638.4	0.2131	7.247	659.1	0.2138	8.603	635.3	0.2162
25	3.712	609.1	0.2124	4.367	618.8	0.2136	5.125	602.8	0.2155

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C11 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	7.351	646.0	0.7396	8.779	652.5	0.7396
2	24.342	860.8	0.7396	28.400	854.6	0.7396
3	32.187	901.5	0.7318	36.955	862.2	0.7323
4	36.184	956.0	0.6943	41.155	877.9	0.6959
5	38.019	987.2	0.6455	43.069	884.1	0.6487
6	39.202	997.4	0.5933	44.307	888.4	0.5981
7	39.677	1003.6	0.5422	44.919	899.3	0.5486
8	40.002	1010.2	0.4962	45.425	914.0	0.5039
9	40.982	1021.8	0.4557	46.650	934.2	0.4641
10	41.025	1023.1	0.4208	46.891	950.9	0.4296
11	40.837	1021.9	0.3907	46.892	967.1	0.3997
12	40.514	1020.4	0.3646	46.755	983.3	0.3735
13	40.126	1019.6	0.3420	46.545	999.2	0.3507
14	39.662	1020.4	0.3220	46.251	1014.6	0.3304
15	39.098	1020.1	0.3043	45.847	1029.3	0.3123
16	38.355	1015.8	0.2885	45.250	1042.9	0.2962
17	37.326	1001.7	0.2743	44.344	1054.5	0.2816
18	36.013	978.2	0.2617	43.092	1060.3	0.2686
19	34.478	950.4	0.2507	41.511	1055.9	0.2571
20	32.721	919.4	0.2417	39.542	1036.0	0.2474
21	29.752	879.9	0.2341	36.096	992.5	0.2391
22	25.852	834.6	0.2273	31.518	934.0	0.2318
23	20.975	776.2	0.2214	25.600	851.3	0.2255
24	9.626	656.9	0.2172	11.858	688.8	0.2214
25	5.706	615.2	0.2164	6.969	631.9	0.2201

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C12

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.815	652.6	0.7396	3.248	636.2	0.7396
2	0.000		0.7396	6.063	918.1	0.7396	10.962	854.4	0.7396
3	0.000		0.7257	8.330	1011.6	0.7257	15.180	934.4	0.7288
4	0.000	Data	0.6779	9.561	1103.9	0.6779	17.345	1001.5	0.6851
5	0.000	Not	0.6160	9.914	1132.0	0.6160	18.028	1026.4	0.6283
6	0.000	Required	0.5531	9.873	1128.7	0.5531	18.105	1035.4	0.5697
7	0.000		0.4975	9.759	1119.6	0.4975	18.068	1041.4	0.5167
8	0.000		0.4514	9.723	1116.7	0.4514	18.139	1049.7	0.4714
9	0.000		0.4126	10.047	1142.8	0.4126	18.747	1072.2	0.4323
10	0.000		0.3792	9.994	1138.5	0.3792	18.805	1081.2	0.3986
11	0.000		0.3508	9.860	1127.7	0.3508	18.765	1088.8	0.3696
12	0.000		0.3267	9.682	1113.5	0.3267	18.674	1095.9	0.3447
13	0.000		0.3061	9.474	1097.1	0.3061	18.547	1102.6	0.3230
14	0.000		0.2882	9.241	1079.1	0.2882	18.387	1108.6	0.3039
15	0.000		0.2726	8.978	1059.1	0.2726	18.189	1114.0	0.2870
16	0.000		0.2590	8.678	1036.8	0.2590	17.939	1118.2	0.2720
17	0.000		0.2470	8.326	1011.3	0.2470	17.600	1119.3	0.2586
18	0.000		0.2365	7.903	981.5	0.2365	17.107	1113.4	0.2466
19	0.000		0.2273	7.387	946.4	0.2273	16.354	1093.9	0.2360
20	0.000		0.2195	6.755	905.3	0.2195	15.243	1055.4	0.2266
21	0.000		0.2128	5.856	850.1	0.2128	13.454	987.7	0.2187
22	0.000		0.2074	4.920	796.4	0.2074	11.388	908.4	0.2121
23	0.000		0.2031	3.998	746.9	0.2031	9.189	827.0	0.2068
24	0.000		0.2001	1.790	640.2	0.2001	4.185	673.7	0.2034
25	0.000		0.1989	1.090	609.3	0.1989	2.488	626.0	0.2017
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.228	619.9	0.7396	4.767	613.7	0.7396	6.054	640.8	0.7396
2	14.344	787.5	0.7396	16.120	751.5	0.7396	20.341	859.8	0.7396
3	19.472	814.4	0.7324	21.637	764.0	0.7342	27.006	899.0	0.7347
4	22.022	841.6	0.6940	24.338	780.2	0.6983	30.335	949.5	0.6999
5	22.897	855.5	0.6439	25.291	788.7	0.6514	31.665	981.3	0.6540
6	23.094	864.3	0.5915	25.549	795.4	0.6021	32.156	1001.6	0.6050
7	23.137	870.2	0.5431	25.647	801.5	0.5561	32.404	1014.8	0.5581
8	23.258	874.0	0.5001	25.818	807.1	0.5149	32.702	1026.2	0.5157
9	23.950	880.3	0.4615	26.584	815.5	0.4772	33.659	1043.6	0.4771
10	24.000	879.7	0.4277	26.669	819.5	0.4440	33.804	1049.1	0.4432
11	23.930	877.4	0.3984	26.624	822.3	0.4148	33.739	1047.2	0.4135
12	23.787	873.5	0.3728	26.501	824.6	0.3893	33.528	1039.2	0.3876
13	23.590	868.3	0.3503	26.319	826.3	0.3666	33.204	1026.3	0.3647
14	23.345	862.0	0.3305	26.083	827.4	0.3466	32.784	1009.8	0.3447
15	23.046	854.6	0.3129	25.787	827.7	0.3288	32.257	989.6	0.3268
16	22.679	846.1	0.2971	25.414	827.0	0.3128	31.594	964.8	0.3110
17	22.203	836.3	0.2831	24.923	825.3	0.2984	30.743	935.0	0.2969
18	21.559	825.6	0.2706	24.250	822.0	0.2857	29.678	903.6	0.2845
19	20.646	814.4	0.2597	23.293	817.0	0.2747	28.345	874.6	0.2737
20	19.347	801.5	0.2504	21.924	809.0	0.2654	26.628	848.6	0.2645
21	17.233	779.6	0.2428	19.653	791.5	0.2579	23.905	816.1	0.2569
22	14.719	750.5	0.2366	16.912	766.9	0.2519	20.615	778.3	0.2509
23	11.869	710.1	0.2309	13.688	728.1	0.2462	16.655	730.4	0.2453
24	5.366	624.7	0.2267	6.168	631.8	0.2414	7.485	633.1	0.2408
25	3.130	596.2	0.2233	3.561	599.4	0.2371	4.294	601.5	0.2370

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C12 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.798	639.4	0.7396	8.196	650.5	0.7396	8.204	585.8	0.7396
2	22.690	841.0	0.7396	26.721	852.3	0.7396	26.744	635.8	0.7396
3	29.991	876.6	0.7350	34.711	858.5	0.7352	34.739	641.9	0.7352
4	33.676	924.0	0.7009	38.592	873.6	0.7018	38.624	653.7	0.7018
5	35.207	952.0	0.6557	40.215	880.8	0.6579	40.249	659.7	0.658
6	35.800	966.5	0.6070	40.918	889.5	0.6107	40.955	668.8	0.6108
7	36.091	972.7	0.5602	41.349	900.6	0.5651	41.389	678.0	0.5652
8	36.412	976.1	0.5175	41.832	913.7	0.5233	41.875	687.3	0.5235
9	37.421	983.6	0.4786	43.055	931.3	0.4850	43.101	696.8	0.4852
10	37.567	983.8	0.4445	43.374	945.9	0.4511	43.422	703.2	0.4513
11	37.484	981.2	0.4148	43.459	960.2	0.4214	43.508	706.4	0.4215
12	37.262	979.6	0.3887	43.405	974.7	0.3952	43.454	706.4	0.3953
13	36.948	981.0	0.3658	43.256	989.3	0.3720	43.306	709.6	0.3722
14	36.573	987.6	0.3457	43.038	1003.3	0.3514	43.087	706.4	0.3516
15	36.122	998.9	0.3277	42.728	1016.1	0.3331	42.776	703.2	0.3333
16	35.515	1007.2	0.3117	42.244	1027.4	0.3167	42.292	703.2	0.3168
17	34.640	1003.6	0.2974	41.469	1036.7	0.3019	41.515	696.8	0.3021
18	33.457	986.1	0.2848	40.336	1041.4	0.2888	40.380	690.5	0.2889
19	31.953	961.4	0.2737	38.789	1037.4	0.2772	38.831	684.2	0.2773
20	30.035	933.1	0.2643	36.683	1020.0	0.2671	36.723	678.0	0.2672
21	27.016	893.1	0.2566	33.209	979.1	0.2586	33.246	668.8	0.2588
22	23.352	845.2	0.2503	28.879	922.5	0.2517	28.911	653.7	0.2517
23	18.871	782.8	0.2446	23.392	843.5	0.2455	23.418	636.0	0.2455
24	8.494	655.5	0.2401	10.620	682.3	0.2409	10.632	596.1	0.2410
25	4.861	613.9	0.2365	6.059	628.2	0.2375	6.065	579.5	0.2376

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C13

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.574	639.7	0.7396	3.251	649.8	0.7396
2	0.000		0.7396	5.248	860.8	0.7396	10.882	908.3	0.7396
3	0.000		0.7331	7.228	935.9	0.7331	15.022	1002.2	0.7283
4	0.000	Data	0.6948	8.418	1017.9	0.6948	17.208	1079.5	0.6842
5	0.000	Not	0.6426	8.920	1054.7	0.6426	17.991	1102.4	0.6272
6	0.000	Required	0.5852	9.065	1065.7	0.5852	18.191	1107.0	0.5684
7	0.000		0.5304	9.092	1067.7	0.5304	18.260	1110.4	0.5149
8	0.000		0.4825	9.151	1072.2	0.4825	18.408	1117.9	0.4690
9	0.000		0.4411	9.531	1101.6	0.4411	19.084	1143.0	0.4293
10	0.000		0.4056	9.520	1100.7	0.4056	19.183	1152.4	0.3949
11	0.000		0.3753	9.413	1092.3	0.3753	19.177	1161.2	0.3656
12	0.000		0.3495	9.254	1080.1	0.3495	19.109	1169.1	0.3401
13	0.000		0.3274	9.063	1065.5	0.3274	19.004	1176.7	0.3180
14	0.000		0.3083	8.851	1049.6	0.3083	18.867	1183.3	0.2985
15	0.000		0.2916	8.622	1032.7	0.2916	18.693	1188.2	0.2813
16	0.000		0.2770	8.376	1014.8	0.2770	18.472	1190.5	0.2659
17	0.000		0.2640	8.112	996.1	0.2640	18.176	1187.6	0.2522
18	0.000		0.2526	7.833	976.6	0.2526	17.763	1175.7	0.2399
19	0.000		0.2425	7.513	954.9	0.2425	17.145	1149.7	0.2291
20	0.000		0.2335	7.090	926.9	0.2335	16.198	1105.5	0.2196
21	0.000		0.2256	6.343	879.6	0.2256	14.524	1031.5	0.2114
22	0.000		0.2192	5.469	827.4	0.2192	12.485	946.0	0.2048
23	0.000		0.2140	4.524	774.7	0.2140	10.196	856.7	0.1996
24	0.000		0.2104	2.056	652.2	0.2104	4.699	686.1	0.1957
25	0.000		0.2089	1.250	616.3	0.2089	2.816	633.8	0.1941
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.036	607.7	0.7396	4.907	648.5	0.7396	6.318	649.0	0.7396
2	13.677	743.4	0.7396	16.557	895.8	0.7396	21.139	890.8	0.7396
3	18.729	774.9	0.7316	22.232	920.7	0.7319	28.049	934.7	0.7321
4	21.531	816.6	0.6927	25.176	939.3	0.6940	31.610	986.5	0.6947
5	23.045	869.1	0.6433	26.648	933.7	0.6459	33.367	1011.4	0.6469
6	23.983	925.8	0.5921	27.518	924.9	0.5960	34.356	1022.1	0.5965
7	24.573	968.2	0.5430	28.050	917.4	0.5477	34.963	1028.8	0.5478
8	24.897	983.0	0.4972	28.351	914.4	0.5028	35.384	1039.7	0.5025
9	25.764	999.3	0.4565	29.247	918.2	0.4626	36.490	1059.1	0.4622
10	26.194	1028.3	0.4229	29.647	914.3	0.4291	36.922	1062.1	0.4283
11	26.211	1030.4	0.3918	29.658	913.5	0.3983	36.923	1061.1	0.3976
12	26.030	1020.4	0.3642	29.483	914.3	0.3710	36.677	1054.5	0.3704
13	25.820	1011.1	0.3403	29.278	914.9	0.3475	36.341	1042.5	0.3470
14	25.514	996.5	0.3192	28.977	915.6	0.3265	35.865	1026.6	0.3263
15	25.139	979.4	0.3005	28.603	915.7	0.3080	35.265	1006.4	0.3080
16	24.694	960.7	0.2840	28.149	914.6	0.2915	34.520	981.1	0.2917
17	24.154	940.7	0.2693	27.581	911.0	0.2769	33.584	950.0	0.2774
18	23.480	919.9	0.2564	26.859	904.9	0.2639	32.453	916.8	0.2647
19	22.604	899.7	0.2451	25.905	895.0	0.2526	31.095	885.1	0.2536
20	21.401	880.3	0.2357	24.582	880.1	0.2431	29.387	856.1	0.2443
21	19.275	846.9	0.2275	22.230	852.8	0.2349	26.548	820.7	0.2362
22	16.631	804.4	0.2207	19.271	816.2	0.2280	23.017	781.2	0.2294
23	13.496	748.5	0.2147	15.658	763.6	0.2220	18.657	732.4	0.2236
24	6.137	638.7	0.2102	7.099	646.1	0.2173	8.465	635.8	0.2192
25	3.606	603.9	0.2076	4.136	608.0	0.2144	4.901	603.2	0.2164

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C13 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	7.121	646.0	0.7396	8.524	650.8	0.7396
2	23.649	864.0	0.7396	27.675	851.8	0.7396
3	31.235	903.1	0.7324	35.968	859.5	0.7329
4	35.152	952.0	0.6957	40.079	874.5	0.6972
5	37.074	975.6	0.6483	42.063	879.3	0.6514
6	38.117	983.5	0.5981	43.175	884.7	0.6028
7	38.734	985.0	0.5493	43.908	893.9	0.5554
8	39.170	987.2	0.5041	44.503	906.7	0.5113
9	40.324	994.3	0.4638	45.863	923.5	0.4717
10	40.732	990.7	0.4298	46.419	935.8	0.4379
11	40.711	987.5	0.3992	46.559	949.3	0.4075
12	40.453	985.7	0.3722	46.472	964.0	0.3805
13	40.116	985.6	0.3488	46.301	978.4	0.3571
14	39.655	987.8	0.3282	46.006	993.1	0.3362
15	39.071	990.1	0.3099	45.580	1007.3	0.3178
16	38.315	988.5	0.2936	44.968	1020.4	0.3013
17	37.309	978.2	0.2792	44.078	1031.1	0.2866
18	36.052	960.1	0.2665	42.876	1036.2	0.2735
19	34.533	937.4	0.2553	41.315	1032.3	0.2619
20	32.643	912.5	0.2459	39.235	1014.8	0.2519
21	29.536	877.0	0.2377	35.673	974.2	0.2432
22	25.656	833.0	0.2309	31.127	917.9	0.2359
23	20.803	774.8	0.2251	25.268	839.3	0.2297
24	9.469	655.1	0.2207	11.606	683.0	0.2254
25	5.469	614.0	0.2181	6.676	628.7	0.2226

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C14

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.583	640.2	0.7396	2.878	628.5	0.7396
2	0.000		0.7396	5.296	864.1	0.7396	9.708	820.3	0.7396
3	0.000		0.7331	7.325	942.3	0.7331	13.650	898.9	0.7349
4	0.000	Data	0.6946	8.519	1025.2	0.6946	15.877	970.3	0.6988
5	0.000	Not	0.6425	8.969	1058.4	0.6425	16.712	998.4	0.6495
6	0.000	Required	0.5857	9.046	1064.2	0.5857	16.917	1008.0	0.5955
7	0.000		0.5316	9.014	1061.8	0.5316	16.950	1012.8	0.5437
8	0.000		0.4845	9.030	1063.0	0.4845	17.063	1020.2	0.4979
9	0.000		0.4437	9.378	1089.6	0.4437	17.704	1042.7	0.4575
10	0.000		0.4087	9.351	1087.5	0.4087	17.773	1050.2	0.4226
11	0.000		0.3788	9.238	1078.8	0.3788	17.731	1055.8	0.3925
12	0.000		0.3531	9.078	1066.6	0.3531	17.633	1060.7	0.3663
13	0.000		0.3311	8.890	1052.5	0.3311	17.504	1065.4	0.3437
14	0.000		0.3121	8.677	1036.7	0.3121	17.343	1069.5	0.3237
15	0.000		0.2955	8.438	1019.3	0.2955	17.141	1072.5	0.3061
16	0.000		0.2809	8.161	999.5	0.2809	16.873	1073.2	0.2904
17	0.000		0.2681	7.829	976.4	0.2681	16.499	1069.8	0.2764
18	0.000		0.2569	7.419	948.6	0.2569	15.957	1059.3	0.2640
19	0.000		0.2471	6.917	915.7	0.2471	15.171	1037.1	0.2529
20	0.000		0.2387	6.305	877.2	0.2387	14.069	1000.0	0.2432
21	0.000		0.2315	5.449	826.3	0.2315	12.359	938.6	0.2350
22	0.000		0.2258	4.562	776.8	0.2258	10.416	868.2	0.2282
23	0.000		0.2213	3.686	730.8	0.2213	8.364	796.4	0.2228
24	0.000		0.2182	1.635	633.2	0.2182	3.771	661.0	0.2193
25	0.000		0.2169	0.987	604.9	0.2169	2.225	618.6	0.2176
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.487	660.7	0.7396	5.491	662.9	0.7396	6.074	595.8	0.7396
2	15.252	970.7	0.7396	18.513	951.2	0.7396	20.326	676.2	0.7396
3	20.659	1028.2	0.7315	24.592	978.1	0.7307	26.781	682.9	0.7328
4	23.276	1063.5	0.6930	27.371	1000.7	0.6921	29.760	694.8	0.6971
5	24.054	1058.2	0.6426	28.140	999.4	0.6421	30.733	707.2	0.6513
6	24.078	1041.8	0.5886	28.114	992.4	0.5888	30.944	721.8	0.6031
7	23.934	1025.9	0.5377	27.921	985.6	0.5386	31.000	737.5	0.5580
8	23.924	1015.1	0.4930	27.877	980.9	0.4944	31.199	753.1	0.5181
9	24.563	1014.9	0.4539	28.540	984.2	0.4558	32.117	769.9	0.4825
10	24.547	1007.5	0.4203	28.500	980.9	0.4224	32.256	781.8	0.4513
11	24.399	998.3	0.3912	28.327	977.4	0.3935	32.217	790.9	0.4236
12	24.178	987.8	0.3659	28.081	974.0	0.3684	32.058	796.9	0.3988
13	23.917	976.6	0.3439	27.793	970.3	0.3465	31.816	800.1	0.3766
14	23.619	965.1	0.3246	27.466	966.3	0.3272	31.497	800.6	0.3566
15	23.272	953.2	0.3074	27.082	961.3	0.3101	31.091	799.1	0.3386
16	22.843	940.1	0.2922	26.603	954.6	0.2948	30.563	795.7	0.3225
17	22.285	925.3	0.2786	25.973	945.0	0.2813	29.858	790.6	0.3079
18	21.539	909.3	0.2664	25.131	932.3	0.2691	28.915	783.7	0.2950
19	20.549	893.5	0.2557	24.025	917.3	0.2583	27.674	774.7	0.2837
20	19.209	875.5	0.2462	22.535	898.2	0.2488	26.000	762.5	0.2737
21	17.079	844.7	0.2382	20.145	866.1	0.2408	23.307	742.8	0.2654
22	14.527	802.0	0.2316	17.238	824.3	0.2341	20.011	718.3	0.2586
23	11.612	745.2	0.2261	13.808	767.3	0.2286	16.003	683.3	0.2524
24	5.187	637.5	0.2226	6.147	645.9	0.2249	7.052	610.7	0.2469
25	3.012	603.8	0.2208	3.546	608.3	0.2230	4.004	587.0	0.2426

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C14 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.318	585.4	0.7396	6.644	580.4	0.7396	6.665	629.0	0.7396
2	21.065	638.9	0.7396	22.019	620.7	0.7396	22.084	794.6	0.7396
3	27.658	642.9	0.7336	28.756	622.6	0.7345	28.838	820.6	0.7345
4	30.708	649.7	0.6989	31.859	625.6	0.7010	31.950	855.0	0.7011
5	31.755	656.8	0.6546	32.966	629.0	0.6583	33.063	878.7	0.6585
6	32.056	665.6	0.6083	33.354	633.9	0.6140	33.456	899.1	0.6142
7	32.212	675.5	0.5653	33.620	640.1	0.5732	33.725	911.5	0.5733
8	32.511	685.5	0.5275	34.049	647.6	0.5376	34.157	924.1	0.5377
9	33.540	696.8	0.4935	35.237	656.8	0.5060	35.349	941.2	0.5060
10	33.767	705.8	0.4639	35.619	666.0	0.4786	35.732	945.5	0.4788
11	33.808	714.2	0.4374	35.824	675.7	0.4546	35.937	945.5	0.4547
12	33.725	722.2	0.4137	35.916	686.3	0.4333	36.029	945.5	0.4333
13	33.554	729.8	0.3922	35.929	697.6	0.4143	36.041	941.2	0.4143
14	33.301	736.9	0.3729	35.865	709.3	0.3971	35.975	932.6	0.3971
15	32.953	743.2	0.3553	35.708	721.4	0.3814	35.815	919.9	0.3814
16	32.475	748.6	0.3393	35.418	733.5	0.3672	35.520	899.1	0.3671
17	31.810	753.1	0.3249	34.932	745.2	0.3542	35.028	874.7	0.3542
18	30.894	756.0	0.3121	34.173	755.7	0.3424	34.263	851.1	0.3424
19	29.664	757.3	0.3007	33.056	763.2	0.3319	33.139	824.4	0.3318
20	27.971	755.2	0.2910	31.406	766.1	0.3225	31.483	802.2	0.3225
21	25.182	744.6	0.2829	28.512	759.1	0.3149	28.582	777.1	0.3148
22	21.721	726.8	0.2763	24.817	743.5	0.3088	24.879	749.3	0.3088
23	17.396	693.7	0.2699	19.960	709.3	0.3019	20.010	709.6	0.3019
24	7.632	615.1	0.2634	8.715	621.8	0.2939	8.738	627.3	0.2938
25	4.294	588.8	0.2572	4.834	592.0	0.2849	4.847	598.9	0.2848

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C15

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.716	647.2	0.7396	3.493	655.5	0.7396
2	0.000		0.7396	5.711	893.0	0.7396	11.708	936.0	0.7396
3	0.000		0.7287	7.831	976.5	0.7287	16.009	1031.3	0.7240
4	0.000	Data	0.6846	9.036	1063.5	0.6846	18.136	1104.8	0.6746
5	0.000	Not	0.6264	9.466	1096.5	0.6264	18.799	1124.3	0.6133
6	0.000	Required	0.5655	9.511	1100.0	0.5655	18.888	1128.0	0.5524
7	0.000		0.5103	9.451	1095.3	0.5103	18.873	1131.8	0.4991
8	0.000		0.4635	9.445	1094.8	0.4635	18.952	1139.0	0.4541
9	0.000		0.4238	9.780	1121.3	0.4238	19.572	1163.6	0.4155
10	0.000		0.3897	9.735	1117.7	0.3897	19.632	1172.8	0.3824
11	0.000		0.3608	9.608	1107.6	0.3608	19.599	1181.1	0.3540
12	0.000		0.3362	9.441	1094.5	0.3362	19.519	1188.9	0.3294
13	0.000		0.3152	9.252	1079.9	0.3152	19.407	1195.8	0.3080
14	0.000		0.2969	9.047	1064.3	0.2969	19.263	1201.2	0.2893
15	0.000		0.2810	8.828	1047.9	0.2810	19.081	1204.6	0.2727
16	0.000		0.2669	8.594	1030.6	0.2669	18.847	1204.6	0.2578
17	0.000		0.2545	8.346	1012.7	0.2545	18.538	1199.1	0.2446
18	0.000		0.2434	8.083	994.0	0.2434	18.122	1185.4	0.2327
19	0.000		0.2336	7.774	972.6	0.2336	17.515	1159.2	0.2222
20	0.000		0.2248	7.352	944.1	0.2248	16.594	1116.6	0.2129
21	0.000		0.2171	6.589	894.8	0.2171	14.936	1044.3	0.2048
22	0.000		0.2108	5.686	840.1	0.2108	12.885	958.9	0.1982
23	0.000		0.2057	4.703	784.4	0.2057	10.545	867.5	0.1930
24	0.000		0.2021	2.141	656.1	0.2021	4.873	690.6	0.1892
25	0.000		0.2006	1.304	618.6	0.2006	2.926	636.4	0.1876
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.086	659.6	0.7396	6.171	671.7	0.7396	6.912	605.7	0.7396
2	17.183	964.3	0.7396	20.662	984.2	0.7396	23.031	715.3	0.7396
3	23.034	1029.6	0.7236	27.283	1022.7	0.7234	30.347	736.5	0.7265
4	25.856	1093.5	0.6746	30.324	1054.9	0.6749	33.868	767.7	0.6824
5	26.788	1119.4	0.6136	31.259	1055.4	0.6148	35.210	795.1	0.6280
6	26.955	1127.0	0.5527	31.361	1045.7	0.5548	35.665	819.7	0.5736
7	26.933	1126.3	0.4991	31.268	1035.2	0.5017	35.862	840.6	0.5249
8	26.984	1123.6	0.4539	31.265	1027.4	0.4569	36.095	857.9	0.4828
9	27.646	1127.7	0.4155	31.920	1026.4	0.4188	36.961	873.8	0.4455
10	27.628	1120.1	0.3826	31.860	1020.3	0.3862	36.977	879.5	0.4127
11	27.470	1108.0	0.3544	31.665	1015.0	0.3582	36.771	878.7	0.3838
12	27.221	1091.8	0.3301	31.384	1010.4	0.3341	36.422	873.5	0.3585
13	26.917	1073.8	0.3090	31.052	1006.4	0.3130	35.981	865.3	0.3363
14	26.564	1054.5	0.2906	30.672	1002.6	0.2946	35.460	854.8	0.3167
15	26.151	1033.6	0.2743	30.231	998.6	0.2784	34.849	842.3	0.2993
16	25.657	1010.6	0.2598	29.699	993.3	0.2639	34.138	829.4	0.2839
17	25.044	984.4	0.2469	29.030	985.4	0.2510	33.211	811.1	0.2699
18	24.291	956.3	0.2355	28.189	973.3	0.2395	32.075	790.7	0.2573
19	23.352	929.4	0.2253	27.130	957.0	0.2292	30.772	774.2	0.2463
20	22.087	902.4	0.2163	25.694	934.3	0.2202	29.270	769.8	0.2376
21	19.925	864.3	0.2085	23.236	896.3	0.2124	26.622	757.3	0.2302
22	17.217	817.2	0.2021	20.131	847.9	0.2060	23.202	737.0	0.2241
23	13.998	758.3	0.1969	16.358	785.0	0.2007	18.855	701.3	0.2185
24	6.417	644.5	0.1932	7.486	655.9	0.1970	8.607	622.4	0.2143
25	3.793	608.0	0.1914	4.393	614.0	0.1950	5.077	598.9	0.2131

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C15 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	7.365	607.5	0.7396	8.806	653.4	0.7396
2	24.458	719.5	0.7396	28.517	854.7	0.7396
3	32.206	742.8	0.7280	36.962	861.3	0.7288
4	36.024	776.0	0.6861	41.001	878.4	0.6884
5	37.588	801.7	0.6342	42.683	887.6	0.6384
6	38.202	820.6	0.5822	43.424	897.7	0.5880
7	38.513	834.5	0.5351	43.890	910.2	0.5422
8	38.833	845.3	0.4938	44.391	925.0	0.5016
9	39.785	856.1	0.4567	45.579	944.8	0.4648
10	39.841	861.1	0.4238	45.834	961.7	0.4321
11	39.654	863.5	0.3947	45.845	978.9	0.4029
12	39.321	865.6	0.3691	45.707	996.2	0.3772
13	38.909	869.3	0.3467	45.483	1013.2	0.3545
14	38.507	884.7	0.3272	45.245	1028.2	0.3345
15	38.402	953.5	0.3109	45.213	1035.0	0.3174
16	38.523	1079.6	0.2968	45.321	1033.8	0.3026
17	37.711	1098.4	0.2819	44.588	1041.2	0.2874
18	36.391	1068.5	0.2680	43.318	1045.9	0.2735
19	34.822	1026.8	0.2559	41.692	1040.5	0.2611
20	33.001	979.1	0.2460	39.640	1019.1	0.2507
21	29.952	922.5	0.2378	36.109	976.0	0.2420
22	26.074	862.1	0.2311	31.550	918.3	0.2349
23	21.141	790.9	0.2251	25.607	839.4	0.2285
24	9.651	658.9	0.2208	11.797	683.6	0.2242
25	5.649	614.4	0.2190	6.850	628.4	0.2221

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C16

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.693	646.0	0.7396	3.305	646.2	0.7396
2	0.000		0.7396	5.595	884.8	0.7396	11.013	892.1	0.7396
3	0.000		0.7302	7.640	963.4	0.7302	15.141	980.6	0.7284
4	0.000	Data	0.6881	8.840	1048.8	0.6881	17.323	1055.0	0.6845
5	0.000	Not	0.6317	9.328	1085.8	0.6317	18.124	1080.0	0.6271
6	0.000	Required	0.5714	9.457	1095.8	0.5714	18.344	1087.3	0.5675
7	0.000		0.5155	9.473	1097.0	0.5155	18.427	1092.8	0.5133
8	0.000		0.4677	9.523	1100.9	0.4677	18.582	1101.4	0.4670
9	0.000		0.4269	9.898	1130.7	0.4269	19.251	1125.9	0.4272
10	0.000		0.3920	9.874	1128.8	0.3920	19.344	1135.9	0.3930
11	0.000		0.3624	9.757	1119.4	0.3624	19.330	1144.7	0.3636
12	0.000		0.3372	9.587	1105.9	0.3372	19.253	1152.7	0.3383
13	0.000		0.3156	9.383	1090.0	0.3156	19.135	1160.1	0.3163
14	0.000		0.2970	9.156	1072.6	0.2970	18.982	1166.6	0.2970
15	0.000		0.2808	8.908	1053.8	0.2808	18.794	1171.9	0.2799
16	0.000		0.2666	8.637	1033.8	0.2666	18.566	1175.6	0.2647
17	0.000		0.2541	8.336	1012.0	0.2541	18.267	1175.8	0.2510
18	0.000		0.2431	7.991	987.6	0.2431	17.837	1168.3	0.2389
19	0.000		0.2333	7.571	958.8	0.2333	17.166	1146.6	0.2280
20	0.000		0.2249	7.033	923.2	0.2249	16.136	1105.1	0.2185
21	0.000		0.2176	6.199	870.7	0.2176	14.384	1031.8	0.2104
22	0.000		0.2117	5.292	817.3	0.2117	12.310	946.1	0.2038
23	0.000		0.2069	4.364	766.1	0.2069	10.044	857.2	0.1986
24	0.000		0.2036	1.985	649.0	0.2036	4.642	686.8	0.1949
25	0.000		0.2022	1.212	614.6	0.2022	2.785	634.1	0.1933
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.053	670.0	0.7396	6.139	671.8	0.7396	7.544	648.6	0.7396
2	16.975	1010.3	0.7396	20.450	983.6	0.7396	24.754	866.8	0.7396
3	22.691	1077.5	0.7249	26.932	1021.6	0.7243	32.258	895.7	0.7261
4	25.431	1131.0	0.6782	29.920	1058.1	0.6776	35.789	939.0	0.6819
5	26.302	1138.0	0.6192	30.867	1069.5	0.6190	37.095	968.9	0.6263
6	26.423	1128.2	0.5593	31.010	1072.9	0.5595	37.482	989.8	0.5691
7	26.378	1115.7	0.5058	30.973	1074.1	0.5062	37.598	1003.1	0.5169
8	26.421	1104.9	0.4605	31.007	1072.7	0.4612	37.732	1012.0	0.4719
9	27.072	1103.2	0.4220	31.675	1075.3	0.4229	38.511	1021.9	0.4331
10	27.057	1092.9	0.3889	31.631	1070.9	0.3900	38.445	1019.9	0.3997
11	26.921	1081.3	0.3605	31.468	1066.8	0.3617	38.194	1012.1	0.3710
12	26.712	1069.0	0.3360	31.232	1062.7	0.3374	37.827	1000.5	0.3462
13	26.450	1055.8	0.3147	30.946	1059.1	0.3161	37.373	985.9	0.3246
14	26.138	1041.3	0.2960	30.606	1054.9	0.2975	36.836	969.1	0.3056
15	25.766	1024.9	0.2796	30.200	1049.9	0.2810	36.198	949.6	0.2889
16	25.317	1005.5	0.2649	29.703	1042.7	0.2664	35.426	927.1	0.2739
17	24.748	982.3	0.2517	29.064	1032.5	0.2532	34.463	901.4	0.2605
18	24.025	957.8	0.2400	28.245	1018.5	0.2414	33.303	875.1	0.2487
19	23.076	935.2	0.2296	27.171	1000.7	0.2310	31.918	851.8	0.2384
20	21.771	913.4	0.2204	25.694	976.7	0.2218	30.100	827.0	0.2293
21	19.573	879.2	0.2126	23.186	935.1	0.2138	27.137	795.1	0.2214
22	16.873	833.5	0.2061	20.066	881.6	0.2073	23.475	758.8	0.2148
23	13.715	772.5	0.2009	16.320	812.2	0.2020	19.023	713.9	0.2093
24	6.299	650.8	0.1973	7.494	667.5	0.1984	8.705	627.3	0.2056
25	3.723	611.7	0.1956	4.403	621.0	0.1967	5.065	597.7	0.2034

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C16 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	8.240	634.1	0.7396	9.192	620.6	0.7396
2	26.803	799.6	0.7396	29.442	739.8	0.7396
3	34.808	822.2	0.7273	37.917	744.4	0.7291
4	38.645	860.1	0.6848	41.964	758.3	0.6890
5	40.171	888.5	0.6312	43.672	770.6	0.6384
6	40.723	910.4	0.5757	44.425	784.5	0.5862
7	40.959	926.8	0.5246	44.889	800.5	0.5379
8	41.188	939.9	0.4800	45.360	817.8	0.4955
9	42.080	955.8	0.4411	46.529	838.1	0.4582
10	42.068	963.5	0.4075	46.755	856.0	0.4255
11	41.849	968.1	0.3785	46.757	873.0	0.3971
12	41.505	971.4	0.3534	46.635	890.4	0.3722
13	41.070	974.2	0.3315	46.471	912.2	0.3504
14	40.540	975.2	0.3122	46.149	929.3	0.3309
15	39.885	972.7	0.2952	45.670	944.0	0.3134
16	39.058	964.8	0.2799	44.997	957.1	0.2978
17	37.993	950.3	0.2663	44.048	967.1	0.2837
18	36.687	929.9	0.2542	42.793	971.5	0.2711
19	35.128	906.3	0.2436	41.188	967.5	0.2600
20	33.111	880.0	0.2343	39.003	953.1	0.2500
21	29.869	844.5	0.2263	35.360	919.5	0.2414
22	25.860	802.5	0.2197	30.755	872.0	0.2342
23	20.933	748.4	0.2140	24.900	803.1	0.2280
24	9.580	642.7	0.2102	11.425	665.5	0.2240
25	5.547	606.1	0.2079	6.553	617.5	0.2208

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C17

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.693	646.0	0.7396	3.141	637.0	0.7396
2	0.000		0.7396	5.624	886.8	0.7396	10.561	857.1	0.7396
3	0.000		0.7300	7.728	969.4	0.7300	14.728	944.9	0.7308
4	0.000	Data	0.6876	8.959	1057.7	0.6876	17.006	1021.2	0.6894
5	0.000	Not	0.6308	9.429	1093.6	0.6308	17.841	1049.4	0.6344
6	0.000	Required	0.5704	9.517	1100.5	0.5704	18.031	1057.4	0.5761
7	0.000		0.5146	9.491	1098.4	0.5146	18.054	1061.3	0.5223
8	0.000		0.4671	9.513	1100.1	0.4671	18.159	1067.9	0.4759
9	0.000		0.4267	9.872	1128.6	0.4267	18.788	1089.7	0.4360
10	0.000		0.3920	9.837	1125.8	0.3920	18.844	1097.1	0.4016
11	0.000		0.3625	9.707	1115.4	0.3625	18.787	1103.2	0.3722
12	0.000		0.3375	9.525	1101.1	0.3375	18.671	1108.6	0.3468
13	0.000		0.3161	9.312	1084.5	0.3161	18.518	1113.6	0.3247
14	0.000		0.2976	9.072	1066.2	0.2976	18.329	1117.9	0.3054
15	0.000		0.2815	8.803	1046.0	0.2815	18.100	1121.2	0.2884
16	0.000		0.2676	8.498	1023.7	0.2676	17.819	1123.2	0.2732
17	0.000		0.2552	8.144	998.3	0.2552	17.451	1122.1	0.2597
18	0.000		0.2444	7.722	969.0	0.2444	16.929	1113.7	0.2476
19	0.000		0.2350	7.209	934.7	0.2350	16.148	1091.6	0.2369
20	0.000		0.2268	6.580	894.3	0.2268	15.012	1051.0	0.2275
21	0.000		0.2200	5.695	840.6	0.2200	13.210	981.6	0.2196
22	0.000		0.2145	4.782	788.8	0.2145	11.155	902.1	0.2131
23	0.000		0.2101	3.886	741.1	0.2101	8.994	821.9	0.2079
24	0.000		0.2071	1.740	637.9	0.2071	4.099	672.0	0.2044
25	0.000		0.2059	1.058	607.9	0.2059	2.440	625.2	0.2028
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.341	633.9	0.7396	5.040	630.3	0.7396	6.142	628.7	0.7396
2	14.730	850.2	0.7396	17.032	817.4	0.7396	20.568	803.6	0.7396
3	20.048	889.1	0.7329	22.849	834.7	0.7340	27.292	829.7	0.7352
4	22.748	921.8	0.6950	25.717	854.5	0.6980	30.695	869.0	0.7014
5	23.693	930.6	0.6445	26.717	861.0	0.6500	32.113	901.1	0.6561
6	23.885	930.7	0.5904	26.937	864.4	0.5985	32.691	929.6	0.6070
7	23.874	928.0	0.5394	26.948	867.1	0.5495	33.009	954.9	0.5594
8	23.941	925.0	0.4944	27.032	869.1	0.5056	33.363	977.7	0.5157
9	24.603	927.6	0.4548	27.743	875.1	0.4665	34.356	1002.1	0.4760
10	24.612	923.9	0.4206	27.762	876.3	0.4326	34.489	1012.2	0.4413
11	24.488	918.6	0.3911	27.642	876.8	0.4031	34.366	1011.9	0.4110
12	24.294	912.5	0.3658	27.445	876.5	0.3777	34.079	1003.9	0.3848
13	24.078	907.6	0.3438	27.220	875.4	0.3556	33.702	990.7	0.3619
14	23.791	900.0	0.3243	26.925	874.4	0.3358	33.208	973.6	0.3416
15	23.441	890.7	0.3068	26.562	872.8	0.3182	32.598	952.8	0.3235
16	23.019	880.0	0.2912	26.117	870.0	0.3024	31.852	928.1	0.3075
17	22.488	867.9	0.2773	25.547	865.3	0.2883	30.920	899.3	0.2931
18	21.786	854.6	0.2649	24.791	858.8	0.2758	29.772	869.2	0.2806
19	20.818	841.1	0.2541	23.753	850.4	0.2649	28.395	844.1	0.2699
20	19.466	825.7	0.2449	22.303	838.9	0.2556	26.595	818.9	0.2607
21	17.300	800.5	0.2372	19.943	816.5	0.2480	23.795	788.4	0.2530
22	14.738	766.8	0.2310	17.111	786.4	0.2417	20.449	754.1	0.2467
23	11.857	721.2	0.2254	13.807	741.5	0.2361	16.478	712.0	0.2410
24	5.361	629.1	0.2214	6.220	636.8	0.2318	7.398	625.5	0.2366
25	3.134	598.9	0.2188	3.603	602.7	0.2286	4.259	597.4	0.2335

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C17 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.553	603.0	0.7396	7.849	643.5	0.7396	7.857	585.8	0.7396
2	21.891	706.8	0.7396	25.682	831.9	0.7396	25.703	629.0	0.7396
3	29.029	729.7	0.7363	33.512	840.7	0.7366	33.536	630.2	0.7366
4	32.726	761.8	0.7041	37.374	853.1	0.7052	37.401	638.9	0.7052
5	34.374	788.0	0.6611	39.031	853.7	0.6636	39.059	641.9	0.6636
6	35.129	808.8	0.6142	39.789	854.0	0.6182	39.821	653.7	0.6182
7	35.589	825.8	0.5685	40.289	857.0	0.5737	40.324	662.7	0.5738
8	36.073	841.8	0.5261	40.860	863.7	0.5323	40.898	671.9	0.5325
9	37.202	858.8	0.4872	42.162	877.0	0.4940	42.203	681.1	0.4942
10	37.418	869.4	0.4526	42.541	889.9	0.4600	42.584	687.3	0.4602
11	37.341	875.3	0.4222	42.648	904.6	0.4298	42.694	696.8	0.4300
12	37.077	878.3	0.3956	42.589	921.3	0.4034	42.636	700.0	0.4036
13	36.699	878.2	0.3723	42.431	939.5	0.3800	42.479	703.2	0.3803
14	36.177	874.6	0.3516	42.141	959.2	0.3592	42.189	703.2	0.3593
15	35.503	866.3	0.3330	41.698	979.3	0.3403	41.746	703.1	0.3405
16	34.652	853.0	0.3165	41.058	998.0	0.3234	41.106	703.2	0.3236
17	33.572	834.6	0.3016	40.142	1012.8	0.3081	40.189	700.0	0.3083
18	32.242	812.6	0.2886	38.893	1020.2	0.2945	38.940	700.0	0.2946
19	30.680	790.8	0.2775	37.292	1016.7	0.2826	37.338	696.8	0.2827
20	28.697	769.8	0.2680	35.131	1000.5	0.2723	35.175	690.5	0.2724
21	25.675	745.1	0.2601	31.699	964.4	0.2637	31.741	684.2	0.2638
22	22.074	717.8	0.2537	27.439	909.3	0.2565	27.476	668.8	0.2567
23	17.767	683.2	0.2479	22.144	832.8	0.2500	22.174	647.8	0.2501
24	7.983	615.6	0.2436	10.043	678.4	0.2454	10.056	598.9	0.2455
25	4.684	601.0	0.2422	5.910	629.8	0.2447	5.917	582.2	0.2448

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C18

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.723	647.6	0.7396	3.519	656.6	0.7396
2	0.000		0.7396	5.741	895.1	0.7396	11.820	942.4	0.7396
3	0.000		0.7284	7.893	980.8	0.7284	16.200	1041.2	0.7235
4	0.000	Data	0.6837	9.148	1072.0	0.6837	18.398	1117.3	0.6735
5	0.000	Not	0.6245	9.619	1108.5	0.6245	19.095	1136.4	0.6110
6	0.000	Required	0.5626	9.695	1114.5	0.5626	19.196	1138.5	0.5493
7	0.000		0.5066	9.661	1111.8	0.5066	19.188	1140.7	0.4955
8	0.000		0.4594	9.677	1113.1	0.4594	19.275	1146.8	0.4502
9	0.000		0.4193	10.033	1141.7	0.4193	19.903	1170.5	0.4116
10	0.000		0.3850	9.989	1138.1	0.3850	19.958	1179.2	0.3784
11	0.000		0.3560	9.851	1126.9	0.3560	19.908	1187.0	0.3500
12	0.000		0.3314	9.663	1111.9	0.3314	19.800	1194.1	0.3256
13	0.000		0.3104	9.449	1095.1	0.3104	19.659	1200.7	0.3044
14	0.000		0.2922	9.217	1077.2	0.2922	19.485	1205.9	0.2858
15	0.000		0.2763	8.968	1058.3	0.2763	19.274	1209.4	0.2693
16	0.000		0.2625	8.701	1038.5	0.2625	19.010	1209.7	0.2546
17	0.000		0.2503	8.410	1017.3	0.2503	18.662	1204.5	0.2415
18	0.000		0.2394	8.080	993.8	0.2394	18.176	1190.5	0.2299
19	0.000		0.2299	7.680	966.2	0.2299	17.464	1162.9	0.2195
20	0.000		0.2214	7.160	931.4	0.2214	16.412	1117.5	0.2104
21	0.000		0.2142	6.331	878.8	0.2142	14.643	1041.6	0.2026
22	0.000		0.2083	5.408	823.9	0.2083	12.528	953.3	0.1962
23	0.000		0.2036	4.444	770.4	0.2036	10.185	861.1	0.1912
24	0.000		0.2002	2.010	650.1	0.2002	4.682	687.6	0.1875
25	0.000		0.1989	1.226	615.2	0.1989	2.811	634.7	0.1861
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.248	668.7	0.7396	6.464	686.3	0.7396	7.497	624.3	0.7396
2	17.657	998.3	0.7396	21.471	1037.2	0.7396	24.631	774.2	0.7396
3	23.509	1055.2	0.7224	28.087	1071.5	0.7210	32.049	795.9	0.7235
4	26.207	1102.0	0.6724	30.975	1100.8	0.6707	35.444	831.5	0.6767
5	26.954	1106.8	0.6107	31.719	1100.4	0.6092	36.612	862.6	0.6196
6	26.952	1097.0	0.5498	31.670	1093.0	0.5488	36.929	890.5	0.5632
7	26.827	1085.9	0.4966	31.500	1086.1	0.4960	37.063	914.3	0.5131
8	26.847	1079.6	0.4519	31.490	1081.4	0.4517	37.306	934.7	0.4704
9	27.515	1083.3	0.4139	32.175	1084.1	0.4141	38.233	954.6	0.4333
10	27.498	1078.6	0.3813	32.135	1080.5	0.3817	38.287	962.5	0.4009
11	27.335	1066.1	0.3533	31.948	1076.9	0.3540	38.097	962.2	0.3725
12	27.092	1053.7	0.3293	31.681	1073.2	0.3301	37.763	956.6	0.3478
13	26.803	1040.2	0.3083	31.368	1069.5	0.3093	37.357	948.9	0.3263
14	26.473	1026.3	0.2900	31.013	1065.8	0.2910	37.004	949.0	0.3078
15	26.098	1011.8	0.2738	30.606	1060.9	0.2749	37.006	983.6	0.2933
16	25.662	996.9	0.2593	30.125	1054.2	0.2604	36.530	984.0	0.2784
17	25.136	981.7	0.2465	29.530	1043.9	0.2476	35.632	958.3	0.2642
18	24.480	967.5	0.2350	28.769	1028.5	0.2361	34.462	924.7	0.2512
19	23.630	956.0	0.2248	27.777	1008.1	0.2259	33.081	893.9	0.2402
20	22.398	941.4	0.2159	26.352	981.0	0.2170	31.233	861.7	0.2304
21	20.214	908.4	0.2083	23.844	937.3	0.2093	28.195	823.1	0.2221
22	17.440	858.6	0.2019	20.639	882.4	0.2029	24.398	782.0	0.2155
23	14.128	790.6	0.1967	16.731	812.0	0.1977	19.720	731.8	0.2098
24	6.446	656.8	0.1930	7.636	667.0	0.1940	8.988	635.1	0.2058
25	3.800	614.4	0.1912	4.477	620.7	0.1922	5.219	602.0	0.2032

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C18 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	7.910	603.2	0.7396	8.878	621.6	0.7396
2	25.886	698.6	0.7396	28.622	747.2	0.7396
3	33.677	718.1	0.7250	36.949	755.2	0.7272
4	37.353	748.3	0.6803	40.851	770.4	0.6853
5	38.763	775.4	0.6261	42.407	780.4	0.6343
6	39.281	798.6	0.5725	43.068	790.4	0.5837
7	39.575	817.6	0.5246	43.523	801.7	0.5382
8	39.953	834.0	0.4833	44.080	814.5	0.4984
9	41.012	850.4	0.4466	45.363	830.9	0.4627
10	41.143	860.1	0.4144	45.693	845.7	0.4310
11	41.000	866.1	0.3859	45.750	860.8	0.4028
12	40.696	869.9	0.3608	45.648	876.4	0.3779
13	40.303	871.6	0.3388	45.455	892.2	0.3557
14	39.934	869.5	0.3198	45.271	907.0	0.3364
15	39.852	858.8	0.3043	45.314	917.2	0.3200
16	39.290	848.0	0.2889	44.909	930.1	0.3041
17	38.286	834.9	0.2741	44.058	942.9	0.2891
18	36.983	818.7	0.2609	42.879	953.4	0.2757
19	35.473	803.3	0.2495	41.516	966.0	0.2642
20	33.561	795.8	0.2397	39.636	968.8	0.2543
21	30.475	790.2	0.2319	36.453	960.4	0.2465
22	26.843	809.6	0.2269	32.351	920.9	0.2408
23	21.927	781.8	0.2219	26.539	850.3	0.2352
24	10.037	659.4	0.2182	12.273	689.0	0.2313
25	5.808	615.9	0.2152	7.102	633.7	0.2284

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C19

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.713	647.1	0.7396	3.387	649.7	0.7396
2	0.000		0.7396	5.696	891.9	0.7396	11.365	910.9	0.7396
3	0.000		0.7293	7.806	974.8	0.7293	15.626	1004.1	0.7267
4	0.000	Data	0.6858	9.026	1062.7	0.6858	17.811	1079.1	0.6805
5	0.000	Not	0.6280	9.494	1098.7	0.6280	18.546	1100.8	0.6211
6	0.000	Required	0.5669	9.591	1106.3	0.5669	18.692	1104.9	0.5605
7	0.000		0.5108	9.579	1105.3	0.5108	18.716	1107.9	0.5062
8	0.000		0.4633	9.611	1107.8	0.4633	18.825	1114.3	0.4604
9	0.000		0.4229	9.974	1136.9	0.4229	19.462	1137.4	0.4212
10	0.000		0.3883	9.938	1133.9	0.3883	19.525	1145.9	0.3874
11	0.000		0.3590	9.807	1123.4	0.3590	19.484	1153.6	0.3585
12	0.000		0.3341	9.625	1108.9	0.3341	19.382	1160.6	0.3336
13	0.000		0.3128	9.411	1092.2	0.3128	19.243	1167.1	0.3120
14	0.000		0.2944	9.174	1073.9	0.2944	19.069	1172.7	0.2930
15	0.000		0.2784	8.913	1054.2	0.2784	18.858	1177.1	0.2762
16	0.000		0.2645	8.624	1032.8	0.2645	18.602	1180.0	0.2613
17	0.000		0.2522	8.296	1009.1	0.2522	18.265	1179.2	0.2479
18	0.000		0.2413	7.910	982.0	0.2413	17.783	1170.7	0.2359
19	0.000		0.2318	7.438	949.8	0.2318	17.043	1147.4	0.2253
20	0.000		0.2236	6.847	911.2	0.2236	15.941	1104.3	0.2160
21	0.000		0.2166	5.980	857.5	0.2166	14.132	1029.3	0.2081
22	0.000		0.2110	5.063	804.3	0.2110	12.021	941.9	0.2017
23	0.000		0.2065	4.139	754.2	0.2065	9.742	852.4	0.1967
24	0.000		0.2034	1.861	643.4	0.2034	4.464	684.1	0.1931
25	0.000		0.2021	1.133	611.2	0.2021	2.671	632.5	0.1915
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.289	615.0	0.7396	4.805	611.4	0.7396	5.496	602.5	0.7396
2	14.512	769.6	0.7396	16.218	743.0	0.7396	18.583	715.0	0.7396
3	19.654	796.3	0.7310	21.736	755.2	0.7329	24.819	737.7	0.7354
4	22.251	824.8	0.6907	24.475	770.3	0.6954	27.995	766.1	0.7015
5	23.224	841.7	0.6386	25.518	777.8	0.6467	29.380	789.0	0.6575
6	23.547	854.5	0.5850	25.898	784.0	0.5961	30.056	809.5	0.6116
7	23.706	864.4	0.5358	26.111	789.9	0.5495	30.528	827.8	0.5687
8	23.908	871.3	0.4926	26.364	795.5	0.5080	31.009	844.3	0.5297
9	24.657	879.7	0.4539	27.188	803.9	0.4703	32.059	861.0	0.4930
10	24.734	880.7	0.4200	27.303	808.1	0.4371	32.273	868.4	0.4598
11	24.670	879.0	0.3904	27.270	811.6	0.4079	32.252	869.3	0.4300
12	24.518	875.2	0.3647	27.142	814.3	0.3822	32.073	865.5	0.4033
13	24.306	869.8	0.3421	26.951	816.7	0.3596	31.786	858.3	0.3796
14	24.041	863.0	0.3222	26.702	818.5	0.3395	31.406	848.6	0.3585
15	23.723	855.2	0.3046	26.394	819.7	0.3217	30.931	836.4	0.3397
16	23.341	846.1	0.2888	26.013	819.8	0.3057	30.340	821.4	0.3227
17	22.862	835.9	0.2747	25.523	818.5	0.2912	29.594	803.4	0.3074
18	22.224	824.8	0.2621	24.862	815.9	0.2785	28.643	783.5	0.2938
19	21.319	813.3	0.2511	23.917	811.4	0.2674	27.414	764.6	0.2820
20	20.020	799.8	0.2418	22.551	803.9	0.2581	25.802	748.5	0.2723
21	17.879	777.5	0.2342	20.258	787.0	0.2507	23.316	736.1	0.2649
22	15.318	748.3	0.2280	17.471	762.7	0.2447	20.185	714.6	0.2589
23	12.383	707.7	0.2223	14.163	724.2	0.2389	16.441	688.2	0.2533
24	5.620	623.4	0.2177	6.400	629.8	0.2337	7.408	616.2	0.2477
25	3.294	595.2	0.2141	3.710	598.2	0.2289	4.335	595.8	0.2444

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C19 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.116	625.7	0.7396	7.652	660.0	0.7396	7.659	582.5	0.7396
2	20.584	793.2	0.7396	25.076	892.7	0.7396	25.097	629.0	0.7396
3	27.336	818.2	0.7352	32.570	898.7	0.7346	32.596	636.0	0.7346
4	30.777	850.8	0.7018	36.157	910.5	0.7012	36.185	641.9	0.7012
5	32.327	871.7	0.6587	37.703	910.1	0.6585	37.733	647.8	0.6586
6	33.114	886.1	0.6137	38.487	909.9	0.6142	38.520	656.7	0.6144
7	33.667	896.8	0.5715	39.076	912.8	0.5725	39.112	665.8	0.5726
8	34.225	907.1	0.5330	39.715	919.4	0.5342	39.754	674.9	0.5344
9	35.405	924.7	0.4966	41.058	932.9	0.4982	41.100	684.2	0.4984
10	35.805	950.6	0.4636	41.592	944.2	0.4655	41.636	690.5	0.4657
11	35.881	964.4	0.4336	41.838	958.6	0.4356	41.884	696.8	0.4358
12	35.903	993.7	0.4070	42.035	973.8	0.4090	42.082	700.0	0.4092
13	36.308	1102.0	0.3842	42.551	983.5	0.3859	42.598	700.0	0.3862
14	36.094	1129.8	0.3622	42.538	1001.4	0.3639	42.585	700.0	0.3641
15	35.542	1116.8	0.3421	42.216	1022.3	0.3439	42.263	700.0	0.3440
16	34.790	1090.2	0.3243	41.685	1042.9	0.3258	41.731	696.8	0.3260
17	33.827	1055.3	0.3083	40.902	1059.9	0.3097	40.948	696.8	0.3098
18	32.625	1016.4	0.2943	39.807	1070.2	0.2952	39.852	693.6	0.2953
19	31.135	977.7	0.2822	38.312	1069.7	0.2825	38.357	693.6	0.2827
20	29.245	938.1	0.2721	36.257	1053.9	0.2718	36.300	687.3	0.2720
21	26.398	889.3	0.2645	32.943	1010.5	0.2633	32.983	678.0	0.2635
22	22.863	837.8	0.2582	28.725	950.5	0.2562	28.761	665.8	0.2563
23	18.592	775.4	0.2524	23.408	865.9	0.2498	23.438	647.8	0.2500
24	8.380	652.0	0.2469	10.662	691.8	0.2443	10.675	598.9	0.2445
25	4.875	611.4	0.2439	6.160	633.1	0.2414	6.167	582.2	0.2415

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C20

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.632	642.8	0.7396	3.216	644.6	0.7396
2	0.000		0.7396	5.443	874.2	0.7396	10.859	892.0	0.7396
3	0.000		0.7316	7.520	955.3	0.7316	15.177	992.0	0.7290
4	0.000	Data	0.6908	8.776	1044.0	0.6908	17.530	1076.6	0.6850
5	0.000	Not	0.6356	9.295	1083.2	0.6356	18.374	1103.1	0.6272
6	0.000	Required	0.5759	9.423	1093.1	0.5759	18.543	1106.5	0.5673
7	0.000		0.5200	9.426	1093.4	0.5200	18.546	1106.5	0.5130
8	0.000		0.4720	9.471	1096.9	0.4720	18.637	1110.3	0.4667
9	0.000		0.4309	9.852	1127.0	0.4309	19.266	1131.1	0.4271
10	0.000		0.3958	9.823	1124.7	0.3958	19.309	1137.2	0.3930
11	0.000		0.3660	9.690	1114.1	0.3660	19.234	1142.2	0.3638
12	0.000		0.3406	9.501	1099.2	0.3406	19.097	1146.6	0.3387
13	0.000		0.3189	9.281	1082.1	0.3189	18.924	1150.7	0.3170
14	0.000		0.3003	9.037	1063.5	0.3003	18.719	1154.1	0.2979
15	0.000		0.2841	8.766	1043.3	0.2841	18.473	1156.2	0.2811
16	0.000		0.2699	8.462	1021.0	0.2699	18.164	1155.8	0.2661
17	0.000		0.2575	8.109	995.9	0.2575	17.753	1150.8	0.2528
18	0.000		0.2466	7.689	966.8	0.2466	17.174	1137.1	0.2409
19	0.000		0.2371	7.176	932.5	0.2371	16.334	1109.6	0.2304
20	0.000		0.2289	6.546	892.2	0.2289	15.142	1063.9	0.2213
21	0.000		0.2220	5.658	838.4	0.2220	13.289	990.1	0.2136
22	0.000		0.2164	4.742	786.6	0.2164	11.183	906.6	0.2073
23	0.000		0.2121	3.839	738.6	0.2121	8.972	823.4	0.2024
24	0.000		0.2091	1.708	636.5	0.2091	4.065	671.9	0.1989
25	0.000		0.2079	1.035	606.9	0.2079	2.420	625.3	0.1975
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.099	679.1	0.7396	6.121	664.8	0.7396	7.327	635.5	0.7396
2	17.230	1050.6	0.7396	20.480	949.5	0.7396	24.158	815.0	0.7396
3	23.101	1113.1	0.7229	27.056	981.1	0.7233	31.611	837.7	0.7254
4	25.907	1157.8	0.6746	30.109	1016.0	0.6758	35.180	876.0	0.6809
5	26.763	1159.1	0.6146	31.057	1029.3	0.6169	36.538	907.8	0.6256
6	26.828	1148.6	0.5543	31.163	1035.2	0.5576	36.996	936.1	0.5694
7	26.733	1138.9	0.5009	31.087	1038.0	0.5047	37.238	962.4	0.5186
8	26.761	1132.6	0.4559	31.120	1038.8	0.4599	37.502	982.0	0.4745
9	27.436	1137.2	0.4177	31.828	1043.6	0.4217	38.422	1000.4	0.4361
10	27.428	1132.1	0.3848	31.806	1041.6	0.3888	38.458	1005.5	0.4028
11	27.283	1125.3	0.3566	31.645	1039.2	0.3607	38.277	1003.8	0.3741
12	27.060	1116.9	0.3323	31.403	1036.4	0.3365	38.043	1004.5	0.3495
13	26.781	1106.6	0.3113	31.104	1033.5	0.3153	38.015	1028.6	0.3291
14	26.437	1093.3	0.2928	30.739	1030.4	0.2968	37.570	1021.4	0.3097
15	26.008	1076.1	0.2765	30.282	1026.4	0.2804	36.863	999.3	0.2922
16	25.464	1054.4	0.2621	29.701	1021.0	0.2659	35.957	971.3	0.2767
17	24.759	1027.9	0.2493	28.943	1013.4	0.2530	34.818	939.5	0.2630
18	23.847	998.7	0.2379	27.968	1004.4	0.2415	33.443	907.3	0.2510
19	22.673	970.4	0.2278	26.720	994.0	0.2313	31.843	880.0	0.2407
20	21.133	941.8	0.2190	25.062	977.6	0.2224	29.812	852.0	0.2316
21	18.758	900.5	0.2114	22.425	942.2	0.2147	26.693	817.2	0.2237
22	15.953	848.3	0.2052	19.226	891.5	0.2084	22.932	778.5	0.2173
23	12.780	781.6	0.2003	15.462	820.9	0.2034	18.430	730.5	0.2121
24	5.766	653.2	0.1970	6.976	668.9	0.1999	8.309	634.0	0.2086
25	3.389	613.4	0.1956	4.072	621.3	0.1984	4.813	601.9	0.2065

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C20 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	7.735	602.7	0.7396	8.704	621.7	0.7396
2	25.403	697.4	0.7396	28.128	746.4	0.7396
3	33.222	716.3	0.7268	36.447	752.1	0.7289
4	37.052	744.3	0.6843	40.487	766.2	0.6890
5	38.625	768.1	0.6317	42.221	777.1	0.6395
6	39.259	788.2	0.5782	43.038	789.8	0.5890
7	39.641	804.6	0.5294	43.626	804.4	0.5428
8	40.025	818.9	0.4868	44.236	820.6	0.5021
9	41.069	834.0	0.4492	45.545	840.1	0.4655
10	41.179	843.2	0.4163	45.884	857.4	0.4331
11	41.044	848.9	0.3874	45.967	874.2	0.4045
12	40.835	852.0	0.3625	45.960	890.0	0.3795
13	40.795	850.5	0.3415	46.079	902.7	0.3579
14	40.352	850.8	0.3218	45.833	918.7	0.3378
15	39.634	849.4	0.3040	45.323	935.9	0.3197
16	38.683	843.8	0.2881	44.572	952.8	0.3036
17	37.456	832.9	0.2740	43.511	967.1	0.2891
18	35.951	817.1	0.2616	42.129	977.8	0.2763
19	34.198	799.0	0.2508	40.486	987.5	0.2654
20	32.002	779.8	0.2414	38.179	977.7	0.2552
21	28.666	755.4	0.2335	34.472	945.8	0.2467
22	24.655	728.2	0.2270	29.970	905.2	0.2400
23	19.838	695.2	0.2217	24.201	831.8	0.2340
24	8.959	621.6	0.2183	11.025	678.7	0.2303
25	5.265	603.4	0.2180	6.460	628.1	0.2298

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C21

Node	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.372	629.0	0.7396	2.586	624.1	0.7396
2	0.000		0.7396	4.579	816.3	0.7396	8.655	797.5	0.7396
3	0.000		0.7395	6.287	876.1	0.7395	12.151	925.8	0.7396
4	0.000	Data	0.7108	7.339	943.2	0.7108	14.287	941.2	0.7110
5	0.000	Not	0.6699	7.838	977.0	0.6699	15.241	973.5	0.6696
6	0.000	Required	0.6219	8.044	991.3	0.6219	15.611	985.4	0.6218
7	0.000		0.5723	8.138	997.9	0.5723	15.788	991.5	0.5729
8	0.000		0.5256	8.246	1005.6	0.5256	16.002	999.4	0.5273
9	0.000		0.4832	8.637	1033.8	0.4832	16.710	1023.2	0.4858
10	0.000		0.4458	8.661	1035.5	0.4458	16.833	1030.8	0.4492
11	0.000		0.4139	8.590	1030.3	0.4139	16.829	1036.0	0.4177
12	0.000		0.3864	8.470	1021.6	0.3864	16.769	1040.6	0.3902
13	0.000		0.3625	8.318	1010.7	0.3625	16.671	1044.8	0.3661
14	0.000		0.3419	8.139	998.0	0.3419	16.537	1048.3	0.3450
15	0.000		0.3238	7.932	983.5	0.3238	16.357	1050.4	0.3263
16	0.000		0.3079	7.686	966.6	0.3079	16.103	1049.8	0.3096
17	0.000		0.2940	7.386	946.4	0.2940	15.738	1044.7	0.2948
18	0.000		0.2817	7.017	922.1	0.2817	15.212	1032.6	0.2815
19	0.000		0.2710	6.560	893.0	0.2710	14.458	1010.0	0.2698
20	0.000		0.2617	6.000	858.7	0.2617	13.411	974.1	0.2595
21	0.000		0.2539	5.203	812.2	0.2539	11.791	916.5	0.2508
22	0.000		0.2476	4.380	767.0	0.2476	9.966	851.3	0.2437
23	0.000		0.2426	3.559	724.4	0.2426	8.042	785.1	0.2380
24	0.000		0.2393	1.578	630.7	0.2393	3.632	657.0	0.2342
25	0.000		0.2378	0.944	603.0	0.2378	2.132	616.3	0.2325
Node	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.150	657.7	0.7396	5.122	659.4	0.7396	6.023	615.8	0.7396
2	14.120	963.4	0.7396	17.393	953.0	0.7396	20.290	754.1	0.7396
3	19.359	1137.6	0.7338	23.414	995.1	0.7326	26.969	768.4	0.7348
4	22.056	1098.2	0.6989	26.336	1027.2	0.6967	30.214	790.1	0.7019
5	22.988	1096.1	0.6526	27.257	1025.6	0.6499	31.394	808.0	0.6589
6	23.148	1076.3	0.6021	27.337	1014.1	0.5993	31.723	825.6	0.6124
7	23.112	1056.6	0.5534	27.218	1002.3	0.5508	31.814	840.7	0.5673
8	23.181	1043.4	0.5092	27.227	993.8	0.5071	31.979	852.1	0.5259
9	23.879	1042.5	0.4700	27.929	994.4	0.4684	32.826	862.9	0.4880
10	23.893	1032.7	0.4355	27.902	988.6	0.4345	32.843	866.2	0.4541
11	23.748	1020.2	0.4058	27.714	982.7	0.4051	32.654	866.1	0.4245
12	23.535	1006.8	0.3799	27.459	976.9	0.3796	32.361	863.3	0.3984
13	23.307	995.5	0.3575	27.186	970.7	0.3574	32.019	858.1	0.3755
14	23.009	981.6	0.3375	26.846	965.0	0.3376	31.586	851.3	0.3550
15	22.641	965.8	0.3198	26.433	958.9	0.3201	31.059	842.9	0.3368
16	22.177	948.5	0.3040	25.915	951.6	0.3044	30.402	832.8	0.3206
17	21.564	928.5	0.2899	25.225	941.4	0.2905	29.554	821.5	0.3061
18	20.756	906.3	0.2774	24.313	927.7	0.2780	28.462	808.8	0.2934
19	19.733	885.7	0.2663	23.171	912.4	0.2669	27.110	794.3	0.2820
20	18.405	864.7	0.2565	21.693	893.4	0.2571	25.375	776.9	0.2720
21	16.340	832.5	0.2481	19.368	861.5	0.2488	22.673	752.0	0.2634
22	13.890	789.3	0.2411	16.557	819.2	0.2418	19.400	722.6	0.2563
23	11.130	735.2	0.2357	13.279	762.3	0.2363	15.503	685.0	0.2503
24	4.996	634.6	0.2321	5.937	644.2	0.2327	6.860	611.7	0.2458
25	2.897	602.6	0.2305	3.422	607.5	0.2311	3.901	588.1	0.2429

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C21 (Continue)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.384	597.7	0.7396	6.805	586.4	0.7396	6.819	605.4	0.7396
2	21.404	681.9	0.7396	22.649	640.1	0.7396	22.691	704.0	0.7396
3	28.314	688.8	0.7358	29.766	642.7	0.7368	29.816	709.6	0.7369
4	31.686	701.8	0.7043	33.225	647.7	0.7067	33.280	725.9	0.7068
5	32.995	715.2	0.6633	34.633	653.4	0.6676	34.691	735.9	0.6677
6	33.467	730.4	0.6192	35.239	661.2	0.6259	35.302	752.7	0.6261
7	33.702	746.0	0.5763	35.643	671.2	0.5858	35.709	763.1	0.5860
8	34.003	761.1	0.5368	36.137	682.8	0.5491	36.205	770.0	0.5493
9	34.990	776.9	0.5002	37.353	696.8	0.5152	37.424	780.6	0.5155
10	35.109	788.6	0.4674	37.690	710.4	0.4852	37.762	784.2	0.4854
11	35.007	798.7	0.4383	37.806	724.2	0.4586	37.880	791.3	0.4589
12	34.786	807.2	0.4125	37.809	738.7	0.4350	37.882	787.7	0.4353
13	34.502	814.1	0.3894	37.747	753.4	0.4139	37.819	784.2	0.4141
14	34.115	819.7	0.3688	37.573	767.7	0.3947	37.644	780.6	0.3949
15	33.617	823.2	0.3503	37.274	781.3	0.3772	37.345	780.6	0.3774
16	32.973	824.8	0.3338	36.815	794.2	0.3613	36.883	770.0	0.3616
17	32.118	823.9	0.3190	36.125	805.9	0.3469	36.190	759.6	0.3471
18	30.996	820.3	0.3059	35.136	815.5	0.3340	35.199	752.7	0.3342
19	29.586	813.3	0.2943	33.802	821.0	0.3223	33.862	742.6	0.3225
20	27.753	801.7	0.2840	31.954	819.9	0.3119	32.011	732.5	0.3121
21	24.865	780.1	0.2753	28.871	805.9	0.3031	28.922	712.8	0.3033
22	21.338	751.5	0.2681	24.995	781.3	0.2958	25.041	696.8	0.2960
23	17.051	709.7	0.2619	20.039	736.5	0.2889	20.076	668.8	0.2891
24	7.511	621.7	0.2567	8.782	632.4	0.2823	8.798	607.3	0.2825
25	4.235	592.8	0.2529	4.879	597.6	0.2763	4.887	585.0	0.2765

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C22

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.934	659.0	0.7396	3.737	657.0	0.7396
2	0.000		0.7396	6.373	940.8	0.7396	12.520	947.7	0.7396
3	0.000		0.7205	8.696	1038.1	0.7205	17.049	1044.8	0.7187
4	0.000	Data	0.6668	9.957	1135.5	0.6668	19.235	1119.6	0.6631
5	0.000	Not	0.5998	10.314	1164.8	0.5998	19.836	1140.3	0.5964
6	0.000	Required	0.5348	10.253	1159.7	0.5348	19.836	1145.5	0.5334
7	0.000		0.4797	10.114	1148.3	0.4797	19.745	1149.7	0.4803
8	0.000		0.4346	10.055	1143.4	0.4346	19.763	1156.3	0.4363
9	0.000		0.3966	10.375	1169.8	0.3966	20.347	1179.4	0.3988
10	0.000		0.3642	10.306	1164.1	0.3642	20.374	1188.0	0.3666
11	0.000		0.3369	10.160	1152.0	0.3369	20.313	1195.6	0.3393
12	0.000		0.3137	9.979	1137.3	0.3137	20.209	1202.5	0.3158
13	0.000		0.2939	9.780	1121.3	0.2939	20.079	1208.7	0.2953
14	0.000		0.2768	9.565	1104.2	0.2768	19.919	1213.7	0.2773
15	0.000		0.2617	9.335	1086.3	0.2617	19.718	1216.4	0.2614
16	0.000		0.2486	9.085	1067.2	0.2486	19.455	1215.2	0.2472
17	0.000		0.2370	8.809	1046.5	0.2370	19.106	1208.6	0.2346
18	0.000		0.2268	8.496	1023.5	0.2268	18.628	1193.7	0.2234
19	0.000		0.2179	8.103	995.4	0.2179	17.930	1166.7	0.2133
20	0.000		0.2099	7.563	958.2	0.2099	16.886	1123.4	0.2045
21	0.000		0.2030	6.677	900.4	0.2030	15.100	1050.3	0.1967
22	0.000		0.1972	5.695	840.6	0.1972	12.956	963.3	0.1904
23	0.000		0.1926	4.693	783.9	0.1926	10.587	870.8	0.1854
24	0.000		0.1892	2.149	656.5	0.1892	4.917	692.4	0.1817
25	0.000		0.1878	1.321	619.4	0.1878	2.970	637.7	0.1801
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.145	647.4	0.7396	6.001	646.9	0.7396	6.883	614.6	0.7396
2	17.345	905.9	0.7396	20.105	879.0	0.7396	22.916	747.7	0.7396
3	23.202	955.0	0.7221	26.598	907.0	0.7238	30.127	766.7	0.7263
4	25.978	1004.8	0.6713	29.607	937.2	0.6753	33.532	793.3	0.6816
5	26.820	1025.9	0.6094	30.522	946.8	0.6162	34.747	814.2	0.6270
6	26.896	1032.7	0.5493	30.609	948.3	0.5581	35.090	832.4	0.5734
7	26.801	1032.3	0.4969	30.502	946.7	0.5067	35.204	848.5	0.5254
8	26.802	1030.8	0.4525	30.491	945.1	0.4628	35.415	864.9	0.4837
9	27.442	1035.8	0.4144	31.161	949.1	0.4246	36.525	898.6	0.4475
10	27.397	1029.4	0.3818	31.100	947.0	0.3919	37.465	980.6	0.4177
11	27.220	1019.1	0.3540	30.901	944.0	0.3640	37.582	1008.1	0.3884
12	26.969	1006.3	0.3299	30.630	941.4	0.3398	37.370	1013.3	0.3622
13	26.675	992.1	0.3090	30.315	938.6	0.3188	37.260	1031.7	0.3403
14	26.339	977.2	0.2907	29.957	935.7	0.3002	36.833	1025.5	0.3200
15	25.947	961.2	0.2744	29.539	932.3	0.2839	36.240	1009.8	0.3018
16	25.471	943.8	0.2600	29.027	927.6	0.2692	35.599	998.5	0.2862
17	24.874	923.9	0.2472	28.375	920.5	0.2562	34.674	974.9	0.2718
18	24.118	902.1	0.2357	27.539	910.2	0.2446	33.502	946.7	0.2590
19	23.146	881.2	0.2256	26.467	897.5	0.2343	32.105	920.3	0.2480
20	21.813	859.7	0.2167	25.000	880.9	0.2254	30.246	889.4	0.2384
21	19.593	828.5	0.2093	22.541	852.0	0.2178	27.243	848.5	0.2302
22	16.870	788.6	0.2030	19.482	813.0	0.2115	23.533	802.0	0.2235
23	13.702	736.9	0.1977	15.822	759.2	0.2060	19.017	744.9	0.2173
24	6.294	635.3	0.1936	7.238	644.5	0.2017	8.638	637.7	0.2126
25	3.731	602.4	0.1912	4.250	607.0	0.1989	5.007	602.8	0.2092

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C22 (Continue)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU) 306.8 Cy 7	Fuel Temp. (K) 306.8 Cy 7	Mod. Dens. (g/cm ³) 306.8 Cy 7	Burnup (GWd/MTU) 0.00 Cy 8	Fuel Temp. (K) 0.00 Cy 8	Mod. Dens. (g/cm ³) 0.00 Cy 8	Burnup (GWd/MTU) 3.67 Cy 8	Fuel Temp. (K) 3.67 Cy 8	Mod. Dens. (g/cm ³) 3.67 Cy 8
1	7.253	598.7	0.7396	8.191	619.7	0.7396	8.196	576.1	0.7396
2	24.070	686.6	0.7396	26.756	743.4	0.7396	26.770	605.4	0.7396
3	31.589	700.8	0.7276	34.753	748.0	0.7296	34.770	610.2	0.7296
4	35.190	721.2	0.6849	38.547	760.9	0.6896	38.566	615.8	0.6897
5	36.571	739.0	0.6330	40.089	771.8	0.6410	40.109	618.7	0.641
6	37.055	754.5	0.5819	40.758	784.5	0.5929	40.781	627.3	0.593
7	37.284	767.3	0.5361	41.190	798.8	0.5496	41.215	633.1	0.5498
8	37.584	777.4	0.4960	41.693	813.2	0.5112	41.719	636.0	0.5114
9	38.768	785.9	0.4603	43.088	828.6	0.4764	43.117	644.8	0.4766
10	39.703	785.4	0.4304	44.120	835.8	0.4463	44.150	647.8	0.4466
11	39.838	787.4	0.4011	44.414	847.6	0.4174	44.446	653.7	0.4176
12	39.649	790.1	0.3751	44.404	861.2	0.3914	44.437	656.7	0.3916
13	39.544	790.7	0.3529	44.450	872.8	0.3691	44.484	659.7	0.3693
14	39.141	793.5	0.3325	44.224	886.7	0.3485	44.258	659.7	0.3488
15	38.572	796.3	0.3143	43.834	900.9	0.3302	43.869	662.7	0.3304
16	37.934	796.6	0.2985	43.354	913.7	0.3141	43.388	659.7	0.3143
17	36.995	795.0	0.2841	42.563	925.9	0.2994	42.596	656.7	0.2996
18	35.789	791.0	0.2711	41.469	935.2	0.2862	41.502	656.7	0.2864
19	34.348	785.9	0.2600	40.090	940.4	0.2748	40.122	653.7	0.2750
20	32.526	790.2	0.2507	38.207	935.3	0.2652	38.237	647.8	0.2653
21	29.842	828.2	0.2449	35.138	903.7	0.2581	35.166	641.9	0.2583
22	25.996	811.8	0.2386	30.779	863.4	0.2512	30.803	630.2	0.2514
23	21.023	759.0	0.2319	24.950	800.2	0.2441	24.970	618.7	0.2443
24	9.531	644.4	0.2266	11.368	665.1	0.2389	11.377	587.8	0.2390
25	5.514	608.4	0.2230	6.534	618.3	0.2352	6.539	576.7	0.2353

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C23

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	2.003	662.8	0.7396	3.794	656.3	0.7396
2	0.000		0.7396	6.638	960.6	0.7396	12.750	945.0	0.7396
3	0.000		0.7187	9.030	1063.0	0.7187	17.271	1036.1	0.7184
4	0.000	Data	0.6626	10.259	1160.2	0.6626	19.377	1106.3	0.6625
5	0.000	Not	0.5934	10.552	1184.7	0.5934	19.916	1126.9	0.5952
6	0.000	Required	0.5272	10.447	1175.9	0.5272	19.885	1133.1	0.5318
7	0.000		0.4720	10.283	1162.2	0.4720	19.784	1138.5	0.4785
8	0.000		0.4273	10.206	1155.8	0.4273	19.792	1145.8	0.4347
9	0.000		0.3897	10.508	1181.0	0.3897	20.363	1169.1	0.3973
10	0.000		0.3578	10.427	1174.2	0.3578	20.384	1178.1	0.3653
11	0.000		0.3309	10.274	1161.4	0.3309	20.322	1186.2	0.3381
12	0.000		0.3081	10.089	1146.2	0.3081	20.221	1193.7	0.3147
13	0.000		0.2886	9.887	1129.8	0.2886	20.095	1200.5	0.2943
14	0.000		0.2717	9.670	1112.5	0.2717	19.940	1206.1	0.2765
15	0.000		0.2569	9.437	1094.2	0.2569	19.744	1209.5	0.2606
16	0.000		0.2439	9.184	1074.7	0.2439	19.488	1209.2	0.2465
17	0.000		0.2324	8.899	1053.2	0.2324	19.143	1203.8	0.2338
18	0.000		0.2222	8.564	1028.4	0.2222	18.661	1190.6	0.2225
19	0.000		0.2131	8.137	997.8	0.2131	17.953	1165.7	0.2124
20	0.000		0.2053	7.571	958.8	0.2053	16.907	1124.5	0.2034
21	0.000		0.1984	6.680	900.6	0.1984	15.134	1052.7	0.1958
22	0.000		0.1928	5.699	840.8	0.1928	12.999	966.1	0.1894
23	0.000		0.1884	4.683	783.3	0.1884	10.600	872.3	0.1844
24	0.000		0.1851	2.125	655.4	0.1851	4.890	692.3	0.1808
25	0.000		0.1838	1.302	618.5	0.1838	2.942	637.3	0.1792
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.607	674.3	0.7396	6.684	670.8	0.7396	8.053	646.2	0.7396
2	18.798	1018.7	0.7396	22.155	965.6	0.7396	26.246	848.8	0.7396
3	24.838	1079.1	0.7177	28.914	998.0	0.7186	34.049	880.9	0.7214
4	27.524	1134.9	0.6623	31.846	1033.3	0.6649	37.644	933.2	0.6715
5	28.215	1150.0	0.5959	32.606	1043.5	0.6002	38.896	974.2	0.6110
6	28.169	1148.5	0.5328	32.560	1043.5	0.5383	39.204	1004.8	0.5519
7	28.006	1142.3	0.4796	32.375	1040.2	0.4854	39.258	1026.1	0.5000
8	27.952	1136.2	0.4357	32.294	1036.3	0.4416	39.356	1042.4	0.4557
9	28.541	1138.0	0.3985	32.895	1038.0	0.4043	40.146	1059.8	0.4175
10	28.464	1128.3	0.3668	32.791	1034.1	0.3726	40.062	1061.7	0.3848
11	28.270	1115.4	0.3398	32.571	1030.3	0.3455	39.772	1055.2	0.3568
12	28.006	1099.7	0.3166	32.283	1026.8	0.3222	39.357	1043.5	0.3326
13	27.698	1082.5	0.2964	31.953	1023.6	0.3019	38.856	1027.9	0.3116
14	27.346	1064.1	0.2787	31.578	1020.3	0.2841	38.264	1008.5	0.2932
15	26.933	1044.3	0.2631	31.144	1017.2	0.2685	37.559	984.9	0.2770
16	26.435	1022.7	0.2493	30.625	1014.2	0.2545	36.705	956.4	0.2626
17	25.811	998.3	0.2369	29.978	1010.9	0.2420	35.654	923.3	0.2497
18	25.020	972.1	0.2259	29.135	1003.5	0.2309	34.372	888.8	0.2382
19	24.000	946.3	0.2161	28.021	990.3	0.2210	32.845	857.5	0.2281
20	22.617	919.3	0.2074	26.472	967.4	0.2122	30.925	830.4	0.2192
21	20.335	880.1	0.2000	23.878	925.9	0.2047	27.882	798.8	0.2118
22	17.532	831.3	0.1938	20.653	872.8	0.1984	24.129	763.2	0.2055
23	14.230	769.8	0.1888	16.762	804.0	0.1932	19.551	719.3	0.2003
24	6.521	649.3	0.1853	7.674	663.6	0.1897	8.964	631.6	0.1969
25	3.863	610.8	0.1835	4.512	618.3	0.1878	5.235	601.0	0.1947

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C23 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	8.793	639.0	0.7396	10.048	640.8	0.7396
2	28.412	815.5	0.7396	31.816	799.9	0.7396
3	36.807	847.8	0.7228	40.823	806.6	0.7248
4	40.800	899.1	0.6748	45.087	826.2	0.6792
5	42.330	936.9	0.6164	46.794	839.2	0.6239
6	42.812	961.4	0.5588	47.459	853.0	0.5690
7	42.972	976.6	0.5075	47.824	868.7	0.5198
8	43.150	988.3	0.4632	48.219	885.6	0.4769
9	44.049	1004.5	0.4247	49.377	906.3	0.4391
10	44.009	1011.1	0.3916	49.561	924.5	0.4063
11	43.739	1014.2	0.3632	49.494	941.5	0.3780
12	43.340	1016.6	0.3388	49.289	957.9	0.3534
13	42.850	1018.3	0.3175	48.988	974.3	0.3317
14	42.256	1018.0	0.2988	48.581	990.8	0.3128
15	41.517	1012.8	0.2822	48.025	1007.2	0.2958
16	40.579	1000.2	0.2675	47.251	1022.2	0.2808
17	39.380	978.4	0.2544	46.171	1033.2	0.2672
18	37.893	949.0	0.2427	44.733	1037.7	0.2551
19	36.134	916.9	0.2323	42.913	1032.0	0.2442
20	33.973	884.8	0.2233	40.539	1012.5	0.2346
21	30.621	845.4	0.2157	36.711	970.1	0.2264
22	26.506	801.6	0.2094	31.911	912.5	0.2196
23	21.458	748.1	0.2041	25.840	833.2	0.2137
24	9.859	644.6	0.2008	11.954	680.5	0.2102
25	5.741	608.3	0.1985	6.919	627.1	0.2076

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C24

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.906	657.5	0.7396	3.657	654.0	0.7396
2	0.000		0.7396	6.354	939.4	0.7396	12.335	934.8	0.7396
3	0.000		0.7220	8.697	1038.2	0.7220	16.825	1027.4	0.7213
4	0.000	Data	0.6695	9.944	1134.4	0.6695	18.965	1098.3	0.6687
5	0.000	Not	0.6031	10.283	1162.2	0.6031	19.537	1117.6	0.6035
6	0.000	Required	0.5378	10.220	1157.0	0.5378	19.523	1121.7	0.5405
7	0.000		0.4822	10.082	1145.6	0.4822	19.429	1125.4	0.4867
8	0.000		0.4368	10.025	1141.0	0.4368	19.449	1132.0	0.4422
9	0.000		0.3986	10.337	1166.7	0.3986	20.028	1154.8	0.4044
10	0.000		0.3660	10.262	1160.4	0.3660	20.056	1163.8	0.3719
11	0.000		0.3386	10.110	1147.9	0.3386	19.994	1171.7	0.3442
12	0.000		0.3153	9.923	1132.7	0.3153	19.889	1178.9	0.3204
13	0.000		0.2954	9.717	1116.2	0.2954	19.757	1185.5	0.2998
14	0.000		0.2782	9.495	1098.7	0.2782	19.598	1191.1	0.2815
15	0.000		0.2631	9.255	1080.1	0.2631	19.398	1194.7	0.2654
16	0.000		0.2498	8.994	1060.3	0.2498	19.143	1195.2	0.2510
17	0.000		0.2380	8.704	1038.7	0.2380	18.805	1190.9	0.2382
18	0.000		0.2276	8.366	1014.1	0.2276	18.338	1179.4	0.2266
19	0.000		0.2184	7.945	984.4	0.2184	17.662	1157.1	0.2164
20	0.000		0.2103	7.394	946.9	0.2103	16.666	1119.1	0.2072
21	0.000		0.2034	6.527	891.0	0.2034	14.946	1050.0	0.1994
22	0.000		0.1977	5.566	833.1	0.1977	12.845	964.6	0.1930
23	0.000		0.1932	4.562	776.8	0.1932	10.456	870.8	0.1878
24	0.000		0.1900	2.059	652.4	0.1900	4.800	691.4	0.1842
25	0.000		0.1887	1.257	616.6	0.1887	2.878	636.4	0.1827
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.480	675.0	0.7396	6.543	669.3	0.7396	7.284	605.7	0.7396
2	18.419	1022.2	0.7396	21.752	962.0	0.7396	24.095	713.4	0.7396
3	24.386	1078.5	0.7199	28.436	994.4	0.7206	31.444	733.0	0.7239
4	27.013	1125.2	0.6672	31.302	1028.5	0.6692	34.771	762.7	0.6770
5	27.631	1129.7	0.6029	31.979	1037.2	0.6065	35.858	790.2	0.6203
6	27.510	1119.2	0.5406	31.849	1035.8	0.5455	36.095	815.6	0.5652
7	27.297	1107.7	0.4874	31.606	1031.4	0.4927	36.158	837.5	0.5170
8	27.244	1100.7	0.4433	31.527	1027.7	0.4487	36.325	855.5	0.4758
9	27.856	1103.8	0.4060	32.158	1030.4	0.4113	37.175	871.9	0.4392
10	27.798	1095.6	0.3739	32.076	1026.9	0.3793	37.187	879.1	0.4070
11	27.604	1083.1	0.3466	31.855	1023.0	0.3520	36.979	880.1	0.3788
12	27.340	1068.3	0.3232	31.562	1018.8	0.3284	36.639	876.5	0.3540
13	27.035	1052.4	0.3027	31.229	1014.8	0.3080	36.215	869.6	0.3322
14	26.691	1035.7	0.2848	30.856	1010.7	0.2899	35.718	860.3	0.3130
15	26.295	1018.2	0.2690	30.429	1006.2	0.2740	35.140	849.1	0.2959
16	25.823	999.3	0.2549	29.925	1001.7	0.2598	34.472	837.2	0.2807
17	25.235	978.0	0.2423	29.301	996.6	0.2472	33.606	819.8	0.2668
18	24.485	954.5	0.2311	28.491	988.2	0.2358	32.516	800.2	0.2544
19	23.532	932.0	0.2211	27.437	974.3	0.2258	31.225	784.0	0.2436
20	22.232	908.0	0.2122	25.972	951.9	0.2168	29.692	779.4	0.2349
21	20.039	872.0	0.2046	23.478	912.5	0.2091	26.995	765.9	0.2275
22	17.296	825.5	0.1983	20.324	861.5	0.2028	23.510	744.3	0.2214
23	14.019	765.5	0.1932	16.471	795.1	0.1975	19.059	706.9	0.2159
24	6.390	647.0	0.1896	7.498	659.4	0.1939	8.652	624.2	0.2117
25	3.771	609.3	0.1878	4.391	615.8	0.1919	5.092	599.8	0.2104

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C24 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	7.726	806.3	0.7396	9.134	651.2	0.7396
2	25.455	711.3	0.7396	29.335	839.4	0.7396
3	33.189	730.5	0.7254	37.705	843.1	0.7268
4	36.782	759.6	0.6808	41.528	860.5	0.6842
5	38.087	784.3	0.6268	42.987	872.4	0.6325
6	38.496	804.4	0.5742	43.559	885.1	0.5819
7	38.687	819.7	0.5279	43.933	899.7	0.5368
8	38.950	831.3	0.4876	44.391	915.4	0.4973
9	39.891	842.5	0.4513	45.577	935.7	0.4612
10	39.948	848.1	0.4191	45.839	953.0	0.4291
11	39.765	851.3	0.3907	45.859	970.5	0.4005
12	39.447	854.0	0.3656	45.739	987.8	0.3752
13	39.060	858.7	0.3436	45.542	1004.8	0.3528
14	38.695	875.6	0.3245	45.342	1019.9	0.3331
15	38.635	945.4	0.3086	45.355	1026.6	0.3165
16	38.812	1072.3	0.2950	45.525	1025.9	0.3019
17	38.090	1095.8	0.2803	44.887	1033.7	0.2870
18	36.850	1071.4	0.2665	43.715	1040.1	0.2730
19	35.322	1034.1	0.2543	42.154	1037.0	0.2606
20	33.493	989.4	0.2445	40.122	1018.2	0.2502
21	30.412	934.5	0.2362	36.587	977.5	0.2415
22	26.480	874.7	0.2295	32.004	922.2	0.2343
23	21.436	801.6	0.2235	25.967	844.2	0.2279
24	9.739	663.1	0.2192	11.925	686.0	0.2237
25	5.684	616.2	0.2172	6.906	629.6	0.2214

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C25

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.512	636.4	0.7396	3.252	653.4	0.7396
2	0.000		0.7396	5.065	848.4	0.7396	10.936	926.3	0.7396
3	0.000		0.7349	7.005	921.4	0.7349	15.147	1028.5	0.7276
4	0.000	Data	0.6989	8.207	1002.8	0.6989	17.382	1111.0	0.6827
5	0.000	Not	0.6491	8.749	1042.0	0.6491	18.182	1132.7	0.6253
6	0.000	Required	0.5934	8.931	1055.6	0.5934	18.371	1133.3	0.5666
7	0.000		0.5390	8.981	1059.3	0.5390	18.411	1132.5	0.5134
8	0.000		0.4909	9.051	1064.6	0.4909	18.521	1135.9	0.4676
9	0.000		0.4489	9.431	1093.7	0.4489	19.165	1158.6	0.4282
10	0.000		0.4129	9.415	1092.5	0.4129	19.225	1165.2	0.3940
11	0.000		0.3824	9.298	1083.4	0.3824	19.176	1171.2	0.3648
12	0.000		0.3562	9.127	1070.4	0.3562	19.067	1176.6	0.3395
13	0.000		0.3338	8.924	1055.0	0.3338	18.921	1181.7	0.3175
14	0.000		0.3144	8.697	1038.2	0.3144	18.740	1185.7	0.2982
15	0.000		0.2976	8.446	1019.9	0.2976	18.517	1188.2	0.2811
16	0.000		0.2829	8.164	999.7	0.2829	18.229	1187.7	0.2659
17	0.000		0.2699	7.839	977.1	0.2699	17.838	1181.8	0.2524
18	0.000		0.2586	7.451	950.7	0.2586	17.280	1166.9	0.2403
19	0.000		0.2486	6.981	919.8	0.2486	16.472	1137.7	0.2296
20	0.000		0.2401	6.408	883.6	0.2401	15.331	1090.3	0.2204
21	0.000		0.2329	5.585	834.2	0.2329	13.535	1013.9	0.2125
22	0.000		0.2271	4.721	785.4	0.2271	11.470	927.5	0.2062
23	0.000		0.2224	3.849	739.1	0.2224	9.266	840.8	0.2012
24	0.000		0.2191	1.721	637.1	0.2191	4.227	679.2	0.1975
25	0.000		0.2178	1.041	607.2	0.2178	2.523	629.9	0.1960

Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.378	629.2	0.7396	5.085	631.1	0.7396	6.334	638.3	0.7396
2	14.876	831.5	0.7396	17.216	822.4	0.7396	21.244	843.6	0.7396
3	20.232	871.4	0.7307	23.112	843.9	0.7320	28.116	871.0	0.7323
4	23.008	912.7	0.6903	26.081	867.0	0.6938	31.570	908.4	0.6950
5	24.091	935.1	0.6382	27.224	874.3	0.6442	33.045	935.1	0.6469
6	24.451	949.0	0.5839	27.604	876.7	0.5922	33.698	957.6	0.5962
7	24.592	957.3	0.5332	27.754	877.8	0.5431	34.110	979.8	0.5481
8	24.757	961.8	0.4881	27.928	878.9	0.4990	34.478	996.6	0.5045
9	25.501	970.1	0.4482	28.719	884.7	0.4596	35.465	1013.8	0.4653
10	25.548	969.0	0.4137	28.774	885.7	0.4253	35.575	1018.7	0.4309
11	25.433	963.6	0.3839	28.660	885.8	0.3956	35.443	1017.1	0.4010
12	25.223	955.2	0.3581	28.449	885.7	0.3697	35.243	1018.1	0.3753
13	24.953	945.1	0.3356	28.179	885.7	0.3471	35.251	1043.3	0.3537
14	24.632	933.8	0.3158	27.855	885.3	0.3272	34.848	1036.1	0.3332
15	24.250	921.1	0.2983	27.466	884.5	0.3096	34.206	1013.3	0.3148
16	23.785	907.3	0.2827	26.983	882.2	0.2938	33.396	984.7	0.2985
17	23.190	891.5	0.2687	26.354	878.1	0.2799	32.385	952.4	0.2840
18	22.408	874.6	0.2564	25.519	871.6	0.2673	31.149	919.6	0.2714
19	21.375	858.0	0.2457	24.416	863.1	0.2565	29.686	891.3	0.2607
20	19.986	840.0	0.2365	22.926	851.0	0.2473	27.799	861.1	0.2514
21	17.794	812.1	0.2289	20.532	827.4	0.2397	24.891	823.7	0.2436
22	15.187	775.5	0.2227	17.635	794.6	0.2336	21.399	782.4	0.2373
23	12.219	726.8	0.2173	14.220	746.8	0.2280	17.219	732.4	0.2317
24	5.523	630.9	0.2132	6.402	638.6	0.2235	7.720	633.2	0.2272
25	3.234	599.8	0.2107	3.712	603.5	0.2204	4.442	601.3	0.2242

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C25 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.766	605.3	0.7396	7.798	625.9	0.7396	7.803	576.1	0.7396
2	22.622	713.5	0.7396	25.606	766.4	0.7396	25.623	615.4	0.7396
3	29.883	732.9	0.7336	33.390	771.0	0.7351	33.409	615.8	0.7351
4	33.590	760.6	0.6982	37.274	783.2	0.7018	37.295	621.5	0.7018
5	35.268	783.6	0.6523	39.075	791.8	0.6585	39.098	627.3	0.6585
6	36.088	803.1	0.6039	40.044	802.3	0.6126	40.069	633.1	0.6126
7	36.631	818.7	0.5576	40.765	815.0	0.5683	40.793	641.9	0.5685
8	37.110	832.2	0.5153	41.451	830.1	0.5276	41.481	647.8	0.5277
9	38.209	846.0	0.4766	42.804	849.1	0.4898	42.837	656.7	0.4900
10	38.381	853.8	0.4425	43.195	865.7	0.4562	43.230	662.7	0.4564
11	38.290	859.0	0.4125	43.319	882.4	0.4264	43.356	668.8	0.4266
12	38.110	861.5	0.3864	43.343	898.6	0.4002	43.382	674.9	0.4004
13	38.102	859.5	0.3642	43.501	912.0	0.3774	43.540	674.9	0.3777
14	37.697	859.2	0.3435	43.299	928.7	0.3564	43.339	678.0	0.3566
15	37.042	857.6	0.3249	42.856	946.4	0.3374	42.896	678.0	0.3376
16	36.188	852.0	0.3083	42.205	963.8	0.3205	42.245	678.0	0.3207
17	35.094	841.7	0.2935	41.288	979.2	0.3053	41.328	678.0	0.3055
18	33.737	826.8	0.2806	40.068	991.3	0.2919	40.108	678.0	0.2920
19	32.126	809.0	0.2694	38.582	1002.5	0.2804	38.621	674.9	0.2806
20	30.068	788.9	0.2598	36.421	993.3	0.2699	36.458	668.8	0.2702
21	26.933	763.1	0.2519	32.909	960.3	0.2612	32.944	662.7	0.2614
22	23.181	734.5	0.2455	28.666	919.0	0.2543	28.698	653.7	0.2545
23	18.675	700.2	0.2398	23.194	843.3	0.2479	23.219	633.1	0.2481
24	8.382	622.7	0.2354	10.507	682.3	0.2432	10.518	593.3	0.2434
25	4.899	603.9	0.2339	6.125	629.8	0.2418	6.131	579.5	0.2420

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C26

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.514	636.5	0.7396	3.034	641.0	0.7396
2	0.000		0.7396	5.066	848.5	0.7396	10.245	874.6	0.7396
3	0.000		0.7350	7.014	921.9	0.7350	14.403	972.5	0.7319
4	0.000	Data	0.6992	8.223	1003.9	0.6992	16.757	1059.0	0.6916
5	0.000	Not	0.6495	8.762	1043.0	0.6495	17.655	1087.8	0.6375
6	0.000	Required	0.5937	8.935	1055.9	0.5937	17.878	1091.9	0.5801
7	0.000		0.5394	8.978	1059.1	0.5394	17.915	1091.4	0.5266
8	0.000		0.4911	9.050	1064.5	0.4911	18.030	1094.9	0.4802
9	0.000		0.4492	9.441	1094.5	0.4492	18.677	1116.1	0.4401
10	0.000		0.4131	9.429	1093.6	0.4131	18.730	1121.6	0.4054
11	0.000		0.3824	9.312	1084.5	0.3824	18.660	1125.5	0.3756
12	0.000		0.3562	9.139	1071.3	0.3562	18.530	1129.2	0.3500
13	0.000		0.3338	8.936	1055.9	0.3338	18.365	1132.4	0.3277
14	0.000		0.3144	8.708	1039.0	0.3144	18.166	1134.8	0.3082
15	0.000		0.2975	8.454	1020.5	0.2975	17.920	1135.5	0.2910
16	0.000		0.2828	8.163	999.7	0.2828	17.600	1133.1	0.2756
17	0.000		0.2699	7.821	975.8	0.2699	17.168	1125.4	0.2621
18	0.000		0.2585	7.410	948.0	0.2585	16.561	1109.0	0.2500
19	0.000		0.2486	6.908	915.1	0.2486	15.701	1079.7	0.2393
20	0.000		0.2401	6.293	876.5	0.2401	14.512	1034.4	0.2300
21	0.000		0.2330	5.431	825.3	0.2330	12.697	963.7	0.2221
22	0.000		0.2273	4.540	775.6	0.2273	10.652	884.9	0.2157
23	0.000		0.2228	3.659	729.4	0.2228	8.516	806.9	0.2107
24	0.000		0.2197	1.614	632.3	0.2197	3.830	664.9	0.2072
25	0.000		0.2185	0.970	604.1	0.2185	2.266	621.2	0.2057
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.168	629.7	0.7396	5.408	689.0	0.7396	6.874	652.7	0.7396
2	14.212	833.7	0.7396	18.194	1064.7	0.7396	22.838	896.2	0.7396
3	19.502	872.5	0.7324	24.234	1095.2	0.7279	30.002	930.8	0.7288
4	22.255	902.8	0.6946	27.109	1114.4	0.6874	33.410	975.1	0.6893
5	23.271	911.9	0.6449	28.086	1108.2	0.6360	34.685	1000.9	0.6391
6	23.524	914.3	0.5921	28.272	1097.7	0.5826	35.045	1016.2	0.5865
7	23.571	915.1	0.5425	28.267	1089.6	0.5330	35.126	1023.9	0.5370
8	23.693	915.6	0.4982	28.353	1084.1	0.4894	35.254	1027.7	0.4930
9	24.399	920.3	0.4588	29.082	1087.6	0.4509	36.041	1033.0	0.4541
10	24.426	918.2	0.4245	29.092	1085.0	0.4173	35.988	1027.3	0.4204
11	24.297	913.6	0.3948	28.948	1082.7	0.3882	35.733	1017.3	0.3912
12	24.085	907.2	0.3690	28.721	1080.4	0.3628	35.358	1004.2	0.3658
13	23.822	899.6	0.3465	28.441	1077.8	0.3407	34.897	988.4	0.3436
14	23.519	891.6	0.3267	28.117	1074.6	0.3213	34.365	970.6	0.3241
15	23.161	883.1	0.3092	27.731	1070.3	0.3040	33.740	950.5	0.3069
16	22.732	874.9	0.2936	27.258	1063.6	0.2886	32.989	927.8	0.2917
17	22.262	872.1	0.2801	26.714	1052.5	0.2752	32.117	901.7	0.2783
18	21.985	897.1	0.2694	26.302	1032.6	0.2644	31.313	871.5	0.2673
19	21.783	949.2	0.2609	25.902	1004.1	0.2559	30.493	840.3	0.2586
20	20.882	973.0	0.2525	24.786	974.1	0.2474	28.981	812.1	0.2500
21	18.866	956.3	0.2448	22.446	930.7	0.2396	26.171	779.8	0.2422
22	16.107	899.4	0.2375	19.282	879.4	0.2323	22.481	745.2	0.2351
23	12.825	815.6	0.2308	15.425	811.6	0.2257	17.956	703.4	0.2289
24	5.684	661.8	0.2260	6.850	664.8	0.2211	7.967	622.2	0.2245
25	3.285	616.0	0.2232	3.949	619.6	0.2185	4.559	595.0	0.2218

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C26 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	7.446	620.4	0.7396	8.307	614.6	0.7396	8.313	579.3	0.7396
2	24.581	759.3	0.7396	27.055	727.4	0.7396	27.074	622.1	0.7396
3	32.182	778.7	0.7300	35.120	733.2	0.7317	35.142	624.4	0.7318
4	35.853	809.4	0.6921	38.998	746.8	0.6960	39.022	630.2	0.6961
5	37.329	833.7	0.6439	40.651	758.5	0.6507	40.678	638.9	0.6507
6	37.859	854.8	0.5933	41.387	772.5	0.6030	41.417	647.8	0.6031
7	38.085	873.3	0.5453	41.843	788.4	0.5579	41.875	653.7	0.5580
8	38.334	889.0	0.5021	42.333	805.4	0.5171	42.369	665.8	0.5172
9	39.257	907.1	0.4635	43.534	825.4	0.4801	43.572	671.9	0.4803
10	39.293	919.1	0.4297	43.797	842.2	0.4474	43.838	681.1	0.4476
11	39.130	931.7	0.4003	43.839	857.7	0.4186	43.882	687.3	0.4188
12	38.878	948.9	0.3748	43.772	871.9	0.3932	43.815	687.3	0.3933
13	38.545	967.1	0.3523	43.613	885.5	0.3706	43.657	690.5	0.3708
14	38.095	979.0	0.3325	43.335	899.2	0.3505	43.380	693.6	0.3507
15	37.472	979.3	0.3148	42.889	913.5	0.3325	42.933	690.5	0.3327
16	36.655	969.7	0.2989	42.239	927.2	0.3164	42.283	690.5	0.3166
17	35.661	952.3	0.2850	41.374	937.9	0.3021	41.417	687.3	0.3023
18	34.680	927.6	0.2734	40.438	941.7	0.2898	40.479	681.1	0.2900
19	33.643	898.3	0.2638	39.330	935.8	0.2793	39.370	678.0	0.2794
20	31.909	869.3	0.2549	37.426	921.7	0.2695	37.464	671.9	0.2697
21	28.812	833.3	0.2469	33.955	891.4	0.2609	33.990	662.7	0.2611
22	24.782	792.7	0.2397	29.384	849.6	0.2533	29.415	650.7	0.2535
23	19.794	740.6	0.2334	23.536	787.2	0.2466	23.561	633.1	0.2467
24	8.787	637.5	0.2290	10.492	657.3	0.2422	10.503	593.3	0.2424
25	5.003	602.7	0.2263	5.920	612.6	0.2388	5.925	576.7	0.2389

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C27

Node	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.381	629.5	0.7396	2.667	628.0	0.7396
2	0.000		0.7396	4.603	817.8	0.7396	8.950	815.8	0.7396
3	0.000		0.7390	6.378	881.7	0.7390	12.671	896.8	0.7383
4	0.000	Data	0.7094	7.500	954.0	0.7094	14.934	975.8	0.7068
5	0.000	Not	0.6670	8.022	989.8	0.6670	15.889	1007.7	0.6623
6	0.000	Required	0.6175	8.220	1003.7	0.6175	16.204	1016.5	0.6117
7	0.000		0.5668	8.296	1009.1	0.5668	16.320	1019.5	0.5614
8	0.000		0.5196	8.388	1015.7	0.5196	16.487	1025.2	0.5154
9	0.000		0.4772	8.774	1043.9	0.4772	17.166	1047.9	0.4741
10	0.000		0.4400	8.783	1044.5	0.4400	17.254	1054.1	0.4380
11	0.000		0.4084	8.694	1038.0	0.4084	17.215	1058.0	0.4070
12	0.000		0.3812	8.557	1027.9	0.3812	17.121	1061.4	0.3800
13	0.000		0.3575	8.389	1015.8	0.3575	16.994	1064.7	0.3565
14	0.000		0.3371	8.195	1001.9	0.3371	16.832	1067.2	0.3358
15	0.000		0.3193	7.971	986.2	0.3193	16.621	1068.2	0.3175
16	0.000		0.3037	7.708	968.1	0.3037	16.334	1066.3	0.3012
17	0.000		0.2900	7.390	946.6	0.2900	15.934	1059.8	0.2867
18	0.000		0.2780	7.004	921.3	0.2780	15.370	1045.8	0.2739
19	0.000		0.2674	6.533	891.3	0.2674	14.576	1020.9	0.2625
20	0.000		0.2584	5.960	856.3	0.2584	13.485	982.4	0.2526
21	0.000		0.2508	5.152	809.4	0.2508	11.817	921.7	0.2441
22	0.000		0.2447	4.318	763.7	0.2447	9.942	853.7	0.2372
23	0.000		0.2398	3.497	721.3	0.2398	7.988	785.6	0.2318
24	0.000		0.2366	1.553	629.6	0.2366	3.608	657.1	0.2282
25	0.000		0.2353	0.932	602.5	0.2353	2.126	616.5	0.2265
Node	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	3.839	632.2	0.7396	4.509	627.3	0.7396	5.699	634.5	0.7396
2	13.070	846.2	0.7396	15.339	813.1	0.7396	19.262	834.9	0.7396
3	18.114	898.5	0.7383	20.901	833.0	0.7388	25.880	869.1	0.7385
4	20.877	937.9	0.7077	23.834	853.0	0.7094	29.405	914.9	0.7093
5	21.997	951.3	0.6649	25.007	859.4	0.6684	30.983	947.8	0.6687
6	22.364	955.5	0.6163	25.402	862.7	0.6218	31.689	973.9	0.6225
7	22.483	955.8	0.5676	25.543	865.4	0.5749	32.079	995.4	0.5756
8	22.633	954.4	0.5225	25.713	867.8	0.5310	32.466	1014.5	0.5314
9	23.356	958.0	0.4818	26.486	873.9	0.4910	33.488	1036.9	0.4911
10	23.389	953.5	0.4462	26.531	875.4	0.4558	33.614	1044.3	0.4553
11	23.271	947.0	0.4155	26.419	876.1	0.4253	33.473	1041.6	0.4243
12	23.075	938.8	0.3888	26.223	876.1	0.3986	33.175	1032.3	0.3973
13	22.828	929.1	0.3654	25.975	876.0	0.3753	32.792	1020.2	0.3737
14	22.533	918.6	0.3449	25.676	875.5	0.3546	32.348	1007.3	0.3530
15	22.174	907.0	0.3267	25.309	874.5	0.3363	31.811	992.4	0.3346
16	21.724	894.4	0.3105	24.843	872.5	0.3200	31.107	971.9	0.3184
17	21.141	880.6	0.2961	24.232	869.1	0.3055	30.154	943.3	0.3040
18	20.379	865.8	0.2834	23.427	863.9	0.2927	28.934	909.9	0.2912
19	19.379	850.7	0.2721	22.364	856.4	0.2813	27.462	878.1	0.2801
20	18.044	833.2	0.2624	20.935	845.2	0.2716	25.632	848.1	0.2705
21	15.968	804.7	0.2543	18.662	822.3	0.2634	22.861	812.3	0.2624
22	13.528	767.0	0.2475	15.935	790.1	0.2567	19.554	772.7	0.2557
23	10.807	718.5	0.2418	12.761	741.9	0.2508	15.646	725.2	0.2500
24	4.829	626.9	0.2379	5.671	635.3	0.2465	6.940	630.5	0.2458
25	2.797	597.7	0.2358	3.253	601.6	0.2439	3.963	600.3	0.2434

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C27 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.420	636.9	0.7396	7.804	649.5	0.7396	7.813	589.0	0.7396
2	21.570	835.2	0.7396	25.654	856.8	0.7396	25.679	642.7	0.7396
3	28.833	872.5	0.7384	33.654	866.3	0.7382	33.685	650.7	0.7382
4	32.744	923.8	0.7092	37.741	879.9	0.7092	37.774	656.7	0.7092
5	34.570	958.4	0.6687	39.590	881.7	0.6694	39.626	665.8	0.6695
6	35.424	979.7	0.6225	40.476	884.3	0.6243	40.514	671.9	0.6244
7	35.905	993.1	0.5754	41.035	890.4	0.5785	41.076	681.1	0.5786
8	36.366	1004.1	0.5310	41.620	900.3	0.5351	41.663	687.3	0.5353
9	37.492	1019.8	0.4904	42.948	916.7	0.4953	42.994	696.8	0.4955
10	37.668	1027.4	0.4546	43.302	931.3	0.4599	43.349	700.0	0.4601
11	37.551	1031.1	0.4235	43.372	947.0	0.4290	43.421	706.4	0.4292
12	37.271	1033.9	0.3964	43.284	963.5	0.4019	43.333	706.4	0.4020
13	36.893	1034.7	0.3726	43.103	980.6	0.3780	43.153	709.6	0.3781
14	36.427	1031.3	0.3517	42.836	998.3	0.3569	42.886	709.6	0.3571
15	35.829	1021.9	0.3333	42.434	1016.0	0.3381	42.482	703.2	0.3383
16	35.016	1005.4	0.3170	41.808	1033.3	0.3213	41.856	703.2	0.3215
17	33.904	981.9	0.3026	40.856	1048.3	0.3064	40.902	696.8	0.3066
18	32.481	952.7	0.2898	39.533	1057.8	0.2931	39.578	693.6	0.2932
19	30.801	923.8	0.2787	37.858	1058.2	0.2813	37.901	687.3	0.2814
20	28.767	896.3	0.2691	35.687	1045.2	0.2708	35.729	684.2	0.2709
21	25.738	862.8	0.2609	32.241	1006.7	0.2618	32.279	671.9	0.2619
22	22.115	823.5	0.2541	27.961	949.2	0.2542	27.994	656.7	0.2543
23	17.759	771.1	0.2482	22.569	865.4	0.2478	22.596	638.9	0.2479
24	7.910	651.8	0.2441	10.167	690.3	0.2433	10.179	596.1	0.2434
25	4.518	612.8	0.2417	5.803	633.1	0.2408	5.809	579.5	0.2409

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C28

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.934	659.0	0.7396	3.737	657.0	0.7396
2	0.000		0.7396	6.373	940.8	0.7396	12.523	948.0	0.7396
3	0.000		0.7205	8.698	1038.3	0.7205	17.055	1045.1	0.7187
4	0.000	Data	0.6668	9.963	1136.0	0.6668	19.245	1120.0	0.6631
5	0.000	Not	0.5998	10.318	1165.1	0.5998	19.845	1140.7	0.5963
6	0.000	Required	0.5348	10.257	1160.0	0.5348	19.845	1146.0	0.5333
7	0.000		0.4796	10.119	1148.7	0.4796	19.754	1150.0	0.4802
8	0.000		0.4345	10.060	1143.8	0.4345	19.772	1156.7	0.4362
9	0.000		0.3966	10.380	1170.2	0.3966	20.356	1179.8	0.3987
10	0.000		0.3641	10.310	1164.4	0.3641	20.382	1188.3	0.3665
11	0.000		0.3368	10.165	1152.4	0.3368	20.321	1195.8	0.3392
12	0.000		0.3137	9.984	1137.7	0.3137	20.217	1202.8	0.3157
13	0.000		0.2938	9.784	1121.6	0.2938	20.087	1209.1	0.2953
14	0.000		0.2767	9.570	1104.6	0.2767	19.927	1214.0	0.2773
15	0.000		0.2616	9.340	1086.7	0.2616	19.726	1216.7	0.2614
16	0.000		0.2485	9.089	1067.5	0.2485	19.463	1215.6	0.2472
17	0.000		0.2370	8.813	1046.8	0.2370	19.114	1208.9	0.2346
18	0.000		0.2268	8.501	1023.9	0.2268	18.636	1194.0	0.2233
19	0.000		0.2178	8.107	995.7	0.2178	17.937	1166.9	0.2133
20	0.000		0.2099	7.567	958.5	0.2099	16.894	1123.8	0.2044
21	0.000		0.2029	6.681	900.6	0.2029	15.107	1050.5	0.1967
22	0.000		0.1972	5.699	840.8	0.1972	12.963	963.5	0.1904
23	0.000		0.1926	4.697	784.1	0.1926	10.593	870.9	0.1853
24	0.000		0.1891	2.150	656.6	0.1891	4.919	692.5	0.1816
25	0.000		0.1878	1.322	619.4	0.1878	2.972	637.7	0.1800
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.142	647.2	0.7396	5.997	646.8	0.7396	6.881	614.7	0.7396
2	17.340	905.2	0.7396	20.099	878.9	0.7396	22.915	748.1	0.7396
3	23.200	954.3	0.7221	26.595	906.9	0.7238	30.130	767.1	0.7263
4	25.980	1004.1	0.6713	29.608	937.0	0.6753	33.538	793.7	0.6816
5	26.822	1025.3	0.6095	30.523	946.7	0.6162	34.754	814.6	0.6270
6	26.899	1032.2	0.5493	30.611	948.2	0.5582	35.096	832.7	0.5734
7	26.805	1031.9	0.4969	30.505	946.6	0.5068	35.210	848.7	0.5254
8	26.807	1030.5	0.4526	30.494	944.8	0.4629	35.422	865.2	0.4838
9	27.448	1035.6	0.4144	31.166	949.0	0.4246	36.533	898.8	0.4475
10	27.404	1029.3	0.3818	31.105	946.7	0.3920	37.475	981.0	0.4177
11	27.227	1019.0	0.3540	30.907	943.9	0.3640	37.592	1008.4	0.3884
12	26.977	1006.3	0.3299	30.636	941.1	0.3399	37.381	1013.8	0.3622
13	26.683	992.1	0.3090	30.322	938.5	0.3188	37.271	1032.1	0.3403
14	26.347	977.2	0.2907	29.964	935.6	0.3002	36.844	1025.8	0.3199
15	25.955	961.2	0.2744	29.546	932.2	0.2839	36.251	1010.2	0.3018
16	25.479	943.8	0.2600	29.035	927.6	0.2692	35.611	998.8	0.2861
17	24.881	923.8	0.2472	28.383	920.6	0.2562	34.685	975.2	0.2718
18	24.125	902.1	0.2357	27.546	910.2	0.2446	33.512	947.0	0.2590
19	23.154	881.3	0.2256	26.474	897.4	0.2343	32.115	920.5	0.2480
20	21.821	859.7	0.2167	25.008	880.9	0.2254	30.257	889.7	0.2383
21	19.601	828.6	0.2092	22.548	851.8	0.2178	27.253	848.7	0.2301
22	16.877	788.6	0.2030	19.490	813.1	0.2116	23.543	802.2	0.2234
23	13.710	737.0	0.1976	15.829	759.1	0.2060	19.026	745.0	0.2173
24	6.296	635.3	0.1936	7.239	644.4	0.2017	8.639	637.7	0.2126
25	3.733	602.4	0.1912	4.252	607.0	0.1989	5.009	602.8	0.2092

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C28 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	7.251	598.7	0.7396	8.190	619.7	0.7396	8.195	576.1	0.7396
2	24.071	686.8	0.7396	26.761	743.7	0.7396	26.775	605.4	0.7396
3	31.594	701.0	0.7276	34.761	748.2	0.7296	34.778	610.2	0.7297
4	35.199	721.6	0.6850	38.558	761.0	0.6896	38.577	615.8	0.6897
5	36.579	739.1	0.6330	40.100	772.0	0.6410	40.120	618.7	0.641
6	37.064	754.8	0.5820	40.769	784.7	0.5929	40.792	627.3	0.593
7	37.292	767.6	0.5361	41.201	799.0	0.5496	41.225	630.2	0.5498
8	37.593	777.7	0.4960	41.704	813.4	0.5112	41.731	638.9	0.5114
9	38.778	786.2	0.4603	43.100	828.7	0.4764	43.129	644.8	0.4766
10	39.713	785.4	0.4304	44.133	836.0	0.4463	44.163	647.8	0.4465
11	39.849	787.5	0.4011	44.428	847.9	0.4174	44.460	653.7	0.4176
12	39.661	790.2	0.3750	44.418	861.4	0.3914	44.451	656.7	0.3916
13	39.556	790.8	0.3529	44.464	873.0	0.3690	44.498	659.7	0.3692
14	39.153	793.6	0.3325	44.239	886.9	0.3485	44.273	659.7	0.3488
15	38.584	796.4	0.3143	43.849	901.2	0.3302	43.884	662.7	0.3304
16	37.947	796.7	0.2985	43.370	914.0	0.3141	43.404	659.7	0.3142
17	37.007	795.1	0.2840	42.577	926.0	0.2993	42.611	659.7	0.2995
18	35.800	791.1	0.2711	41.483	935.4	0.2862	41.516	656.7	0.2864
19	34.359	786.0	0.2600	40.105	940.7	0.2748	40.136	650.7	0.2749
20	32.538	790.3	0.2507	38.222	935.5	0.2651	38.252	647.8	0.2653
21	29.853	828.3	0.2449	35.152	903.9	0.2581	35.180	641.9	0.2582
22	26.006	811.8	0.2385	30.792	863.6	0.2512	30.817	633.1	0.2513
23	21.033	759.2	0.2319	24.963	800.5	0.2441	24.983	618.7	0.2442
24	9.533	644.5	0.2266	11.370	665.1	0.2388	11.379	587.8	0.2389
25	5.516	608.4	0.2230	6.537	618.3	0.2351	6.541	573.9	0.2353

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C29

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.882	656.2	0.7396	3.675	656.4	0.7396
2	0.000		0.7396	6.253	932.0	0.7396	12.391	947.0	0.7396
3	0.000		0.7230	8.587	1030.1	0.7230	16.960	1046.4	0.7209
4	0.000	Data	0.6714	9.882	1129.4	0.6714	19.179	1121.2	0.6675
5	0.000	Not	0.6055	10.270	1161.1	0.6055	19.776	1138.9	0.6016
6	0.000	Required	0.5403	10.231	1157.9	0.5403	19.752	1140.2	0.5381
7	0.000		0.4843	10.102	1147.3	0.4843	19.637	1141.4	0.4841
8	0.000		0.4385	10.051	1143.1	0.4385	19.640	1146.0	0.4395
9	0.000		0.4001	10.370	1169.4	0.4001	20.210	1167.8	0.4017
10	0.000		0.3672	10.293	1163.0	0.3672	20.220	1175.5	0.3693
11	0.000		0.3395	10.131	1149.7	0.3395	20.135	1182.3	0.3417
12	0.000		0.3162	9.931	1133.4	0.3162	20.006	1188.6	0.3180
13	0.000		0.2962	9.712	1115.8	0.2962	19.852	1194.4	0.2975
14	0.000		0.2789	9.477	1097.3	0.2789	19.669	1199.1	0.2794
15	0.000		0.2639	9.222	1077.6	0.2639	19.447	1202.1	0.2634
16	0.000		0.2506	8.941	1056.3	0.2506	19.165	1202.0	0.2492
17	0.000		0.2389	8.625	1032.9	0.2389	18.791	1196.7	0.2364
18	0.000		0.2285	8.249	1005.8	0.2285	18.277	1184.4	0.2250
19	0.000		0.2195	7.781	973.1	0.2195	17.541	1160.8	0.2149
20	0.000		0.2115	7.184	933.0	0.2115	16.479	1121.1	0.2059
21	0.000		0.2048	6.292	876.4	0.2048	14.704	1049.4	0.1982
22	0.000		0.1994	5.334	819.7	0.1994	12.573	961.7	0.1919
23	0.000		0.1950	4.357	765.8	0.1950	10.200	867.5	0.1869
24	0.000		0.1918	1.963	648.0	0.1918	4.677	689.7	0.1834
25	0.000		0.1906	1.198	614.0	0.1906	2.806	635.8	0.1819
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	5.454	672.1	0.7396	6.217	637.0	0.7396	7.299	627.4	0.7396
2	18.324	1007.5	0.7396	20.749	833.6	0.7396	24.048	784.9	0.7396
3	24.299	1058.0	0.7186	27.285	856.5	0.7205	31.327	801.4	0.7236
4	26.968	1100.1	0.6648	30.194	885.7	0.6693	34.644	830.2	0.6767
5	27.627	1106.0	0.6000	30.988	902.6	0.6076	35.771	854.4	0.6203
6	27.539	1099.9	0.5380	30.994	914.6	0.5484	36.067	876.2	0.5656
7	27.345	1092.4	0.4854	30.866	923.1	0.4975	36.163	893.4	0.5176
8	27.283	1086.2	0.4420	30.844	928.3	0.4547	36.290	905.0	0.4761
9	27.888	1089.5	0.4050	31.503	935.3	0.4178	37.080	915.4	0.4390
10	27.872	1087.1	0.3734	31.493	936.1	0.3860	37.085	916.6	0.4067
11	27.705	1079.4	0.3462	31.324	935.8	0.3585	36.882	913.9	0.3784
12	27.485	1070.9	0.3228	31.095	934.7	0.3348	36.577	907.9	0.3538
13	27.303	1068.3	0.3030	30.892	931.9	0.3145	36.257	898.7	0.3325
14	26.998	1057.0	0.2850	30.570	929.7	0.2962	35.798	888.1	0.3134
15	26.597	1040.8	0.2688	30.147	926.8	0.2799	35.214	875.7	0.2963
16	26.096	1021.2	0.2545	29.612	922.4	0.2653	34.486	861.2	0.2811
17	25.460	998.4	0.2417	28.929	916.4	0.2524	33.574	844.3	0.2675
18	24.655	973.6	0.2303	28.113	914.9	0.2411	32.494	825.2	0.2556
19	23.629	949.6	0.2202	27.303	943.1	0.2320	31.372	803.3	0.2456
20	22.258	924.8	0.2114	26.141	971.2	0.2242	29.871	780.1	0.2370
21	20.030	889.6	0.2041	23.742	948.2	0.2169	27.060	752.8	0.2293
22	17.381	851.1	0.1987	20.836	914.6	0.2115	23.669	722.0	0.2235
23	14.098	787.6	0.1939	16.952	840.9	0.2062	19.186	685.6	0.2177
24	6.423	655.7	0.1903	7.711	676.2	0.2020	8.690	614.7	0.2133
25	3.795	614.4	0.1885	4.516	624.6	0.1996	5.037	590.3	0.2099

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C29 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)			Statepoint 11 (3.67 EFPD Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	7.656	597.3	0.7396	8.212	594.9	0.7396	8.218	579.3	0.7396
2	25.095	674.0	0.7396	26.658	661.8	0.7396	26.676	618.8	0.7396
3	32.602	681.8	0.7249	34.432	664.7	0.7265	34.454	624.4	0.7265
4	36.062	696.3	0.6797	38.027	672.7	0.6836	38.051	630.2	0.6836
5	37.335	711.4	0.6254	39.443	681.3	0.6322	39.469	636.0	0.6322
6	37.787	727.8	0.5733	40.073	692.1	0.5831	40.102	644.8	0.5832
7	38.040	744.8	0.5277	40.529	704.6	0.5406	40.561	653.7	0.5408
8	38.317	761.4	0.4881	41.026	718.5	0.5039	41.060	659.7	0.5041
9	39.272	780.1	0.4525	42.236	734.9	0.4707	42.273	668.8	0.4710
10	39.419	796.5	0.4214	42.607	749.6	0.4418	42.646	674.9	0.4420
11	39.372	815.0	0.3941	42.771	763.7	0.4162	42.813	684.2	0.4164
12	39.257	838.1	0.3704	42.850	776.9	0.3937	42.892	684.2	0.3939
13	39.130	862.3	0.3496	42.899	789.1	0.3735	42.943	690.5	0.3737
14	38.808	879.9	0.3304	42.760	802.0	0.3549	42.803	687.4	0.3550
15	38.275	886.5	0.3128	42.417	815.6	0.3376	42.460	687.3	0.3378
16	37.532	884.6	0.2967	41.859	829.1	0.3219	41.903	690.5	0.3221
17	36.560	876.8	0.2822	41.049	841.1	0.3077	41.092	687.3	0.3078
18	35.383	864.3	0.2695	39.984	849.5	0.2949	40.027	687.3	0.2950
19	34.124	847.0	0.2587	38.745	851.0	0.2836	38.786	681.1	0.2837
20	32.450	825.7	0.2493	36.984	844.5	0.2735	37.025	681.1	0.2737
21	29.403	797.6	0.2410	33.686	825.9	0.2649	33.724	671.9	0.2651
22	25.712	763.2	0.2347	29.576	795.8	0.2580	29.610	659.7	0.2581
23	20.817	718.4	0.2285	23.979	747.9	0.2512	24.007	641.9	0.2513
24	9.407	627.8	0.2237	10.830	641.0	0.2458	10.842	596.1	0.2460
25	5.413	596.6	0.2195	6.157	603.1	0.2399	6.164	582.2	0.2401

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C30

Node No.	Datapoint 3 (BOC Cy 5)			Datapoint 4 (239.5 EFPD Cy 5)			Datapoint 5 (BOC Cy 6)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 5	0.00 Cy 5	0.00 Cy 5	239.5 Cy 5	239.5 Cy 5	239.5 Cy 5	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6
1	0.000		0.7396	1.397	630.3	0.7396	3.077	650.0	0.7396
2	0.000		0.7396	4.659	821.5	0.7396	10.319	910.3	0.7396
3	0.000		0.7382	6.453	886.4	0.7382	14.430	1015.9	0.7300
4	0.000	Data	0.7070	7.622	962.2	0.7070	16.747	1106.9	0.6879
5	0.000	Not	0.6627	8.214	1003.3	0.6627	17.650	1133.0	0.6331
6	0.000	Required	0.6110	8.471	1021.7	0.6110	17.914	1133.6	0.5763
7	0.000		0.5587	8.587	1030.1	0.5587	18.003	1131.3	0.5239
8	0.000		0.5105	8.706	1038.8	0.5105	18.148	1133.5	0.4781
9	0.000		0.4674	9.115	1069.4	0.4674	18.818	1155.9	0.4381
10	0.000		0.4301	9.125	1070.2	0.4301	18.893	1161.5	0.4032
11	0.000		0.3984	9.025	1062.6	0.3984	18.844	1166.0	0.3734
12	0.000		0.3713	8.865	1050.6	0.3713	18.732	1170.2	0.3476
13	0.000		0.3480	8.671	1036.3	0.3480	18.580	1173.9	0.3251
14	0.000		0.3278	8.452	1020.3	0.3278	18.391	1176.5	0.3054
15	0.000		0.3103	8.206	1002.7	0.3103	18.154	1177.3	0.2879
16	0.000		0.2950	7.927	983.1	0.2950	17.844	1174.6	0.2725
17	0.000		0.2815	7.602	960.9	0.2815	17.421	1166.0	0.2587
18	0.000		0.2698	7.213	934.9	0.2698	16.826	1148.1	0.2465
19	0.000		0.2595	6.742	904.5	0.2595	15.982	1116.5	0.2358
20	0.000		0.2507	6.171	869.0	0.2507	14.815	1067.8	0.2264
21	0.000		0.2433	5.361	821.2	0.2433	13.021	992.3	0.2185
22	0.000		0.2373	4.521	774.5	0.2373	10.988	908.4	0.2122
23	0.000		0.2325	3.681	730.6	0.2325	8.859	826.2	0.2073
24	0.000		0.2292	1.646	633.7	0.2292	4.038	673.6	0.2035
25	0.000		0.2278	0.992	605.1	0.2278	2.407	626.7	0.2020
Node No.	Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)			Statepoint 8 (193.2 EFPD Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7
1	4.962	679.2	0.7396	6.070	674.3	0.7396	7.541	653.0	0.7396
2	16.752	1056.8	0.7396	20.300	994.9	0.7396	24.800	883.6	0.7396
3	22.533	1130.6	0.7232	26.842	1031.4	0.7227	32.448	917.7	0.7246
4	25.341	1179.9	0.6755	29.874	1064.7	0.6752	36.100	968.7	0.6793
5	26.230	1178.5	0.6171	30.800	1070.3	0.6169	37.437	1004.2	0.6234
6	26.339	1162.7	0.5588	30.894	1068.0	0.5588	37.803	1028.4	0.5668
7	26.279	1147.7	0.5069	30.810	1064.4	0.5070	37.887	1043.7	0.5152
8	26.307	1136.1	0.4624	30.810	1060.2	0.4628	38.009	1055.0	0.4705
9	26.966	1135.0	0.4243	31.481	1062.0	0.4249	38.818	1067.9	0.4319
10	26.925	1123.6	0.3912	31.413	1057.9	0.3920	38.736	1066.6	0.3985
11	26.738	1110.2	0.3627	31.200	1054.0	0.3638	38.434	1058.3	0.3698
12	26.468	1095.0	0.3382	30.907	1050.6	0.3394	38.000	1045.2	0.3450
13	26.146	1079.0	0.3168	30.563	1047.3	0.3182	37.475	1028.7	0.3234
14	25.774	1062.0	0.2982	30.170	1044.2	0.2995	36.860	1008.9	0.3045
15	25.337	1043.8	0.2817	29.711	1041.0	0.2831	36.127	985.0	0.2879
16	24.802	1023.6	0.2671	29.156	1038.0	0.2685	35.237	956.5	0.2731
17	24.120	1001.0	0.2541	28.449	1034.4	0.2555	34.131	923.8	0.2600
18	23.241	976.8	0.2425	27.519	1026.9	0.2439	32.774	890.1	0.2484
19	22.114	953.2	0.2323	26.297	1013.2	0.2335	31.144	859.2	0.2381
20	20.638	928.3	0.2233	24.651	989.2	0.2245	29.127	832.0	0.2292
21	18.340	889.0	0.2156	22.031	945.4	0.2166	26.051	799.9	0.2215
22	15.613	837.9	0.2093	18.864	888.8	0.2102	22.353	764.0	0.2152
23	12.533	772.7	0.2046	15.170	815.8	0.2053	17.964	719.6	0.2102
24	5.680	649.9	0.2011	6.864	666.5	0.2017	8.126	630.1	0.2068
25	3.339	611.4	0.1997	4.009	620.1	0.2003	4.711	599.9	0.2051

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly C30 (Continued)

Node No.	Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (EOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	495.2 Cy 7	495.2 Cy 7	495.2 Cy 7
1	8.229	633.2	0.7396	9.395	634.8	0.7396
2	26.846	799.2	0.7396	30.076	785.9	0.7396
3	35.031	826.2	0.7257	38.842	792.1	0.7276
4	39.024	868.8	0.6822	43.089	810.1	0.6862
5	40.607	900.9	0.6282	44.857	823.5	0.6351
6	41.146	924.3	0.5732	45.587	837.5	0.5827
7	41.354	941.4	0.5226	46.005	853.3	0.5344
8	41.576	955.5	0.4781	46.448	870.2	0.4916
9	42.509	973.3	0.4395	47.643	890.7	0.4537
10	42.495	983.2	0.4057	47.849	908.4	0.4204
11	42.260	993.1	0.3767	47.815	924.8	0.3916
12	41.921	1007.2	0.3517	47.658	940.0	0.3664
13	41.495	1022.2	0.3299	47.408	954.9	0.3443
14	40.933	1030.3	0.3107	47.027	970.5	0.3247
15	40.171	1025.9	0.2936	46.454	987.1	0.3073
16	39.175	1009.8	0.2784	45.634	1002.8	0.2919
17	37.896	984.1	0.2649	44.490	1015.0	0.2780
18	36.324	953.1	0.2529	42.981	1020.8	0.2657
19	34.458	920.3	0.2424	41.071	1016.7	0.2546
20	32.201	888.2	0.2332	38.623	999.4	0.2449
21	28.817	848.8	0.2255	34.781	959.2	0.2365
22	24.756	804.6	0.2192	30.052	903.7	0.2297
23	19.891	750.3	0.2141	24.185	826.7	0.2240
24	9.008	643.3	0.2106	11.017	675.3	0.2204
25	5.204	607.1	0.2088	6.321	623.7	0.2181

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D1

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.481	652.5	0.7396	2.432	657.4	0.7396
2	0.000		0.7396	5.443	962.9	0.7396	8.915	984.8	0.7396
3	0.000		0.7223	7.352	1061.2	0.7223	12.044	1091.2	0.7210
4	0.000	Data	0.6712	8.257	1148.3	0.6712	13.393	1162.6	0.6689
5	0.000	Not	0.6073	8.421	1164.9	0.6073	13.547	1160.9	0.6047
6	0.000	Required	0.5445	8.286	1151.2	0.5445	13.265	1136.8	0.5425
7	0.000		0.4905	8.105	1133.2	0.4905	12.936	1113.0	0.4892
8	0.000		0.4461	7.997	1122.5	0.4461	12.723	1096.5	0.4456
9	0.000		0.4089	8.174	1140.0	0.4089	12.927	1100.7	0.4091
10	0.000		0.3771	8.051	1127.8	0.3771	12.739	1090.6	0.3779
11	0.000		0.3502	7.860	1109.2	0.3502	12.476	1079.5	0.3513
12	0.000		0.3274	7.640	1088.1	0.3274	12.188	1069.1	0.3287
13	0.000		0.3079	7.408	1066.4	0.3079	11.889	1058.9	0.3092
14	0.000		0.2910	7.166	1044.2	0.2910	11.582	1049.2	0.2923
15	0.000		0.2763	6.909	1021.1	0.2763	11.256	1038.9	0.2774
16	0.000		0.2635	6.625	996.3	0.2635	10.890	1026.9	0.2642
17	0.000		0.2522	6.280	967.0	0.2522	10.428	1010.0	0.2527
18	0.000		0.2425	5.726	921.9	0.2425	9.654	979.1	0.2426
19	0.000		0.2342	5.362	893.5	0.2342	9.104	953.7	0.2338
20	0.000		0.2268	5.008	866.8	0.2268	8.532	924.8	0.2261
21	0.000		0.2204	4.624	838.8	0.2204	7.868	889.2	0.2193
22	0.000		0.2149	3.944	791.5	0.2149	6.714	832.0	0.2136
23	0.000		0.2105	3.156	740.0	0.2105	5.354	768.2	0.2091
24	0.000		0.2078	1.236	627.9	0.2078	2.130	640.2	0.2062
25	0.000		0.2067	0.725	600.6	0.2067	1.232	606.1	0.2050
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.586	632.3	0.7396	4.397	647.2	0.7396	6.011	665.7	0.7396
2	13.226	868.5	0.7396	16.114	921.5	0.7396	21.312	959.6	0.7396
3	17.809	931.9	0.7251	21.561	983.8	0.7246	27.780	983.1	0.7239
4	19.987	1002.2	0.6783	24.213	1056.2	0.6778	30.648	1002.4	0.6774
5	20.625	1045.8	0.6197	25.093	1095.4	0.6194	31.489	998.8	0.6205
6	20.637	1073.3	0.5605	25.216	1113.8	0.5604	31.554	993.6	0.5633
7	20.502	1091.9	0.5074	25.134	1122.7	0.5069	31.461	992.7	0.5118
8	20.451	1107.6	0.4620	25.129	1130.6	0.4613	31.506	997.1	0.4676
9	20.861	1128.0	0.4232	25.643	1148.4	0.4222	32.167	1010.4	0.4293
10	20.698	1130.5	0.3900	25.522	1155.7	0.3888	32.172	1022.0	0.3965
11	20.358	1122.8	0.3617	25.221	1162.5	0.3602	32.030	1036.8	0.3682
12	19.915	1107.5	0.3375	24.828	1171.3	0.3357	31.818	1053.9	0.3438
13	19.409	1087.4	0.3168	24.360	1178.1	0.3146	31.554	1073.5	0.3225
14	18.849	1063.4	0.2988	23.790	1176.3	0.2962	31.207	1095.4	0.3038
15	18.223	1035.6	0.2832	23.069	1159.6	0.2801	30.723	1119.2	0.2872
16	17.495	1003.1	0.2694	22.172	1130.4	0.2661	30.051	1142.3	0.2726
17	16.597	965.5	0.2574	21.042	1091.6	0.2538	29.098	1160.8	0.2596
18	15.319	923.8	0.2471	19.492	1047.8	0.2432	27.651	1171.8	0.2481
19	14.274	884.8	0.2381	18.146	1001.6	0.2341	26.240	1164.9	0.2378
20	13.226	848.9	0.2303	16.779	955.1	0.2262	24.609	1137.3	0.2287
21	12.029	810.6	0.2235	15.180	899.7	0.2194	22.395	1075.5	0.2207
22	10.204	764.8	0.2177	12.891	840.0	0.2136	19.247	995.3	0.2138
23	8.065	714.9	0.2131	10.194	773.6	0.2091	15.365	894.9	0.2084
24	3.239	621.9	0.2104	4.120	643.5	0.2062	6.351	689.1	0.2050
25	1.853	595.7	0.2091	2.353	607.9	0.2049	3.618	632.2	0.2034

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D1 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.035	639.5	0.7396
2	21.389	846.7	0.7396
3	27.874	867.9	0.724
4	30.751	904.5	0.6775
5	31.598	929.7	0.6206
6	31.667	947.0	0.5636
7	31.579	969.1	0.5122
8	31.625	973.6	0.4679
9	32.290	991.8	0.4296
10	32.296	996.4	0.3968
11	32.153	991.8	0.3685
12	31.941	991.8	0.3440
13	31.675	982.6	0.3227
14	31.327	978.1	0.3040
15	30.839	960.2	0.2874
16	30.163	942.7	0.2728
17	29.205	921.2	0.2597
18	27.753	900.3	0.2483
19	26.336	875.9	0.2380
20	24.698	848.3	0.2288
21	22.475	814.1	0.2208
22	19.317	777.8	0.2140
23	15.421	729.8	0.2085
24	6.375	630.4	0.2051
25	3.630	596.2	0.2035

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D2

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.714	668.0	0.7396	2.887	681.9	0.7396
2	0.000		0.7396	6.201	1035.5	0.7396	10.443	1110.8	0.7396
3	0.000		0.7120	8.224	1145.0	0.7120	13.743	1228.0	0.7078
4	0.000	Data	0.6502	9.025	1228.0	0.6502	14.886	1289.3	0.6424
5	0.000	Not	0.5790	9.015	1228.9	0.5790	14.777	1271.3	0.5695
6	0.000	Required	0.5144	8.747	1198.5	0.5144	14.317	1236.9	0.5051
7	0.000		0.4621	8.496	1172.5	0.4621	13.896	1207.3	0.4534
8	0.000		0.4200	8.358	1158.5	0.4200	13.643	1187.6	0.4121
9	0.000		0.3846	8.543	1177.4	0.3846	13.847	1190.8	0.3775
10	0.000		0.3544	8.428	1165.6	0.3544	13.666	1179.6	0.3480
11	0.000		0.3289	8.244	1147.0	0.3289	13.415	1168.4	0.3230
12	0.000		0.3073	8.031	1125.9	0.3073	13.135	1157.3	0.3017
13	0.000		0.2887	7.807	1104.1	0.2887	12.844	1146.2	0.2833
14	0.000		0.2727	7.576	1082.1	0.2727	12.545	1135.2	0.2673
15	0.000		0.2586	7.334	1059.5	0.2586	12.229	1123.2	0.2531
16	0.000		0.2462	7.069	1035.4	0.2462	11.879	1109.7	0.2407
17	0.000		0.2354	6.749	1007.1	0.2354	11.439	1090.9	0.2297
18	0.000		0.2259	6.216	961.7	0.2259	10.682	1056.7	0.2199
19	0.000		0.2178	5.881	934.3	0.2178	10.141	1026.2	0.2114
20	0.000		0.2105	5.548	907.9	0.2105	9.552	989.6	0.2041
21	0.000		0.2041	5.162	878.3	0.2041	8.827	943.4	0.1977
22	0.000		0.1987	4.433	825.2	0.1987	7.553	873.8	0.1922
23	0.000		0.1944	3.565	766.3	0.1944	6.038	798.2	0.1879
24	0.000		0.1915	1.409	637.3	0.1915	2.428	651.6	0.1849
25	0.000		0.1904	0.831	606.2	0.1904	1.416	612.9	0.1839
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.161	640.2	0.7396	4.716	618.7	0.7396	5.385	602.3	0.7396
2	15.063	895.3	0.7396	16.967	781.1	0.7396	19.135	705.3	0.7396
3	19.667	945.0	0.7146	22.077	806.3	0.7179	24.712	714.3	0.7216
4	21.451	999.6	0.6578	24.158	842.4	0.6653	27.027	729.3	0.6737
5	21.679	1029.7	0.5931	24.613	871.2	0.6055	27.679	742.2	0.6197
6	21.402	1046.4	0.5333	24.522	895.5	0.5498	27.811	757.0	0.5697
7	21.058	1053.6	0.4828	24.323	915.0	0.5015	27.857	773.6	0.5265
8	20.819	1054.9	0.4404	24.190	929.5	0.4601	27.980	791.4	0.4892
9	21.069	1059.2	0.4039	24.552	945.2	0.4234	28.637	812.4	0.4554
10	20.818	1052.7	0.3730	24.354	952.7	0.3918	28.683	830.2	0.4261
11	20.459	1042.7	0.3466	24.030	957.6	0.3648	28.587	847.2	0.4004
12	20.037	1029.7	0.3240	23.635	961.5	0.3414	28.427	865.2	0.3779
13	19.577	1014.5	0.3044	23.196	964.5	0.3212	28.273	887.4	0.3585
14	19.082	997.2	0.2873	22.712	966.1	0.3034	28.009	905.0	0.3404
15	18.543	977.8	0.2723	22.167	965.2	0.2878	27.645	919.8	0.3239
16	17.936	956.1	0.2590	21.529	960.8	0.2739	27.170	933.3	0.3092
17	17.205	932.0	0.2474	20.737	952.1	0.2616	26.514	944.8	0.2961
18	16.133	906.7	0.2376	19.578	939.8	0.2514	25.454	953.2	0.2852
19	15.277	882.2	0.2294	18.583	920.6	0.2424	24.450	952.5	0.2749
20	14.283	851.7	0.2215	17.402	895.4	0.2339	23.130	940.7	0.2652
21	13.014	812.4	0.2143	15.833	856.5	0.2261	21.170	908.3	0.2560
22	11.050	765.3	0.2084	13.487	809.5	0.2199	18.241	862.2	0.2490
23	8.710	712.5	0.2034	10.629	750.1	0.2146	14.468	794.8	0.2428
24	3.478	618.7	0.2001	4.239	632.1	0.2112	5.794	648.9	0.2389
25	1.979	592.6	0.1980	2.382	599.1	0.2085	3.192	606.8	0.2347

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D2 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.397	598.9	0.7396
2	19.178	708.2	0.7396
3	24.770	736.4	0.7217
4	27.093	763.8	0.6739
5	27.753	792.1	0.6199
6	27.891	814.1	0.5701
7	27.943	836.7	0.5271
8	28.070	852.2	0.4897
9	28.732	871.9	0.4560
10	28.779	875.9	0.4267
11	28.684	879.9	0.4009
12	28.524	879.9	0.3784
13	28.370	879.9	0.3589
14	28.105	875.9	0.3407
15	27.740	871.9	0.3243
16	27.263	863.9	0.3095
17	26.607	863.9	0.2964
18	25.553	888.0	0.2855
19	24.581	1029.2	0.2754
20	23.266	1053.4	0.2657
21	21.295	1001.0	0.2564
22	18.349	925.5	0.2493
23	14.555	840.6	0.2431
24	5.830	666.1	0.2392
25	3.211	616.0	0.2350

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D3

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.142	630.4	0.7396	2.019	649.4	0.7396
2	0.000		0.7396	4.254	858.3	0.7396	7.449	942.8	0.7396
3	0.000		0.7340	5.875	933.8	0.7340	10.248	1042.8	0.7300
4	0.000	Data	0.6974	6.849	1015.8	0.6974	11.703	1116.7	0.6890
5	0.000	Not	0.6476	7.313	1057.6	0.6476	12.167	1116.7	0.6358
6	0.000	Required	0.5922	7.510	1075.9	0.5922	12.207	1092.0	0.5796
7	0.000		0.5383	7.571	1081.6	0.5383	12.110	1067.7	0.5271
8	0.000		0.4904	7.611	1085.4	0.4904	12.047	1052.2	0.4813
9	0.000		0.4488	7.889	1112.0	0.4488	12.361	1057.6	0.4419
10	0.000		0.4131	7.848	1108.0	0.4131	12.257	1048.1	0.4080
11	0.000		0.3826	7.713	1095.1	0.3826	12.058	1038.6	0.3791
12	0.000		0.3567	7.521	1076.9	0.3567	11.809	1030.3	0.3542
13	0.000		0.3346	7.303	1056.7	0.3346	11.539	1022.7	0.3327
14	0.000		0.3155	7.068	1035.3	0.3155	11.254	1015.5	0.3141
15	0.000		0.2990	6.814	1012.8	0.2990	10.944	1007.5	0.2979
16	0.000		0.2846	6.532	988.3	0.2846	10.593	997.7	0.2835
17	0.000		0.2720	6.192	959.7	0.2720	10.148	982.9	0.2709
18	0.000		0.2612	5.646	915.6	0.2612	9.393	954.4	0.2600
19	0.000		0.2521	5.293	888.3	0.2521	8.870	931.8	0.2505
20	0.000		0.2440	4.951	862.6	0.2440	8.330	906.2	0.2422
21	0.000		0.2370	4.581	835.7	0.2370	7.704	874.2	0.2349
22	0.000		0.2309	3.912	789.3	0.2309	6.590	821.4	0.2286
23	0.000		0.2261	3.136	738.8	0.2261	5.274	761.8	0.2237
24	0.000		0.2230	1.233	627.7	0.2230	2.107	638.4	0.2205
25	0.000		0.2218	0.721	600.4	0.2218	1.215	605.0	0.2192
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.149	630.8	0.7396	3.952	646.3	0.7396	5.533	663.4	0.7396
2	11.679	861.6	0.7396	14.602	926.9	0.7396	19.824	961.9	0.7396
3	16.025	932.9	0.7313	19.859	996.0	0.7295	26.150	989.4	0.7275
4	18.334	1005.4	0.6919	22.653	1071.1	0.6884	29.158	1008.7	0.6855
5	19.256	1046.8	0.6401	23.796	1107.3	0.6353	30.226	1001.9	0.6329
6	19.560	1071.5	0.5844	24.180	1120.7	0.5789	30.522	994.0	0.5780
7	19.641	1088.5	0.5314	24.288	1125.3	0.5257	30.605	991.8	0.5267
8	19.739	1104.1	0.4846	24.417	1130.6	0.4788	30.779	995.8	0.4815
9	20.266	1125.1	0.4440	25.039	1146.9	0.4383	31.550	1009.3	0.4422
10	20.188	1127.7	0.4090	24.997	1153.1	0.4035	31.632	1020.6	0.4082
11	19.913	1120.1	0.3791	24.754	1158.7	0.3737	31.543	1034.9	0.3789
12	19.516	1105.6	0.3535	24.403	1166.8	0.3481	31.368	1051.5	0.3535
13	19.054	1086.9	0.3315	23.979	1173.5	0.3259	31.138	1070.1	0.3312
14	18.542	1065.4	0.3125	23.459	1172.0	0.3067	30.829	1090.8	0.3118
15	17.962	1040.3	0.2960	22.791	1156.6	0.2900	30.383	1112.9	0.2947
16	17.275	1010.0	0.2815	21.942	1128.7	0.2754	29.747	1134.7	0.2795
17	16.403	972.8	0.2690	20.845	1091.1	0.2626	28.823	1152.6	0.2661
18	15.136	930.1	0.2581	19.312	1048.3	0.2516	27.396	1163.8	0.2541
19	14.114	890.5	0.2487	17.998	1003.4	0.2422	26.027	1158.0	0.2436
20	13.095	854.2	0.2406	16.675	958.9	0.2341	24.458	1132.4	0.2342
21	11.935	815.5	0.2335	15.131	905.7	0.2271	22.319	1072.9	0.2260
22	10.142	768.9	0.2275	12.887	847.2	0.2211	19.230	994.1	0.2190
23	8.041	718.4	0.2228	10.233	780.8	0.2163	15.399	894.5	0.2133
24	3.244	623.4	0.2197	4.158	646.7	0.2131	6.389	689.1	0.2096
25	1.856	596.7	0.2185	2.380	610.1	0.2119	3.650	632.5	0.2081

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D3 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.545	598.9	0.7396
2	19.865	700.7	0.7396
3	26.202	716.6	0.7276
4	29.217	739.8	0.6857
5	30.292	763.8	0.6331
6	30.592	777.8	0.5784
7	30.680	795.8	0.5271
8	30.859	814.1	0.4820
9	31.634	829.1	0.4428
10	31.719	840.6	0.4088
11	31.634	856.1	0.3794
12	31.472	908.6	0.3540
13	31.281	1088.2	0.3320
14	30.983	1145.4	0.3125
15	30.535	1134.8	0.2953
16	29.895	1113.8	0.2801
17	28.964	1078.1	0.2665
18	27.530	1043.6	0.2545
19	26.153	1005.6	0.2439
20	24.575	964.7	0.2345
21	22.424	912.8	0.2263
22	19.321	856.1	0.2192
23	15.472	788.5	0.2136
24	6.420	651.0	0.2099
25	3.667	610.3	0.2084

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D4

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.592	659.9	0.7396	2.827	688.8	0.7396
2	0.000		0.7396	5.768	993.4	0.7396	10.197	1143.6	0.7396
3	0.000		0.7170	7.670	1091.0	0.7170	13.403	1266.0	0.7078
4	0.000	Data	0.6611	8.467	1169.6	0.6611	14.514	1323.9	0.6439
5	0.000	Not	0.5950	8.517	1174.7	0.5950	14.432	1299.3	0.5733
6	0.000	Required	0.5328	8.313	1153.9	0.5328	14.022	1261.7	0.5104
7	0.000		0.4804	8.106	1133.3	0.4804	13.644	1231.3	0.4591
8	0.000		0.4375	8.000	1122.8	0.4375	13.427	1211.9	0.4177
9	0.000		0.4012	8.196	1142.2	0.4012	13.655	1217.5	0.3829
10	0.000		0.3702	8.102	1132.9	0.3702	13.501	1207.1	0.3532
11	0.000		0.3438	7.942	1117.2	0.3438	13.278	1196.3	0.3278
12	0.000		0.3214	7.755	1099.1	0.3214	13.030	1185.9	0.3061
13	0.000		0.3021	7.557	1080.3	0.3021	12.771	1175.6	0.2873
14	0.000		0.2853	7.352	1061.2	0.2853	12.503	1165.1	0.2709
15	0.000		0.2706	7.141	1041.9	0.2706	12.221	1153.3	0.2564
16	0.000		0.2576	6.920	1022.1	0.2576	11.913	1139.1	0.2436
17	0.000		0.2462	6.676	1000.7	0.2462	11.542	1118.6	0.2323
18	0.000		0.2362	6.258	965.2	0.2362	10.890	1081.9	0.2223
19	0.000		0.2274	6.053	948.3	0.2274	10.469	1049.2	0.2137
20	0.000		0.2195	5.825	929.8	0.2195	9.976	1010.5	0.2061
21	0.000		0.2123	5.492	903.6	0.2123	9.288	961.0	0.1995
22	0.000		0.2062	4.750	847.9	0.2062	7.987	888.3	0.1937
23	0.000		0.2012	3.825	783.5	0.2012	6.397	809.3	0.1892
24	0.000		0.1979	1.512	643.0	0.1979	2.578	655.9	0.1858
25	0.000		0.1967	0.887	609.2	0.1967	1.501	615.4	0.1847
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.928	628.9	0.7396	4.431	613.1	0.7396	5.158	606.1	0.7396
2	14.209	843.3	0.7396	15.957	760.7	0.7396	18.341	721.2	0.7396
3	18.581	885.4	0.7163	20.808	784.9	0.7198	23.708	731.3	0.7236
4	20.307	934.2	0.6626	22.815	818.1	0.6703	25.951	746.8	0.6790
5	20.593	964.8	0.6020	23.299	842.3	0.6145	26.603	758.0	0.6287
6	20.426	985.6	0.5456	23.283	861.3	0.5619	26.765	770.1	0.5815
7	20.206	999.4	0.4965	23.175	875.7	0.5155	26.850	783.4	0.5394
8	20.108	1009.9	0.4544	23.156	886.0	0.4744	27.031	797.4	0.5020
9	20.508	1025.3	0.4174	23.639	897.0	0.4375	27.756	814.7	0.4674
10	20.417	1031.0	0.3857	23.577	900.9	0.4054	27.885	828.7	0.4369
11	20.208	1032.2	0.3585	23.385	903.1	0.3777	27.878	842.4	0.4101
12	19.921	1028.7	0.3350	23.110	904.8	0.3536	27.786	856.3	0.3864
13	19.576	1020.9	0.3146	22.779	906.6	0.3326	27.634	870.0	0.3653
14	19.181	1009.6	0.2966	22.398	908.5	0.3142	27.431	884.0	0.3466
15	18.729	994.6	0.2807	21.956	909.9	0.2979	27.163	897.8	0.3299
16	18.208	976.2	0.2666	21.431	909.3	0.2834	26.802	911.1	0.3149
17	17.577	954.2	0.2542	20.776	906.1	0.2706	26.288	922.6	0.3015
18	16.621	929.2	0.2435	19.778	900.5	0.2596	25.399	931.7	0.2901
19	15.848	901.1	0.2339	18.928	890.2	0.2495	24.560	932.6	0.2791
20	14.948	869.7	0.2253	17.912	875.1	0.2405	23.431	923.2	0.2689
21	13.719	829.8	0.2176	16.458	846.4	0.2323	21.620	894.2	0.2594
22	11.729	781.7	0.2113	14.149	807.5	0.2259	18.773	852.3	0.2522
23	9.282	725.8	0.2061	11.221	752.3	0.2204	14.983	789.4	0.2460
24	3.716	623.5	0.2026	4.491	633.4	0.2166	6.035	648.2	0.2421
25	2.109	595.0	0.2004	2.517	599.6	0.2136	3.326	606.8	0.2379

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D4 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.170	598.9	0.7396
2	18.384	708.2	0.7396
3	23.765	733.1	0.7238
4	26.018	767.3	0.6792
5	26.680	803.0	0.629
6	26.849	829.1	0.5818
7	26.941	856.1	0.5399
8	27.128	879.9	0.5025
9	27.858	900.3	0.4679
10	27.988	904.5	0.4373
11	27.982	908.6	0.4105
12	27.889	904.5	0.3868
13	27.739	912.8	0.3657
14	27.547	960.2	0.3470
15	27.320	1161.6	0.3303
16	26.969	1217.1	0.3153
17	26.450	1189.0	0.3018
18	25.554	1150.8	0.2903
19	24.705	1098.4	0.2792
20	23.566	1048.5	0.2690
21	21.741	982.6	0.2595
22	18.879	917.0	0.2523
23	15.069	836.7	0.2460
24	6.073	672.2	0.2421
25	3.347	621.7	0.2379

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D5

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.139	630.3	0.7396	2.015	649.3	0.7396
2	0.000		0.7396	4.243	857.4	0.7396	7.434	942.2	0.7396
3	0.000		0.7341	5.862	932.8	0.7341	10.228	1041.7	0.7301
4	0.000	Data	0.6977	6.835	1014.6	0.6977	11.683	1115.7	0.6893
5	0.000	Not	0.6480	7.300	1056.4	0.6480	12.149	1115.9	0.6361
6	0.000	Required	0.5927	7.498	1074.8	0.5927	12.191	1091.4	0.5800
7	0.000		0.5389	7.561	1080.7	0.5389	12.096	1067.1	0.5276
8	0.000		0.4909	7.602	1084.5	0.4909	12.033	1051.4	0.4818
9	0.000		0.4493	7.881	1111.2	0.4493	12.348	1056.8	0.4423
10	0.000		0.4135	7.840	1107.3	0.4135	12.245	1047.5	0.4084
11	0.000		0.3831	7.705	1094.3	0.3831	12.047	1038.2	0.3795
12	0.000		0.3571	7.514	1076.3	0.3571	11.798	1029.7	0.3545
13	0.000		0.3350	7.297	1056.1	0.3350	11.529	1022.1	0.3331
14	0.000		0.3159	7.062	1034.8	0.3159	11.244	1014.9	0.3144
15	0.000		0.2993	6.808	1012.2	0.2993	10.935	1007.0	0.2981
16	0.000		0.2849	6.526	987.8	0.2849	10.584	997.2	0.2838
17	0.000		0.2723	6.187	959.3	0.2723	10.139	982.4	0.2712
18	0.000		0.2616	5.640	915.2	0.2616	9.384	954.0	0.2602
19	0.000		0.2524	5.288	887.9	0.2524	8.861	931.2	0.2507
20	0.000		0.2443	4.947	862.3	0.2443	8.322	905.7	0.2424
21	0.000		0.2372	4.576	835.4	0.2372	7.697	873.9	0.2351
22	0.000		0.2312	3.908	789.0	0.2312	6.584	821.2	0.2289
23	0.000		0.2264	3.133	738.6	0.2264	5.269	761.6	0.2239
24	0.000		0.2233	1.232	627.7	0.2233	2.105	638.3	0.2207
25	0.000		0.2221	0.720	600.4	0.2221	1.214	605.0	0.2195
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.142	630.6	0.7396	3.944	646.2	0.7396	5.524	663.3	0.7396
2	11.654	860.7	0.7396	14.572	926.1	0.7396	19.792	961.7	0.7396
3	15.995	932.1	0.7314	19.822	994.9	0.7295	26.113	989.4	0.7276
4	18.303	1004.5	0.6921	22.616	1070.1	0.6886	29.120	1008.6	0.6857
5	19.227	1045.8	0.6405	23.761	1106.3	0.6357	30.191	1001.9	0.6332
6	19.533	1070.5	0.5849	24.148	1119.9	0.5794	30.489	993.9	0.5784
7	19.616	1087.4	0.5319	24.259	1124.6	0.5261	30.573	991.5	0.5271
8	19.716	1103.2	0.4850	24.390	1129.9	0.4792	30.748	995.4	0.4818
9	20.244	1124.2	0.4444	25.013	1146.2	0.4388	31.519	1008.8	0.4426
10	20.168	1126.9	0.4094	24.972	1152.2	0.4039	31.602	1020.1	0.4086
11	19.893	1119.3	0.3795	24.731	1158.2	0.3741	31.514	1034.3	0.3792
12	19.497	1104.8	0.3538	24.381	1166.2	0.3484	31.340	1050.9	0.3537
13	19.036	1086.2	0.3319	23.958	1172.9	0.3263	31.111	1069.5	0.3316
14	18.525	1064.7	0.3128	23.438	1171.3	0.3070	30.802	1090.2	0.3121
15	17.946	1039.6	0.2963	22.771	1155.9	0.2903	30.357	1112.3	0.2950
16	17.259	1009.3	0.2819	21.923	1128.2	0.2756	29.721	1133.9	0.2798
17	16.388	972.3	0.2692	20.826	1090.4	0.2629	28.798	1152.0	0.2664
18	15.122	929.7	0.2583	19.294	1047.7	0.2519	27.371	1163.1	0.2543
19	14.101	890.2	0.2490	17.981	1002.8	0.2425	26.003	1157.3	0.2438
20	13.083	853.9	0.2408	16.659	958.3	0.2343	24.435	1131.7	0.2344
21	11.924	815.2	0.2338	15.116	905.2	0.2273	22.298	1072.3	0.2262
22	10.132	768.6	0.2278	12.875	846.9	0.2213	19.212	993.6	0.2192
23	8.033	718.2	0.2230	10.223	780.6	0.2165	15.384	894.1	0.2136
24	3.240	623.3	0.2200	4.154	646.7	0.2133	6.383	689.0	0.2098
25	1.854	596.7	0.2187	2.377	610.0	0.2121	3.646	632.5	0.2083

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D5 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.536	598.9	0.7396
2	19.833	700.7	0.7396
3	26.165	716.6	0.7276
4	29.179	739.8	0.6858
5	30.256	760.3	0.6334
6	30.559	777.8	0.5787
7	30.648	795.8	0.5275
8	30.827	810.4	0.4823
9	31.604	832.9	0.4431
10	31.690	844.4	0.4092
11	31.606	860.0	0.3798
12	31.444	908.6	0.3543
13	31.253	1083.1	0.3323
14	30.956	1145.4	0.3128
15	30.509	1134.8	0.2955
16	29.869	1113.8	0.2803
17	28.938	1073.1	0.2668
18	27.504	1038.8	0.2548
19	26.129	1005.6	0.2441
20	24.552	964.7	0.2347
21	22.403	912.8	0.2265
22	19.302	852.2	0.2195
23	15.456	784.9	0.2138
24	6.414	651.0	0.2101
25	3.663	610.3	0.2085

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D6

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.424	648.8	0.7396	2.424	662.8	0.7396
2	0.000		0.7396	5.268	946.8	0.7396	8.936	1015.5	0.7396
3	0.000		0.7231	7.208	1048.0	0.7231	12.184	1136.3	0.7195
4	0.000	Data	0.6722	8.228	1145.4	0.6722	13.661	1213.0	0.6654
5	0.000	Not	0.6076	8.524	1175.4	0.6076	13.910	1204.8	0.5992
6	0.000	Required	0.5434	8.497	1172.6	0.5434	13.693	1172.6	0.5355
7	0.000		0.4880	8.390	1161.7	0.4880	13.407	1143.0	0.4815
8	0.000		0.4423	8.327	1155.4	0.4423	13.216	1122.3	0.4375
9	0.000		0.4040	8.544	1177.5	0.4040	13.439	1123.2	0.4006
10	0.000		0.3713	8.435	1166.3	0.3713	13.253	1111.0	0.3691
11	0.000		0.3438	8.243	1146.9	0.3438	12.986	1099.2	0.3425
12	0.000		0.3206	8.013	1124.1	0.3206	12.686	1088.2	0.3199
13	0.000		0.3008	7.763	1099.9	0.3008	12.371	1078.2	0.3005
14	0.000		0.2838	7.499	1074.9	0.2838	12.045	1068.8	0.2836
15	0.000		0.2690	7.219	1049.0	0.2690	11.697	1058.5	0.2688
16	0.000		0.2562	6.908	1021.1	0.2562	11.304	1046.2	0.2559
17	0.000		0.2449	6.530	988.2	0.2449	10.808	1028.8	0.2444
18	0.000		0.2353	5.937	938.8	0.2353	9.989	996.4	0.2345
19	0.000		0.2271	5.543	907.6	0.2271	9.400	969.3	0.2259
20	0.000		0.2199	5.167	878.7	0.2199	8.794	938.3	0.2183
21	0.000		0.2136	4.763	848.8	0.2136	8.095	900.2	0.2117
22	0.000		0.2082	4.055	799.0	0.2082	6.895	840.2	0.2062
23	0.000		0.2040	3.242	745.5	0.2040	5.493	773.9	0.2017
24	0.000		0.2012	1.276	630.0	0.2012	2.197	642.7	0.1989
25	0.000		0.2001	0.751	602.0	0.2001	1.276	607.7	0.1978
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.656	637.4	0.7396	4.234	621.3	0.7396	5.177	620.2	0.7396
2	13.521	892.2	0.7396	15.583	802.2	0.7396	18.711	778.5	0.7396
3	18.180	951.0	0.7234	20.845	837.2	0.7257	24.657	792.9	0.7288
4	20.336	1009.3	0.6743	23.343	880.7	0.6801	27.427	812.3	0.6873
5	20.911	1038.7	0.6135	24.126	908.3	0.6234	28.373	824.2	0.6355
6	20.860	1054.0	0.5534	24.206	926.1	0.5665	28.619	836.4	0.5834
7	20.671	1063.1	0.5003	24.092	936.5	0.5153	28.684	849.9	0.5361
8	20.578	1072.3	0.4556	24.037	941.8	0.4710	28.809	863.6	0.4943
9	21.014	1092.7	0.4174	24.524	949.0	0.4324	29.513	880.5	0.4570
10	20.948	1104.4	0.3846	24.453	948.3	0.3992	29.599	892.9	0.4244
11	20.734	1109.6	0.3567	24.222	945.9	0.3708	29.522	905.3	0.3961
12	20.400	1106.2	0.3327	23.876	944.2	0.3464	29.334	918.2	0.3716
13	19.992	1097.2	0.3121	23.463	943.5	0.3254	29.083	931.6	0.3502
14	19.517	1082.8	0.2941	22.991	943.9	0.3071	28.777	945.6	0.3315
15	18.966	1063.6	0.2784	22.440	943.9	0.2911	28.391	959.7	0.3149
16	18.316	1039.7	0.2646	21.776	941.9	0.2770	27.884	973.3	0.3002
17	17.503	1011.1	0.2525	20.924	936.5	0.2647	27.167	985.2	0.2872
18	16.309	978.3	0.2421	19.672	928.4	0.2541	26.017	994.3	0.2761
19	15.299	942.9	0.2329	18.575	916.5	0.2446	24.909	993.3	0.2657
20	14.223	905.0	0.2249	17.390	901.8	0.2363	23.568	979.4	0.2562
21	12.914	858.2	0.2178	15.864	873.3	0.2289	21.604	941.7	0.2474
22	10.927	801.5	0.2120	13.545	831.4	0.2229	18.646	889.3	0.2406
23	8.589	739.2	0.2074	10.685	769.9	0.2179	14.823	816.2	0.2349
24	3.428	628.6	0.2045	4.271	639.9	0.2148	5.986	658.2	0.2316
25	1.947	598.3	0.2031	2.399	603.5	0.2129	3.321	613.0	0.2289

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D6 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.195	619.0	0.7396
2	18.771	774.8	0.7396
3	24.731	792.1	0.7289
4	27.509	821.6	0.6874
5	28.460	840.6	0.6358
6	28.711	860.0	0.5837
7	28.781	879.9	0.5364
8	28.910	896.2	0.4947
9	29.617	908.6	0.4574
10	29.705	917.0	0.4248
11	29.628	917.0	0.3965
12	29.439	912.8	0.3720
13	29.188	912.8	0.3505
14	28.879	900.3	0.3317
15	28.491	892.1	0.3151
16	27.981	879.9	0.3005
17	27.260	863.9	0.2874
18	26.106	848.3	0.2763
19	24.994	832.9	0.2659
20	23.647	810.4	0.2564
21	21.676	784.9	0.2477
22	18.709	753.4	0.2408
23	14.873	710.1	0.2351
24	6.006	618.9	0.2318
25	3.332	593.4	0.2291

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D7

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.763	671.3	0.7396	2.924	680.5	0.7396
2	0.000		0.7396	6.413	1056.7	0.7396	10.624	1105.5	0.7396
3	0.000		0.7073	8.584	1181.6	0.7073	14.065	1221.3	0.7051
4	0.000	Data	0.6395	9.502	1280.2	0.6395	15.344	1285.9	0.6361
5	0.000	Not	0.5633	9.573	1288.1	0.5633	15.356	1275.1	0.5599
6	0.000	Required	0.4960	9.368	1265.3	0.4960	15.000	1247.9	0.4934
7	0.000		0.4428	9.149	1241.4	0.4428	14.641	1223.2	0.4409
8	0.000		0.4005	9.008	1226.2	0.4005	14.395	1205.0	0.3991
9	0.000		0.3651	9.178	1244.5	0.3651	14.571	1206.0	0.3644
10	0.000		0.3353	9.031	1228.6	0.3353	14.357	1194.6	0.3350
11	0.000		0.3104	8.827	1206.9	0.3104	14.089	1183.7	0.3103
12	0.000		0.2892	8.595	1182.7	0.2892	13.798	1173.7	0.2893
13	0.000		0.2711	8.348	1157.5	0.2711	13.495	1164.4	0.2712
14	0.000		0.2555	8.086	1131.3	0.2555	13.179	1155.4	0.2555
15	0.000		0.2420	7.804	1103.8	0.2420	12.839	1145.9	0.2417
16	0.000		0.2301	7.488	1073.8	0.2301	12.456	1135.0	0.2296
17	0.000		0.2197	7.106	1038.8	0.2197	11.975	1119.1	0.2188
18	0.000		0.2108	6.501	985.7	0.2108	11.167	1087.2	0.2093
19	0.000		0.2031	6.093	951.6	0.2031	10.559	1056.7	0.2012
20	0.000		0.1964	5.692	919.3	0.1964	9.895	1017.9	0.1940
21	0.000		0.1906	5.249	884.9	0.1906	9.092	967.4	0.1878
22	0.000		0.1856	4.479	828.5	0.1856	7.750	892.5	0.1825
23	0.000		0.1816	3.594	768.2	0.1816	6.190	812.1	0.1783
24	0.000		0.1790	1.428	638.4	0.1790	2.503	656.7	0.1756
25	0.000		0.1780	0.850	607.2	0.1780	1.470	615.9	0.1745
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.410	654.3	0.7396	4.849	606.2	0.7396	5.756	617.8	0.7396
2	15.953	959.7	0.7396	17.472	731.5	0.7396	20.413	763.7	0.7396
3	20.903	1023.9	0.7106	22.869	755.3	0.7133	26.491	779.7	0.7177
4	22.903	1091.2	0.6483	25.140	786.0	0.6547	29.088	802.6	0.6649
5	23.222	1121.2	0.5777	25.654	808.9	0.5888	29.839	819.7	0.6052
6	22.966	1131.2	0.5136	25.549	827.2	0.5290	29.960	836.3	0.5509
7	22.611	1131.6	0.4610	25.314	841.9	0.4796	29.952	853.4	0.5054
8	22.335	1128.6	0.4183	25.146	855.5	0.4392	30.008	870.6	0.4674
9	22.537	1131.2	0.3824	25.474	871.6	0.4047	30.600	891.3	0.4338
10	22.218	1120.7	0.3521	25.244	883.2	0.3753	30.565	907.0	0.4049
11	21.791	1105.1	0.3264	24.926	897.5	0.3504	30.417	920.9	0.3796
12	21.303	1086.0	0.3045	24.735	938.0	0.3305	30.359	931.9	0.3585
13	20.771	1064.2	0.2855	25.067	1067.4	0.3174	30.749	936.8	0.3424
14	20.196	1040.2	0.2692	24.770	1113.0	0.2999	30.593	948.7	0.3241
15	19.563	1013.7	0.2548	24.110	1108.5	0.2824	30.112	964.1	0.3066
16	18.842	984.0	0.2422	23.255	1086.3	0.2668	29.434	979.5	0.2911
17	17.970	950.9	0.2311	22.188	1055.0	0.2533	28.512	992.4	0.2775
18	16.736	916.1	0.2215	20.730	1020.1	0.2420	27.142	1000.3	0.2661
19	15.678	880.9	0.2131	19.412	981.2	0.2318	25.784	996.7	0.2555
20	14.551	846.1	0.2057	18.001	940.5	0.2231	24.178	979.4	0.2460
21	13.193	806.4	0.1991	16.261	888.7	0.2153	21.966	938.7	0.2371
22	11.182	761.0	0.1938	13.803	831.8	0.2093	18.837	884.0	0.2304
23	8.832	710.7	0.1894	10.885	765.0	0.2041	14.940	810.2	0.2245
24	3.566	619.4	0.1866	4.388	637.9	0.2010	6.070	656.3	0.2212
25	2.057	593.9	0.1854	2.496	602.4	0.1986	3.399	612.0	0.2180

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D7 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.771	608.9	0.7396
2	20.459	719.6	0.7396
3	26.548	733.1	0.7179
4	29.151	753.4	0.665
5	29.908	774.3	0.6055
6	30.035	795.8	0.5513
7	30.032	814.1	0.5060
8	30.091	825.3	0.4679
9	30.687	840.6	0.4345
10	30.655	852.2	0.4054
11	30.508	856.1	0.3801
12	30.449	852.2	0.3590
13	30.837	844.4	0.3429
14	30.680	840.6	0.3246
15	30.196	829.1	0.3071
16	29.516	821.6	0.2915
17	28.591	810.4	0.2780
18	27.220	806.7	0.2666
19	25.858	792.1	0.2559
20	24.249	781.4	0.2463
21	22.030	756.8	0.2375
22	18.894	733.1	0.2307
23	14.985	694.1	0.2249
24	6.088	613.1	0.2216
25	3.409	590.6	0.2183

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D8

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.476	652.2	0.7396	2.424	657.1	0.7396
2	0.000		0.7396	5.425	961.2	0.7396	8.888	983.4	0.7396
3	0.000		0.7225	7.329	1059.1	0.7225	12.012	1089.8	0.7212
4	0.000	Data	0.6717	8.235	1146.1	0.6717	13.362	1161.1	0.6694
5	0.000	Not	0.6080	8.401	1162.8	0.6080	13.520	1159.7	0.6054
6	0.000	Required	0.5453	8.269	1149.5	0.5453	13.241	1135.7	0.5432
7	0.000		0.4913	8.090	1131.7	0.4913	12.914	1111.9	0.4899
8	0.000		0.4469	7.984	1121.3	0.4469	12.703	1095.4	0.4463
9	0.000		0.4096	8.162	1138.8	0.4096	12.909	1099.8	0.4097
10	0.000		0.3778	8.040	1126.8	0.3778	12.722	1089.6	0.3784
11	0.000		0.3509	7.850	1108.2	0.3509	12.460	1078.5	0.3518
12	0.000		0.3280	7.631	1087.3	0.3280	12.173	1068.1	0.3292
13	0.000		0.3085	7.399	1065.5	0.3085	11.876	1058.3	0.3097
14	0.000		0.2915	7.158	1043.5	0.2915	11.569	1048.4	0.2927
15	0.000		0.2768	6.901	1020.4	0.2768	11.244	1038.4	0.2778
16	0.000		0.2640	6.617	995.6	0.2640	10.878	1026.3	0.2647
17	0.000		0.2526	6.273	966.5	0.2526	10.417	1009.5	0.2531
18	0.000		0.2429	5.720	921.5	0.2429	9.643	978.4	0.2430
19	0.000		0.2346	5.356	893.1	0.2346	9.094	953.1	0.2342
20	0.000		0.2273	5.002	866.4	0.2273	8.523	924.4	0.2265
21	0.000		0.2208	4.619	838.4	0.2208	7.860	888.8	0.2197
22	0.000		0.2153	3.941	791.3	0.2153	6.708	831.7	0.2139
23	0.000		0.2110	3.153	739.8	0.2110	5.349	768.0	0.2094
24	0.000		0.2081	1.234	627.8	0.2081	2.128	640.2	0.2065
25	0.000		0.2071	0.724	600.6	0.2071	1.231	606.1	0.2053
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.574	632.1	0.7396	4.383	647.0	0.7396	5.997	665.7	0.7396
2	13.187	867.5	0.7396	16.068	920.4	0.7396	21.267	959.7	0.7396
3	17.764	930.9	0.7253	21.508	982.7	0.7248	27.729	983.2	0.7240
4	19.942	1000.9	0.6787	24.161	1055.1	0.6782	30.598	1002.5	0.6777
5	20.584	1044.5	0.6203	25.046	1094.4	0.6200	31.443	998.9	0.6209
6	20.600	1072.1	0.5612	25.175	1113.1	0.5609	31.510	993.4	0.5638
7	20.469	1090.8	0.5081	25.096	1121.9	0.5076	31.420	992.4	0.5124
8	20.420	1106.5	0.4627	25.095	1130.0	0.4619	31.467	996.7	0.4681
9	20.833	1127.0	0.4238	25.610	1147.6	0.4228	32.130	1010.1	0.4298
10	20.671	1129.5	0.3906	25.492	1155.2	0.3893	32.137	1021.5	0.3970
11	20.333	1121.9	0.3623	25.193	1162.0	0.3607	31.996	1036.2	0.3687
12	19.892	1106.7	0.3380	24.801	1170.6	0.3362	31.786	1053.4	0.3442
13	19.387	1086.6	0.3173	24.335	1177.5	0.3150	31.523	1072.9	0.3229
14	18.829	1062.7	0.2993	23.766	1175.6	0.2966	31.177	1094.8	0.3041
15	18.203	1034.9	0.2836	23.046	1159.0	0.2805	30.693	1118.5	0.2876
16	17.476	1002.5	0.2699	22.150	1129.9	0.2664	30.022	1141.6	0.2729
17	16.580	965.0	0.2578	21.020	1090.7	0.2542	29.069	1160.1	0.2599
18	15.302	923.3	0.2475	19.471	1047.2	0.2436	27.623	1171.0	0.2484
19	14.259	884.4	0.2385	18.127	1001.0	0.2344	26.213	1164.0	0.2381
20	13.212	848.6	0.2306	16.761	954.5	0.2266	24.584	1136.5	0.2289
21	12.016	810.2	0.2238	15.164	899.3	0.2197	22.373	1075.0	0.2209
22	10.193	764.5	0.2181	12.877	839.6	0.2139	19.228	994.8	0.2141
23	8.057	714.8	0.2134	10.183	773.3	0.2093	15.349	894.5	0.2086
24	3.235	621.8	0.2107	4.116	643.5	0.2065	6.344	689.0	0.2052
25	1.850	595.6	0.2094	2.350	607.9	0.2052	3.613	632.1	0.2036

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D8 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.020	636.0	0.7396
2	21.339	825.0	0.7396
3	27.819	852.2	0.7241
4	30.700	900.3	0.6779
5	31.552	929.7	0.6211
6	31.625	955.8	0.5641
7	31.539	973.6	0.5126
8	31.589	987.2	0.4684
9	32.258	1015.0	0.4301
10	32.267	1024.4	0.3972
11	32.128	1034.0	0.3689
12	31.920	1043.6	0.3444
13	31.659	1053.3	0.3230
14	31.313	1053.3	0.3043
15	30.828	1048.5	0.2877
16	30.152	1024.4	0.2731
17	29.194	1001.0	0.2600
18	27.741	969.1	0.2485
19	26.325	942.7	0.2382
20	24.688	908.6	0.2290
21	22.467	867.9	0.2210
22	19.309	817.8	0.2142
23	15.415	763.8	0.2087
24	6.374	648.0	0.2053
25	3.629	607.5	0.2037

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D9

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.686	666.2	0.7396	2.728	667.4	0.7396
2	0.000		0.7396	6.136	1029.1	0.7396	9.933	1036.3	0.7396
3	0.000		0.7125	8.192	1141.8	0.7125	13.226	1145.8	0.7122
4	0.000	Data	0.6506	9.054	1231.1	0.6506	14.490	1213.5	0.6507
5	0.000	Not	0.5787	9.104	1236.5	0.5787	14.509	1208.1	0.5795
6	0.000	Required	0.5133	8.884	1213.0	0.5133	14.138	1182.3	0.5147
7	0.000		0.4603	8.665	1190.0	0.4603	13.772	1157.8	0.4620
8	0.000		0.4177	8.539	1177.0	0.4177	13.541	1140.5	0.4198
9	0.000		0.3819	8.725	1196.2	0.3819	13.745	1143.5	0.3843
10	0.000		0.3514	8.597	1182.9	0.3514	13.554	1133.2	0.3542
11	0.000		0.3258	8.399	1162.6	0.3258	13.292	1122.9	0.3286
12	0.000		0.3040	8.171	1139.7	0.3040	12.999	1112.6	0.3070
13	0.000		0.2855	7.928	1115.8	0.2855	12.695	1102.9	0.2883
14	0.000		0.2694	7.675	1091.5	0.2694	12.380	1093.2	0.2721
15	0.000		0.2555	7.407	1066.3	0.2555	12.050	1083.6	0.2579
16	0.000		0.2433	7.114	1039.5	0.2433	11.694	1073.9	0.2454
17	0.000		0.2327	6.766	1008.6	0.2327	11.268	1062.1	0.2344
18	0.000		0.2235	6.202	960.6	0.2235	10.530	1036.1	0.2247
19	0.000		0.2155	5.828	930.1	0.2155	9.992	1012.3	0.2162
20	0.000		0.2085	5.452	900.5	0.2085	9.384	979.6	0.2087
21	0.000		0.2024	5.033	868.7	0.2024	8.643	936.1	0.2021
22	0.000		0.1971	4.296	815.6	0.1971	7.373	868.6	0.1965
23	0.000		0.1930	3.442	758.3	0.1930	5.880	794.3	0.1922
24	0.000		0.1903	1.357	634.5	0.1903	2.356	649.7	0.1894
25	0.000		0.1892	0.801	604.6	0.1892	1.371	611.6	0.1882
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.041	642.8	0.7396	4.816	643.2	0.7396	6.290	656.0	0.7396
2	14.729	910.9	0.7396	17.461	897.8	0.7396	22.168	913.5	0.7396
3	19.580	981.3	0.7175	23.194	963.8	0.7193	28.868	936.1	0.7207
4	21.755	1063.2	0.6623	25.895	1042.7	0.6663	31.859	960.8	0.6700
5	22.279	1111.7	0.5965	26.694	1086.7	0.6023	32.756	969.3	0.6091
6	22.167	1137.5	0.5336	26.691	1104.6	0.5399	32.845	977.3	0.5497
7	21.933	1150.9	0.4797	26.483	1109.0	0.4857	32.761	988.3	0.4977
8	21.796	1160.6	0.4352	26.356	1110.6	0.4406	32.786	1001.9	0.4538
9	22.148	1175.9	0.3976	26.757	1118.9	0.4025	33.404	1021.7	0.4161
10	21.929	1173.0	0.3656	26.525	1116.7	0.3701	33.341	1037.4	0.3839
11	21.545	1160.4	0.3386	26.117	1112.6	0.3428	33.109	1054.1	0.3563
12	21.070	1141.8	0.3156	25.620	1109.0	0.3194	32.793	1071.5	0.3327
13	20.538	1119.0	0.2959	25.080	1107.6	0.2994	32.432	1089.0	0.3121
14	19.952	1092.4	0.2789	24.514	1111.0	0.2820	32.038	1106.1	0.2941
15	19.297	1061.5	0.2640	23.900	1117.8	0.2668	31.581	1122.0	0.2782
16	18.552	1025.7	0.2510	23.159	1118.5	0.2535	30.975	1135.8	0.2640
17	17.662	984.7	0.2396	22.173	1102.5	0.2417	30.091	1146.4	0.2515
18	16.415	941.8	0.2298	20.723	1069.3	0.2314	28.688	1151.3	0.2405
19	15.390	902.6	0.2213	19.420	1025.6	0.2224	27.280	1140.4	0.2306
20	14.327	867.5	0.2138	18.038	977.8	0.2146	25.609	1110.8	0.2217
21	13.054	828.3	0.2072	16.346	918.7	0.2078	23.294	1049.9	0.2138
22	11.104	780.9	0.2017	13.911	855.0	0.2022	20.007	972.2	0.2074
23	8.796	727.7	0.1973	11.017	784.2	0.1977	15.951	876.2	0.2022
24	3.560	627.1	0.1948	4.483	647.5	0.1950	6.613	683.0	0.1991
25	2.049	598.7	0.1935	2.570	609.8	0.1937	3.771	628.6	0.1975

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D9 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.302	598.9	0.7396
2	22.206	689.6	0.7396
3	28.914	697.2	0.7208
4	31.909	710.1	0.6701
5	32.811	726.4	0.6093
6	32.906	746.6	0.550
7	32.828	767.2	0.4982
8	32.857	781.4	0.4544
9	33.480	799.4	0.4167
10	33.420	810.4	0.3845
11	33.191	821.6	0.3571
12	32.875	821.6	0.3334
13	32.514	821.6	0.3128
14	32.119	817.8	0.2948
15	31.661	814.1	0.2788
16	31.053	806.7	0.2646
17	30.167	799.4	0.2520
18	28.761	788.5	0.2410
19	27.351	781.4	0.2311
20	25.676	767.3	0.2222
21	23.356	750.0	0.2143
22	20.061	723.1	0.2079
23	15.995	690.9	0.2026
24	6.631	613.1	0.1996
25	3.780	587.9	0.1979

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D10

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.372	645.4	0.7396	2.245	649.0	0.7396
2	0.000		0.7396	5.056	927.6	0.7396	8.242	941.5	0.7396
3	0.000		0.7273	6.835	1014.6	0.7273	11.175	1037.9	0.7265
4	0.000	Data	0.6826	7.671	1091.1	0.6826	12.464	1107.0	0.6810
5	0.000	Not	0.6253	7.808	1104.2	0.6253	12.613	1108.9	0.6234
6	0.000	Required	0.5671	7.656	1089.7	0.5671	12.330	1088.4	0.5652
7	0.000		0.5150	7.460	1071.2	0.5150	11.992	1066.6	0.5135
8	0.000		0.4712	7.340	1060.1	0.4712	11.777	1052.3	0.4700
9	0.000		0.4340	7.492	1074.2	0.4340	11.978	1059.7	0.4333
10	0.000		0.4022	7.378	1063.6	0.4022	11.803	1050.5	0.4017
11	0.000		0.3751	7.206	1047.8	0.3751	11.562	1040.3	0.3748
12	0.000		0.3521	7.022	1031.2	0.3521	11.309	1030.1	0.3517
13	0.000		0.3330	6.863	1017.1	0.3330	11.082	1020.2	0.3322
14	0.000		0.3155	6.663	999.6	0.3155	10.816	1010.7	0.3146
15	0.000		0.2998	6.437	980.3	0.2998	10.520	1000.8	0.2989
16	0.000		0.2860	6.185	959.1	0.2860	10.184	988.9	0.2850
17	0.000		0.2739	5.876	933.9	0.2739	9.758	972.7	0.2727
18	0.000		0.2634	5.368	894.0	0.2634	9.029	942.9	0.2619
19	0.000		0.2544	5.040	869.2	0.2544	8.527	920.0	0.2526
20	0.000		0.2465	4.721	845.8	0.2465	8.009	894.7	0.2444
21	0.000		0.2395	4.375	821.1	0.2395	7.413	863.8	0.2372
22	0.000		0.2336	3.746	778.2	0.2336	6.350	813.0	0.2311
23	0.000		0.2289	3.014	731.1	0.2289	5.095	755.8	0.2262
24	0.000		0.2258	1.186	625.2	0.2258	2.036	636.3	0.2230
25	0.000		0.2246	0.694	599.0	0.2246	1.175	603.9	0.2218
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.610	646.2	0.7396	4.400	644.8	0.7396	5.868	655.6	0.7396
2	13.318	936.2	0.7396	16.147	912.5	0.7396	20.907	918.4	0.7396
3	17.912	1014.9	0.7250	21.627	978.4	0.7253	27.360	941.1	0.7257
4	20.050	1093.8	0.6782	24.278	1056.5	0.6789	30.274	963.6	0.6807
5	20.622	1135.5	0.6190	25.118	1100.0	0.6200	31.168	968.2	0.6242
6	20.567	1158.7	0.5590	25.180	1119.5	0.5600	31.277	972.3	0.5666
7	20.378	1174.1	0.5055	25.033	1126.6	0.5059	31.216	979.9	0.5147
8	20.289	1187.3	0.4604	24.968	1130.7	0.4602	31.273	990.7	0.4701
9	20.676	1207.1	0.4222	25.422	1142.2	0.4216	31.926	1008.6	0.4320
10	20.503	1207.3	0.3894	25.255	1143.2	0.3885	31.917	1023.1	0.3991
11	20.173	1197.8	0.3613	24.921	1142.5	0.3602	31.755	1039.1	0.3708
12	19.773	1182.3	0.3375	24.513	1141.2	0.3361	31.528	1056.2	0.3464
13	19.346	1161.5	0.3174	24.071	1138.6	0.3156	31.274	1074.4	0.3253
14	18.827	1135.7	0.2995	23.518	1132.8	0.2974	30.924	1094.3	0.3067
15	18.202	1103.1	0.2839	22.823	1120.9	0.2815	30.439	1115.4	0.2901
16	17.462	1064.4	0.2703	21.960	1100.3	0.2677	29.776	1135.8	0.2755
17	16.553	1020.0	0.2586	20.865	1070.0	0.2557	28.844	1152.7	0.2625
18	15.269	971.5	0.2482	19.346	1032.9	0.2451	27.426	1163.4	0.2510
19	14.228	926.7	0.2396	18.027	990.8	0.2362	26.051	1157.5	0.2408
20	13.180	884.9	0.2320	16.674	946.7	0.2285	24.449	1131.6	0.2317
21	11.984	839.9	0.2256	15.084	892.9	0.2220	22.260	1071.8	0.2238
22	10.167	786.8	0.2201	12.808	834.3	0.2164	19.140	993.1	0.2171
23	8.056	730.6	0.2157	10.144	769.0	0.2121	15.294	893.2	0.2117
24	3.246	627.4	0.2127	4.113	642.2	0.2090	6.327	688.1	0.2081
25	1.859	599.0	0.2117	2.351	607.2	0.2079	3.602	631.4	0.2067

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D10 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.889	629.2	0.7396
2	20.973	799.5	0.7396
3	27.441	817.8	0.7258
4	30.363	848.3	0.6808
5	31.263	871.9	0.6244
6	31.376	888.0	0.5669
7	31.320	908.6	0.5150
8	31.381	925.5	0.4705
9	32.037	938.3	0.4324
10	32.029	942.7	0.3995
11	31.867	942.7	0.3712
12	31.639	938.3	0.3468
13	31.383	929.7	0.3257
14	31.030	917.0	0.3070
15	30.543	908.6	0.2904
16	29.877	896.2	0.2758
17	28.940	875.9	0.2628
18	27.519	863.9	0.2512
19	26.139	844.4	0.2410
20	24.531	821.6	0.2319
21	22.335	795.7	0.2240
22	19.205	760.3	0.2173
23	15.346	716.6	0.2119
24	6.349	624.6	0.2084
25	3.614	596.2	0.2069

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D11

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.662	664.5	0.7396	2.755	673.0	0.7396
2	0.000		0.7396	6.083	1023.9	0.7396	10.081	1069.4	0.7396
3	0.000		0.7137	8.158	1138.4	0.7137	13.437	1186.6	0.7113
4	0.000	Data	0.6532	9.010	1226.4	0.6532	14.668	1252.6	0.6488
5	0.000	Not	0.5824	9.008	1226.2	0.5824	14.586	1238.3	0.5774
6	0.000	Required	0.5178	8.718	1195.5	0.5178	14.104	1204.8	0.5130
7	0.000		0.4653	8.438	1166.6	0.4653	13.645	1174.4	0.4611
8	0.000		0.4232	8.273	1149.9	0.4232	13.354	1153.5	0.4196
9	0.000		0.3878	8.432	1166.0	0.3878	13.524	1155.3	0.3848
10	0.000		0.3578	8.295	1152.1	0.3578	13.313	1143.1	0.3552
11	0.000		0.3324	8.094	1132.1	0.3324	13.034	1130.5	0.3301
12	0.000		0.3109	7.868	1110.0	0.3109	12.731	1118.1	0.3088
13	0.000		0.2924	7.633	1087.5	0.2924	12.421	1108.2	0.2904
14	0.000		0.2764	7.391	1064.8	0.2764	12.104	1094.5	0.2744
15	0.000		0.2624	7.134	1041.3	0.2624	11.768	1082.2	0.2602
16	0.000		0.2501	6.850	1015.9	0.2501	11.392	1068.1	0.2477
17	0.000		0.2394	6.504	985.9	0.2394	10.919	1049.0	0.2368
18	0.000		0.2300	5.945	939.5	0.2300	10.128	1015.0	0.2271
19	0.000		0.2220	5.579	910.4	0.2220	9.559	986.3	0.2187
20	0.000		0.2150	5.223	883.0	0.2150	8.962	953.3	0.2113
21	0.000		0.2088	4.831	853.8	0.2088	8.259	912.4	0.2049
22	0.000		0.2035	4.127	803.9	0.2035	7.044	849.3	0.1995
23	0.000		0.1993	3.306	749.6	0.1993	5.617	780.4	0.1952
24	0.000		0.1965	1.301	631.4	0.1965	2.246	644.8	0.1924
25	0.000		0.1955	0.767	602.8	0.1955	1.307	609.0	0.1913
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.942	634.5	0.7396	4.395	607.7	0.7396	4.971	596.3	0.7396
2	14.439	872.5	0.7396	16.022	739.6	0.7396	17.933	686.7	0.7396
3	19.062	920.6	0.7181	21.081	761.2	0.7212	23.423	696.0	0.7246
4	20.927	973.1	0.6644	23.214	791.8	0.6717	25.781	710.0	0.6795
5	21.189	1003.0	0.6021	23.691	817.3	0.6144	26.454	722.5	0.6277
6	20.892	1019.4	0.5437	23.587	841.0	0.5606	26.571	736.8	0.5796
7	20.507	1026.1	0.4936	23.366	861.6	0.5138	26.595	753.0	0.5382
8	20.215	1026.0	0.4513	23.208	878.8	0.4734	26.691	770.1	0.5023
9	20.411	1028.3	0.4146	23.539	896.6	0.4372	27.313	790.3	0.4695
10	20.113	1020.5	0.3833	23.323	907.6	0.4058	27.335	807.2	0.4409
11	19.714	1009.8	0.3568	22.996	917.3	0.3789	27.226	822.9	0.4157
12	19.262	996.6	0.3341	22.612	926.6	0.3556	27.045	837.9	0.3933
13	18.778	981.5	0.3144	22.188	935.0	0.3353	26.811	852.2	0.3732
14	18.263	964.6	0.2971	21.709	940.0	0.3173	26.514	866.2	0.3551
15	17.704	946.0	0.2820	21.153	940.4	0.3014	26.132	879.7	0.3388
16	17.074	925.2	0.2687	20.489	935.6	0.2872	25.631	892.6	0.3242
17	16.311	902.1	0.2569	19.657	926.1	0.2747	24.937	903.7	0.3113
18	15.186	876.2	0.2470	18.435	912.8	0.2642	23.817	912.0	0.3006
19	14.244	848.3	0.2380	17.349	893.6	0.2544	22.733	912.1	0.2900
20	13.229	818.0	0.2299	16.139	868.1	0.2457	21.397	901.9	0.2803
21	12.006	782.0	0.2227	14.619	830.8	0.2377	19.509	872.7	0.2709
22	10.139	739.1	0.2168	12.375	785.9	0.2313	16.714	831.0	0.2639
23	7.963	692.7	0.2119	9.702	730.4	0.2259	13.189	770.4	0.2576
24	3.167	611.7	0.2088	3.847	624.5	0.2225	5.231	639.0	0.2534
25	1.801	588.9	0.2068	2.159	595.0	0.2196	2.872	601.5	0.2486

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D11 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	4.984	602.2	0.7396
2	17.977	712.0	0.7396
3	23.480	733.1	0.7246
4	25.847	763.8	0.6796
5	26.526	784.9	0.628
6	26.648	803.0	0.58
7	26.676	817.8	0.5387
8	26.776	832.9	0.5028
9	27.402	848.3	0.4700
10	27.427	860.0	0.4414
11	27.321	871.9	0.4161
12	27.152	921.2	0.3937
13	26.959	1113.8	0.3737
14	26.673	1172.5	0.3555
15	26.290	1167.0	0.3391
16	25.782	1129.5	0.3244
17	25.081	1093.3	0.3114
18	23.954	1058.3	0.3007
19	22.861	1015.0	0.2902
20	21.517	978.1	0.2803
21	19.615	917.0	0.2710
22	16.807	863.9	0.2640
23	13.263	792.1	0.2576
24	5.261	648.0	0.2534
25	2.888	607.5	0.2487

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D12

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.773	672.0	0.7396	2.867	673.1	0.7396
2	0.000		0.7396	6.422	1057.6	0.7396	10.401	1066.2	0.7396
3	0.000		0.7067	8.552	1178.3	0.7067	13.783	1178.5	0.7063
4	0.000	Data	0.6388	9.427	1271.8	0.6388	15.066	1249.2	0.6386
5	0.000	Not	0.5631	9.470	1276.6	0.5631	15.116	1250.4	0.5635
6	0.000	Required	0.4966	9.253	1252.7	0.4966	14.805	1233.8	0.4975
7	0.000		0.4440	9.038	1229.4	0.4440	14.492	1216.6	0.4450
8	0.000		0.4019	8.916	1216.4	0.4019	14.294	1203.5	0.4031
9	0.000		0.3667	9.119	1238.1	0.3667	14.523	1207.9	0.3680
10	0.000		0.3369	9.022	1227.7	0.3369	14.370	1198.3	0.3384
11	0.000		0.3118	8.878	1212.3	0.3118	14.166	1188.1	0.3134
12	0.000		0.2905	8.712	1194.9	0.2905	13.943	1178.5	0.2920
13	0.000		0.2720	8.527	1175.7	0.2720	13.701	1168.9	0.2736
14	0.000		0.2561	8.312	1153.8	0.2561	13.428	1159.3	0.2575
15	0.000		0.2421	8.055	1128.2	0.2421	13.105	1148.4	0.2434
16	0.000		0.2299	7.741	1097.8	0.2299	12.707	1134.7	0.2309
17	0.000		0.2192	7.340	1060.1	0.2192	12.188	1115.7	0.2200
18	0.000		0.2100	6.700	1002.8	0.2100	11.341	1083.3	0.2104
19	0.000		0.2022	6.266	965.9	0.2022	10.716	1054.3	0.2020
20	0.000		0.1953	5.848	931.7	0.1953	10.065	1020.0	0.1946
21	0.000		0.1893	5.399	896.4	0.1893	9.287	973.5	0.1882
22	0.000		0.1842	4.621	838.6	0.1842	7.961	901.2	0.1827
23	0.000		0.1801	3.724	776.7	0.1801	6.395	820.6	0.1783
24	0.000		0.1773	1.489	641.7	0.1773	2.604	660.4	0.1755
25	0.000		0.1764	0.889	609.3	0.1764	1.534	618.1	0.1744
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.735	613.9	0.7396	4.091	597.3	0.7396	4.625	593.6	0.7396
2	13.581	776.4	0.7396	14.830	698.4	0.7396	16.618	677.9	0.7396
3	17.889	806.7	0.7156	19.472	713.8	0.7187	21.649	685.8	0.7224
4	19.679	843.0	0.6596	21.459	734.9	0.6672	23.818	697.0	0.6758
5	20.076	868.8	0.5974	22.015	752.3	0.6102	24.518	706.0	0.6244
6	20.040	889.8	0.5418	22.122	768.3	0.5593	24.787	716.2	0.5788
7	19.947	907.1	0.4952	22.153	782.4	0.5164	24.998	727.8	0.5406
8	19.938	922.1	0.4555	22.246	794.3	0.4790	25.279	740.0	0.5072
9	20.402	941.3	0.4199	22.812	806.3	0.4446	26.071	755.0	0.4759
10	20.390	953.0	0.3890	22.855	812.9	0.4143	26.298	767.4	0.4482
11	20.276	960.5	0.3623	22.779	817.5	0.3875	26.400	779.6	0.4233
12	20.083	963.0	0.3388	22.618	821.3	0.3638	26.416	792.0	0.4009
13	19.822	961.4	0.3184	22.390	825.3	0.3430	26.365	804.5	0.3808
14	19.484	956.0	0.3002	22.087	829.6	0.3246	26.241	817.4	0.3627
15	19.056	947.2	0.2843	21.694	833.9	0.3083	26.027	830.5	0.3465
16	18.517	935.6	0.2702	21.185	837.6	0.2939	25.695	843.7	0.3321
17	17.819	921.1	0.2578	20.510	840.5	0.2815	25.187	856.3	0.3195
18	16.750	903.4	0.2474	19.458	842.6	0.2714	24.281	867.6	0.3095
19	15.836	881.0	0.2377	18.534	841.3	0.2616	23.422	872.6	0.2991
20	14.816	853.1	0.2289	17.466	835.4	0.2527	22.307	868.9	0.2893
21	13.521	815.7	0.2207	16.013	816.1	0.2441	20.585	848.4	0.2796
22	11.524	769.6	0.2141	13.755	785.3	0.2376	17.883	815.5	0.2725
23	9.123	716.0	0.2082	10.911	735.7	0.2313	14.277	762.2	0.2655
24	3.670	619.6	0.2043	4.370	626.4	0.2265	5.720	637.1	0.2602
25	2.094	592.4	0.2007	2.450	594.8	0.2211	3.140	600.2	0.2529

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D12 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	4.638	602.2	0.7396
2	16.664	719.6	0.7396
3	21.709	743.2	0.7226
4	23.889	781.4	0.676
5	24.597	810.4	0.6247
6	24.872	832.9	0.5792
7	25.089	856.1	0.5410
8	25.375	875.9	0.5077
9	26.171	892.1	0.4764
10	26.399	896.2	0.4487
11	26.501	896.2	0.4236
12	26.516	892.1	0.4012
13	26.465	892.1	0.3811
14	26.339	884.0	0.3630
15	26.124	879.9	0.3468
16	25.790	871.9	0.3324
17	25.280	863.9	0.3197
18	24.381	892.1	0.3097
19	23.554	1034.0	0.2993
20	22.443	1053.4	0.2895
21	20.710	1001.0	0.2798
22	17.993	934.0	0.2726
23	14.364	840.6	0.2657
24	5.757	669.2	0.2602
25	3.160	618.9	0.2530

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D13

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.723	668.6	0.7396	2.867	678.6	0.7396
2	0.000		0.7396	6.216	1037.0	0.7396	10.336	1089.9	0.7396
3	0.000		0.7113	8.224	1145.0	0.7113	13.585	1200.5	0.7082
4	0.000	Data	0.6486	9.015	1226.9	0.6486	14.728	1262.4	0.6433
5	0.000	Not	0.5769	9.020	1227.5	0.5769	14.668	1250.8	0.5706
6	0.000	Required	0.5121	8.786	1202.6	0.5121	14.283	1224.1	0.5058
7	0.000		0.4597	8.569	1180.0	0.4597	13.936	1201.6	0.4538
8	0.000		0.4175	8.452	1168.0	0.4175	13.731	1186.6	0.4120
9	0.000		0.3820	8.648	1188.2	0.3820	13.966	1193.2	0.3771
10	0.000		0.3516	8.543	1177.4	0.3516	13.812	1184.9	0.3472
11	0.000		0.3260	8.375	1160.2	0.3260	13.592	1176.1	0.3220
12	0.000		0.3043	8.179	1140.5	0.3043	13.345	1167.6	0.3004
13	0.000		0.2856	7.970	1119.9	0.2856	13.085	1159.1	0.2818
14	0.000		0.2694	7.752	1098.8	0.2694	12.815	1150.5	0.2654
15	0.000		0.2552	7.523	1077.1	0.2552	12.531	1141.5	0.2512
16	0.000		0.2428	7.276	1054.2	0.2428	12.225	1131.9	0.2384
17	0.000		0.2318	6.987	1028.1	0.2318	11.860	1119.7	0.2272
18	0.000		0.2221	6.490	984.8	0.2221	11.190	1092.4	0.2172
19	0.000		0.2138	6.190	959.6	0.2138	10.717	1065.9	0.2086
20	0.000		0.2064	5.870	933.4	0.2064	10.148	1028.8	0.2009
21	0.000		0.1998	5.476	902.3	0.1998	9.400	978.5	0.1941
22	0.000		0.1942	4.711	845.1	0.1942	8.063	902.7	0.1885
23	0.000		0.1897	3.794	781.4	0.1897	6.459	819.9	0.1840
24	0.000		0.1868	1.506	642.7	0.1868	2.611	659.5	0.1810
25	0.000		0.1857	0.890	609.3	0.1857	1.526	617.3	0.1799
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.980	629.7	0.7396	4.496	614.5	0.7396	5.183	603.5	0.7396
2	14.369	845.0	0.7396	16.156	765.7	0.7396	18.404	711.1	0.7396
3	18.777	886.5	0.7165	21.048	790.0	0.7198	23.784	720.7	0.7236
4	20.534	935.3	0.6620	23.090	823.9	0.6696	26.057	735.7	0.6782
5	20.847	966.3	0.6000	23.605	848.8	0.6123	26.743	746.9	0.6265
6	20.703	987.0	0.5423	23.618	868.8	0.5586	26.938	759.1	0.5782
7	20.501	999.6	0.4927	23.532	883.8	0.5115	27.054	772.8	0.5358
8	20.383	1007.3	0.4504	23.499	895.0	0.4702	27.234	787.5	0.4983
9	20.738	1018.0	0.4132	23.947	907.4	0.4331	27.940	805.8	0.4639
10	20.587	1018.3	0.3815	23.837	913.0	0.4011	28.041	821.0	0.4339
11	20.326	1014.6	0.3545	23.602	916.5	0.3736	28.009	836.0	0.4076
12	19.998	1007.4	0.3312	23.291	918.8	0.3497	27.894	850.7	0.3843
13	19.622	997.2	0.3109	22.929	920.7	0.3289	27.724	865.4	0.3637
14	19.204	984.3	0.2932	22.523	922.4	0.3106	27.501	879.6	0.3452
15	18.736	968.5	0.2775	22.058	922.8	0.2945	27.212	893.6	0.3286
16	18.208	949.9	0.2637	21.515	920.7	0.2801	26.830	906.5	0.3137
17	17.579	928.2	0.2513	20.845	915.2	0.2673	26.296	917.6	0.3004
18	16.607	904.1	0.2408	19.812	906.9	0.2564	25.363	925.9	0.2891
19	15.793	877.6	0.2311	18.894	893.0	0.2462	24.450	926.3	0.2781
20	14.839	848.7	0.2226	17.793	873.8	0.2372	23.232	916.6	0.2681
21	13.581	812.0	0.2150	16.279	841.3	0.2291	21.363	888.0	0.2587
22	11.595	767.6	0.2088	13.956	800.5	0.2227	18.503	846.5	0.2516
23	9.181	715.6	0.2036	11.061	745.8	0.2172	14.750	784.3	0.2453
24	3.684	619.9	0.2003	4.435	631.2	0.2136	5.939	645.9	0.2414
25	2.098	593.1	0.1979	2.493	598.4	0.2105	3.278	605.5	0.2368

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D13 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.196	602.2	0.7396
2	18.449	715.8	0.7396
3	23.844	743.2	0.7236
4	26.126	774.3	0.6784
5	26.822	810.4	0.6268
6	27.036	884.0	0.5786
7	27.198	1093.3	0.5363
8	27.395	1183.5	0.4988
9	28.106	1211.4	0.4643
10	28.205	1200.2	0.4341
11	28.170	1183.5	0.4077
12	28.052	1167.0	0.3843
13	27.878	1145.4	0.3636
14	27.652	1129.5	0.3451
15	27.360	1113.8	0.3285
16	26.975	1098.4	0.3136
17	26.436	1073.1	0.3002
18	25.499	1053.3	0.2889
19	24.580	1024.4	0.2780
20	23.354	987.2	0.2679
21	21.473	934.0	0.2585
22	18.600	879.9	0.2514
23	14.828	806.7	0.2452
24	5.973	660.0	0.2412
25	3.297	616.0	0.2366

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D14

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.709	667.7	0.7396	2.881	681.8	0.7396
2	0.000		0.7396	6.185	1033.9	0.7396	10.421	1109.8	0.7396
3	0.000		0.7123	8.205	1143.1	0.7123	13.717	1226.7	0.7078
4	0.000	Data	0.6505	9.006	1226.0	0.6505	14.862	1288.4	0.6426
5	0.000	Not	0.5794	8.998	1225.1	0.5794	14.756	1270.6	0.5699
6	0.000	Required	0.5149	8.733	1197.1	0.5149	14.298	1238.0	0.5053
7	0.000		0.4625	8.482	1171.1	0.4625	13.877	1206.4	0.4537
8	0.000		0.4204	8.346	1157.3	0.4204	13.625	1186.6	0.4124
9	0.000		0.3850	8.532	1176.2	0.3850	13.831	1190.0	0.3778
10	0.000		0.3547	8.417	1164.5	0.3547	13.651	1179.0	0.3483
11	0.000		0.3293	8.235	1146.1	0.3293	13.401	1167.6	0.3233
12	0.000		0.3076	8.023	1125.1	0.3076	13.121	1158.3	0.3019
13	0.000		0.2891	7.799	1103.3	0.2891	12.831	1145.4	0.2835
14	0.000		0.2730	7.568	1081.3	0.2730	12.533	1134.5	0.2675
15	0.000		0.2589	7.326	1058.8	0.2589	12.218	1122.8	0.2533
16	0.000		0.2465	7.062	1034.8	0.2465	11.868	1109.1	0.2409
17	0.000		0.2356	6.742	1006.5	0.2356	11.428	1090.3	0.2298
18	0.000		0.2261	6.209	961.1	0.2261	10.671	1056.1	0.2200
19	0.000		0.2180	5.875	933.8	0.2180	10.130	1025.5	0.2117
20	0.000		0.2107	5.542	907.5	0.2107	9.542	989.1	0.2043
21	0.000		0.2043	5.157	878.0	0.2043	8.818	942.9	0.1978
22	0.000		0.1989	4.429	824.9	0.1989	7.545	873.3	0.1923
23	0.000		0.1946	3.562	766.1	0.1946	6.032	797.9	0.1880
24	0.000		0.1917	1.407	637.2	0.1917	2.425	651.5	0.1851
25	0.000		0.1906	0.830	606.2	0.1906	1.415	612.9	0.1841
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.157	640.3	0.7396	4.713	618.9	0.7396	5.381	602.2	0.7396
2	15.046	895.7	0.7396	16.953	781.5	0.7396	19.119	705.1	0.7396
3	19.647	945.5	0.7147	22.060	806.7	0.7179	24.694	714.3	0.7217
4	21.431	1000.0	0.6579	24.141	842.8	0.6654	27.007	729.1	0.6739
5	21.660	1029.9	0.5932	24.595	871.3	0.6056	27.660	742.1	0.6198
6	21.382	1046.4	0.5335	24.503	895.7	0.5499	27.790	756.9	0.5697
7	21.039	1053.6	0.4828	24.303	914.9	0.5017	27.836	773.6	0.5266
8	20.800	1054.8	0.4405	24.170	929.4	0.4601	27.959	791.3	0.4892
9	21.050	1058.9	0.4041	24.531	944.9	0.4234	28.616	812.4	0.4555
10	20.800	1052.4	0.3732	24.334	952.4	0.3919	28.662	830.1	0.4262
11	20.441	1042.3	0.3468	24.010	957.4	0.3649	28.567	847.2	0.4005
12	20.020	1029.4	0.3241	23.616	961.2	0.3415	28.407	865.1	0.3780
13	19.561	1014.2	0.3045	23.178	964.2	0.3213	28.254	887.4	0.3585
14	19.067	996.9	0.2874	22.695	965.8	0.3035	27.990	904.9	0.3404
15	18.528	977.5	0.2723	22.150	964.9	0.2878	27.627	919.7	0.3239
16	17.921	955.7	0.2591	21.512	960.5	0.2739	27.152	933.3	0.3092
17	17.191	931.8	0.2474	20.721	951.8	0.2617	26.496	944.6	0.2962
18	16.119	906.5	0.2377	19.563	939.7	0.2514	25.436	953.0	0.2853
19	15.263	882.0	0.2294	18.568	920.5	0.2424	24.433	952.3	0.2750
20	14.270	851.4	0.2216	17.387	895.1	0.2339	23.114	940.6	0.2653
21	13.003	812.2	0.2144	15.820	856.3	0.2261	21.155	908.1	0.2560
22	11.040	765.1	0.2084	13.476	809.4	0.2199	18.228	862.1	0.2490
23	8.702	712.4	0.2034	10.619	749.8	0.2146	14.457	794.8	0.2428
24	3.475	618.7	0.2002	4.236	632.1	0.2112	5.791	648.9	0.2389
25	1.977	592.5	0.1981	2.380	599.1	0.2086	3.189	606.8	0.2347

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D14 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.393	598.9	0.7396
2	19.163	712.0	0.7396
3	24.751	733.1	0.7217
4	27.074	767.3	0.6741
5	27.733	788.5	0.6201
6	27.870	814.1	0.5702
7	27.922	836.7	0.5271
8	28.049	852.2	0.4898
9	28.710	867.9	0.4560
10	28.758	875.9	0.4267
11	28.664	879.9	0.4010
12	28.504	879.9	0.3784
13	28.351	879.9	0.3589
14	28.086	875.9	0.3408
15	27.722	871.9	0.3243
16	27.245	863.9	0.3095
17	26.589	863.9	0.2964
18	25.536	892.1	0.2855
19	24.564	1029.2	0.2754
20	23.250	1053.3	0.2657
21	21.280	1001.0	0.2564
22	18.336	925.5	0.2493
23	14.544	840.6	0.2431
24	5.827	666.1	0.2392
25	3.209	618.9	0.2350

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D15

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.499	653.7	0.7396	2.525	665.6	0.7396
2	0.000		0.7396	5.522	970.2	0.7396	9.303	1033.7	0.7396
3	0.000		0.7215	7.489	1073.9	0.7215	12.578	1154.8	0.7179
4	0.000	Data	0.6696	8.357	1158.4	0.6696	13.856	1224.5	0.6624
5	0.000	Not	0.6059	8.393	1162.0	0.6059	13.802	1208.8	0.5965
6	0.000	Required	0.5444	8.118	1134.5	0.5444	13.307	1171.4	0.5346
7	0.000		0.4923	7.833	1106.6	0.4923	12.820	1138.1	0.4830
8	0.000		0.4495	7.665	1090.5	0.4495	12.515	1116.1	0.4411
9	0.000		0.4135	7.806	1104.0	0.4135	12.676	1119.2	0.4059
10	0.000		0.3827	7.676	1091.6	0.3827	12.467	1106.7	0.3758
11	0.000		0.3566	7.487	1073.7	0.3566	12.194	1093.5	0.3502
12	0.000		0.3343	7.280	1054.6	0.3343	11.904	1080.7	0.3282
13	0.000		0.3151	7.070	1035.5	0.3151	11.613	1068.3	0.3092
14	0.000		0.2984	6.855	1016.4	0.2984	11.317	1056.1	0.2927
15	0.000		0.2838	6.628	996.6	0.2838	11.004	1043.2	0.2780
16	0.000		0.2709	6.375	975.0	0.2709	10.648	1028.1	0.2651
17	0.000		0.2595	6.059	948.8	0.2595	10.189	1007.5	0.2536
18	0.000		0.2497	5.535	906.9	0.2497	9.415	972.4	0.2436
19	0.000		0.2412	5.203	881.4	0.2412	8.877	944.6	0.2349
20	0.000		0.2337	4.886	857.8	0.2337	8.334	915.0	0.2273
21	0.000		0.2271	4.537	832.6	0.2271	7.705	879.7	0.2207
22	0.000		0.2214	3.883	787.4	0.2214	6.583	823.9	0.2150
23	0.000		0.2170	3.117	737.6	0.2170	5.261	762.4	0.2105
24	0.000		0.2140	1.229	627.5	0.2140	2.106	638.7	0.2076
25	0.000		0.2129	0.722	600.5	0.2129	1.222	605.5	0.2065
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.849	643.5	0.7396	4.493	628.5	0.7396	5.364	615.4	0.7396
2	14.180	918.2	0.7396	16.442	829.8	0.7396	19.309	758.0	0.7396
3	18.907	979.1	0.7217	21.814	867.7	0.7240	25.322	771.8	0.7272
4	20.895	1042.2	0.6710	24.171	916.5	0.6765	27.961	791.4	0.6841
5	21.189	1074.7	0.6097	24.693	948.1	0.6188	28.677	805.2	0.6315
6	20.857	1090.3	0.5499	24.502	968.3	0.5616	28.686	819.6	0.5796
7	20.430	1096.1	0.4978	24.157	980.2	0.5107	28.556	835.4	0.5330
8	20.141	1097.7	0.4541	23.917	987.4	0.4669	28.535	851.8	0.4925
9	20.368	1104.1	0.4171	24.217	998.2	0.4293	29.097	872.0	0.4565
10	20.098	1098.2	0.3855	23.961	1000.3	0.3971	29.045	888.0	0.4253
11	19.715	1087.5	0.3587	23.575	999.9	0.3696	28.851	903.4	0.3981
12	19.276	1073.3	0.3356	23.129	998.8	0.3461	28.593	918.7	0.3744
13	18.804	1056.3	0.3158	22.650	997.8	0.3257	28.299	934.0	0.3535
14	18.297	1036.8	0.2985	22.134	996.4	0.3079	27.960	949.0	0.3350
15	17.738	1014.6	0.2833	21.556	993.6	0.2922	27.548	963.2	0.3186
16	17.096	989.4	0.2699	20.871	987.2	0.2784	27.010	976.0	0.3040
17	16.299	960.5	0.2583	19.996	975.8	0.2662	26.254	986.5	0.2911
18	15.135	928.3	0.2481	18.725	960.4	0.2557	25.060	993.4	0.2800
19	14.187	895.7	0.2393	17.621	938.3	0.2464	23.917	989.9	0.2696
20	13.204	862.0	0.2315	16.438	910.8	0.2381	22.551	973.7	0.2601
21	12.027	822.0	0.2247	14.949	869.7	0.2308	20.606	934.7	0.2514
22	10.190	772.6	0.2190	12.711	819.6	0.2249	17.711	881.4	0.2444
23	8.027	718.3	0.2145	10.011	757.3	0.2200	14.035	808.0	0.2387
24	3.204	621.3	0.2116	3.998	635.2	0.2170	5.640	653.9	0.2353
25	1.822	594.5	0.2103	2.252	601.5	0.2155	3.126	610.4	0.2327

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D15 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.377	602.2	0.7396
2	19.351	704.5	0.7396
3	25.376	723.1	0.7272
4	28.023	750.0	0.6842
5	28.745	770.8	0.6318
6	28.759	788.5	0.58
7	28.634	806.7	0.5335
8	28.617	821.6	0.4930
9	29.183	836.7	0.4570
10	29.134	848.3	0.4258
11	28.942	856.1	0.3987
12	28.684	856.1	0.3749
13	28.389	852.2	0.3540
14	28.050	852.2	0.3355
15	27.636	844.4	0.3191
16	27.096	836.7	0.3045
17	26.336	821.6	0.2915
18	25.138	806.7	0.2803
19	23.990	788.5	0.2699
20	22.619	770.8	0.2604
21	20.667	746.6	0.2517
22	17.764	719.8	0.2448
23	14.077	684.6	0.2390
24	5.657	610.3	0.2356
25	3.139	599.0	0.2332

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D16

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.775	672.1	0.7396	2.869	673.1	0.7396
2	0.000		0.7396	6.425	1057.9	0.7396	10.406	1066.5	0.7396
3	0.000		0.7066	8.555	1178.6	0.7066	13.787	1178.6	0.7062
4	0.000	Data	0.6385	9.428	1272.0	0.6385	15.069	1249.5	0.6383
5	0.000	Not	0.5627	9.469	1276.5	0.5627	15.115	1250.4	0.5631
6	0.000	Required	0.4961	9.251	1252.5	0.4961	14.803	1233.8	0.4970
7	0.000		0.4435	9.035	1229.1	0.4435	14.488	1216.4	0.4446
8	0.000		0.4015	8.913	1216.0	0.4015	14.290	1203.3	0.4027
9	0.000		0.3663	9.116	1237.8	0.3663	14.519	1207.8	0.3676
10	0.000		0.3365	9.019	1227.4	0.3365	14.366	1198.1	0.3380
11	0.000		0.3114	8.875	1212.0	0.3114	14.163	1188.1	0.3130
12	0.000		0.2901	8.710	1194.7	0.2901	13.939	1178.1	0.2917
13	0.000		0.2718	8.524	1175.4	0.2718	13.698	1168.9	0.2733
14	0.000		0.2558	8.310	1153.6	0.2558	13.425	1159.1	0.2572
15	0.000		0.2418	8.053	1128.0	0.2418	13.101	1148.0	0.2431
16	0.000		0.2296	7.739	1097.6	0.2296	12.704	1134.5	0.2306
17	0.000		0.2190	7.338	1059.9	0.2190	12.185	1115.6	0.2197
18	0.000		0.2098	6.699	1002.7	0.2098	11.338	1083.0	0.2101
19	0.000		0.2019	6.265	965.8	0.2019	10.714	1054.1	0.2017
20	0.000		0.1951	5.847	931.6	0.1951	10.062	1019.7	0.1944
21	0.000		0.1891	5.397	896.2	0.1891	9.285	973.5	0.1880
22	0.000		0.1840	4.620	838.5	0.1840	7.959	901.1	0.1825
23	0.000		0.1799	3.724	776.7	0.1799	6.393	820.4	0.1781
24	0.000		0.1771	1.489	641.7	0.1771	2.604	660.4	0.1752
25	0.000		0.1761	0.890	609.3	0.1761	1.534	618.0	0.1741
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.822	619.3	0.7396	4.252	605.2	0.7396	5.386	632.9	0.7396
2	13.933	803.7	0.7396	15.495	736.9	0.7396	19.223	827.5	0.7396
3	18.456	847.1	0.7134	20.558	770.5	0.7173	25.131	848.4	0.7212
4	20.374	895.3	0.6553	22.820	810.6	0.6644	27.716	873.2	0.6729
5	20.790	924.6	0.5909	23.462	838.1	0.6056	28.522	886.1	0.6187
6	20.703	943.0	0.5332	23.518	856.0	0.5521	28.721	897.5	0.5685
7	20.544	956.0	0.4852	23.440	866.3	0.5065	28.792	909.5	0.5246
8	20.504	969.3	0.4449	23.446	872.2	0.4670	28.942	921.3	0.4857
9	21.191	1009.1	0.4103	24.169	876.9	0.4317	29.835	935.4	0.4501
10	22.190	1117.1	0.3828	25.103	868.5	0.4020	30.798	937.9	0.4191
11	22.274	1145.8	0.3536	25.159	864.9	0.3723	30.972	947.9	0.3893
12	22.038	1144.6	0.3279	24.908	863.0	0.3464	30.870	960.6	0.3634
13	21.978	1163.1	0.3073	24.824	859.9	0.3251	30.913	971.6	0.3414
14	21.557	1148.0	0.2878	24.407	860.4	0.3055	30.657	985.8	0.3216
15	20.969	1121.4	0.2706	23.826	861.3	0.2884	30.244	1000.8	0.3043
16	20.362	1100.8	0.2565	23.203	859.3	0.2741	29.766	1014.0	0.2892
17	19.456	1063.8	0.2435	22.252	853.6	0.2610	28.949	1026.3	0.2757
18	18.156	1022.1	0.2325	20.883	844.9	0.2501	27.686	1036.2	0.2642
19	17.085	982.7	0.2230	19.720	833.5	0.2404	26.538	1037.6	0.2538
20	15.923	939.8	0.2143	18.557	833.4	0.2323	25.231	1024.2	0.2447
21	14.480	886.7	0.2065	17.426	872.8	0.2269	23.558	975.4	0.2374
22	12.339	826.1	0.2003	15.073	845.8	0.2209	20.513	916.7	0.2305
23	9.785	758.3	0.1950	11.986	781.9	0.2150	16.412	837.4	0.2241
24	3.971	636.1	0.1918	4.872	645.4	0.2114	6.780	669.6	0.2204
25	2.286	602.6	0.1899	2.808	609.9	0.2097	3.884	621.6	0.2187

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D16 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.408	632.6	0.7396
2	19.298	838.0	0.7396
3	25.229	884.0	0.7213
4	27.828	942.7	0.6731
5	28.645	991.8	0.6189
6	28.853	1034.0	0.5686
7	28.931	1068.1	0.5248
8	29.087	1098.4	0.4859
9	29.984	1119.0	0.4501
10	30.946	1113.8	0.4191
11	31.119	1108.6	0.3893
12	31.016	1103.5	0.3633
13	31.057	1093.3	0.3414
14	30.801	1093.3	0.3216
15	30.388	1093.3	0.3042
16	29.909	1088.2	0.2891
17	29.089	1073.1	0.2756
18	27.820	1043.6	0.2641
19	26.666	1015.0	0.2538
20	25.351	978.1	0.2446
21	23.666	925.5	0.2373
22	20.607	867.9	0.2304
23	16.489	803.0	0.2240
24	6.815	663.1	0.2203
25	3.904	618.9	0.2186

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D17

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.710	667.8	0.7396	2.917	685.7	0.7396
2	0.000		0.7396	6.181	1033.5	0.7396	10.526	1128.8	0.7396
3	0.000		0.7111	8.222	1144.8	0.7111	13.851	1247.4	0.7054
4	0.000	Data	0.6480	9.062	1232.0	0.6480	15.032	1309.5	0.6379
5	0.000	Not	0.5758	9.092	1235.2	0.5758	14.979	1294.1	0.5637
6	0.000	Required	0.5107	8.857	1210.1	0.5107	14.585	1265.1	0.4987
7	0.000		0.4582	8.626	1185.9	0.4582	14.216	1240.5	0.4468
8	0.000		0.4160	8.494	1172.3	0.4160	13.991	1224.1	0.4054
9	0.000		0.3805	8.680	1191.5	0.3805	14.209	1229.7	0.3708
10	0.000		0.3503	8.569	1180.0	0.3503	14.043	1220.1	0.3413
11	0.000		0.3249	8.401	1162.8	0.3249	13.818	1210.2	0.3164
12	0.000		0.3033	8.208	1143.4	0.3033	13.570	1200.7	0.2951
13	0.000		0.2846	8.004	1123.2	0.2846	13.310	1191.1	0.2768
14	0.000		0.2685	7.788	1102.3	0.2685	13.037	1181.5	0.2607
15	0.000		0.2544	7.558	1080.4	0.2544	12.741	1170.4	0.2465
16	0.000		0.2420	7.307	1057.1	0.2420	12.407	1156.6	0.2340
17	0.000		0.2311	7.007	1029.9	0.2311	11.986	1136.8	0.2229
18	0.000		0.2214	6.502	985.8	0.2214	11.258	1101.2	0.2131
19	0.000		0.2132	6.204	960.7	0.2132	10.750	1068.8	0.2046
20	0.000		0.2058	5.899	935.8	0.2058	10.183	1029.7	0.1972
21	0.000		0.1992	5.519	905.7	0.1992	9.447	979.1	0.1907
22	0.000		0.1936	4.757	848.4	0.1936	8.115	903.5	0.1851
23	0.000		0.1891	3.837	784.3	0.1891	6.512	821.1	0.1807
24	0.000		0.1861	1.528	643.9	0.1861	2.643	660.4	0.1776
25	0.000		0.1849	0.905	610.1	0.1849	1.550	618.1	0.1766
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.336	649.8	0.7396	4.945	624.7	0.7396	5.696	607.6	0.7396
2	15.666	942.1	0.7396	17.746	804.7	0.7396	20.161	723.5	0.7396
3	20.438	1001.6	0.7115	23.082	834.6	0.7149	26.024	734.0	0.7189
4	22.299	1063.4	0.6511	25.276	876.8	0.6590	28.480	751.3	0.6681
5	22.552	1092.5	0.5831	25.773	909.1	0.5959	29.200	766.3	0.6110
6	22.280	1104.4	0.5211	25.690	935.0	0.5375	29.359	782.9	0.5584
7	21.930	1106.2	0.4693	25.476	954.1	0.4876	29.404	801.2	0.5135
8	21.673	1103.1	0.4267	25.316	968.0	0.4453	29.509	820.2	0.4750
9	21.904	1104.4	0.3907	25.655	983.7	0.4087	30.150	842.6	0.4407
10	21.633	1094.2	0.3601	25.430	990.5	0.3773	30.167	860.9	0.4110
11	21.263	1080.2	0.3341	25.094	995.5	0.3506	30.051	878.0	0.3850
12	20.836	1063.3	0.3118	24.697	1000.0	0.3276	29.877	895.6	0.3623
13	20.372	1044.3	0.2925	24.256	1003.4	0.3077	29.715	918.3	0.3427
14	19.869	1023.4	0.2757	23.761	1004.6	0.2902	29.432	935.9	0.3246
15	19.315	1000.4	0.2610	23.189	1001.9	0.2748	29.037	950.8	0.3084
16	18.686	974.8	0.2480	22.509	994.3	0.2612	28.515	964.4	0.2939
17	17.933	946.9	0.2366	21.667	981.2	0.2491	27.800	975.5	0.2811
18	16.851	918.0	0.2269	20.466	963.9	0.2389	26.681	982.7	0.2702
19	15.991	890.3	0.2188	19.435	939.7	0.2301	25.615	979.6	0.2601
20	14.992	857.4	0.2111	18.218	909.7	0.2218	24.225	964.5	0.2506
21	13.685	816.0	0.2041	16.584	866.7	0.2143	22.153	927.3	0.2416
22	11.655	768.1	0.1982	14.150	816.5	0.2081	19.088	876.5	0.2346
23	9.222	714.9	0.1933	11.186	755.0	0.2030	15.167	804.9	0.2287
24	3.717	620.0	0.1901	4.506	634.8	0.1996	6.142	653.6	0.2250
25	2.131	593.5	0.1882	2.553	600.8	0.1972	3.413	609.6	0.2212

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D17 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.720	639.5	0.7396
2	20.237	842.3	0.7396
3	26.121	879.9	0.7191
4	28.587	921.2	0.6683
5	29.314	951.4	0.6112
6	29.477	969.1	0.5587
7	29.526	987.2	0.5138
8	29.633	996.4	0.4752
9	30.277	1010.3	0.4409
10	30.295	1015.0	0.4112
11	30.180	1019.7	0.3852
12	30.006	1019.7	0.3625
13	29.842	1010.3	0.3428
14	29.557	1001.0	0.3248
15	29.160	991.8	0.3085
16	28.633	969.1	0.2940
17	27.912	942.7	0.2811
18	26.787	917.0	0.2703
19	25.713	884.0	0.2602
20	24.316	856.1	0.2506
21	22.235	821.6	0.2417
22	19.160	784.9	0.2347
23	15.225	736.4	0.2287
24	6.166	630.4	0.2251
25	3.427	601.8	0.2213

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D18

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.592	659.9	0.7396	2.828	688.9	0.7396
2	0.000		0.7396	5.768	893.4	0.7396	10.201	1144.3	0.7396
3	0.000		0.7170	7.670	1091.0	0.7170	13.407	1266.8	0.7078
4	0.000	Data	0.6611	8.467	1169.6	0.6611	14.518	1324.6	0.6438
5	0.000	Not	0.5950	8.517	1174.7	0.5950	14.435	1299.8	0.5733
6	0.000	Required	0.5328	8.314	1154.0	0.5328	14.025	1262.1	0.5103
7	0.000		0.4804	8.106	1133.3	0.4804	13.646	1231.6	0.4591
8	0.000		0.4375	8.000	1122.8	0.4375	13.429	1212.3	0.4177
9	0.000		0.4013	8.196	1142.2	0.4013	13.658	1218.0	0.3829
10	0.000		0.3702	8.103	1133.0	0.3702	13.503	1207.3	0.3531
11	0.000		0.3438	7.943	1117.3	0.3438	13.281	1196.6	0.3278
12	0.000		0.3214	7.756	1099.2	0.3214	13.032	1186.1	0.3061
13	0.000		0.3021	7.558	1080.4	0.3021	12.773	1175.8	0.2872
14	0.000		0.2853	7.353	1061.3	0.2853	12.505	1165.2	0.2709
15	0.000		0.2706	7.142	1042.0	0.2706	12.223	1153.5	0.2564
16	0.000		0.2577	6.921	1022.2	0.2577	11.915	1139.2	0.2436
17	0.000		0.2462	6.677	1000.8	0.2462	11.544	1118.8	0.2323
18	0.000		0.2362	6.258	965.2	0.2362	10.892	1082.2	0.2222
19	0.000		0.2274	6.054	948.4	0.2274	10.471	1049.3	0.2137
20	0.000		0.2195	5.826	929.9	0.2195	9.976	1010.3	0.2061
21	0.000		0.2124	5.493	903.7	0.2124	9.289	981.0	0.1994
22	0.000		0.2062	4.750	847.9	0.2062	7.988	888.4	0.1937
23	0.000		0.2012	3.825	783.5	0.2012	6.398	809.5	0.1891
24	0.000		0.1979	1.512	643.0	0.1979	2.578	655.9	0.1857
25	0.000		0.1967	0.887	609.2	0.1967	1.501	615.4	0.1847
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.930	628.9	0.7396	4.433	613.1	0.7396	5.160	606.1	0.7396
2	14.214	843.3	0.7396	15.963	760.8	0.7396	18.346	721.1	0.7396
3	18.586	885.5	0.7163	20.814	785.0	0.7197	23.712	731.2	0.7236
4	20.312	934.3	0.6625	22.821	818.2	0.6702	25.955	746.7	0.6790
5	20.598	965.0	0.6019	23.305	842.4	0.6144	26.607	757.9	0.6287
6	20.429	985.6	0.5455	23.287	861.5	0.5619	26.767	769.9	0.5814
7	20.209	999.4	0.4965	23.178	875.7	0.5154	26.852	783.3	0.5394
8	20.111	1010.0	0.4544	23.158	885.9	0.4744	27.033	797.4	0.5019
9	20.510	1025.2	0.4174	23.641	897.0	0.4374	27.758	814.7	0.4673
10	20.419	1031.0	0.3857	23.579	900.9	0.4054	27.887	828.7	0.4369
11	20.211	1032.2	0.3585	23.388	903.1	0.3777	27.881	842.4	0.4101
12	19.924	1028.8	0.3350	23.113	904.8	0.3535	27.789	856.3	0.3864
13	19.579	1021.0	0.3145	22.782	906.6	0.3326	27.638	870.1	0.3653
14	19.184	1009.7	0.2966	22.401	908.5	0.3142	27.435	884.0	0.3466
15	18.732	994.7	0.2807	21.960	910.0	0.2979	27.167	897.8	0.3299
16	18.210	976.2	0.2666	21.434	909.5	0.2834	26.806	911.1	0.3149
17	17.579	954.2	0.2542	20.779	906.2	0.2706	26.292	922.7	0.3016
18	16.623	929.2	0.2435	19.781	900.6	0.2596	25.403	931.8	0.2901
19	15.850	901.1	0.2338	18.930	890.2	0.2495	24.564	932.8	0.2791
20	14.950	869.8	0.2252	17.914	875.1	0.2405	23.434	923.3	0.2689
21	13.720	829.8	0.2176	16.459	846.4	0.2323	21.623	894.4	0.2594
22	11.730	781.7	0.2113	14.150	807.5	0.2259	18.776	852.5	0.2522
23	9.283	725.8	0.2061	11.222	752.3	0.2204	14.985	789.5	0.2460
24	3.716	623.5	0.2026	4.492	633.5	0.2166	6.036	648.2	0.2421
25	2.110	595.0	0.2004	2.517	599.5	0.2136	3.327	606.8	0.2379

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D18 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.183	636.1	0.7396
2	18.424	851.1	0.7396
3	23.810	884.0	0.7237
4	26.064	929.7	0.6791
5	26.723	960.2	0.6289
6	26.888	982.6	0.5816
7	26.975	991.8	0.5396
8	27.159	1005.6	0.5020
9	27.887	1019.7	0.4674
10	28.017	1024.4	0.4369
11	28.012	1029.2	0.4101
12	27.920	1029.2	0.3864
13	27.769	1029.2	0.3653
14	27.565	1024.4	0.3466
15	27.294	1010.3	0.3299
16	26.929	991.8	0.3149
17	26.409	964.7	0.3015
18	25.513	934.0	0.2900
19	24.666	900.3	0.2790
20	23.529	871.9	0.2689
21	21.707	829.1	0.2594
22	18.849	788.5	0.2522
23	15.045	743.2	0.2460
24	6.062	636.2	0.2421
25	3.341	601.8	0.2379

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D19

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.639	663.0	0.7396	2.829	683.8	0.7396
2	0.000		0.7396	5.959	1011.8	0.7396	10.289	1126.2	0.7396
3	0.000		0.7154	7.962	1119.1	0.7154	13.633	1254.9	0.7087
4	0.000	Data	0.6572	8.778	1201.8	0.6572	14.787	1316.8	0.6444
5	0.000	Not	0.5889	8.759	1199.8	0.5889	14.619	1289.2	0.5729
6	0.000	Required	0.5258	8.458	1168.7	0.5258	14.072	1244.7	0.5096
7	0.000		0.4738	8.167	1139.3	0.4738	13.569	1207.6	0.4586
8	0.000		0.4317	8.004	1123.2	0.4317	13.263	1183.2	0.4177
9	0.000		0.3964	8.165	1139.1	0.3964	13.434	1184.9	0.3835
10	0.000		0.3662	8.044	1127.2	0.3662	13.234	1171.6	0.3542
11	0.000		0.3406	7.859	1109.1	0.3406	12.967	1157.9	0.3294
12	0.000		0.3188	7.651	1089.2	0.3188	12.679	1144.8	0.3082
13	0.000		0.3000	7.436	1069.0	0.3000	12.385	1131.9	0.2898
14	0.000		0.2838	7.217	1048.8	0.2838	12.085	1118.9	0.2738
15	0.000		0.2696	6.987	1028.1	0.2696	11.767	1105.0	0.2597
16	0.000		0.2570	6.734	1005.8	0.2570	11.405	1087.9	0.2472
17	0.000		0.2460	6.420	978.8	0.2460	10.937	1064.4	0.2362
18	0.000		0.2364	5.895	935.5	0.2364	10.147	1025.0	0.2265
19	0.000		0.2281	5.572	909.8	0.2281	9.593	992.0	0.2182
20	0.000		0.2208	5.262	885.9	0.2208	9.025	956.5	0.2109
21	0.000		0.2143	4.909	859.5	0.2143	8.349	914.0	0.2046
22	0.000		0.2087	4.220	810.3	0.2087	7.142	849.9	0.1991
23	0.000		0.2043	3.395	755.3	0.2043	5.711	780.9	0.1949
24	0.000		0.2012	1.342	633.6	0.2012	2.295	645.6	0.1918
25	0.000		0.2002	0.790	604.0	0.2002	1.337	609.6	0.1908
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.335	655.7	0.7396	4.966	627.1	0.7396	5.818	614.2	0.7396
2	15.749	972.0	0.7396	17.920	817.1	0.7396	20.669	748.8	0.7396
3	20.653	1040.5	0.7130	23.445	853.1	0.7161	26.809	762.0	0.7201
4	22.539	1110.0	0.6537	25.699	900.9	0.6610	29.365	782.7	0.6701
5	22.679	1140.7	0.5861	26.096	935.9	0.5980	30.002	799.6	0.6130
6	22.228	1150.4	0.5240	25.829	961.9	0.5391	29.984	817.5	0.5598
7	21.715	1149.4	0.4720	25.440	979.9	0.4887	29.853	836.4	0.5138
8	21.355	1143.9	0.4294	25.166	992.6	0.4461	29.832	855.5	0.4744
9	21.526	1143.9	0.3935	25.442	1008.3	0.4095	30.399	878.0	0.4396
10	21.199	1131.1	0.3632	25.162	1015.4	0.3784	30.341	895.6	0.4093
11	20.762	1114.2	0.3374	24.768	1021.9	0.3518	30.149	911.9	0.3830
12	20.270	1094.3	0.3154	24.324	1029.3	0.3291	29.893	927.3	0.3599
13	19.746	1072.3	0.2964	23.843	1036.0	0.3095	29.595	942.7	0.3397
14	19.189	1048.2	0.2800	23.304	1038.8	0.2922	29.235	957.9	0.3217
15	18.582	1021.8	0.2656	22.673	1035.0	0.2770	28.777	972.9	0.3058
16	17.891	992.7	0.2529	21.908	1023.6	0.2636	28.171	987.0	0.2917
17	17.046	960.4	0.2417	20.942	1005.2	0.2518	27.331	998.2	0.2792
18	15.837	925.9	0.2321	19.579	982.4	0.2416	26.044	1005.1	0.2685
19	14.839	890.7	0.2237	18.378	953.1	0.2326	24.794	1000.6	0.2586
20	13.800	854.9	0.2164	17.096	919.2	0.2247	23.311	982.7	0.2493
21	12.553	813.6	0.2100	15.499	872.8	0.2177	21.233	941.2	0.2409
22	10.637	765.1	0.2046	13.158	819.6	0.2120	18.213	885.7	0.2342
23	8.384	712.6	0.2003	10.359	756.3	0.2074	14.420	810.7	0.2287
24	3.361	619.6	0.1974	4.152	635.0	0.2043	5.815	655.1	0.2254
25	1.922	593.7	0.1961	2.349	601.3	0.2027	3.235	611.0	0.2226

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D19 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.838	625.7	0.7396
2	20.732	787.1	0.7396
3	26.888	810.4	0.7202
4	29.451	836.7	0.6702
5	30.095	863.9	0.6133
6	30.082	884.0	0.5601
7	29.955	900.3	0.5143
8	29.938	917.0	0.4748
9	30.508	929.7	0.4399
10	30.451	934.0	0.4097
11	30.259	934.0	0.3833
12	30.003	934.0	0.3603
13	29.703	925.5	0.3400
14	29.342	921.2	0.3220
15	28.881	908.6	0.3061
16	28.272	896.2	0.2919
17	27.428	879.9	0.2794
18	26.136	860.0	0.2687
19	24.882	844.4	0.2588
20	23.393	821.6	0.2496
21	21.308	795.8	0.2411
22	18.279	763.8	0.2344
23	14.472	716.6	0.2289
24	5.837	624.6	0.2255
25	3.247	596.2	0.2228

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D20

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.506	654.2	0.7396	2.557	668.3	0.7396
2	0.000		0.7396	5.520	970.0	0.7396	9.384	1047.2	0.7396
3	0.000		0.7217	7.448	1070.1	0.7217	12.632	1170.6	0.7172
4	0.000	Data	0.6705	8.276	1150.2	0.6705	13.851	1237.8	0.6613
5	0.000	Not	0.6076	8.286	1151.2	0.6076	13.745	1217.5	0.5955
6	0.000	Required	0.5470	8.000	1122.8	0.5470	13.218	1176.3	0.5341
7	0.000		0.4952	7.712	1095.0	0.4952	12.719	1141.3	0.4830
8	0.000		0.4526	7.547	1079.4	0.4526	12.416	1119.1	0.4414
9	0.000		0.4167	7.695	1093.4	0.4167	12.587	1122.8	0.4064
10	0.000		0.3859	7.573	1081.8	0.3859	12.388	1110.5	0.3764
11	0.000		0.3597	7.393	1065.0	0.3597	12.124	1097.3	0.3508
12	0.000		0.3372	7.195	1046.8	0.3372	11.844	1084.5	0.3289
13	0.000		0.3180	6.994	1028.7	0.3180	11.564	1072.4	0.3099
14	0.000		0.3012	6.789	1010.6	0.3012	11.280	1060.4	0.2933
15	0.000		0.2865	6.576	992.1	0.2865	10.981	1047.5	0.2786
16	0.000		0.2735	6.339	972.0	0.2735	10.640	1032.2	0.2657
17	0.000		0.2620	6.041	947.3	0.2620	10.195	1010.9	0.2541
18	0.000		0.2520	5.532	906.7	0.2520	9.431	975.1	0.2441
19	0.000		0.2434	5.218	882.6	0.2434	8.907	946.6	0.2354
20	0.000		0.2358	4.918	860.2	0.2358	8.378	916.5	0.2278
21	0.000		0.2291	4.584	835.9	0.2291	7.762	881.0	0.2211
22	0.000		0.2233	3.935	790.9	0.2233	6.643	824.9	0.2154
23	0.000		0.2187	3.166	740.7	0.2187	5.318	763.3	0.2109
24	0.000		0.2157	1.253	628.8	0.2157	2.136	639.2	0.2078
25	0.000		0.2145	0.735	601.1	0.2145	1.239	605.8	0.2067
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.916	645.8	0.7396	4.652	638.8	0.7396	5.960	644.6	0.7396
2	14.409	931.6	0.7396	17.025	880.5	0.7396	21.268	871.8	0.7396
3	19.262	1005.4	0.7200	22.699	938.7	0.7219	27.857	893.9	0.7240
4	21.320	1082.5	0.6674	25.225	1006.6	0.6717	30.701	919.7	0.6767
5	21.604	1120.5	0.6041	25.747	1043.1	0.6107	31.371	931.9	0.6194
6	21.232	1136.0	0.5430	25.464	1057.2	0.5507	31.220	943.0	0.5628
7	20.795	1142.3	0.4901	25.033	1058.1	0.4979	30.928	954.9	0.5123
8	20.569	1150.1	0.4463	24.788	1055.1	0.4534	30.824	967.0	0.4692
9	20.949	1171.6	0.4092	25.184	1057.6	0.4158	31.405	983.2	0.4318
10	20.836	1180.6	0.3774	25.024	1050.2	0.3836	31.362	993.6	0.3996
11	20.574	1180.8	0.3502	24.710	1042.0	0.3561	31.177	1005.3	0.3718
12	20.201	1171.1	0.3268	24.295	1035.5	0.3325	30.902	1018.0	0.3478
13	19.758	1154.3	0.3068	23.830	1032.1	0.3122	30.585	1031.7	0.3270
14	19.257	1132.3	0.2893	23.326	1031.6	0.2945	30.229	1045.6	0.3087
15	18.680	1104.8	0.2742	22.753	1032.3	0.2792	29.800	1059.3	0.2926
16	17.993	1071.5	0.2609	22.048	1029.5	0.2656	29.225	1071.8	0.2782
17	17.124	1032.2	0.2493	21.104	1018.0	0.2536	28.384	1081.9	0.2656
18	15.874	989.0	0.2391	19.731	999.4	0.2432	27.073	1088.0	0.2544
19	14.854	946.9	0.2304	18.542	974.5	0.2341	25.808	1080.5	0.2443
20	13.827	906.6	0.2229	17.329	947.8	0.2261	24.348	1056.6	0.2353
21	12.604	859.9	0.2164	15.810	907.0	0.2192	22.265	1004.2	0.2272
22	10.706	803.7	0.2109	13.513	855.0	0.2134	19.189	936.3	0.2205
23	8.462	742.2	0.2066	10.706	786.8	0.2088	15.292	849.4	0.2152
24	3.410	631.0	0.2036	4.334	647.6	0.2059	6.278	671.8	0.2119
25	1.951	600.5	0.2027	2.464	609.1	0.2048	3.543	621.7	0.2104

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D20 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.981	629.2	0.7396
2	21.335	803.7	0.7396
3	27.941	829.1	0.7241
4	30.795	867.9	0.677
5	31.472	896.2	0.6197
6	31.326	917.0	0.5631
7	31.039	938.3	0.5126
8	30.939	955.8	0.4695
9	31.523	969.1	0.4321
10	31.483	982.6	0.3999
11	31.297	978.1	0.3721
12	31.022	978.1	0.3481
13	30.704	973.6	0.3272
14	30.346	964.7	0.3090
15	29.913	947.0	0.2928
16	29.334	929.7	0.2784
17	28.488	908.6	0.2657
18	27.171	884.0	0.2546
19	25.900	860.0	0.2445
20	24.434	836.7	0.2354
21	22.342	803.0	0.2274
22	19.256	767.3	0.2207
23	15.346	723.1	0.2154
24	6.301	627.5	0.2121
25	3.555	596.2	0.2105

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D21

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.747	670.3	0.7396	2.881	677.5	0.7396
2	0.000		0.7396	6.323	1047.7	0.7396	10.446	1090.4	0.7396
3	0.000		0.7083	8.439	1166.7	0.7083	13.844	1208.1	0.7059
4	0.000	Data	0.6422	9.301	1258.0	0.6422	15.086	1275.5	0.6381
5	0.000	Not	0.5677	9.310	1258.9	0.5677	15.045	1266.4	0.5633
6	0.000	Required	0.5020	9.047	1230.4	0.5020	14.641	1241.2	0.4980
7	0.000		0.4499	8.796	1203.7	0.4499	14.261	1218.5	0.4461
8	0.000		0.4082	8.656	1189.0	0.4082	14.032	1203.1	0.4047
9	0.000		0.3731	8.846	1209.0	0.3731	14.253	1208.5	0.3700
10	0.000		0.3433	8.737	1197.5	0.3433	14.088	1198.8	0.3406
11	0.000		0.3184	8.571	1180.2	0.3184	13.865	1189.1	0.3158
12	0.000		0.2971	8.385	1161.2	0.2971	13.621	1179.3	0.2946
13	0.000		0.2789	8.188	1141.4	0.2789	13.368	1169.9	0.2763
14	0.000		0.2630	7.975	1120.4	0.2630	13.095	1159.9	0.2604
15	0.000		0.2490	7.735	1097.2	0.2490	12.788	1148.9	0.2462
16	0.000		0.2367	7.461	1071.3	0.2367	12.430	1135.2	0.2338
17	0.000		0.2259	7.125	1040.5	0.2259	11.976	1116.2	0.2228
18	0.000		0.2164	6.569	991.5	0.2164	11.216	1084.2	0.2131
19	0.000		0.2083	6.224	962.4	0.2083	10.702	1058.5	0.2046
20	0.000		0.2011	5.886	934.7	0.2011	10.152	1027.1	0.1971
21	0.000		0.1948	5.494	903.7	0.1948	9.446	982.4	0.1906
22	0.000		0.1893	4.734	846.7	0.1893	8.136	909.1	0.1849
23	0.000		0.1849	3.828	783.7	0.1849	6.548	826.2	0.1804
24	0.000		0.1820	1.535	644.3	0.1820	2.672	662.4	0.1774
25	0.000		0.1809	0.913	610.6	0.1809	1.570	619.2	0.1763
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.623	605.9	0.7396	4.086	608.8	0.7396	5.634	661.1	0.7396
2	13.232	746.5	0.7396	14.930	754.2	0.7396	19.966	944.2	0.7396
3	17.645	785.7	0.7153	19.967	795.9	0.7189	26.065	972.4	0.7194
4	19.590	835.0	0.6602	22.336	847.3	0.6687	28.737	999.3	0.6701
5	20.076	874.2	0.6000	23.104	883.4	0.6133	29.564	1004.6	0.6156
6	20.061	904.3	0.5463	23.258	905.8	0.5625	29.757	1008.2	0.5652
7	19.953	926.0	0.5008	23.241	918.2	0.5181	29.818	1015.3	0.5207
8	19.919	941.9	0.4611	23.258	925.1	0.4782	29.950	1025.9	0.4808
9	20.329	957.6	0.4248	23.731	933.8	0.4411	30.632	1045.4	0.4439
10	20.196	960.3	0.3929	23.605	934.8	0.4086	30.673	1061.3	0.4114
11	19.913	955.3	0.3652	23.312	933.4	0.3802	30.557	1078.5	0.3829
12	19.549	945.3	0.3412	22.935	931.6	0.3556	30.358	1096.0	0.3579
13	19.134	932.0	0.3203	22.528	932.7	0.3343	30.123	1113.2	0.3361
14	18.671	916.7	0.3019	22.176	948.3	0.3159	29.924	1128.8	0.3170
15	18.147	899.5	0.2856	22.219	1032.1	0.3005	30.030	1135.3	0.3007
16	17.564	882.0	0.2713	22.588	1191.1	0.2872	30.373	1132.6	0.2865
17	16.793	858.0	0.2583	21.935	1212.5	0.2727	29.795	1140.4	0.2717
18	15.670	831.4	0.2474	20.597	1173.8	0.2597	28.515	1146.4	0.2584
19	14.840	808.9	0.2375	19.442	1117.7	0.2481	27.270	1137.0	0.2464
20	14.170	800.6	0.2300	18.384	1054.3	0.2386	25.917	1107.0	0.2363
21	13.206	782.9	0.2228	16.929	979.6	0.2301	23.847	1047.0	0.2274
22	11.461	754.0	0.2171	14.631	902.2	0.2235	20.716	971.3	0.2202
23	9.185	710.4	0.2117	11.691	817.8	0.2176	16.642	877.5	0.2140
24	3.749	620.2	0.2085	4.784	658.4	0.2142	6.951	685.2	0.2102
25	2.237	598.1	0.2086	2.807	614.3	0.2135	4.030	629.9	0.2092

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly D21 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.647	602.2	0.7396
2	20.010	712.0	0.7396
3	26.119	723.1	0.7195
4	28.796	739.8	0.6703
5	29.629	760.3	0.6159
6	29.828	781.4	0.5655
7	29.894	799.4	0.5212
8	30.030	814.1	0.4814
9	30.717	832.9	0.4444
10	30.760	840.6	0.4120
11	30.645	844.4	0.3834
12	30.447	848.3	0.3585
13	30.211	844.4	0.3366
14	30.010	836.7	0.3175
15	30.114	829.1	0.3012
16	30.454	817.8	0.2869
17	29.874	810.4	0.2721
18	28.591	799.4	0.2588
19	27.344	792.1	0.2467
20	25.986	774.3	0.2367
21	23.910	753.4	0.2278
22	20.772	729.8	0.2206
23	16.686	690.9	0.2144
24	6.970	616.0	0.2106
25	4.039	587.9	0.2095

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E1

Node	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
No.	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.558	657.5	0.7396	2.828	692.7	0.7396
2	0.000		0.7396	5.652	982.1	0.7396	10.227	1169.3	0.7396
3	0.000		0.7186	7.545	1078.7	0.7186	13.477	1301.7	0.7068
4	0.000	Data	0.6646	8.343	1156.4	0.6646	14.576	1358.4	0.6428
5	0.000	Not	0.6007	8.375	1159.7	0.6007	14.425	1323.7	0.5731
6	0.000	Required	0.5400	8.138	1135.9	0.5400	13.933	1276.6	0.5114
7	0.000		0.4884	7.892	1111.8	0.4884	13.474	1238.4	0.4611
8	0.000		0.4459	7.726	1095.8	0.4459	13.157	1212.0	0.4203
9	0.000		0.4105	7.726	1095.8	0.4105	13.112	1204.2	0.3864
10	0.000		0.3803	7.610	1084.8	0.3803	12.909	1189.4	0.3577
11	0.000		0.3545	7.464	1071.1	0.3545	12.683	1175.9	0.3330
12	0.000		0.3324	7.295	1055.5	0.3324	12.438	1163.2	0.3118
13	0.000		0.3132	7.116	1039.2	0.3132	12.183	1150.6	0.2934
14	0.000		0.2964	6.931	1022.7	0.2964	11.920	1137.9	0.2772
15	0.000		0.2818	6.739	1005.8	0.2818	11.639	1123.5	0.2629
16	0.000		0.2687	6.534	988.1	0.2687	11.323	1105.9	0.2503
17	0.000		0.2573	6.288	967.4	0.2573	10.919	1081.3	0.2391
18	0.000		0.2472	5.842	930.9	0.2472	10.200	1040.2	0.2293
19	0.000		0.2384	5.644	915.2	0.2384	9.763	1005.5	0.2211
20	0.000		0.2306	5.453	900.3	0.2306	9.308	968.7	0.2138
21	0.000		0.2234	5.195	880.6	0.2234	8.718	924.4	0.2074
22	0.000		0.2171	4.513	830.7	0.2171	7.514	859.1	0.2017
23	0.000		0.2120	3.646	771.4	0.2120	6.036	788.9	0.1972
24	0.000		0.2085	1.462	640.2	0.2085	2.473	650.8	0.1936
25	0.000		0.2072	0.857	607.6	0.2072	1.443	612.9	0.1924
Node	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.	Burnup	Fuel	Mod. Dens.
	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)	(GWd/MTU)	Temp. (K)	(g/cm ³)
No.	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.600	607.7	0.7396	4.069	609.4	0.7396	5.558	657.0	0.7396
2	13.147	756.4	0.7396	14.868	757.0	0.7396	19.703	925.0	0.7396
3	17.444	796.9	0.7163	19.771	796.3	0.7198	25.618	950.4	0.7207
4	19.229	845.7	0.6644	21.942	843.0	0.6723	28.101	977.4	0.6741
5	19.562	882.0	0.6081	22.522	874.3	0.6203	28.773	985.5	0.6227
6	19.406	908.2	0.5569	22.508	892.9	0.5718	28.831	991.9	0.5744
7	19.171	926.1	0.5122	22.350	903.1	0.5284	28.777	1001.3	0.5309
8	19.014	939.2	0.4727	22.237	909.1	0.4891	28.797	1013.3	0.4915
9	19.143	953.6	0.4376	22.431	917.9	0.4533	29.220	1034.5	0.4556
10	18.959	955.1	0.4063	22.250	918.3	0.4213	29.201	1049.7	0.4234
11	18.675	950.3	0.3788	21.954	916.6	0.3932	29.072	1065.7	0.3949
12	18.315	940.8	0.3548	21.581	914.9	0.3687	28.869	1082.2	0.3699
13	17.904	928.1	0.3339	21.181	916.4	0.3474	28.632	1098.3	0.3480
14	17.452	912.9	0.3155	20.850	933.0	0.3290	28.438	1112.0	0.3287
15	16.955	895.9	0.2992	20.925	1016.1	0.3136	28.567	1117.5	0.3123
16	16.412	878.3	0.2848	21.341	1173.6	0.3000	28.952	1114.4	0.2977
17	15.692	854.5	0.2718	20.762	1198.8	0.2852	28.431	1120.2	0.2827
18	14.615	828.4	0.2608	19.500	1165.8	0.2720	27.216	1125.0	0.2692
19	13.867	806.4	0.2511	18.448	1113.6	0.2602	26.065	1115.0	0.2569
20	13.295	798.2	0.2434	17.505	1053.3	0.2506	24.823	1085.2	0.2467
21	12.443	780.4	0.2362	16.168	979.5	0.2420	22.876	1026.9	0.2377
22	10.786	750.4	0.2303	13.954	901.7	0.2351	19.850	954.6	0.2303
23	8.611	706.5	0.2248	11.087	814.0	0.2290	15.872	864.4	0.2240
24	3.536	619.4	0.2213	4.557	656.9	0.2254	6.624	679.1	0.2200
25	2.098	597.4	0.2212	2.656	613.2	0.2246	3.810	625.9	0.2190

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E1 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.573	608.8	0.7396
2	19.750	723.3	0.7396
3	25.676	736.3	0.7208
4	28.166	760.2	0.6744
5	28.843	777.7	0.623
6	28.907	799.2	0.5748
7	28.859	821.4	0.5313
8	28.883	836.5	0.4920
9	29.311	855.8	0.4562
10	29.294	863.7	0.4240
11	29.166	867.7	0.3954
12	28.962	863.7	0.3704
13	28.724	859.8	0.3485
14	28.528	851.9	0.3291
15	28.654	840.3	0.3127
16	29.035	825.1	0.2981
17	28.512	817.6	0.2830
18	27.294	806.5	0.2695
19	26.139	792.0	0.2573
20	24.893	777.7	0.2470
21	22.940	756.7	0.2380
22	19.906	729.6	0.2306
23	15.917	694.0	0.2242
24	6.643	616.0	0.2202
25	3.820	590.6	0.2192

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E2

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.572	658.5	0.7396	2.715	678.4	0.7396
2	0.000		0.7396	5.767	993.0	0.7396	9.912	1093.7	0.7396
3	0.000		0.7156	7.825	1105.3	0.7156	13.277	1215.6	0.7107
4	0.000	Data	0.6563	8.856	1209.4	0.6563	14.672	1280.4	0.6476
5	0.000	Not	0.5849	9.136	1239.3	0.5849	14.850	1261.9	0.5751
6	0.000	Required	0.5178	9.111	1236.6	0.5178	14.627	1226.8	0.5092
7	0.000		0.4623	9.008	1225.6	0.4623	14.351	1196.9	0.4556
8	0.000		0.4177	8.901	1214.2	0.4177	14.114	1174.9	0.4126
9	0.000		0.3808	8.929	1217.1	0.3808	14.103	1168.3	0.3771
10	0.000		0.3497	8.806	1204.1	0.3497	13.897	1154.6	0.3471
11	0.000		0.3237	8.640	1186.8	0.3237	13.658	1142.6	0.3218
12	0.000		0.3015	8.427	1164.9	0.3015	13.379	1131.9	0.3002
13	0.000		0.2826	8.187	1140.8	0.2826	13.077	1121.9	0.2816
14	0.000		0.2663	7.928	1115.3	0.2663	12.757	1112.2	0.2655
15	0.000		0.2522	7.644	1088.1	0.2522	12.409	1102.1	0.2514
16	0.000		0.2398	7.326	1058.4	0.2398	12.013	1090.0	0.2389
17	0.000		0.2290	6.931	1022.7	0.2290	11.504	1072.4	0.2279
18	0.000		0.2197	6.285	967.1	0.2197	10.638	1039.4	0.2183
19	0.000		0.2119	5.871	933.2	0.2119	10.019	1009.6	0.2101
20	0.000		0.2050	5.483	902.6	0.2050	9.381	974.6	0.2029
21	0.000		0.1991	5.083	872.2	0.1991	8.656	930.9	0.1966
22	0.000		0.1939	4.341	818.6	0.1939	7.388	864.7	0.1913
23	0.000		0.1898	3.480	760.6	0.1898	5.905	792.7	0.1870
24	0.000		0.1870	1.391	636.3	0.1870	2.411	651.6	0.1842
25	0.000		0.1860	0.825	605.9	0.1860	1.414	613.2	0.1831
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.812	628.6	0.7396	4.292	610.6	0.7396	4.883	597.3	0.7396
2	13.930	843.5	0.7396	15.607	751.4	0.7396	17.566	690.0	0.7396
3	18.445	884.4	0.7184	20.568	772.8	0.7217	22.952	698.5	0.7251
4	20.415	929.8	0.6651	22.793	802.3	0.6726	25.378	711.0	0.6805
5	20.924	957.1	0.6030	23.491	825.0	0.6153	26.237	721.3	0.6286
6	20.912	975.0	0.5444	23.640	844.8	0.5609	26.570	733.1	0.5796
7	20.758	985.5	0.4939	23.619	861.6	0.5134	26.761	747.0	0.5370
8	20.584	991.0	0.4511	23.552	875.4	0.4722	26.925	762.5	0.5003
9	20.676	1000.0	0.4145	23.765	891.2	0.4360	27.422	781.9	0.4677
10	20.446	997.8	0.3829	23.593	898.9	0.4043	27.482	798.2	0.4388
11	20.141	992.1	0.3559	23.328	904.2	0.3769	27.437	813.9	0.4132
12	19.762	983.4	0.3328	22.980	908.4	0.3532	27.305	829.7	0.3907
13	19.333	972.5	0.3128	22.576	911.8	0.3325	27.110	845.3	0.3706
14	18.858	959.4	0.2953	22.120	914.3	0.3144	26.852	860.3	0.3526
15	18.327	944.2	0.2799	21.596	915.3	0.2986	26.512	874.5	0.3364
16	17.718	926.8	0.2663	20.975	913.6	0.2844	26.061	887.9	0.3219
17	16.961	906.9	0.2544	20.184	909.1	0.2720	25.417	899.6	0.3091
18	15.812	884.9	0.2445	18.978	901.4	0.2619	24.331	909.3	0.2988
19	14.859	859.5	0.2354	17.922	887.7	0.2523	23.297	911.1	0.2884
20	13.830	830.8	0.2273	16.738	867.6	0.2436	22.012	902.9	0.2787
21	12.588	794.5	0.2198	15.228	833.9	0.2354	20.163	876.0	0.2692
22	10.650	749.7	0.2137	12.933	791.2	0.2290	17.343	836.0	0.2622
23	8.383	700.6	0.2084	10.159	734.3	0.2233	13.712	774.8	0.2557
24	3.405	615.6	0.2053	4.114	627.2	0.2197	5.537	641.2	0.2511
25	1.944	590.8	0.2027	2.316	596.3	0.2163	3.048	602.5	0.2457

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E2 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU) 3.67 Cy 8	Fuel Temp. (K) 3.67 Cy 8	Mod. Dens. (g/cm ³) 3.67 Cy 8
1	4.897	605.5	0.7396
2	17.612	719.5	0.7396
3	23.012	743.0	0.7252
4	25.447	774.1	0.6806
5	26.311	792.0	0.6289
6	26.649	810.2	0.58
7	26.842	817.6	0.5375
8	27.010	832.7	0.5008
9	27.511	848.0	0.4682
10	27.573	855.8	0.4392
11	27.531	867.7	0.4137
12	27.411	916.7	0.3912
13	27.256	1103.0	0.3711
14	27.008	1155.6	0.3530
15	26.666	1144.9	0.3367
16	26.209	1113.3	0.3221
17	25.557	1072.7	0.3093
18	24.463	1033.6	0.2988
19	23.420	991.4	0.2885
20	22.126	951.1	0.2787
21	20.265	900.0	0.2693
22	17.431	844.2	0.2623
23	13.781	774.1	0.2557
24	5.566	645.0	0.2511
25	3.064	607.4	0.2458

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E3

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.773	671.9	0.7396	2.901	676.8	0.7396
2	0.000		0.7396	6.439	1058.9	0.7396	10.535	1085.4	0.7396
3	0.000		0.7078	8.573	1179.9	0.7078	13.915	1196.7	0.7066
4	0.000	Data	0.6412	9.410	1269.3	0.6412	15.119	1261.0	0.6393
5	0.000	Not	0.5664	9.403	1268.5	0.5664	15.072	1253.9	0.5646
6	0.000	Required	0.5004	9.144	1240.2	0.5004	14.683	1230.8	0.4989
7	0.000		0.4480	8.894	1213.4	0.4480	14.314	1210.1	0.4467
8	0.000		0.4064	8.709	1194.0	0.4064	14.035	1194.0	0.4051
9	0.000		0.3720	8.687	1191.7	0.3720	14.000	1191.8	0.3708
10	0.000		0.3429	8.536	1176.1	0.3429	13.783	1180.6	0.3418
11	0.000		0.3185	8.362	1158.3	0.3185	13.547	1170.2	0.3173
12	0.000		0.2976	8.167	1138.8	0.2976	13.292	1160.2	0.2963
13	0.000		0.2796	7.959	1118.3	0.2796	13.026	1150.6	0.2782
14	0.000		0.2639	7.738	1097.0	0.2639	12.747	1141.1	0.2623
15	0.000		0.2502	7.500	1074.5	0.2502	12.449	1131.4	0.2484
16	0.000		0.2382	7.235	1050.0	0.2382	12.120	1121.1	0.2361
17	0.000		0.2276	6.907	1020.6	0.2276	11.708	1107.8	0.2251
18	0.000		0.2184	6.333	971.1	0.2184	10.951	1079.3	0.2154
19	0.000		0.2105	5.985	942.4	0.2105	10.424	1052.2	0.2069
20	0.000		0.2034	5.647	915.4	0.2034	9.838	1015.8	0.1996
21	0.000		0.1972	5.279	886.9	0.1972	9.123	967.2	0.1931
22	0.000		0.1920	4.537	832.4	0.1920	7.821	893.9	0.1876
23	0.000		0.1877	3.655	772.0	0.1877	6.272	814.3	0.1833
24	0.000		0.1849	1.472	640.7	0.1849	2.580	659.7	0.1803
25	0.000		0.1838	0.876	608.6	0.1838	1.516	617.6	0.1792
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.221	643.2	0.7396	4.979	641.2	0.7396	6.418	653.5	0.7396
2	15.321	909.7	0.7396	17.974	885.8	0.7396	22.555	901.7	0.7396
3	20.227	977.3	0.7128	23.746	949.9	0.7154	29.292	925.1	0.7180
4	22.333	1058.0	0.6532	26.393	1029.8	0.6588	32.249	951.2	0.6648
5	22.806	1107.7	0.5849	27.174	1078.5	0.5930	33.132	959.9	0.6026
6	22.707	1136.5	0.5217	27.214	1101.3	0.5306	33.251	966.8	0.5433
7	22.506	1153.6	0.4687	27.061	1109.3	0.4771	33.202	975.8	0.4918
8	22.360	1167.2	0.4250	26.941	1113.6	0.4327	33.218	987.8	0.4482
9	22.532	1188.8	0.3884	27.183	1125.4	0.3953	33.686	1008.1	0.4112
10	22.313	1188.6	0.3572	26.956	1124.1	0.3635	33.624	1023.2	0.3794
11	21.969	1177.3	0.3306	26.589	1120.2	0.3365	33.428	1039.2	0.3521
12	21.539	1159.2	0.3080	26.131	1115.5	0.3133	33.149	1056.1	0.3287
13	21.068	1138.3	0.2886	25.636	1111.5	0.2935	32.835	1073.5	0.3083
14	20.581	1117.6	0.2717	25.124	1107.3	0.2763	32.496	1090.5	0.2905
15	20.046	1094.4	0.2569	24.550	1100.8	0.2612	32.086	1106.8	0.2747
16	19.404	1064.5	0.2439	23.833	1088.5	0.2478	31.521	1122.2	0.2605
17	18.563	1025.1	0.2324	22.851	1065.7	0.2360	30.669	1135.5	0.2480
18	17.296	980.1	0.2224	21.386	1034.5	0.2257	29.292	1144.6	0.2371
19	16.242	936.0	0.2137	20.089	997.5	0.2167	27.944	1139.3	0.2272
20	15.123	893.4	0.2061	18.712	959.9	0.2088	26.344	1116.5	0.2183
21	13.770	845.2	0.1994	17.019	912.6	0.2020	24.092	1061.4	0.2103
22	11.689	790.1	0.1939	14.525	858.4	0.1963	20.791	986.9	0.2038
23	9.258	732.0	0.1894	11.545	791.7	0.1918	16.650	889.4	0.1985
24	3.841	630.2	0.1867	4.823	653.2	0.1891	7.059	689.4	0.1954
25	2.230	600.6	0.1854	2.791	613.5	0.1877	4.057	632.2	0.1937

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E3 (continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.427	589.1	0.7396
2	22.583	653.4	0.7396
3	29.327	663.0	0.7181
4	32.287	672.1	0.6649
5	33.175	687.7	0.6029
6	33.297	697.1	0.5436
7	33.254	716.5	0.4922
8	33.275	733.0	0.4487
9	33.748	749.8	0.4118
10	33.688	756.7	0.3800
11	33.494	763.6	0.3528
12	33.217	770.6	0.3294
13	32.903	770.6	0.3090
14	32.563	767.1	0.2911
15	32.152	763.6	0.2752
16	31.586	760.2	0.2612
17	30.732	753.3	0.2486
18	29.352	743.0	0.2377
19	28.002	736.3	0.2277
20	26.399	726.3	0.2188
21	24.142	710.0	0.2108
22	20.834	687.7	0.2043
23	16.684	660.0	0.1990
24	7.072	599.0	0.1958
25	4.064	582.3	0.1941

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E4

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.570	658.3	0.7396	2.712	678.3	0.7396
2	0.000		0.7396	5.762	992.5	0.7396	9.904	1093.2	0.7396
3	0.000		0.7158	7.819	1104.8	0.7158	13.268	1215.1	0.7108
4	0.000	Data	0.6565	8.852	1209.0	0.6565	14.664	1279.7	0.6478
5	0.000	Not	0.5853	9.132	1238.9	0.5853	14.844	1261.6	0.5755
6	0.000	Required	0.5182	9.108	1236.3	0.5182	14.623	1226.6	0.5096
7	0.000		0.4627	9.005	1225.2	0.4627	14.347	1196.7	0.4560
8	0.000		0.4180	8.899	1214.0	0.4180	14.111	1174.7	0.4129
9	0.000		0.3811	8.926	1216.8	0.3811	14.100	1168.3	0.3774
10	0.000		0.3500	8.804	1203.9	0.3500	13.894	1154.4	0.3474
11	0.000		0.3239	8.638	1186.6	0.3239	13.655	1142.4	0.3221
12	0.000		0.3018	8.425	1164.7	0.3018	13.378	1131.7	0.3005
13	0.000		0.2829	8.185	1140.6	0.2829	13.074	1121.8	0.2819
14	0.000		0.2666	7.925	1115.0	0.2666	12.754	1112.2	0.2657
15	0.000		0.2524	7.642	1087.9	0.2524	12.406	1102.0	0.2516
16	0.000		0.2400	7.323	1058.1	0.2400	12.010	1090.0	0.2391
17	0.000		0.2292	6.929	1022.5	0.2292	11.501	1072.3	0.2282
18	0.000		0.2200	6.283	967.0	0.2200	10.635	1039.3	0.2185
19	0.000		0.2121	5.869	933.1	0.2121	10.016	1009.5	0.2103
20	0.000		0.2053	5.480	902.4	0.2053	9.378	974.6	0.2031
21	0.000		0.1993	5.081	872.0	0.1993	8.653	930.8	0.1968
22	0.000		0.1941	4.339	818.4	0.1941	7.385	864.6	0.1915
23	0.000		0.1900	3.478	760.5	0.1900	5.902	792.6	0.1872
24	0.000		0.1873	1.390	636.2	0.1873	2.410	651.6	0.1844
25	0.000		0.1862	0.825	605.9	0.1862	1.413	613.1	0.1833
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.810	628.6	0.7396	4.291	610.7	0.7396	4.882	597.3	0.7396
2	13.925	843.8	0.7396	15.603	751.5	0.7396	17.559	689.8	0.7396
3	18.439	884.6	0.7185	20.562	772.8	0.7217	22.943	698.3	0.7252
4	20.408	929.9	0.6653	22.787	802.5	0.6727	25.368	710.8	0.6806
5	20.919	957.2	0.6033	23.486	825.0	0.6156	26.228	721.0	0.6288
6	20.907	974.9	0.5447	23.634	844.7	0.5612	26.562	733.0	0.5799
7	20.753	985.4	0.4942	23.613	861.5	0.5136	26.752	746.8	0.5373
8	20.579	990.8	0.4514	23.547	875.4	0.4725	26.916	762.2	0.5006
9	20.671	999.8	0.4147	23.759	891.0	0.4363	27.414	781.8	0.4680
10	20.441	997.7	0.3831	23.586	898.6	0.4045	27.473	798.1	0.4390
11	20.136	991.9	0.3562	23.321	903.9	0.3771	27.429	813.9	0.4135
12	19.757	983.2	0.3331	22.974	908.2	0.3534	27.298	829.6	0.3909
13	19.328	972.4	0.3130	22.571	911.8	0.3327	27.103	845.1	0.3708
14	18.853	959.2	0.2955	22.115	914.3	0.3147	26.846	860.2	0.3528
15	18.323	944.1	0.2801	21.591	915.1	0.2988	26.506	874.5	0.3366
16	17.714	926.7	0.2665	20.971	913.6	0.2846	26.055	887.7	0.3221
17	16.958	906.9	0.2546	20.179	908.8	0.2723	25.412	899.6	0.3093
18	15.808	884.8	0.2447	18.974	901.4	0.2621	24.326	909.2	0.2990
19	14.855	859.5	0.2356	17.918	887.7	0.2525	23.292	911.0	0.2886
20	13.827	830.8	0.2275	16.734	867.5	0.2438	22.008	902.9	0.2789
21	12.584	794.4	0.2200	15.225	834.1	0.2356	20.159	875.9	0.2694
22	10.648	749.8	0.2139	12.930	791.1	0.2292	17.340	836.0	0.2625
23	8.380	700.6	0.2086	10.156	734.3	0.2235	13.709	774.8	0.2559
24	3.404	615.6	0.2055	4.113	627.2	0.2199	5.537	641.2	0.2513
25	1.942	590.8	0.2029	2.314	596.3	0.2165	3.047	602.6	0.2459

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E4 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	4.895	602.2	0.7396
2	17.605	719.5	0.7396
3	23.003	743.0	0.7253
4	25.437	774.1	0.6808
5	26.302	792.0	0.6291
6	26.640	806.5	0.5802
7	26.834	821.4	0.5377
8	27.001	832.7	0.5010
9	27.503	848.1	0.4684
10	27.565	859.8	0.4395
11	27.523	867.7	0.4139
12	27.404	916.7	0.3914
13	27.249	1103.0	0.3714
14	27.002	1155.6	0.3533
15	26.660	1144.9	0.3369
16	26.203	1113.3	0.3224
17	25.552	1072.7	0.3095
18	24.458	1033.6	0.2991
19	23.416	996.0	0.2887
20	22.122	951.1	0.2790
21	20.261	900.0	0.2695
22	17.428	844.2	0.2625
23	13.779	777.7	0.2559
24	5.565	642.1	0.2513
25	3.063	607.4	0.2460

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E5

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.737	669.5	0.7396	2.906	681.3	0.7396
2	0.000		0.7396	6.321	1047.1	0.7396	10.562	1110.2	0.7396
3	0.000		0.7092	8.461	1168.4	0.7092	13.992	1229.4	0.7056
4	0.000	Data	0.6436	9.352	1262.9	0.6436	15.256	1296.5	0.6374
5	0.000	Not	0.5692	9.388	1266.9	0.5692	15.248	1288.5	0.5619
6	0.000	Required	0.5029	9.142	1240.0	0.5029	14.874	1265.2	0.4958
7	0.000		0.4501	8.888	1212.8	0.4501	14.500	1243.7	0.4435
8	0.000		0.4082	8.693	1192.3	0.4082	14.210	1227.0	0.4019
9	0.000		0.3736	8.664	1189.3	0.3736	14.166	1224.4	0.3677
10	0.000		0.3445	8.512	1173.6	0.3445	13.941	1211.7	0.3388
11	0.000		0.3200	8.340	1156.1	0.3200	13.702	1200.1	0.3145
12	0.000		0.2991	8.151	1137.2	0.2991	13.448	1189.0	0.2937
13	0.000		0.2810	7.950	1117.4	0.2810	13.182	1178.1	0.2756
14	0.000		0.2654	7.735	1096.7	0.2654	12.901	1167.0	0.2599
15	0.000		0.2516	7.497	1074.2	0.2516	12.590	1154.9	0.2460
16	0.000		0.2395	7.225	1049.1	0.2395	12.227	1140.0	0.2337
17	0.000		0.2288	6.876	1017.8	0.2288	11.747	1118.9	0.2228
18	0.000		0.2196	6.280	966.7	0.2196	10.915	1081.9	0.2131
19	0.000		0.2117	5.921	937.2	0.2117	10.340	1049.2	0.2048
20	0.000		0.2048	5.592	911.1	0.2048	9.751	1011.2	0.1977
21	0.000		0.1986	5.241	884.1	0.1986	9.057	963.4	0.1913
22	0.000		0.1932	4.517	831.0	0.1932	7.778	891.0	0.1859
23	0.000		0.1890	3.648	771.6	0.1890	6.253	812.9	0.1816
24	0.000		0.1861	1.473	640.8	0.1861	2.581	659.7	0.1786
25	0.000		0.1850	0.878	608.7	0.1850	1.522	618.0	0.1776
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.208	642.0	0.7396	4.980	642.8	0.7396	6.468	656.9	0.7396
2	15.286	904.2	0.7396	17.978	891.6	0.7396	22.677	912.5	0.7396
3	20.231	971.1	0.7130	23.774	953.3	0.7156	29.415	933.0	0.7177
4	22.392	1050.7	0.6534	26.441	1028.1	0.6590	32.369	957.4	0.6641
5	22.893	1099.0	0.5851	27.216	1071.3	0.5931	33.245	966.1	0.6017
6	22.788	1125.5	0.5219	27.224	1089.6	0.5307	33.347	974.3	0.5422
7	22.557	1139.8	0.4685	27.023	1094.5	0.4771	33.272	985.4	0.4907
8	22.381	1151.4	0.4247	26.863	1097.2	0.4325	33.265	999.0	0.4473
9	22.527	1171.0	0.3881	27.066	1106.6	0.3953	33.703	1020.4	0.4104
10	22.300	1170.8	0.3570	26.821	1103.6	0.3637	33.625	1035.9	0.3788
11	21.959	1160.2	0.3305	26.451	1098.8	0.3368	33.425	1051.9	0.3517
12	21.539	1143.3	0.3080	26.003	1094.2	0.3138	33.152	1068.7	0.3283
13	21.067	1122.6	0.2885	25.524	1093.1	0.2941	32.845	1085.5	0.3080
14	20.549	1099.3	0.2716	25.034	1097.7	0.2768	32.514	1101.2	0.2901
15	19.960	1072.7	0.2569	24.503	1107.3	0.2618	32.127	1115.7	0.2743
16	19.255	1040.8	0.2439	23.829	1112.5	0.2484	31.582	1128.8	0.2602
17	18.348	1002.4	0.2324	22.863	1102.6	0.2365	30.726	1140.1	0.2477
18	17.034	960.9	0.2225	21.388	1076.3	0.2263	29.322	1147.5	0.2368
19	15.968	920.6	0.2139	20.084	1038.5	0.2171	27.944	1139.8	0.2268
20	14.898	882.8	0.2063	18.731	995.5	0.2093	26.334	1113.6	0.2178
21	13.620	839.1	0.1997	17.058	938.5	0.2023	24.068	1055.3	0.2099
22	11.607	787.4	0.1942	14.572	875.0	0.1965	20.757	979.7	0.2034
23	9.223	731.0	0.1898	11.581	800.0	0.1920	16.609	883.3	0.1981
24	3.836	629.9	0.1870	4.837	655.0	0.1892	7.036	687.1	0.1950
25	2.231	600.3	0.1856	2.798	614.0	0.1877	4.043	631.0	0.1932

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E5 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.482	605.5	0.7396
2	22.719	704.4	0.7396
3	29.467	716.5	0.7177
4	32.426	733.0	0.6642
5	33.307	749.8	0.6019
6	33.416	774.1	0.5427
7	33.346	792.0	0.4912
8	33.344	810.2	0.4479
9	33.787	828.9	0.4110
10	33.712	840.3	0.3795
11	33.513	844.2	0.3523
12	33.240	844.2	0.3289
13	32.933	844.2	0.3085
14	32.601	840.3	0.2907
15	32.211	828.9	0.2748
16	31.664	821.4	0.2607
17	30.806	813.9	0.2481
18	29.400	806.5	0.2372
19	28.019	795.6	0.2273
20	26.404	777.7	0.2183
21	24.133	760.1	0.2103
22	20.814	733.0	0.2038
23	16.655	697.1	0.1985
24	7.055	616.0	0.1954
25	4.053	590.6	0.1937

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E6

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.670	665.0	0.7396	2.739	670.2	0.7396
2	0.000		0.7396	6.109	1026.0	0.7396	10.005	1052.0	0.7396
3	0.000		0.7121	8.215	1143.6	0.7121	13.369	1165.0	0.7111
4	0.000	Data	0.6493	9.158	1241.7	0.6493	14.707	1232.6	0.6481
5	0.000	Not	0.5759	9.290	1256.1	0.5759	14.794	1224.7	0.5755
6	0.000	Required	0.5091	9.136	1239.3	0.5091	14.482	1197.4	0.5097
7	0.000		0.4552	8.955	1219.9	0.4552	14.149	1171.7	0.4565
8	0.000		0.4121	8.811	1204.7	0.4121	13.886	1151.9	0.4139
9	0.000		0.3764	8.814	1205.0	0.3764	13.858	1146.9	0.3788
10	0.000		0.3463	8.668	1189.7	0.3463	13.636	1134.5	0.3491
11	0.000		0.3211	8.483	1170.6	0.3211	13.380	1123.1	0.3241
12	0.000		0.2996	8.264	1148.5	0.2996	13.093	1112.2	0.3027
13	0.000		0.2812	8.026	1124.9	0.2812	12.790	1102.0	0.2843
14	0.000		0.2654	7.772	1100.2	0.2654	12.474	1092.3	0.2683
15	0.000		0.2516	7.499	1074.4	0.2516	12.138	1082.5	0.2543
16	0.000		0.2395	7.198	1046.7	0.2395	11.772	1072.6	0.2420
17	0.000		0.2290	6.830	1013.8	0.2290	11.321	1060.0	0.2311
18	0.000		0.2200	6.215	961.3	0.2200	10.525	1033.1	0.2216
19	0.000		0.2122	5.823	929.4	0.2122	9.962	1008.4	0.2134
20	0.000		0.2054	5.447	899.8	0.2054	9.352	975.5	0.2061
21	0.000		0.1994	5.055	870.1	0.1994	8.641	932.6	0.1996
22	0.000		0.1942	4.318	816.9	0.1942	7.380	866.5	0.1941
23	0.000		0.1901	3.461	759.4	0.1901	5.896	793.8	0.1899
24	0.000		0.1875	1.382	635.8	0.1875	2.404	651.8	0.1871
25	0.000		0.1864	0.820	605.6	0.1864	1.405	612.8	0.1859
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.842	629.0	0.7396	4.275	605.5	0.7396	4.793	592.6	0.7396
2	14.052	846.0	0.7396	15.565	730.6	0.7396	17.289	673.3	0.7396
3	18.585	888.1	0.7185	20.505	750.0	0.7217	22.611	681.4	0.7248
4	20.507	934.5	0.6651	22.671	777.5	0.6725	24.973	693.4	0.6798
5	20.926	962.0	0.6029	23.285	800.1	0.6152	25.760	704.1	0.6279
6	20.813	978.9	0.5446	23.355	822.0	0.5615	26.030	716.7	0.5797
7	20.581	987.7	0.4945	23.282	841.5	0.5150	26.186	731.4	0.5384
8	20.347	990.2	0.4522	23.182	858.3	0.4748	26.334	747.7	0.5029
9	20.382	995.7	0.4158	23.361	876.8	0.4395	26.811	767.7	0.4717
10	20.098	990.3	0.3845	23.157	887.2	0.4082	26.852	784.6	0.4437
11	19.743	981.7	0.3578	22.865	895.5	0.3812	26.790	800.8	0.4191
12	19.329	970.8	0.3349	22.506	902.9	0.3577	26.651	816.6	0.3972
13	18.875	958.1	0.3150	22.095	908.6	0.3372	26.451	832.0	0.3775
14	18.383	943.4	0.2976	21.631	912.4	0.3191	26.183	846.6	0.3597
15	17.847	927.1	0.2825	21.101	913.2	0.3032	25.833	860.3	0.3436
16	17.252	908.8	0.2690	20.484	910.3	0.2890	25.381	873.0	0.3290
17	16.540	888.3	0.2572	19.723	903.7	0.2765	24.760	884.0	0.3161
18	15.449	865.8	0.2473	18.558	893.8	0.2661	23.706	892.8	0.3056
19	14.543	840.4	0.2382	17.532	878.1	0.2564	22.696	894.1	0.2950
20	13.535	811.9	0.2299	16.351	855.9	0.2474	21.412	885.9	0.2851
21	12.309	776.5	0.2223	14.845	821.2	0.2391	19.570	859.8	0.2755
22	10.397	734.0	0.2161	12.568	778.3	0.2325	16.774	821.0	0.2683
23	8.173	688.5	0.2107	9.846	723.3	0.2265	13.216	762.3	0.2616
24	3.315	611.1	0.2076	3.979	623.0	0.2229	5.317	636.3	0.2567
25	1.892	588.5	0.2051	2.239	594.0	0.2194	2.923	599.9	0.2509

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E6 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	4.805	598.9	0.7396
2	17.331	704.4	0.7396
3	22.666	726.3	0.7249
4	25.038	760.2	0.68
5	25.834	792.0	0.6282
6	26.123	863.7	0.5801
7	26.324	1062.7	0.5390
8	26.490	1155.6	0.5035
9	26.972	1182.9	0.4721
10	27.012	1177.4	0.4440
11	26.947	1161.0	0.4192
12	26.805	1144.9	0.3972
13	26.602	1129.0	0.3774
14	26.331	1113.3	0.3596
15	25.978	1097.9	0.3434
16	25.522	1077.7	0.3289
17	24.896	1052.9	0.3159
18	23.837	1028.8	0.3054
19	22.821	1000.6	0.2948
20	21.530	968.8	0.2849
21	19.677	920.9	0.2753
22	16.867	863.7	0.2681
23	13.292	799.2	0.2614
24	5.350	656.9	0.2565
25	2.941	613.1	0.2507

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E7

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.772	671.9	0.7396	2.859	672.2	0.7396
2	0.000		0.7396	6.442	1059.2	0.7396	10.403	1062.8	0.7396
3	0.000		0.7069	8.595	1182.2	0.7069	13.805	1174.4	0.7068
4	0.000	Data	0.6393	9.465	1275.4	0.6393	15.084	1245.0	0.6396
5	0.000	Not	0.5638	9.484	1277.5	0.5638	15.106	1245.5	0.5648
6	0.000	Required	0.4975	9.234	1250.0	0.4975	14.760	1228.6	0.4989
7	0.000		0.4451	8.980	1222.6	0.4451	14.407	1211.3	0.4465
8	0.000		0.4035	8.791	1202.6	0.4035	14.134	1196.9	0.4047
9	0.000		0.3691	8.771	1200.5	0.3691	14.106	1195.5	0.3703
10	0.000		0.3403	8.630	1185.8	0.3403	13.898	1184.1	0.3413
11	0.000		0.3160	8.472	1169.5	0.3160	13.677	1173.5	0.3168
12	0.000		0.2953	8.300	1152.1	0.2953	13.442	1163.0	0.2958
13	0.000		0.2773	8.115	1133.6	0.2773	13.194	1152.6	0.2777
14	0.000		0.2617	7.909	1113.5	0.2617	12.923	1142.0	0.2619
15	0.000		0.2479	7.670	1090.5	0.2479	12.611	1130.1	0.2478
16	0.000		0.2358	7.387	1064.0	0.2358	12.237	1115.6	0.2354
17	0.000		0.2252	7.022	1030.8	0.2252	11.747	1095.9	0.2245
18	0.000		0.2159	6.404	977.1	0.2159	10.918	1063.5	0.2149
19	0.000		0.2081	6.021	945.4	0.2081	10.364	1037.9	0.2066
20	0.000		0.2012	5.670	917.2	0.2012	9.805	1007.8	0.1992
21	0.000		0.1951	5.306	889.0	0.1951	9.142	966.1	0.1927
22	0.000		0.1898	4.576	835.2	0.1898	7.882	896.7	0.1871
23	0.000		0.1855	3.702	775.1	0.1855	6.355	818.4	0.1827
24	0.000		0.1827	1.497	642.1	0.1827	2.627	661.7	0.1797
25	0.000		0.1816	0.893	609.5	0.1816	1.547	618.9	0.1785
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.911	625.7	0.7396	4.356	606.8	0.7396	5.070	605.2	0.7396
2	14.261	830.3	0.7396	15.817	736.0	0.7396	18.171	718.9	0.7396
3	18.790	870.4	0.7154	20.774	757.1	0.7189	23.631	728.4	0.7230
4	20.655	916.0	0.6590	22.890	785.6	0.6670	25.974	743.2	0.6763
5	21.030	944.7	0.5953	23.452	807.6	0.6085	26.704	754.4	0.6236
6	20.925	964.8	0.5370	23.501	826.1	0.5547	26.935	766.6	0.5753
7	20.748	979.8	0.4878	23.443	840.7	0.5086	27.075	780.2	0.5336
8	20.635	993.7	0.4463	23.420	852.0	0.4687	27.254	794.3	0.4972
9	20.875	1017.3	0.4106	23.753	863.8	0.4335	27.831	811.7	0.4643
10	20.837	1032.7	0.3798	23.743	867.4	0.4023	27.998	824.6	0.4345
11	20.718	1042.0	0.3531	23.638	869.2	0.3751	28.062	837.1	0.4079
12	20.499	1043.4	0.3299	23.433	871.0	0.3512	28.027	849.8	0.3843
13	20.206	1039.3	0.3097	23.158	873.3	0.3305	27.924	862.9	0.3634
14	19.837	1030.4	0.2919	22.811	876.1	0.3123	27.752	876.5	0.3448
15	19.376	1017.0	0.2761	22.371	878.9	0.2962	27.489	890.4	0.3283
16	18.808	999.8	0.2622	21.817	880.7	0.2820	27.109	904.4	0.3137
17	18.077	978.9	0.2500	21.088	880.9	0.2695	26.539	917.3	0.3007
18	16.960	954.5	0.2396	19.965	880.2	0.2592	25.552	928.5	0.2901
19	16.045	924.8	0.2301	19.018	876.0	0.2495	24.644	931.8	0.2796
20	15.048	890.2	0.2215	17.964	868.6	0.2407	23.497	924.1	0.2697
21	13.782	844.7	0.2136	16.532	847.6	0.2325	21.720	896.0	0.2601
22	11.752	790.2	0.2072	14.216	812.6	0.2260	18.874	854.7	0.2529
23	9.302	729.6	0.2017	11.267	755.0	0.2201	15.057	791.2	0.2463
24	3.813	626.1	0.1983	4.603	634.8	0.2161	6.161	649.0	0.2418
25	2.184	596.5	0.1958	2.595	599.8	0.2123	3.411	607.1	0.2368

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E7 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node No.	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	5.094	639.5	0.7396
2	18.251	859.8	0.7396
3	23.733	900.0	0.7231
4	26.088	951.1	0.6765
5	26.825	982.3	0.6238
6	27.059	996.0	0.5755
7	27.200	1000.6	0.5338
8	27.380	1005.2	0.4973
9	27.960	1019.3	0.4643
10	28.128	1024.0	0.4345
11	28.192	1024.0	0.4079
12	28.157	1024.0	0.3843
13	28.053	1019.3	0.3634
14	27.879	1009.9	0.3447
15	27.613	996.0	0.3283
16	27.228	973.3	0.3136
17	26.652	946.7	0.3007
18	25.658	916.7	0.2901
19	24.742	883.7	0.2795
20	23.589	859.8	0.2697
21	21.802	821.4	0.2601
22	18.944	777.7	0.2529
23	15.114	733.0	0.2463
24	6.186	633.3	0.2417
25	3.425	601.8	0.2368

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E8

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.668	664.9	0.7396	2.807	678.0	0.7396
2	0.000		0.7396	6.109	1026.0	0.7396	10.254	1093.7	0.7396
3	0.000		0.7125	8.231	1145.2	0.7125	13.667	1212.9	0.7085
4	0.000	Data	0.6500	9.155	1241.4	0.6500	14.974	1281.0	0.6430
5	0.000	Not	0.5771	9.244	1251.1	0.5771	15.034	1275.7	0.5690
6	0.000	Required	0.5108	9.044	1229.4	0.5108	14.722	1255.5	0.5028
7	0.000		0.4572	8.818	1205.4	0.4572	14.389	1236.5	0.4497
8	0.000		0.4146	8.628	1185.6	0.4146	14.100	1219.1	0.4075
9	0.000		0.3795	8.589	1181.5	0.3795	14.037	1215.0	0.3729
10	0.000		0.3500	8.423	1164.5	0.3500	13.791	1201.2	0.3437
11	0.000		0.3251	8.238	1145.9	0.3251	13.534	1188.9	0.3191
12	0.000		0.3039	8.036	1125.9	0.3039	13.266	1177.7	0.2980
13	0.000		0.2856	7.822	1105.0	0.2856	12.989	1167.2	0.2798
14	0.000		0.2698	7.596	1083.5	0.2698	12.700	1156.7	0.2638
15	0.000		0.2559	7.350	1060.6	0.2559	12.385	1145.4	0.2498
16	0.000		0.2437	7.070	1035.1	0.2437	12.023	1132.1	0.2373
17	0.000		0.2330	6.718	1004.0	0.2330	11.551	1112.9	0.2263
18	0.000		0.2237	6.125	953.9	0.2237	10.728	1077.0	0.2165
19	0.000		0.2157	5.771	925.2	0.2157	10.159	1044.6	0.2081
20	0.000		0.2088	5.449	900.0	0.2088	9.574	1006.4	0.2009
21	0.000		0.2027	5.106	873.9	0.2027	8.883	958.1	0.1946
22	0.000		0.1973	4.393	822.2	0.1973	7.614	886.0	0.1892
23	0.000		0.1930	3.538	764.4	0.1930	6.104	808.5	0.1849
24	0.000		0.1901	1.424	638.1	0.1901	2.512	657.8	0.1818
25	0.000		0.1890	0.847	607.0	0.1890	1.478	616.8	0.1807
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.170	646.0	0.7396	4.927	641.1	0.7396	6.347	652.2	0.7396
2	15.182	922.5	0.7396	17.831	885.2	0.7396	22.345	895.7	0.7396
3	20.128	990.2	0.7139	23.632	947.8	0.7164	29.083	917.3	0.7190
4	22.310	1069.4	0.6551	26.343	1025.7	0.6605	32.090	941.9	0.6665
5	22.862	1117.0	0.5867	27.193	1072.6	0.5948	33.043	950.7	0.6045
6	22.823	1144.3	0.5228	27.289	1094.5	0.5318	33.228	958.3	0.5448
7	22.654	1161.0	0.4691	27.166	1102.1	0.4778	33.225	968.7	0.4929
8	22.500	1175.0	0.4250	27.042	1107.1	0.4331	33.254	982.1	0.4493
9	22.643	1196.7	0.3883	27.259	1119.5	0.3957	33.713	1003.7	0.4122
10	22.399	1196.9	0.3571	27.014	1119.4	0.3639	33.644	1019.7	0.3805
11	22.046	1186.7	0.3306	26.642	1116.2	0.3368	33.452	1036.4	0.3533
12	21.625	1170.8	0.3080	26.197	1112.1	0.3137	33.190	1053.7	0.3298
13	21.151	1150.5	0.2885	25.702	1108.6	0.2938	32.882	1071.7	0.3093
14	20.609	1125.0	0.2716	25.138	1105.0	0.2765	32.509	1090.4	0.2914
15	19.967	1092.9	0.2567	24.463	1099.5	0.2614	32.022	1109.1	0.2756
16	19.206	1055.1	0.2436	23.626	1087.0	0.2480	31.361	1127.0	0.2615
17	18.259	1011.9	0.2323	22.531	1063.1	0.2363	30.408	1141.6	0.2491
18	16.912	966.4	0.2223	20.970	1029.5	0.2261	28.932	1150.4	0.2382
19	15.821	923.3	0.2138	19.610	988.9	0.2173	27.502	1143.1	0.2283
20	14.722	882.9	0.2065	18.209	945.4	0.2095	25.841	1116.5	0.2195
21	13.422	837.4	0.2001	16.515	891.7	0.2029	23.548	1057.5	0.2116
22	11.401	784.6	0.1946	14.034	833.1	0.1974	20.231	980.8	0.2051
23	9.037	728.7	0.1903	11.108	766.9	0.1929	16.135	883.2	0.1999
24	3.751	629.0	0.1875	4.629	643.2	0.1901	6.813	686.2	0.1968
25	2.181	600.0	0.1863	2.680	607.8	0.1889	3.915	630.5	0.1951

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E8 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	6.357	592.3	0.7396
2	22.380	678.5	0.7396
3	29.125	684.5	0.719
4	32.136	697.1	0.6666
5	33.093	710.0	0.6047
6	33.284	729.6	0.5451
7	33.286	746.4	0.4933
8	33.321	767.1	0.4499
9	33.784	781.2	0.4129
10	33.719	795.6	0.3811
11	33.528	799.2	0.3539
12	33.268	806.5	0.3304
13	32.960	806.5	0.3099
14	32.585	799.2	0.2920
15	32.097	795.6	0.2761
16	31.434	788.4	0.2621
17	30.479	781.2	0.2496
18	29.001	774.1	0.2387
19	27.569	767.1	0.2289
20	25.904	753.3	0.2200
21	23.606	736.3	0.2121
22	20.281	710.0	0.2057
23	16.175	678.3	0.2004
24	6.829	607.4	0.1972
25	3.923	585.1	0.1955

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E9

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.625	662.0	0.7396	2.694	670.2	0.7396
2	0.000		0.7396	5.919	1007.5	0.7396	9.806	1050.6	0.7396
3	0.000		0.7148	7.950	1117.4	0.7148	13.109	1165.8	0.7120
4	0.000	Data	0.6552	8.864	1210.2	0.6552	14.454	1239.8	0.6501
5	0.000	Not	0.5845	8.990	1223.6	0.5845	14.604	1244.1	0.5783
6	0.000	Required	0.5189	8.829	1206.6	0.5189	14.367	1230.7	0.5126
7	0.000		0.4651	8.634	1186.2	0.4651	14.092	1216.7	0.4591
8	0.000		0.4220	8.474	1169.7	0.4220	13.854	1203.2	0.4163
9	0.000		0.3865	8.466	1168.9	0.3865	13.836	1201.5	0.3810
10	0.000		0.3565	8.334	1155.5	0.3565	13.638	1190.2	0.3512
11	0.000		0.3311	8.186	1140.7	0.3311	13.425	1179.2	0.3260
12	0.000		0.3095	8.022	1124.5	0.3095	13.199	1168.8	0.3045
13	0.000		0.2908	7.843	1107.1	0.2908	12.960	1158.9	0.2858
14	0.000		0.2744	7.643	1088.0	0.2744	12.697	1148.5	0.2694
15	0.000		0.2601	7.411	1066.2	0.2601	12.393	1136.8	0.2550
16	0.000		0.2475	7.134	1040.9	0.2475	12.024	1121.9	0.2422
17	0.000		0.2365	6.772	1008.7	0.2365	11.530	1101.0	0.2308
18	0.000		0.2269	6.161	956.8	0.2269	10.684	1064.8	0.2209
19	0.000		0.2188	5.794	927.1	0.2188	10.111	1034.1	0.2124
20	0.000		0.2117	5.468	901.4	0.2117	9.543	999.3	0.2048
21	0.000		0.2054	5.133	875.9	0.2054	8.887	955.0	0.1983
22	0.000		0.1998	4.433	825.0	0.1998	7.654	886.0	0.1926
23	0.000		0.1954	3.587	767.6	0.1954	6.167	810.1	0.1881
24	0.000		0.1924	1.449	639.5	0.1924	2.548	658.9	0.1849
25	0.000		0.1912	0.862	607.8	0.1912	1.501	617.5	0.1837
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	3.857	632.9	0.7396	4.278	604.2	0.7396	4.864	596.9	0.7396
2	14.040	861.7	0.7396	15.507	724.9	0.7396	17.448	688.7	0.7396
3	18.553	905.9	0.7190	20.420	744.2	0.7220	22.789	697.5	0.7253
4	20.503	955.1	0.6661	22.617	771.8	0.6731	25.201	711.0	0.6810
5	20.989	983.6	0.6039	23.300	794.5	0.6159	26.064	722.4	0.6291
6	20.947	1000.6	0.5448	23.439	815.9	0.5615	26.405	735.5	0.5804
7	20.767	1009.0	0.4938	23.419	835.4	0.5141	26.613	750.5	0.5380
8	20.557	1011.4	0.4508	23.352	853.2	0.4735	26.789	766.8	0.5018
9	20.605	1017.3	0.4141	23.560	873.7	0.4380	27.291	787.1	0.4700
10	20.339	1011.3	0.3826	23.400	887.5	0.4070	27.363	803.5	0.4414
11	20.017	1001.6	0.3559	23.180	901.0	0.3800	27.352	818.5	0.4160
12	19.648	989.1	0.3327	22.921	915.8	0.3566	27.283	832.5	0.3934
13	19.237	974.3	0.3126	22.618	930.6	0.3360	27.158	845.7	0.3729
14	18.778	957.7	0.2950	22.231	940.6	0.3177	26.947	859.1	0.3545
15	18.251	939.2	0.2795	21.722	943.2	0.3013	26.614	872.7	0.3379
16	17.627	918.6	0.2659	21.064	938.4	0.2866	26.125	885.9	0.3231
17	16.840	895.4	0.2538	20.199	927.6	0.2737	25.406	897.5	0.3099
18	15.663	870.0	0.2436	18.916	913.1	0.2628	24.233	906.4	0.2993
19	14.711	841.8	0.2343	17.810	892.5	0.2527	23.131	906.7	0.2885
20	13.723	811.7	0.2260	16.621	866.3	0.2435	21.818	896.7	0.2784
21	12.545	775.8	0.2183	15.140	828.4	0.2349	19.976	868.3	0.2685
22	10.672	734.1	0.2120	12.891	783.8	0.2282	17.188	827.7	0.2612
23	8.459	689.4	0.2067	10.175	727.9	0.2222	13.629	768.0	0.2543
24	3.473	611.9	0.2033	4.158	625.0	0.2183	5.550	639.4	0.2494
25	1.999	589.1	0.2009	2.360	595.3	0.2149	3.082	602.0	0.2441

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E9 (Continued)

Statepoint 11 (3.67 EFPD Cy 8)			
Node	Burnup	Fuel	Mod. Dens.
No.	(GWd/MTU)	Temp. (K)	(g/cm ³)
	3.67 Cy 8	3.67 Cy 8	3.67 Cy 8
1	4.877	602.2	0.7396
2	17.493	715.7	0.7396
3	22.848	739.7	0.7254
4	25.268	767.1	0.6811
5	26.137	788.4	0.6295
6	26.484	810.2	0.5808
7	26.696	825.1	0.5385
8	26.877	844.2	0.5023
9	27.383	859.8	0.4705
10	27.456	863.7	0.4419
11	27.446	867.7	0.4165
12	27.377	867.7	0.3938
13	27.251	863.7	0.3734
14	27.040	863.7	0.3549
15	26.705	855.8	0.3383
16	26.213	844.2	0.3234
17	25.492	836.5	0.3103
18	24.315	821.4	0.2995
19	23.209	806.5	0.2888
20	21.890	784.8	0.2787
21	20.041	760.2	0.2688
22	17.244	729.6	0.2614
23	13.673	690.8	0.2546
24	5.568	613.1	0.2497
25	3.095	599.0	0.2444

LaSalle Unit 1 Burnup and TH Feedback Parameters Assembly E10

Node No.	Datapoint 5 (BOC Cy 6)			Datapoint 6 (196.1 Cy 6)			Statepoint 7 (BOC Cy 7)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	0.00 Cy 6	0.00 Cy 6	0.00 Cy 6	196.1 Cy 6	196.1 Cy 6	196.1 Cy 6	0.00 Cy 7	0.00 Cy 7	0.00 Cy 7
1	0.000		0.7396	1.740	669.7	0.7396	2.909	681.3	0.7396
2	0.000		0.7396	6.328	1047.8	0.7396	10.573	1110.9	0.7396
3	0.000		0.7091	8.468	1169.1	0.7091	14.003	1230.1	0.7055
4	0.000	Data	0.6433	9.358	1263.6	0.6433	15.265	1297.1	0.6372
5	0.000	Not	0.5688	9.392	1267.3	0.5688	15.253	1288.6	0.5616
6	0.000	Required	0.5025	9.144	1240.2	0.5025	14.877	1265.4	0.4955
7	0.000		0.4498	8.889	1212.9	0.4498	14.502	1243.9	0.4432
8	0.000		0.4079	8.694	1192.4	0.4079	14.212	1227.2	0.4016
9	0.000		0.3734	8.664	1189.3	0.3734	14.166	1224.4	0.3674
10	0.000		0.3443	8.512	1173.6	0.3443	13.942	1211.8	0.3386
11	0.000		0.3198	8.340	1156.1	0.3198	13.702	1200.1	0.3143
12	0.000		0.2989	8.151	1137.2	0.2989	13.448	1189.0	0.2935
13	0.000		0.2808	7.950	1117.4	0.2808	13.182	1178.1	0.2754
14	0.000		0.2652	7.734	1096.6	0.2652	12.901	1167.2	0.2597
15	0.000		0.2514	7.497	1074.2	0.2514	12.590	1154.9	0.2458
16	0.000		0.2393	7.224	1049.0	0.2393	12.227	1140.2	0.2335
17	0.000		0.2287	6.875	1017.7	0.2287	11.747	1119.1	0.2226
18	0.000		0.2195	6.279	966.6	0.2195	10.914	1081.9	0.2130
19	0.000		0.2115	5.921	937.2	0.2115	10.339	1049.0	0.2047
20	0.000		0.2046	5.591	911.0	0.2046	9.750	1011.2	0.1975
21	0.000		0.1984	5.240	884.0	0.1984	9.056	963.4	0.1912
22	0.000		0.1931	4.516	830.9	0.1931	7.777	891.0	0.1858
23	0.000		0.1889	3.647	771.5	0.1889	6.251	812.8	0.1815
24	0.000		0.1859	1.473	640.8	0.1859	2.580	659.6	0.1785
25	0.000		0.1849	0.878	609.4	0.1849	1.522	618.0	0.1774
Node No.	Statepoint 8 (193.2 EFPD Cy 7)			Statepoint 9 (306.8 EFPD Cy 7)			Statepoint 10 (BOC Cy 8)		
	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)	Burnup (GWd/MTU)	Fuel Temp. (K)	Mod. Dens. (g/cm ³)
	193.2 Cy 7	193.2 Cy 7	193.2 Cy 7	306.8 Cy 7	306.8 Cy 7	306.8 Cy 7	0.00 Cy 8	0.00 Cy 8	0.00 Cy 8
1	4.211	642.0	0.7396	4.984	642.9	0.7396	6.472	656.9	0.7396
2	15.297	904.2	0.7396	17.989	891.6	0.7396	22.689	912.6	0.7396
3	20.243	971.2	0.7129	23.787	953.5	0.7155	29.429	933.1	0.7176
4	22.402	1050.8	0.6532	26.452	1028.3	0.6587	32.380	957.4	0.6639
5	22.900	1099.2	0.5849	27.223	1071.3	0.5929	33.253	966.2	0.6014
6	22.792	1125.6	0.5216	27.228	1089.6	0.5304	33.353	974.4	0.5420
7	22.558	1139.7	0.4683	27.025	1094.7	0.4768	33.275	985.4	0.4904
8	22.382	1151.3	0.4244	26.864	1097.2	0.4323	33.267	999.1	0.4470
9	22.527	1171.0	0.3878	27.066	1106.6	0.3950	33.704	1020.5	0.4102
10	22.299	1170.5	0.3568	26.820	1103.6	0.3635	33.625	1036.0	0.3786
11	21.958	1160.1	0.3303	26.449	1098.7	0.3366	33.424	1052.0	0.3515
12	21.538	1143.2	0.3078	26.002	1094.2	0.3137	33.151	1068.7	0.3282
13	21.066	1122.5	0.2884	25.523	1093.1	0.2938	32.844	1085.5	0.3078
14	20.547	1099.1	0.2715	25.032	1097.7	0.2767	32.513	1101.3	0.2899
15	19.959	1072.6	0.2567	24.501	1107.1	0.2616	32.125	1115.7	0.2741
16	19.254	1040.7	0.2437	23.827	1112.3	0.2483	31.580	1128.8	0.2600
17	18.347	1002.3	0.2323	22.861	1102.5	0.2364	30.724	1140.1	0.2475
18	17.032	960.8	0.2223	21.386	1076.3	0.2261	29.320	1147.5	0.2366
19	15.967	920.6	0.2138	20.082	1038.4	0.2171	27.942	1139.8	0.2266
20	14.897	882.8	0.2062	18.728	995.2	0.2091	26.331	1113.6	0.2177
21	13.618	839.0	0.1996	17.055	938.4	0.2022	24.065	1055.3	0.2098
22	11.605	787.3	0.1941	14.569	874.8	0.1965	20.754	979.7	0.2033
23	9.221	731.0	0.1896	11.579	800.0	0.1918	16.606	883.2	0.1979
24	3.836	629.9	0.1869	4.837	655.0	0.1890	7.035	687.0	0.1949
25	2.231	600.3	0.1856	2.798	614.0	0.1876	4.043	631.0	0.1932