NRC FORM 618 (8-2000) 10 CFR 71			U.S. NUCLEAR REGULATORY COMMISSION		
CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES					
1. a. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d. PACKAGE IDENTIFICATION NUMBER	PAGE	PAGES
9325	0 - Draft	71-9325	USA/9325/B(U)F-96	1 OF	5

2. PREAMBLE

a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."

b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.

3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION

a. ISSUED TO *(Name and Address)*

Holtec International
Holtec Center
555 Lincoln Drive West
Marlton, NJ 08053

b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION

Holtec International Report No. HI-2063570, Safety Analysis Report on the HI-STAR 180 Package, Revision 0, dated TBD

4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

5.(a) Packaging

(1) Model No.: HI-STAR 180

(2) Description

The HI-STAR 180 Packaging consists of a cask system with a pair of impact limiters, support saddles and if necessary a personnel barrier. The HI-STAR 180 Packaging features a dual purpose cask system designed for both storage and transportation of used nuclear fuel with interchangeable fuel baskets that provide criticality control and a cask that provides the containment boundary, helium retention boundary, moderator exclusion barrier, gamma and neutron radiation shielding, and heat rejection. The outer diameter of the HI-STAR 180 Packaging is approximately 2700 mm (106.3 inches) without impact limiters and approximately 3250 mm (128 inches) with impact limiters. The HI-STAR 180 System consists of the HI-STAR 180 Packaging without support saddles and personnel barrier. Maximum gross weight of the loaded HI-STAR 180 System as presented for transport is 142 Metric Tons (313,056 pounds). Specific tolerances germane to the safety analyses are called out in the drawings listed below.

Fuel Basket

There are two fuel basket models designated as the F-32 and F-37. The double digits in the model number designate the fuel assembly capacity. The F-32 series and the F-37 series are designed to contain Pressurized Water Reactor (PWR) fuel assemblies.

The HI-STAR 180 basket is a honeycomb structure consisting of multiple interlocking panels. The fuel basket designs vary based on the model. Both the F-32 and F-37 feature flux traps between some but not all cells.

5.(a) (2) Description (continued)

Cask

The HI-STAR 180 Cask is a steel cylinder with a welded bottom baseplate (containment baseplate) and features a double lid closure system. The cask inner shell (containment shell) forms an internal cylindrical cavity for housing the fuel basket. The outer surface of the containment shell is buttressed with a shielding cylinder (monolithic shield cylinder) optimized for gamma and neutron shielding. Each cask closure lid features a dual metallic self-energizing seal system designed to ensure its containment or moderator exclusion functions.

The containment system boundary consists of the cask containment shell, containment baseplate, containment closure flange and a bolted closure lid. Either closure lid may be designated by the user to serve as a containment boundary. The closure lid and its subcomponents designated to perform the containment function may consist of either the primary closure lid (with bolts and inner seal) and primary closure lid vent and drain port covers (with bolts and inner seals); or the secondary closure lid (with bolts and inner seal) and secondary closure lid access port plug (with seal).

The cask also features one bolted closure lid as a moderator exclusion barrier. Either closure lid may be designated by the user to serve as a moderator exclusion barrier. The closure lid and its subcomponents designated to perform the moderator exclusion barrier may consist of either the primary closure lid (with bolts and inner seal) and primary closure lid vent and drain port covers (with bolts and inner seals); or the secondary closure lid (with bolts and inner seal) and secondary closure lid access port plug (with seal).

One closure lid shall not be designated to perform both containment and water exclusion functions.

Impact Limiters

The HI-STAR 180 Cask is fitted with two impact limiters. Impact limiter aluminum honeycomb crush material and neutron shield are completely enclosed by an all-welded stainless steel skin. One impact limiter is attached to the top of the cask with 16 studs and nuts and one impact limiter is attached to the bottom of the cask with 16 studs and nuts.

(3) Drawings

The packaging shall be constructed and assembled in accordance with the drawings in Section 1.3 of Holtec International Report No. HI-2063570, Safety Analysis Report on the HI-STAR 180 Package, Revision 0. The following drawings apply:

(a) HI-STAR 180 Cask	Drawing 4845, Sheets 1-6, Rev. 0
(b) F-37 Fuel Basket	Drawing 4847, Sheets 1-4, Rev.1
(c) F-32 Fuel Basket	Drawing 4848, Sheets 1-4, Rev. 1

5.(a) (3) Drawings (continued)

(d) HI-STAR 180 Impact Limiters	Drawing 5062, Sheets 1-5, Rev. 1
(e) Typical Assembly for Transport	Drawing 5089, Sheets 1-3, Rev. 1

5.(b) Contents (Type, Form, and Quantity of Material)

(1) Fuel assemblies meeting the specifications and quantities provided in Appendix A to this Certificate of Compliance and meeting the requirements provided in all conditions in 5.(b) are authorized for transportation.

(2) Non-fuel hardware and neutron sources are not authorized for transportation.

(3) The following definitions apply to this CoC:

Damaged Fuel Assemblies are fuel assemblies with known or suspected cladding defects, as determined by a review of records, greater than pinhole leaks or hairline cracks, empty fuel rod locations that are not filled with dummy fuel rods, whose structural integrity have been impaired such that geometric rearrangement of fuel or gross failure of the cladding is expected, or that cannot be handled by normal means. Also see fuel debris.

Damaged Fuel Containers (DFCs) are specially designed vessels for damaged fuel assemblies or fuel debris that may permit gaseous and liquid media to escape while minimizing dispersal of gross particulates. The DFCs are not authorized for use in the HI-STAR 180 System.

Fuel Debris is ruptured fuel rods, severed rods and loose fuel pellets from damaged fuel assemblies; and fuel assemblies with known or suspected defects which cannot be handled by normal means due to fuel cladding damage, including containers and structures supporting these parts.

Incore Grid Spacers are fuel assembly grid spacers located within the active fuel region (i.e., not including top and bottom spacers).

Intact Fuel Assemblies are fuel assemblies without known or suspected cladding defects greater than pinhole leaks or hairline cracks and which can be handled by normal means. Fuel assemblies without fuel rods in fuel rod locations shall not be classified as intact fuel assemblies unless dummy fuel rods are used to displace an amount of water greater than or equal to that displaced by the original fuel rod(s).

Minimum Enrichment is the minimum assembly average enrichment. Natural uranium blankets are not considered in determining minimum enrichment.

Neutron Sources are fuel assembly non-fuel hardware specially designed to produce neutrons for startup of the reactor.

5.(b) (2) Definitions (continued)

Non-Fuel Hardware are removable fuel assembly hardware not used to produce thermal energy in the reactor but considered high-level waste. Neutron Sources are considered non-fuel hardware.

Planar-Average Initial Enrichment is the average of the distributed fuel rod initial enrichments within a given axial plane of the assembly lattice.

ZR means any zirconium-based fuel cladding materials authorized for use in a commercial nuclear power plant reactor.

5.(c) Criticality Safety Index (CSI) = 0.0

6. In addition to the requirements of Subpart G of 10 CFR Part 71 the requirements in the following conditions apply.

6.(a) Each package shall be both prepared for shipment and operated in accordance with detailed written operating procedures. Procedures for both preparation and operation shall be developed. At a minimum, those procedures shall include the provisions provided in Chapter 7 of the HI-STAR 180 SAR.

6.(b) All acceptance tests and maintenance shall be performed in accordance with detailed written procedures. Procedures developed for acceptance testing, and maintenance shall include the provisions provided in Chapter 8 of the HI-STAR 180 SAR.

7. The personnel barrier shall be installed and remain installed while transporting a loaded cask if necessary to meet cask surface temperature limits and/or package dose rates.

9. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.

10. Expiration Date: TBD

Attachment: Appendix A

References:

Holtec International Report No. HI-2063570, *Safety Analysis Report on the HI-STAR 180 Package*, Revision 0, dated January TBD, 2007

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

TBD, Chief
Licensing Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

/RA/

Date: TBD

APPENDIX A

CERTIFICATE OF COMPLIANCE NO. 9325, REVISION 0

MODEL NO. HI-STAR 180 SYSTEM

INDEX TO APPENDIX A

Table A.1 (Page 1 of 2)
Fuel Assembly Limits

I. BASKET MODEL: F-32

A. Allowable Contents

Uranium Oxide and MOX, PWR intact fuel assemblies listed in Table A.2 and meeting the following specifications:

a.	Cladding Type	Zr
b.	Maximum Initial Enrichment for UO_2 Assemblies	5 wt% ^{235}U
c.	Initial Fuel Composition for MOX Assemblies	As specified in Tables A.3 and A.4. Each assembly must meet one of the requirement sets from each table.
d.	Post-irradiation cooling time, average burnup, decay heat and minimum initial enrichment per assembly	As specified in Table A.7
e.	Decay heat per basket	32 kW

B. Quantity per F-32: Up to 32 assemblies

C. Fuel assemblies shall not contain non-fuel hardware

D. Damaged fuel assemblies and fuel debris are not authorized for transport In the F-32

Table A.1 (Page 2 of 2)
Fuel Assembly Limits

I. BASKET MODEL: F-37

A. Allowable Contents

Uranium Oxide and MOX, PWR intact fuel assemblies listed in Table A.2 and meeting the following specifications:

a.	Cladding Type	Zr
b.	Maximum Initial Enrichment for UO_2 Assemblies	5 wt% ^{235}U
c.	Initial Fuel Composition for MOX Assemblies	As specified in Tables A.3 and A.4. Each assembly must meet one of the requirement sets from each table.
d.	Post-irradiation cooling time, average burnup, decay heat and minimum initial enrichment per assembly	As specified in Table A.7
e.	Minimum Burnup	As specified in Table A.6
e.	Maximum decay heat per basket	32 kW

B. Quantity per F-37: Up to 37 assemblies

C. Fuel assemblies shall not contain non-fuel hardware

D. Damaged fuel assemblies and fuel debris are not authorized for transport In the F-32

Table A.2 (Page 1 of 1)
PWR FUEL ASSEMBLY CHARACTERISTICS

Fuel Assembly Type	**14x14**
Clad Material	Zr
No. of Fuel Rod Locations	179
Design Initial Heavy Metal Mass (kg)	≤ 341
Fuel Rod Clad O.D. (mm)	≥10.72
Fuel Rod Clad I.D. (mm)	≤9.58
Fuel Pellet Dia. (mm)	≤9.31
Fuel Rod Pitch (mm)	≤14.224
Active Fuel Length (mm)	≤3070
No. of Guide and/or Instrument Tubes	17
Minimum Cooling Time for Assemblies with Zr Guide/Instrument Tubes	3 years
Minimum Cooling Time for Assemblies with Stainless Steel Guide/Instrument Tubes	15 Years
Guide/Instrument Tube Thickness (mm)	≥0.325
Maximum Fuel Assembly Length (mm)	3518
Maximum Fuel Assembly Mass (kg)	500

Notes:

1. All dimensions are nominal values

2. Zr designates material made out of Zirconium or Zirconium alloys

Table A.3 (Page 1 of 1)
REQUIREMENT SET 1 FOR MOX ISOTOPIC CHARACTERISTICS

	Isotopic Composition (g/assembly)			
Requirement	1	2	3	4
Isotope				
Pu238	≤ 700	≤ 200	≤ 200	≤ 200
Pu239	≥ 13000	≥ 11000	≥ 7600	≥ 8000
Pu240	≥ 5800	≥ 3800	≥ 1700	≥ 1700
Pu241	≤ 2300	≤ 1600	≤ 1250	≤ 1600
Pu242	≤ 1900	≤ 750	≤ 700	≤ 750
U235	≥ 730	≥ 720	≥ 2100	≥ 720
U238	≤ 297000	≤ 320000	≤ 326000	≤ 326000

Note:

1. All values are nominal values

Table A.4 (Page 1 of 1)
REQUIREMENT SET 2 FOR MOX ISOTOPIC CHARACTERISTICS

Requirement	1	2
Pu-239 (g/kg-HM)	≤ 39	≤ 49
Pu-238/Pu-239 (g/g)	≥ 0.0	≥ 0.015
Pu-240/Pu-239 (g/g)	≥ 0.27	≥ 0.38
Pu-241/Pu-239 (g/g)	≤ 0.12	≤ 0.18
Pu-242/Pu-239 (g/g)	≥ 0.012	≥ 0.06
U-235 (g/kg-HM)	≤ 7.1	≤ 7.1

Table A.5 (Page 1 of 1)
REGIONS FOR REGIONALIZED LOADING

Region Number	**Cell Numbers**	
	F-32 (see Figure A.1)	**F-37 (see Figure A.1)**
1	3,11,22,30	2,16,22,36
2	8,12,21,25	6,17,21,32
3	13,14,19,20	12,18,20,26
4	4,5,28,29	19
5	6,9,24,27	1,3,9,15,23,29,35,37
6	7,15,18,26	5,7,10,14,24,28,31,33
7	1,10,23,32	11,13,25,27
8	2,16,17,31	4,8,30,34

Table A.6 (Page 1 of 1)
MINIMUM BURNUP REQUIREMENTS FOR SPENT UO_2 FUEL IN THE F-37 BASKET

Configuration	**Regions (Figure A.2)**	**Minimum Assembly Burnup (GWd/mtU)**
1	1,2,3,4,6,7,8	22
2	1,3,6,7,8	25
3	2,3,6,7,8	25
4	2,4,6,7,8	27
5	2,4,5,6,7	27
6	2,3,4,6,7	31
7	2,4,6,7	34

Table A.7 (Page 1 of 3)
LOADING PATTERNS FOR THE F-32 BASKET

Loading Pattern A for the F-32 Basket					
Region (see Table A.5)	Maximum Heat Load per Assembly† (kW)	Maximum Burnup (GWd/mtU)	Minimum Enrichment (wt%) or MOX	Minimum Cooling Time (years)	Alternative Fuel Specification (see Table A.9)
1	2.1	61.5	MOX	11	A-6
2	1.2	51	4.5	3	A-1
3	1.0	60	4.5	9	A-1
4	1.2	66	4.5	14	A-2
5	1.5	54	4.5	4	A-3
6	1.5	66	4.5	3	A-6
7	1.2	66	4.5	11	A-4
8	1.2	15	4.5	3	A-5
Loading Pattern B for the F-32 Basket					
1	2.1	66	4.5	3	A-7
2	1.2	51	4.5	3	A-1
3	1.0	60	4.5	9	A-1
4	1.2	66	4.5	14	A-2
5	1.5	48	MOX	17	A-3
6	1.5	66	4.5	3	A-6
7	1.2	66	4.5	11	A-4
8	1.2	15	4.5	3	A-5

† Total heat load per cask not to exceed 32 kW.

Table A.7 (Page 2 of 3)
LOADING PATTERNS FOR THE F-32 BASKET

Region (see Table A.5)	Maximum Heat Load per Assembly† (kW)	Maximum Burnup (GWd/mtU)	Minimum Enrichment (wt%) or MOX	Minimum Cooling Time (years)	Alternative Fuel Specification (see Table A.9)
Loading Pattern C for the F-32 Basket					
1	1.8	63	4.5	3.5	A-7
2	1.2	51	4.5	3	A-1
3	1.0	60	4.5	9	A-1
4	1.2	66	4.5	14	A-2
5	1.7	60	MOX	15	A-6
6	1.6	66	4.5	3	A-6
7	1.2	66	4.5	11	A-4
8	1.2	15	4.5	3	A-5
Loading Pattern D for the F-32 Basket					
1	1.8	63	4.5	4	A-8
2	1.2	48	MOX	17	A-6
3	1.0	60	4.5	9	A-1
4	1.2	66	4.5	14	A-2
5	1.7	48	MOX	17	A-7
6	1.6	66	4.5	4	A-9
7	1.2	60	4.5	11	A-4
8	1.2	39	MOX	17	A-5

† Total heat load per cask not to exceed 32 kW.

Table A.7 (Page 3 of 3)
LOADING PATTERNS FOR THE F-32 BASKET

Table 1.2.8: Loading Patterns for the F-32 Basket (continued)					
Loading Pattern E for the F-32 Basket					
Region (see Table A.5)	Maximum Heat Load per Assembly† (kW)	Maximum Burnup (GWd/mtU)	Minimum Enrichment (wt%) or MOX	Minimum Cooling Time (years)	Alternative Fuel Specification (see Table A.9)
1 through 8	1	66	4.5	7	n/a

† Total heat load per cask not to exceed 32 kW.

Table A.8 (Page 1 of 2)
LOADING PATTERNS FOR THE F-37 BASKET

Loading Pattern A for the F-37 Basket					
Region (see Table A.5)	Maximum Heat Load per Assembly† (kW)	Maximum Burnup (GWd/mtU)	Minimum Enrichment (wt%) or MOX	Minimum Cooling Time (years)	Alternative Fuel Specification (see Table A.9)
1	2.1	61.5	MOX	11	B-9
2	1.2	51	4.5	4	B-1
3	0.8	60	4.5	9	B-2
4	0.5	66	4.5	14	B-3
5	1.2	66	4.5	14	B-4
6	1.5	66	4.5	4	B-10
7	1.0	66	4.5	11	B-5
8	1.2	15	4.5	4	B-6
Loading Pattern B for the F-37 Basket					
1	2.1	66	4.5	4	B-10
2	1.2	51	4.5	4	B-1
3	0.8	60	4.5	9	B-2
4	0.5	66	4.5	14	B-3
5	1.2	66	4.5	14	B-4
6	1.5	48	MOX	17	B-9
7	1.0	66	4.5	11	B-5
8	1.2	15	4.5	4	B-7

† Total heat load per cask not to exceed 32 kW.

Table A.8 (Page 2 of 2)
LOADING PATTERNS FOR THE F-37 BASKET

Loading Pattern C for the F-37 Basket					
Region (see Table A.5)	Maximum Heat Load per Assembly† (kW)	Maximum Burnup (GWd/mtU)	Minimum Enrichment (wt%) or MOX	Minimum Cooling Time (years)	Alternative Fuel Specification (see Table A.9)
1	1.7	63	4.5	14	B-8
2	1.2	48	MOX	17	B-9
3	0.8	60	4.5	9	B-2
4	0.5	66	4.5	14	B-3
5	1.2	45	MOX	17	B-4
6	1.7	63	4.5	5	B-11
7	1.0	63	4.5	11	B-2
8	1.2	15	4.5	4	B-6
Loading Pattern D for the F-32 Basket					
1 through 8	0.865	66	4.5	8	n/a

† Total heat load per cask not to exceed 32 kW.

Table A.9 (Page 1 of 2)
ALTERNATIVE FUEL SPECIFICATIONS

Maximum Burnup (GWd/mtU)	Minimum Enrichment (wt% ^{235}U)	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9
		Minimum Cooling Time (Years)								
66	4.5	18	14	7	11	14	3	4	4.5	4
66	3.95	24	20	8	14	18	5	4.5	5	7
63	4.5	14	--	6	10	11	--	3.5	4	3
63	3.95	20	18	7	12	14	3.5	4	4.5	4.5
60	4.5	9	11	5	9	9	--	--	--	--
60	3.95	16	14	6	10	11	3	3.5	--	3
57	4.5	6	10	4.5	9	8	--	--	3.5	--
57	3.95	10	11	5	9	9	--	--	4	--
54	4.5	4	9	4	8	7	--	--	--	--
54	3.95	6	10	4.5	8	8	--	--	3.5	--
51	4.5	3	8	--	7	6	--	--	--	--
51	3.95	4	9	4	--	7	--	--	--	--
51	3.15	9	10	5	9	8	3	--	--	--
48	4.5	--	--	--	--	--	--	--	--	--
48	3.95	3	8	--	7	6	--	--	--	--
48	3.15	5	9	4.5	8	7	--	--	--	--
45	4.5	--	7	3.5	6	5	--	--	--	--
45	3.95	--	7	3.5	--	--	--	--	--	--
45	3.15	3.5	8	4	7	6	--	--	--	--
42	4.5	--	--	--	--	4.5	--	--	--	--
42	3.95	--	--	--	6	5	--	--	--	--
42	3.15	3	7	--	--	--	--	--	--	--
39	4.5	--	6	--	--	--	--	--	--	--
39	3.95	--	6	--	--	4.5	--	--	--	--
39	3.15	--	--	3.5	6	5	--	--	--	--
33	4.5	--	--	--	--	4	--	--	--	--
33	3.15	--	--	--	--	4.5	--	--	--	--
27	4.5	--	--	--	--	--	--	--	--	--
27	3.15	--	--	--	--	4	--	--	--	--
21	4.5	--	--	--	--	3.5	--	--	--	--
21	3.15	--	--	--	--	3.5	--	--	--	--
15	4.5	--	--	--	--	3	--	--	--	--
15	3.15	--	--	--	--	--	--	--	--	--

Table A.9 (Page 2 of 2)
ALTERNATIVE FUEL SPECIFICATIONS

Maximum Burnup (GWd/mtU)	Minimum Enrichment (wt% ^{235}U)	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11
		Minimum Cooling Time (Years)										
66	4.5	24	18	14	14	11	22	30	20	4	4	6
66	3.95	28	24	20	20	16	24	--	24	4	5	8
63	4.5	18	14	10	12	8	20	28	14	--	--	5.5
63	3.95	24	20	16	18	12	22	30	20	--	4.5	7
60	4.5	14	9	7	11	5.5	18	24	12	--	--	5
60	3.95	18	16	11	14	9	20	28	18	--	4	5.5
57	4.5	9	5.5	4	10	4	14	22	9	--	--	4.5
57	3.95	14	10	7	11	5.5	18	24	12	--	--	5
54	4.5	6	4	--	9	--	12	20	8	--	--	--
54	3.95	10	6	4	10	4	14	22	9	--	--	--
51	4.5	4	--	--	8	--	10	14	7	--	--	4
51	3.95	6	4	--	8	--	11	20	8	--	--	4.5
51	3.15	14	9	5.5	10	5	14	24	11	--	--	4.5
48	4.5	--	--	--	7	--	9	11	5.5	--	--	--
48	3.95	4	--	--	7	--	10	14	6	--	--	4
48	3.15	8	5	4	9	4	12	20	8	--	--	--
45	4.5	--	--	--	6	--	8	9	5	--	--	--
45	3.95	--	--	--	--	--	9	11	5.5	--	--	--
45	3.15	5	4	--	8	--	10	14	7	--	--	4
42	4.5	--	--	--	6	--	7	8	4.5	--	--	--
42	3.95	--	--	--	6	--	8	9	5	--	--	--
42	3.15	4	--	--	7	--	9	11	5.5	--	--	--
39	4.5	--	--	--	5.5	--	--	7	--	--	--	--
39	3.95	--	--	--	5.5	--	7	8	4.5	--	--	--
39	3.15	--	--	--	6	--	8	9	5	--	--	--
33	4.5	--	--	--	--	--	6	6	--	--	--	--
33	3.15	--	--	--	--	--	7	7	--	--	--	--
27	4.5	--	--	--	--	--	5	5	--	--	--	--
27	3.15	--	--	--	--	--	5.5	5.5	--	--	--	--
21	4.5	--	--	--	--	--	4.5	4.5	--	--	--	--
21	3.15	--	--	--	--	--	5	5	--	--	--	--
15	4.5	--	--	--	--	--	4	4	--	--	--	--
15	3.15	--	--	--	--	--	4.5	4.5	--	--	--	--

Figure A.1
F-32 Fuel Basket Storage Cell Numbering
(Numbers in parenthesis denote region number)

	1 (7)	**2** (8)	**3** (1)	**4** (4)	
5 (4)	**6** (5)	**7** (6)	**8** (2)	**9** (5)	**10** (7)
11 (1)	**12** (2)	**13** (3)	**14** (3)	**15** (6)	**16** (8)
17 (8)	**18** (6)	**19** (3)	**20** (3)	**21** (2)	**22** (1)
23 (7)	**24** (5)	**25** (2)	**26** (6)	**27** (5)	**28** (4)
	29 (4)	**30** (1)	**31** (8)	**32** (7)	

Figure A.2
F-37 Fuel Basket Storage Cell Numbering
(Numbers in parenthesis denote region number)

		1 (5)	2 (1)	3 (5)		
	4 (8)	5 (6)	6 (2)	7 (6)	8 (8)	
9 (5)	10 (6)	11 (7)	12 (3)	13 (7)	14 (6)	15 (5)
16 (1)	17 (2)	18 (3)	19 (4)	20 (3)	21 (2)	22 (1)
23 (5)	24 (6)	25 (7)	26 (3)	27 (7)	28 (6)	29 (5)
	30 (8)	31 (6)	32 (2)	33 (6)	34 (8)	
		35 (5)	36 (1)	37 (5)		