Southern Nuclear Operating Company, Inc. Post Office Box 1295 Birmingham, Alabama 35201-1295

Tel 205.992.5000



August 27, 2007

Docket No.: 50-425

NL-07-1628

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D. C. 20555-0001

> Vogtle Electric Generating Plant – Unit 2 NRC Request Regarding the Spring 2007 Refueling Outage Reactor Pressure Head Inspection Report

Ladies and Gentlemen:

On August 6, 2007, Southern Nuclear Operating Company (SNC) participated in a telecom with the NRC staff regarding the spring 2007 Vogtle Electric Generating Plant Unit 2 (VEGP-2) reactor pressure vessel (RPV) head inspection report, submitted by SNC on June 21, 2007. The NRC staff requested that SNC provide a table showing the amount of wear on each thermal sleeve and the method used to collect the data. The subject table is contained in Enclosure 1. Enclosure 2 contains the VEGP RPV head layout as a reference.

This letter contains no NRC commitments. If you have any questions, please advise.

Sincerely,

B. J. George Manager, Nuclear Licensing

BJG/DRG/daj

Enclosures: 1. Plant Vogtle Unit 2 Thermal Sleeve Inspection Data Table 2. Plant Vogtle Unit 2 Reactor Pressure Vessel Head Layout cc: <u>Southern Nuclear Operating Company</u> Mr. J. T. Gasser, Executive Vice President Mr. T. E. Tynan, Vice President -- Vogtle Mr. D. H. Jones, Vice President -- Engineering RType: CVC7000

> <u>U. S. Nuclear Regulatory Commission</u> Dr. W. D. Travers, Regional Administrator Mr. S. P. Lingam, NRR Project Manager – Vogtle Mr. G. J. McCoy, Senior Resident Inspector – Vogtle

Vogtle Electric Generating Plant – Unit 2 NRC Request Regarding the Spring 2007 Refueling Outage Reactor Pressure Head Inspection Report

Enclosure 1

Thermal Sleeve Inspection Data Table

			Eddy	Current	Results		UT Res	lts	
					Estimated			Estimated	
			ſ	Max.	Depth of		Max.	Depth of	Physical
Quadrant	Pentration	Video Deview	Position	Length	Wear Scar	Pecition	Length	Wear Scar	Measurement
Quadrani	Number			0.770	<u>(III.)</u>	FUSILION	((1.)	(#1.)	(11.)
				<u>v.770</u>	>0.119				<u>0.10</u> 2
			3		>0.119				0.125
	64	Severe wear to clight wear	4		>0.119				
l '	04	Severe wear to sirgin wear	5		<u><0.040</u>				<u>0.063</u>
			6		<0.040				
					<0.040				0.070
					<0.078				
			2	0.320	<0.040				
			3		<0.040				
1 1	52	Severe wear to slight wear	4		<u><0.020</u>			<u>0.035</u>	
			5		<0.040				
			6		<0.020				
			/ 8		<0.020				
			1		<0.020	_	_		
			2		<0.020				
			3		<0.020				
1	70	Severe wear to slight wear	4		<u><0.020</u>			<u>0.035</u>	
			5	0.380	<0.020				
			6 7						
			, 8		<0.020				
					<0.020			_	
			2		<0.040				
			3	0.130	<0.040				
1	34	Severe wear to slight wear	4		<0.020				
ľ			5		<0.040				
					<0.040				
			8		<0.040				
			1	0.280	<0.020				
			2		<0.020				
			3		<0.020			0.007	
1	46	Severe wear to slight wear	4 5		<0.020			0.037	
			6		<0.020				
			7		<0.020				
			8		<0.020				
			1	_	<0.040				
			2	0.320	<0.040	!			
ļ					<0.020			0.001	
1	71	Minimal Wear	45		<0.020	l		<u>v.v</u> 21	
1			6		<0.020				
			7		<0.020				
			8		<0.020	L			
1					<0.020	ľ –			
					<0.040	Ì			
			4		<0.020			0.060	
1	58	Minimal Wear	5		<0.040	1			
			6		<0.020				
			7	• -•·	<0.040				
 	<u> </u>		8	0.520	<0.078	 _			
					<0.020	ļ			
1			3		<0.020				
	10	Minimal Mana	4	0.290	<0.020	l			
1 '	10	waramai wear	5		<0.020]			
1			6		<0.020	1			
1			7		<0.020				
	L		88		<0.020				

			Eddy	Current	Results	UT Results			
					Estimated			Estimated	
				Max.	Depth of		Max.	Depth of	Physical
	Pentration			Length	Wear Scar		Length	Wear Scar	Measurement
Quadrant	Number	Video Review	Position	(in.)	(in.)	Position	(in.)	_(in.)	(in.)
			1		<0.020				
			2		<0.020				
			3		<0.020			0.000	
1	40	Minimal Wear	<u>4</u> 5		<0.020			0.023	
			6	0.500	<0.020				
			7	0.000	<0.020				
			8		<0.020				
			1	0.420	<0.020				
			2		<0.020				
			3		<0.020				
1	20	Minimal Wear	4		<0.020				
[5		<0.020				
			7		<0.020				
			8		<0.020				
			1		<0.020	<u> </u>	<u> </u>		
			2		<0.020				
			3		<0.020				
1 1	47	Minimal Wear	4		<u><0.020</u>			<u>0.032</u>	
			5	0.420	<0.020	1			
					<0.020				
			[′]		<0.020				
					-0.020				
			2						
			3						
	5	Minimal Wear	4						
ſ '.	Ŭ		5						
├ ────		<u> </u>	╞──╬		<0.020				
					<0.020				
			3		<0.020				
		Almost clean or no wear	4		<0.020				
['	-	Almost clean of no wear	5	0.300	<0.020				
			6		<0.020				
1			7		<0.020				
					<0.020	┟────			
1					<0.020				
1					<0.020				
		A3	4	0,120	<0.020	J			ľ
1	8	Almost clean or no wear	5		<0.020	ľ			
l			6		<0.020				
1	[7		<0.020	1			
<u> </u>			8		<0.020	L			
					<0.020				
1				0.990	<0.020				
				0.380	<0.040	ļ		0 020	1
1	59	Almost clean or no wear		•	<0.020	1		<u>v.vz</u> 0	
1	(i		6	;	<0.020	ł			
1			7		<0.020	1			
L			8		<0.020				
1				0.220	<0.020				
1					<0.020	l			
1					<0.040	ľ			
1	35	Almost clean or no wear	4		<0.020	l			
					<0.020				[
1	Į		7		<0.020	l			
L			88		<0.020				
1			1						
									[
1			3						
1	1	Almost clean or no wear	[[‡]						l
1			6			ſ			
1			7			Î			l
			88						

Notes: Final matrix of thermal sleeve thickness measurements.

This matrix contains eddy current data on 55 thermal sleeves, and UT data on 17 sleeves.

UT data was acquired at 90 points around the thermal sleeves, and only the deepest wear mark was recorded.

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			Eddy	Current	Results	UT Results			
					Estimated			Estimated	
				Max.	Depth of		Max.	Depth of	Physical
	Pentration			Length	Wear Scar		Length	Wear Scar	Measurement
Quadrant	Number	Video Review	Position	(in.)	(in.)	Position	(in.)	(in.)	(in.)
			1		<0.078				
				0.660	< 0.119				
			3		<0.078				
2	65	Severe wear to slight wear	4		<0.040				
			6		<0.040				
			7		<0.040				
			8		<0.040				
					<0.020				
			2		<0.020				
			3		<0.020				
	17	Severe weer to elight weer	4		<0.020				
2	17	Severe wear to slight wear	5		<0.020				
			6		<0.020				
			7		<0.020			I	
			_ 8	0.280	<0.020				
			1 1		<0.040				
			2		<0.020				
			3		<0.020				
2	53	Minimal Wear	4		<u><0.020</u>			<u>0.050</u>	
			5		<0.020				
					<0.040				
			['] a	0.380	<0.040				
<u> </u>				0.000	<0.070				
					<0.020				
			1 3		<0.020				
			4		<0.020	1		0.025	
2	60	Minimal Wear	5		<0.020			2	
			6		<0.020	l.			
			7		<0.020				
			8	0.340	<0.040				
			1		<0.020				
			2		<0.020				
			3		<0.020				
2	72	Minimal Wear	4		<u><0.040</u>			<u>0.051</u>	
			5		No Data	1			
			6		No Data				
				0.340	<0.040				
					<0.020		_		
					<0.040				
					<0.040	Į			
			4		<0.040				
2	21	Minimal Wear	5		<0.040				
			6		<0.020	1			
			7		<0.040				
			88	<u>0.3</u> 40	<0.040				
			1	0.350	<0.020				
			2		<0.020	Į			
l			3		<0.020			I	
2	14	Minimal Wear	4		<0.020				
			5		<0.020	ł			
1					<0.020				
					<0.020	l			
├ ────			├─ ─- [₽]	0 140	<0.020				
	1			0.140	<0.020	1			
					~0.020	1		I	
		l	⊿		<0.020	I			
2	36	Almost clean or no wear			<0.020	1			
1			6		<0.020	1			ľ
			Ť		<0.020	Į			
			8		<0.020				
			1	_	<0.020		-		
			2		<0.020	1			
			3		<0.020				
2	48	Almost clean or no wear	4	<u>0.060</u>	<u><0.020</u>	1		<u>0.035</u>	
			5		<0.020				
					<0.020	1			
					<0.020	1			
L			<u> </u>		~0.020		_		

			Eddy C	urrent	Results	UT Results			
					Estimated			Estimated	
				Max.	Depth of		Max.	Depth of	Physical
	Pentration			ength	Wear Scar		Length	Wear Scar	Measurement
Quadrant	Number	Video Review	Position	(in.)	(in.)	Position	(in.)	(in.)	(in.)
			1		<0.020				
			2		<0.020				
			3		<0.020			0.010	
2	41	Almost clean or no wear	4		<u><0.020</u>			0.019	
			5		<0.020				
			7		<0.020				
			8	0.160	<0.020				
			1	0.320	<0.020				
			2		<0.020				
			3		<0.020				
2	9	Almost clean or no wear	4		<0.020				
	_		5		<0.020				
			7		<0.020				
			í á		<0.020				
					<0.020				
			2		<0.020				
	1		3		<0.020				
,	2	Almost clean or no wear	4		<0.020				
-	-	Alloor oball of no wear	5		<0.020				
			6		<0.020				
				0 100	<0.020	l			
				0.180	<0.020				
	(<0.020				
	· ۱		3	0.100	<0.040				
			4		<0.020				
2	3/	Almost clean or no wear	5		<0.020	ľ			l
			6		<0.020				
			7		<0.020				1
			8		<0.020				
					<0.020				
			3		<0.020				
			4		<0.020	1		0.016	1
2	61	Almost clean or no wear	5		<0.020	ſ			1
			6		<0.020	1			
Į.			7	0.180	<0.020				i
L			8		<0.020	L			L
				0.440	<0.020				1
	[2		<0.020				1
[<0.020			0.021	5
2	49	Almost clean or no wear	5		<0.020	[<u>v.vz I</u>	1
	1		6		<0.020				[
			7		<0.020	l			
			88		<0.020				
			1		<0.020				
			2		<0.040				ł
1	1		3	0.340	<0.040				1
2	73	Almost clean or no wear	4		< <u>0.020</u>			<u>0.030</u>	1
]	I	2		<0.020	1			1
			7		<0.020				1
1	1		8		<0.020	1			1
— —	<u> </u>	t		_	<0.020	<u> </u>			
Į			2		<0.040	I			1
[3	0.380	<0.040	1			
2	50	Almost clean or no wear	4		<u><0.020</u>	1		<u>0.044</u>	1
	۳ I		5		<0.020				1
1	1		6		<0.020	1			1
1	l				<0.020	1			1
Ļ	L	<u> </u>	8		<0.020				<u> </u>

Notes: Final matrix of thermal sleeve thickness measurements.

This matrix contains eddy current data on 55 thermal sleeves, and UT data on 17 sleeves.

UT data was acquired at 90 points around the thermal sleeves, and only the deepest wear mark was recorded.

			Eddy	Current	Results		UT Res	ults	
l .					Estimated			Estimated	
				Max.	Depth of		Max.	Depth of	Physical
Quadrant	Pentration		Desition	Length	wear Scar	Desition	Length	Wear Scar	Measurement
Quadrant	Number	VIDEO Heview	Position	(in.)	(in.)	Position	(in.)	<u>(in.)</u>	(in.)
					<0.040				
			2		>0.040				
			3		<0.020				
3	62	Severe wear to slight wear		0 800	<0.078				
			6	0.000	>0.119				
			7		~0.020				
			8		<0.020				
			1	0.340	<0.020		_		
1			2		<0.020				
!			3		<0.020				
	20	Minimal Maar	4		<0.020				
3	30	Minimal Wear	5		<0.020				
			6		<0.020				
			7		<0.020				
			88		<0.020				
			1		<0.040				
[2		<0.040				
			3		<0.020				
3	54	Minimal Wear	4		no data				
			5		no data				
			6		<0.040				
					<0.040				
			°		<0.020				
					<0.020				
			- -		<0.020				
			4		<0.020				
3	42	Minimal Wear	5		<0.020				
		i i i i i i i i i i i i i i i i i i i	6		<0.020				
			7	0.300	<0.020				
			8		<0.020				
			1		<0.020				
			2		<0.020				
			3		<0.020				4
3	66	Minimal Wear	4		<0.020				
			5		<0.020	ſ			
			6 7	0 000	no data				
				0.360	<0.040				
			- 0		<u>CU.UZU</u>				
			3						ļ
			Å Å						
3	15	Minimal wear	5			ł			
	[6						
			7	0.320	<0.020				
			88		_				
			1	0.320	<0.020				
			2		<0.020	1			[
1	l	1	3		<0.040	I			
3	51	Minimal Wear	1 <u>4</u>		<0.020	1			
					<0.020				
	1		?		<0.020				1
1			'		<0.020	1			1
			<mark></mark> ₽		<0.020	———	<u> </u>		
			'		<0.020	[ł
1			1 3		<0.020				1
	~~	6.41-1	4		<0.040	1			
3	67	Minimal Wear	5		<0.040				1
r			6		<0.020				
			7	0.400	<0.040	1			{
			88		<0.020				
			1 1		<0.020				
	l		2		<0.020				
			3	0 000	<0.020	I			1
3	38	Almost clean or no wear	1 4	0.300	<0.020	1			}
			2		<0.020				
	I				<0.020	1			1
	ł		, А		<0.020	I			
L		<u> </u>	<u> </u>						

·			Eddv	Current	Results	<u> </u>	UT Resi		
					Estimated			Estimated	
				Max.	Depth of		Max.	Depth of	Physical
	Pentration			Length	Wear Scar		Length	Wear Scar	Measurement
Quadrant	Number	Video Review	Position	(in.)	(in.)	Position	(in.)	(in.)	(in.)
			1		<0.020				
			2		<0.020	[
			3		<0.020				
2	12	Almost clean or no wear	4		<0.020	ľ			
5	10	Alliost clean of no wear	5		<0.020				
			6		<0.020				
			7		<0.040				
			8	0.380	<0.040				
1					<0.020	1			
}					<0.020				
			3		<0.020	1			
3	6	Almost clean or no wear	4		<0.020				
			6		<0.020				
ļ	Į –		, ž		<0.020	ļ			
			í á		<0.020				
<u> </u>			1	_	<0.020	<u> </u>			
			2		<0.020				
			3		<0.020				
			4	0.200	<0.020				
3	3	Almost clean or no wear	5		<0.020				1
			6		<0.020				
			7		<0.020				
			8		<0.020				
			1		<0.020				
	1	l	2		<0.020	l I			l '
			3		<0.020	1			ſ
3	55	Almost clean or no wear	4	0.000	<0.020				
			5	0.300	<0.020				
					<0.020				
			8		<0.020				
	<u> </u>		-		<0.020	<u> </u>			t
1	Į.		2		<0.020	1			1
	1	1	3		<0.020	1			ł
	01		4		<0.020				
, s		Almost clean of no wear	5		<0.020				
		l	6		<0.020	Į –			1
1	l		7	0.190	< 0.020				
			8		<0.020	<u> </u>			
					<0.020	1			
	I		2		<0.020				
			3		<0.040				1
з	43	Almost clean or no wear	1 4	0.450	<0.020	1			1
	I			0.460	<0.020	1			l I
[1			,	<0.020				
	1				<0.020	1			1
L		J							1

Notes: Final matrix of thermal sleeve thickness measurements. This matrix contains eddy current data on 55 thermal sleeves, and UT data on 17 sleeves. UT data was acquired at 90 points around the thermal sleeves, and only the deepest wear mark was recorded.

			Eddy	Current	Results		UT Res	ults	
					Estimated			Estimated	Í
				Max.	Depth of	[Max.	Depth of	Physical
0	Pentration	Video Deview	Position	Length	wear Scar	Position	Length	Wear Scar	Measurement
Quadrant				(0).)	((0.)	- USILION	(III.)	((11.)	<u>(#1.)</u>
				0 720	>0.119	ľ			
			3	5.720	<0.119				
	60	Soucro wear to alight woor	4		<0.040				
4	03	Severe wear to slight wear	5		<0.078				
			6		<0.078				
			7		<0.040				
					<0.040				
					<0.020				
			3		<0.020				
4	32	Minimal Wear	4		<0.020	ſ			
	52		5		<0.020				
			6		<0.020	ļ			
				0.500	<0.020				
L			- 0	0 360	<0.020		_ <u></u>		
				0.500	<0.040				
			3		<0.020				
	56	Minimal Wear	4		<0.020	1			
-			5		<0.020				
			6		<0.020	Į			
					<0.020				
<u> </u>					<0.020				
					<0.020	1			
			3		<0.040				
	20	Minimal Woor	4		<0.020	ſ			
1	39		5		<0.020				
			6		<0.020	Į			
					<0.020				
				0 320	<0.020				
				0.520	<0.040				
			3		<0.040				
₄	10	Minimal Wear	4		<0.040				
			5		<0.020				
			6		<0.040	l			
					<0.040				
<u> </u>			1		<0.040				
ſ					<0.020				
			3		<0.020	1			
₄	69	Minimal Wear	4		<0.020	1			
			5		<0.020				
1			6		<0.020	ł			1
			'	0 200	<0.020	1			
<u> </u>				0.200	<0.020	┼───			
ľ					<0.020]
1			3		<0.020				
4	68	Almost clean or no wear	4	0.340	<0.020	1			
l .			5		<0.020				
1					<0.020	9			1
			/ ¤		<0.020				J
			1 1		<0.020	├ ───			
1			2		<0.020]
1	1		3	0.340	<0.020	1			
4	44	Almost clean or no wear	4		<0.020	1			
			5		<0.020	1			
1	l				<0.020	1			
1			Г я		<0.020]			
			1		<0.020	 			t
l			2		<0.020				1
1	1		3		<0.020				
4	7	Almost clean or no wear	4	0.260	<0.020	1			1
1					<0.020				
1					<0.020	1			1
1			á		<0.020				

			Eddy	Eddy Current Results			UT Res	ults	
	1				Estimated			Estimated	
1			1	Max.	Depth of		Max.	Depth of	Physical
1	Pentration			Length	Wear Scar		Length	Wear Scar	Measurement
Quadrant	Number	Video Review	Position	(in.)	(in.)	Position	(in.)	(in.)	(in.)
			1		<0.020				
1		1	2		<0.020				
			3		<0.020				
	45	Almost closen or po wear	4		<0.020				
1 7	~~	Allitost cloall of the weat	5		<0.020				
	1		6	0.420	<0.020				
1			7		<0.020				
			88		<0.020				
			1		<0.020				
			2		<0.020				
			3		<0.020				
	57	Almost clean or no wear	4	0.300	<0.020				
-	, J,	Amost clean of no wear	5		<0.020				
			6		<0.020				
1			7		<0.020				
			8		<0.020	_		_	
			1		<0.020				
	1		2		<0.020				
	I 1		3		<0.020				(
4	33	Almost clean or no wear	4		<0.020				
			5		<0.020				J
	i 1		6		<0.020	ľ			1
			7	0.520	<0.020				
			88		<0.020			_	

Notes:

Final matrix of thermal sleeve thickness measurements.

This matrix contains eddy current data on 55 thermal sleeves, and UT data on 17 sleeves. UT data was acquired at 90 points around the thermal sleeves, and only the deepest wear mark was recorded.

Vogtle Electric Generating Plant – Unit 2 NRC Request Regarding the Spring 2007 Refueling Outage Reactor Pressure Head Inspection Report

Enclosure 2

Reactor Pressure Vessel Head Layout

