

**Attachment 5 to**

**GNRO-2012/00039**

**Entergy Nuclear Grand Gulf Nuclear Station License Renewal Environmental  
Audit – Hydrology Patton – Attachment E labeled “2005, 2008, 2009 and 2010  
Annual Water Use Reports”**

**Attachment E**

**2005, 2008, 2009 and 2010 Annual Water Use Reports**



Entergy Operations, Inc.  
Waterloo Road  
P.O. Box 756  
Port Gibson, MS 39150  
Tel 601 437 2129

W. Russell Brian  
General Manager, Plant Operations

August 17, 2006

Mr. John Warner  
Department of Environmental Quality  
Office of Land and Water Resources  
Post Office Box 10631  
Jackson, Mississippi 39289-0631

SUBJECT: Grand Gulf Nuclear Station  
Water Use Program [Annual Water Use Survey – 2005]

GEXO-2006/00048

Dear Mr. Warner:

As requested, we have attached the 2005 Water Use Program information for Grand Gulf Nuclear Station. Please note that we made the following changes:

**Amendments to the Well Data Forms (WDF)\*:**

OLWR Permit Number	Change Description
MS-GW-00371	Changed the well depth from 122 to 128
MS-GW-15026	Changed the date drilled from 1986 to 1996
MS-GW-02967	Changed the well depth from 152 to 154.8
MS-GW-02972	Changed the well depth from 32.5 to 31.3
MS-GW-02973	Changed the well depth from 45.52 to 42.5
MS-GW-02974	Changed the well depth from 50.45 to 59.7
MS-GW-02975	Changed the well depth from 52.62 to 55.4
MS-GW-02976	Changed the well depth from 43 to 42.8
MS-GW-02977	Changed the well depth from 48 to 48.4
MS-GW-02978	Changed the well depth from 48 to 48.3
MS-GW-02979	Changed the well depth from 55 to 55.2

\*All WDF casing diameters were converted to inches to facilitate reporting

(1) Well depths were changed to match the driller's logs and/or the Updated Final Safety Analysis Report to facilitate reporting

The following wells are closed and no longer in service:

- MS-GW-02965 - Closed and status changed to inactive
- MS-GW-02966 - Closed and status changed to inactive
- MS-GW-02968 - Closed and status changed to inactive

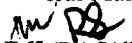
Please amend your records to reflect these changes.

If you have any questions, please contact Mr. John Lassetter, at (601) 437-2115.

Sincerely,



W. R. Brian  
General Manager, Plant Operations

  
JML/RAS/dh

cc: Mr. Duff R. Austin (GGNS-NPE) w/a  
Mr. C. A. Bottemiller w/o  
Mr. R. N. Buckley (M-ECH-595) w/a  
Mr. Michael Canerdy (MDEQ) w/a  
File (CENTRAL) [ 9 ]  
File (CHEM) w/a

**Attachment to Well Data Form: 2005 Information**

**Well Data Form  
Office of Land and Water Resources  
Water – Use Program**

**Well Data Form  
2005**

**ENTERGY OPERATIONS, INC.**

<b>OLWR Permit No.</b>	<b>GGNS Identifier</b>	<b>MS Health Dept. Tag No.</b>	<b>Well Depth (feet)</b>	<b>Rated (gpm)</b>	<b>Casing Diameter (inches)</b>	<b>Date Drilled</b>	<b>Total Gallons</b>
MS-GW-02968	South Const. Well	CLOSED					
MS-GW-02966	Car Wash	CLOSED					
MS-GW-02967	Const. Well 1	0110011-01	154.8	400	24	9/1/76	7.44E <sup>4</sup>
MS-GW-02970	Radial Well 3		123	10000	156	1/1/79	2.68E <sup>9</sup>
MS-GW-00371	Radial Well 5		128	10000	156	1/1/79	3.76E <sup>9</sup>
MS-GW-02977	DW 3		48.4	200	10	11/1/79	*
MS-GW-02979	DW 1		55.2	200	10	11/1/79	*
MS-GW-02978	DW 2		48.3	200	10	11/1/79	*
MS-GW-02976	DW4		42.8	200	10	11/1/79	*
MS-GW-02971	Radial Well 1		122	10000	156	1/1/80	1.36E <sup>8</sup>
MS-GW-02975	DW 5		55.4	200	10	7/16/80	*
MS-GW-02973	DW 7		42.5	200	10	7/18/80	*
MS-GW-02972	DW 8		31.3	200	10	7/21/80	*
MS-GW-02969	Radial Well 4		125	10000	192	1/1/85	4.29E <sup>9</sup>
MS-GW-02965	DW 8A	CLOSED					
MS-GW-02974	DW 6		59.7	200	10	7/21/80	*
MS-GW-14989	Const. Well 3	0110011-03	162	500	18	8/4/95	1.92E <sup>7</sup>
MS-GW-15026	Const. Well 4	0110011-04	163	500	18	1/18/96	1.95E <sup>7</sup>

\*Withdrawal is minimal and intermittent and is dependent upon a level indicator switch. Discharge is not tracked or recorded.

**Responsible Person:** Duff Austin  
System Engineering  
(601) 437-6263

**Wells Included:**

- Radial Wells 1, 3, 4, and 5
- Dewatering Wells 1, 2, 3, 4, 5, 6, 7, and 8

**Responsible Person:** Clark Burrell  
Licensed Operator  
(601) 437-6962

**Wells Included:**

- Mississippi Health Department Tag Wells\*

\*These wells serve approximately 700 persons.

**FLOW CALCULATIONS**

**0110011-01, 0110011-03, 0110011-04:**

Data provided by the Licensed Operator

**The following wells are closed:**

- MS-GW-02968 [0110011-02] Construction Well: *Out of Service and Casing filled in*
- MS-GW-02965: *Out of Service and Casing filled in*
- MS-GW-02966: *Out of Service and Casing filled in*

**Radial Wells:**

Total gallons pumped for each well:

average gpm x minutes/year = gallons/year

**Dewatering Wells:**

Well depth(s) for DW-1 through DW-8 are based upon Updated Final Safety Analysis Report Table 2.4-29.



## Well Owner Information Sheet

### Commercial, Industrial and Private Well Owners

This section to be filled out by Commercial, industrial and private well owners

Name of Well Owner Entergy Operations, Inc.  
Mailing Address P. O. Box 31995  
City Jackson County Hinds Zip 39286-1995  
Number of wells owned 18  
Combined total gallons pumped (all wells) during the 2005 calender year 1.12E<sup>10</sup> gallons.

This section to be filled out by Public water suppliers.

### Public Water Suppliers Information

Name of Water System Grand Gulf Nuclear Station  
Address P.O. Box 7561 7003 Bald Hill Road  
City Port Gibson County Clairborne Zip 39150  
Phone 601-437-2115

### Water Superintendent/Operator

Name See Attached  
Work Phone \_\_\_\_\_ Home Phone \_\_\_\_\_

### Secretary/Treasurer/Bookkeeper

Name N/A  
Work Phone \_\_\_\_\_ Home Phone \_\_\_\_\_

### System Information

Please fill out a separate page for each system (photocopy form if necessary).

MS Department of Health Number 110011  
How many usable sources of water does this system have? (wells for groundwater systems, purchase points, etc.)  
Wells 3 purchase points N/A  
How many active connections on this system? N/A  
How many people does this system serve? 700  
How many total gallons of water did this system:  
pump during the 2005 calender year (Jan - Dec )? 3.88E<sup>7</sup> gal.  
sell during the 2005 calender year ( Jan - Dec )? N/A gal.  
How many gallons of water did this system purchase during the 2005 calender year?  
N/A gallons purchased? From whom? N/A

Name of individual completing this form: John M. Lassetter  
Phone Number: Work 601-437-2115 Home 601-924-4986

Mail to: Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
PO Box 10631, Jackson, MS 39289

Public Water Suppliers



# Well Data Form

**Mail To:** Mississippi Dept. of Environmental Quality  
Office of Land and Water Resources  
P.O Box 10631  
Jackson, MS 39289-0631

JULY 2006

**SYSTEM ENERGY RESOURCES,  
INC.**

Well ID #	OLWR Permit Number	MS Health Dept. Tag No.	County	Well Depth	Rated (GPM)	Casing Size	Date Drilled	Status	Connections on Well	Total Gallons Pumped in 2005
	<u>MS-GW-02965</u>		<u>CLAIBORNE</u>	<u>45</u>	<u>200</u>	<u>6</u>	<u>05/12/1986</u>	<b>ACTIVE</b> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive <input type="checkbox"/> Plugged <input type="checkbox"/>	<u>N/A</u>	<u>Closed</u>
<u>021F0044</u>	<u>MS-GW-02966</u>		<u>CLAIBORNE</u>	<u>641</u>	<u>200</u>	<u>6</u>	<u>06/01/1974</u>	<b>STANDBY</b> Active <input type="checkbox"/> Standby <input checked="" type="checkbox"/> Inactive <input type="checkbox"/> Plugged <input type="checkbox"/>	<u>N/A</u>	<u>Closed</u>
<u>021F0053</u>	<u>MS-GW-02967</u>	<u>0110011-01</u>	<u>CLAIBORNE</u>	<del>152</del> <u>154.8</u>	<u>400</u>	<u>24</u>	<u>09/01/1976</u>	<b>ACTIVE</b> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive <input type="checkbox"/> Plugged <input type="checkbox"/>	<u>NONE</u>	<u>7.44E<sup>4</sup></u>
<u>021F0027</u>	<u>MS-GW-02968</u>	<u>0110011-02</u>	<u>CLAIBORNE</u>	<u>147</u>	<u>500</u>	<u>8</u>	<u>08/01/1972</u>	<b>STANDBY</b> Active <input type="checkbox"/> Standby <input checked="" type="checkbox"/> Inactive <input type="checkbox"/> Plugged <input type="checkbox"/>	<u>N/A</u>	<u>Closed</u>
	<u>MS-GW-02969</u>		<u>CLAIBORNE</u>	<u>125</u>	<u>10000</u>	<u>192</u>	<u>01/01/1985</u>	<b>ACTIVE</b> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive <input type="checkbox"/> Plugged <input type="checkbox"/>	<u>NONE</u>	<u>4.29E<sup>9</sup></u>
	<u>MS-GW-02971</u>		<u>CLAIBORNE</u>	<u>122</u>	<u>10000</u>	<u>156</u>	<u>01/01/1980</u>	<b>ACTIVE</b> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive <input type="checkbox"/> Plugged <input type="checkbox"/>	<u>NONE</u>	<u>1.36E<sup>8</sup></u>
	<u>MS-GW-02972</u>		<u>CLAIBORNE</u>	<del>32.5</del> <u>31.3</u>	<u>200</u>	<u>10</u>	<u>07/21/1980</u>	<b>ACTIVE</b> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive <input type="checkbox"/> Plugged <input type="checkbox"/>	<u>NONE</u>	<u>*</u>

Please correct any inaccurate information in the above form and fill in any missing information.

**Add any wells not included in the above list**

Well Status = Active (well in use) Standby (well maintained but not used daily) Inactive (well not maintained but not plugged) Plugged (well plugged as per MDEQ Regulations)

IF YOU DID NOT RETURN A QUESTIONNAIRE LAST YEAR, PLEASE INCLUDE THAT INFORMATION ON AN ATTACHED SHEET

**Well Data Form**

**Mail To:** Mississippi Dept. of Environmental Quality  
Office of Land and Water Resources  
P.O Box 10631  
Jackson, MS 39289-0631

JULY 2006

**SYSTEM ENERGY RESOURCES,  
INC.**

Well ID #	OLWR Permit Number	MS Health Dept. Tag No.	County	Well Depth	Rated (GPM)	Casing Size	Date Drilled	Status	Connections on Well	Total Gallons Pumped in 2005
	<u>MS-GW-02973</u>		<u>CLAIBORNE</u>	<del>46.52</del> 42.8	<u>200</u> 42.5	<u>10</u>	<u>07/18/1980</u>	<b>ACTIVE</b> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>* /</u>
	<u>MS-GW-02974</u>		<u>CLAIBORNE</u>	<del>50.45</del> 59.7	<u>200</u>	<u>10</u>	<u>07/21/1980</u>	<b>ACTIVE</b> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>* /</u>
	<u>MS-GW-02976</u>		<u>CLAIBORNE</u>	<del>42</del> 42.8	<u>200</u>	<u>10</u>	<u>11/01/1979</u>	<b>ACTIVE</b> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>* /</u>
	<u>MS-GW-02977</u>		<u>CLAIBORNE</u>	<u>48.4</u>	<u>200</u>	<u>10</u>	<u>11/01/1979</u>	<b>ACTIVE</b> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>* /</u>
	<u>MS-GW-02978</u>		<u>CLAIBORNE</u>	<u>48.3</u>	<u>200</u>	<u>10</u>	<u>11/01/1979</u>	<b>ACTIVE</b> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>* /</u>
<u>021F0066</u>	<u>MS-GW-15026</u>	<u>0110011-04</u>	<u>CLAIBORNE</u>	<u>163</u>	<u>500</u>	<u>18</u>	<del>03/01/1986</del> 18-JAN-96	<b>ACTIVE</b> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>1.95E<sup>7</sup></u>
<u>021F0064</u>	<u>MS-GW-14989</u>	<u>0110011-03</u>	<u>CLAIBORNE</u>	<u>162</u>	<u>500</u>	<u>18</u>	<u>08/04/1995</u>	<b>ACTIVE</b> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>1.92E<sup>7</sup></u>

Please correct any inaccurate information in the above form and fill in any missing information. **Add any wells not included in the above list**

Well Status = Active (well in use) Standby (well maintained but not used daily) Inactive (well not maintained but not plugged) Plugged (well plugged as per MDEQ Regulations)

IF YOU DID NOT RETURN A QUESTIONNAIRE LAST YEAR, PLEASE INCLUDE THAT INFORMATION ON AN ATTACHED SHEET

# Well Data Form

SYSTEM ENERGY RESOURCES,  
INC.

Mail To: Mississippi Dept. of Environmental Quality  
Office of Land and Water Resources  
P.O Box 10631  
Jackson, MS 39289-0631

JULY 2006

Well ID #	OLWR Permit Number	MS Health Dept. Tag No.	County	Well Depth	Rated (GPM)	Casing Size	Date Drilled	Status	Connections on Well	Total Gallons Pumped in 2005
	<u>MS-GW-00371</u>		<u>CLAIBORNE</u>	<del>122</del> <u>128</u>	<u>10000</u>	<u>156</u>	<u>01/01/1979</u>	<u>ACTIVE</u> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>3.76E<sup>9</sup></u>
	<u>MS-GW-02975</u>		<u>CLAIBORNE</u>	<del>52.62</del> <u>55.4</u>	<u>200</u>	<u>10</u>	<u>07/16/1980</u>	<u>ACTIVE</u> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>*</u>
	<u>MS-GW-02979</u>		<u>CLAIBORNE</u>	<u>55.2</u>	<u>200</u>	<u>10</u>	<u>11/01/1979</u>	<u>ACTIVE</u> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>*</u>
	<u>MS-GW-02970</u>		<u>CLAIBORNE</u>	<u>123</u>	<u>10000</u>	<u>156</u>	<u>01/01/1979</u>	<u>ACTIVE</u> Active Standby Inactive Plugged	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<u>NONE</u> <u>2.68E<sup>9</sup></u>

Please correct any inaccurate information in the above form and fill in any missing information.

**Add any wells not included in the above list**

Well Status = Active (well in use) Standby (well maintained but not used daily) Inactive (well not maintained but not plugged) Plugged (well plugged as per MDEQ Regulations)

IF YOU DID NOT RETURN A QUESTIONNAIRE LAST YEAR, PLEASE INCLUDE THAT INFORMATION ON AN ATTACHED SHEET



Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, MS 39150  
Tel 601 437 2800

July 28, 2010

Mr. James L. Crawford, RPG *Assistant Director*  
Mississippi Dept. of Environmental Quality  
Office of Land and Water Resources  
Post Office Box 2309  
Jackson, Mississippi 39225-2309

SUBJECT: Grand Gulf Nuclear Station (GGNS)  
Water Use Program [Annual Water Use Survey 2008 & 2009]

GEXO-2010 / 00492

Dear Mr. Crawford:

As requested, we have attached the 2008 & 2009 Water Use Program information for GGNS. Please note that we made comments on several of the wells identified in the Well Survey Form. In addition, we have attached a copy of a communication between MDEQ and Grand Gulf (Attachment III) pertaining to the noted comments and ask that your records reflect these changes/corrections.

If you have any questions or comments, please feel free to contact Charles K. Shepphard at (601) 437-7312 or [CShepph@Entergy.com](mailto:CShepph@Entergy.com).

Sincerely,

A handwritten signature in black ink, appearing to read "C. Shepphard".

Charles K. Shepphard  
GGNS, Site Environmental Lead

CKS/JML/cks

Attachment: 2008 Water Use Survey, 2009 Water Use Survey and MDEQ & GGNS communication.

cc: Mr. Jeffrey Goldstein (K-WPO-12D) w/a  
Mr. Peter Glover (G-ADM2-PSE) w/a  
File [CHEM]  
File [CENTRAL] [ 13 ]



**ATTACHMENT I**

**2008 WATER USE SURVEY**



## WELL OWNER INFORMATION SHEET

Name of Well Owner	<u>Entergy Operations, Inc.</u>		
Address	<u>P.O. Box 31995</u>		
City	<u>Jackson</u>	State	<u>MS</u> Zip <u>39213</u>
County	<u>Hinds</u>		
Phone	<u>(601) 368-5000</u>	Fax	<u>(601) 368-5816</u>
How many active and/or standby wells do you have? <u>8</u>			
How many total gallons of water were pumped during the <sup>2008</sup> <del>2009</del> calendar year (Jan - Dec)? <u>10,915,566,200</u> (gal)			
Is the pumped total from metered readings or estimates?		<input type="checkbox"/> Metered	<input checked="" type="checkbox"/> Estimates
Did you purchase any non-potable water?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If so, how many gallons?		From?	

Name of individual completing this form: Charles K. Sheppard

Phone (601) 437-7312 E-mail CSheppard@Entergy.com



Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
Annual Water Use Survey

Return to:  
MDEQ - OLWR  
P.O. Box 2309  
Jackson, Ms 39225-2309

**SYSTEM ENERGY RESOURCES INC**

MDEQ-OLWR Permit Number	Health Dept. Tag Number	County Name	Well Depth	Rated (GPM)	Casing Diameter	Date Drilled	Well Status	Amount Pumped In 2008 <i>2008</i>
MS-GW-00371		CLAIBORNE	128	10000	156	1/1/1979	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>3,454,030,000</u>
MS-GW-02967	0110011-01	CLAIBORNE	152	500	24	9/1/1976	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>46,200</u>
MS-GW-02969		CLAIBORNE	125	10000	192	1/1/1985	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>1,848,220,000</u>
MS-GW-02970		CLAIBORNE	123	10000	156	1/1/1979	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>3,252,480,000</u>
MS-GW-02971		CLAIBORNE	122	10000	156	1/1/1980	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>2,325,500,000</u>

Please correct inaccurate or missing information in the form. Add any wells that are not shown.

Well Status definitions: Active - well in use. Standby - well maintained but only used for emergencies. Inactive - well not maintained but not plugged. Abandoned - well plugged as per MDEQ regulations.



Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
Annual Water Use Survey

Return to:  
MDEQ - OLWR  
P.O. Box 2309  
Jackson, Ms 39225-2309

MS-GW-14989	0110011-03	CLAIBORNE	162	500	18	8/1/1995	ACTIVE	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>17,561,000</u>
MS-GW-15026	0110011-04	CLAIBORNE	163	500	18	1/18/1996	ACTIVE	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>17,729,000</u>
MS-GW-16232		CLAIBORNE	100	1000			ACTIVE	<input type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>
MS-GW-16233		CLAIBORNE	100	1000			ACTIVE	<input type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>
MS-GW-16234		CLAIBORNE	100	1000			ACTIVE	<input type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>
MS-GW-16235		CLAIBORNE	100	1000			ACTIVE	<input type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>

Please correct inaccurate or missing information in the form. Add any wells that are not shown.

Well Status definitions: Active - well in use. Standby - well maintained but only used for emergencies. Inactive - well not maintained but not plugged.  
Abandoned - well plugged as per MDEQ regulations.





Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
Annual Water Use Survey

Return to:  
MDEQ - OLWR  
P.O. Box 2309  
Jackson, Ms 39225-2309

MS-GW-16714

CLAIBORNE

155

10000

300

- Active
- Standby
- Inactive (will never be put back in service)
- Abandoned (plugged per MDEQ regulations)

Construction started in 2010

**Please correct inaccurate or missing information in the form. Add any wells that are not shown.**

Well Status definitions: Active - well in use. Standby - well maintained but only used for emergencies. Inactive - well not maintained but not plugged.  
Abandoned - well plugged as per MDEQ regulations.

**ATTACHMENT II**

**2009 WATER USE SURVEY**



## WELL OWNER INFORMATION SHEET

Name of Well Owner	<u>Entergy Operations, Inc.</u>		
Address	<u>P.O. Box 31995</u>		
City	<u>Jackson</u>	State	<u>MS</u> Zip <u>39213</u>
County	<u>Hinds</u>		
Phone	<u>(601) 368-5000</u>	Fax	<u>(601) 368-5816</u>
How many active and/or standby wells do you have? <u>8</u>			
How many total gallons of water were pumped during the 2009 calendar year (Jan - Dec)? <u>13,104,810,500</u> (gal)			
Is the pumped total from metered readings or estimates?	<input type="checkbox"/> Metered	<input checked="" type="checkbox"/> Estimates	
Did you purchase any non-potable water?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
If so, how many gallons? _____ From? _____			

Name of individual completing this form: Charles K. Sheppard

Phone (601) 437-7312 E-mail CShepph@Entergy.com



Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
Annual Water Use Survey

Return to:  
MDEQ - OLWR  
P.O. Box 2309  
Jackson, Ms 39225-2309

**SYSTEM ENERGY RESOURCES INC**

MDEQ-OLWR Permit Number	Health Dept. Tag Number	County Name	Well Depth	Rated (GPM)	Casing Diameter	Date Drilled	Well Status	Amount Pumped in 2009
MS-GW-00371		CLAIBORNE	128	10000	156	1/1/1979	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>4,167,530,000</u>
MS-GW-02967	0110011-01	CLAIBORNE	152	500	24	9/1/1976	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>54,500</u>
MS-GW-02969		CLAIBORNE	125	10000	192	1/1/1985	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>4,097,410,000</u>
MS-GW-02970		CLAIBORNE	123	10000	156	1/1/1979	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>3,260,990,000</u>
MS-GW-02971		CLAIBORNE	122	10000	156	1/1/1980	ACTIVE <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>1,545,790,000</u>

Please correct inaccurate or missing information in the form. Add any wells that are not shown.

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Jackson, Ms 39225-2309

MS-GW-14989	0110011-03	CLAIBORNE	162	500	18	8/1/1995	ACTIVE	<input checked="" type="checkbox"/> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input checked="" type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>16,429,000</u>
MS-GW-15026	0110011-04	CLAIBORNE	163	500	18	1/18/1996	ACTIVE	<input checked="" type="checkbox"/> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input checked="" type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>16,687,000</u>
MS-GW-16232		CLAIBORNE	100	1000			ACTIVE	<input checked="" type="checkbox"/> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input checked="" type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>
MS-GW-16233		CLAIBORNE	100	1000			ACTIVE	<input checked="" type="checkbox"/> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input checked="" type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>
MS-GW-16234		CLAIBORNE	100	1000			ACTIVE	<input checked="" type="checkbox"/> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input checked="" type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>
MS-GW-16235		CLAIBORNE	100	1000			ACTIVE	<input type="checkbox"/> Active <input checked="" type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input checked="" type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>* See Attachment</u>

Please correct inaccurate or missing information in the form. Add any wells that are not shown.

Well Status definitions: Active - well in use. Standby - well maintained but only used for emergencies. Inactive - well not maintained but not plugged.  
Abandoned - well plugged as per MDEQ regulations.



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MS-GW-16714

CLAIBORNE

155

10000

300

- Active Construction = 10000  
 Standby  
 Inactive (will never be put back in service)  
 Abandoned (plugged per MDEQ regulations)

**Please correct inaccurate or missing information in the form. Add any wells that are not shown.**

**Well Status definitions:** Active - well in use. Standby - well maintained but only used for emergencies. Inactive - well not maintained but not plugged.

**Abandoned - well plugged as per MDEQ regulations.**

**ATTACHMENT III**

**MDEQ & GGNS  
COMMUNICATION**

Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
P. O. Box 2309  
Jackson, MS 39225-2309

May 27, 2010

Please deliver the following 2 pages, including this transmittal sheet to:

Name: Charles Sheppard Phone: 601-437-7312 Fax: 601-437-2336

From:

L. Wayne Williams II  
Geologist  
MDEQ-OLWR Permitting and Monitoring Branch  
(601) 961-5610 office  
(601) 961-5228 fax

Message:

I spoke with Jamie Crawford and he said that these wells (MS-GW-16232 through 16235) were used for testing the aquifer to decide if it could support an additional reactor on site. The conclusion at that time was that an additional reactor would require adding surface water usage. I am changing these well permits to a beneficial use of Test Hole so that they will not continue to show up on reports and surveys for your company. Should any of these wells ever be used for any additional purpose beyond that described above, you will need to contact us and have the permits reinstated. Thank you for you assistance in this matter.





Entergy Operations, Inc.  
P.O. Box 756  
Port Gibson, MS 39150  
Tel 601 437 2800

GEXO-2011/00367

June 7, 2011

Mr. James L. Crawford, RPG *Assistant Director*  
Mississippi Dept. of Environmental Quality  
Office of Land and Water Resources  
Post Office Box 2309  
Jackson, Mississippi 39225-2309

SUBJECT: Grand Gulf Nuclear Station (GGNS)  
2010 Water Use Program Survey

Dear Mr. Crawford:

As requested, GGNS has attached the completed *Well Owner Information Sheet* and the *Well Data Form* for 2010 as part of the Mississippi Department of Environmental Quality (MDEQ) Water Use Program.

If you have any questions or comments, please feel free to contact Charles K. Shepphard at (601) 437-7312 or [CShepph@Entergy.com](mailto:CShepph@Entergy.com).

Sincerely,

A handwritten signature in black ink, appearing to read "C. Shepphard", with a long horizontal flourish extending to the right.

Charles K. Shepphard  
GGNS, Site Environmental Lead

CKS/JML/cks

Attachment: 2010 Water Use Survey

cc: Mr. Patrick Donahue (K-WPO-12E) w/a  
File [CHEM]  
File [CENTRAL] [ 5 ]





STATE OF MISSISSIPPI  
HALEY BARBOUR  
GOVERNOR  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
TRUDY D. FISHER, EXECUTIVE DIRECTOR

April 15, 2011

Dear Water User,

The Office of Land and Water Resources is conducting its annual water-use survey for the **2010 calendar year** and needs your participation. We would appreciate you taking the time to complete the survey and returning it to us by ~~May 31, 2011~~ June, 15 2011 \*

Enclosed you will find two forms: (1) a *Well Owner Information Sheet* and (2) a *Well Data Form*.

A *Well Owner Information Sheet* should be completed for your facility. Please note on the form if you are estimating your pumpage.


The *Well Data Form* provides you with a list of all wells that we currently track for your system(s). Please check the well information for accuracy and make any necessary corrections. Also, if you have any wells on your system(s) that are not included on the list, please provide information on them. If your wells are individually metered, assign the pumpage data for each of them in the spaces provided on the form.

Should you have any questions or need any assistance in providing the information, our staff can be contacted by telephone.

Wayne Williams 601-961-5610  
OR  
Celeste Evans 601-961-5215

We are aware of the time and effort it takes to complete this survey and provide the requested water-use information. However, this information is invaluable to us in our efforts to manage the water resources of the state and to project and address future water supply issues. Your cooperation in this matter is much appreciated.

Sincerely,

  
James L. Crawford, RPG  
Assistant Director

\* We sent to wrong address initially.



## WELL OWNER INFORMATION SHEET

Name of Well Owner <u>ENERGY OPERATIONS, INC.</u>			
Address <u>POST OFFICE BOX 31995</u>			
City <u>JACKSON</u>	State <u>MS</u>	Zip <u>39213</u>	
County <u>HINDS</u>			
Phone <u>(601) 368 - 5000</u>	Fax <u>(601) 368 - 5816</u>		
How many active and/or standby wells do you have? <u>8</u>			
How many total gallons of water were pumped during the 2010 calendar year (Jan - Dec)? <u>12,297,833,521</u> (gal)			
Is the pumped total from metered readings or estimates?	<input type="checkbox"/> Metered	<input checked="" type="checkbox"/> Estimates	
Did you purchase any non-potable water?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
If so, how many gallons?	<u>N/A</u>	From?	<u>N/A</u>

Name of individual completing this form: CHARLES K. SHEPPHARD

Phone (601) 437 - 7312 E-mail CShepph@Entergy.com

Mail to: Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
PO Box 2309, Jackson, MS 39225  
Fax: 601-961-5228



Mississippi Department of Environmental Quality  
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**ENTERGY OPERATIONS INC, CLAIBORNE**

MDEQ-OLWR Permit Number	Health Dept. Tag Number	County Name	Well Depth	Rated (GPM)	Casing Diameter	Date Drilled	Well Status	Amount Pumped in 2010
MS-GW-00371		CLAIBORNE	128	10000	156	1/1/1979	<b>ACTIVE</b> <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>3,679,549,861</u>
MS-GW-02967	0110011-01	CLAIBORNE	152	500	24	9/1/1976	<b>ACTIVE</b> <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>57,750</u>
MS-GW-02969		CLAIBORNE	125	10000	192	1/1/1985	<b>ACTIVE</b> <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>4,310,784,110</u>
MS-GW-02970		CLAIBORNE	123	10000	156	1/1/1979	<b>ACTIVE</b> <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>3,034,807,651</u>
MS-GW-02971		CLAIBORNE	122	10000	156	1/1/1980	<b>ACTIVE</b> <input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	<u>1,240,231,147</u>

**Please correct inaccurate or missing information in the form. Add any wells that are not shown.**

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MS-GW-14989	0110011-03	CLAIBORNE	162	500	18	8/1/1995	<b>ACTIVE</b>	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	16,097,000
MS-GW-15026	0110011-04	CLAIBORNE	163	500	18	1/18/1996	<b>ACTIVE</b>	<input checked="" type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations)	16,306,000
MS-GW-16714		CLAIBORNE	155	10000	300		<b>ACTIVE</b>	<input type="checkbox"/> Active <input type="checkbox"/> Standby <input type="checkbox"/> Inactive (will never be put back in service) <input type="checkbox"/> Abandoned (plugged per MDEQ regulations) <input checked="" type="checkbox"/> Currently Under Construction	0

**Please correct inaccurate or missing information in the form. Add any wells that are not shown.**

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Abandoned - well plugged as per MDEQ regulations.