

1. Manufactured and certified by Alfa Laval Inc., 5400 International Trade Drive, Richmond, Virginia, 23231

(Name and address of Manufacturer)

2. Manufactured for MISSISSIPPI POWER COMPANY, PO BOX 830727, BIRMINGHAM, 35283

(Name and address of Purchaser)

3. Location of installation Kemper County IGCC Generating Facility, 5835 Highway 493, De Kalb, 39328

(Name and address)

4. Type Vertical

(Horizontal, vertical, or sphere)

Plate Heat Exchanger

(Tank, separator, jkt. vessel, heat exch., etc.)

30113-88709

(Manufacturer's serial number)

N/A

(CRN)

30113-88709.2

(Drawing number)

31601

(National Board number)

2012

(Year built)

5. ASME Code, Section VIII, Div. 1

2010/ A11

Edition and Addenda (date)

N/A

Code Case number

N/A

Special Service per UG-120(d)

*Items 6-11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.*6. Shell: (a) Number of course(s) N/A(b) Overall length 0'

Course(s)			Material Spec./Grade or Type	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

7. Heads: (a) SA-516-70

(Material spec. number, grade or type) (H.T. - time and temp.)

(b) SA-516-70

(Material spec. number, grade or type) (H.T. - time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	<u>Fixed</u>	<u>4.33"</u>	<u>0"</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>127" X 46"</u>			<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
(b)	<u>Movable</u>	<u>3.54"</u>	<u>0"</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>127" X 46"</u>			<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

If removable, bolts used (describe other fastening)

SA193-B7 (24) 1.89" (M48 actual) BOLTS

(Material spec. number, grade, size, number)

8. Type of jacket N/A

Jacket closure

N/A

(Describe as ogee & weld, bar, etc.)

If bar, give dimensions

N/A

If bolted, describe or sketch.

9. MAWP 185 psi N/A at max. temp. 150 °F N/A Min. design metal temp. -20 °F at 185 psi

(Internal)

(External)

(Internal)

(External)

10. Impact test NO (Impact Exemption UCS-66(a), (b), UHA-51, UNF-65, as applicable) at test temperature of N/A

(Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test pressure 241 psi Proof test N/A*Items 12 and 13 to be completed for tube sections.*12. Tubesheet N/A N/A N/A N/A N/A

(Stationary (material spec. no.))

(Diameter (subject to press.))

(Nominal thickness)

(Corr. allow.)

Attachment (welded or bolted)

N/A
(Floating (material spec. no.))N/A
(Diameter)N/A
(Nominal thickness)N/A
(Corr. allow.)N/A
(Attachment)13. Tubes N/A N/A N/A N/A N/A

(Material spec. no., grade or type)

(O. D.)

(Nominal thickness)

(Number)

(Type (Straight or U))

*Items 14-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.*14. Shell: (a) Number of N/A (b) Overall length N/A

Course(s)			Material Spec./Grade or Type	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

15. Heads: (a) N/A

(Material spec. number, grade or type) (H.T. - time and temp.)

(b) N/A

(Material spec. number, grade or type) (H.T. - time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>			<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

If removable, bolts used (describe other fastening)

N/A

(Material spec. number, grade, size, number)

Quality
Record

16. MAWP N/A N/A at max. temp. N/A N/A Min. design metal temp. N/A at N/A.
(Internal) (External) (Internal) (External)

17. Impact test N/A at test temperature of N/A.
[Indicate yes or no and the component(s) impact tested]

18. Hydro., pneu., or comb. test pressure N/A Proof test N/A

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet	2	14"	STUDS	SA193-B7		1"					
Outlet	2	14"	STUDS	SA193-B7		1"					

20. Supports: Skirt Lugs N/A Legs N/A Others FEET Attached BOLTED
(Yes or no) (Number) (Number) (Describe) (Where and how)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report (list the name of part, item number, Manufacturer's name, and identifying number):

N/A

22. Remarks

(811) SB-265 Gr. 2 .02" Plates Maximum; Distance between Heads = 63.1188"; Customer PO#: MPC17837-0001; Tag #: HX1204; Owner to supply Safety Valve/Noncorrosive Service Only

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. U Certificate of Authorization Number 25017 Expires July 5, 2013

Date 01/25/2012 Name Alfa Laval Inc. Signed *Aimee Bernard*
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of VA and employed by OneBeacon America Insurance Co. of Lynn, MA have inspected the pressure vessel described in this Manufacturer's Data Report on January 23, 2012, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 01/25/2012 Signed *Robert M. Smith* Commissions 10803A, VA951R
(Authorized Inspector) [National Board (incl. endorsements), State, Province, and number]

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements made in this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. U Certificate of Authorization Number Expires

Date Name Signed
(Assembler) (Representative)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of and employed by of , have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items , not included in the certificate of shop inspection, have been inspected by me and to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of . By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Signed Commissions
(Authorized Inspector) [National Board (incl. endorsements), State, Province, and number]

