

DOCKETED	
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Project Title:	Abengoa Mojave Compliance
TN #:	232302
Document Title:	COMPLIANCE7-03-00, Mojave Solar Project 2019 Annual Compliance Report (09-AFC-5C) 1,1
Description:	COMPLIANCE7-03-00, Mojave Solar Project 2019 Annual Compliance Report (09-AFC-5C) part 1.1
Filer:	Jose Manuel Bravo Romero
Organization:	Mojave Solar Project
Submitter Role:	Applicant
Submission Date:	3/4/2020 9:19:34 AM
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Mojave Solar LLC

42134 Harper Lake Road
Hinkley, California 92347

Phone: 760 308 0400

SUBMITTED ELECTRONICALLY

Subject: 09-AFC-5C
Condition Number: Compliance 7
Description: Mojave Solar Project 2019 Annual Compliance Report
Submittal Number: COMPLIANCE7-03-00
Distribution: Keith Winstead, CEC; Kara Harris, US DOE; Dr. Sharma Shankar CDFW; Ray Bransfield, USFWS; Thomas Dietsch, USFWS

February 27, 2020

Keith Winstead
Compliance Project Manager
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814
keith.winstead@energy.ca.gov

Dear Mr. Winstead,

The attached Mojave Solar Project 2019 Annual Compliance Report (09-AFC-5C) is submitted for your review as part of the ongoing reporting required by the California Energy Commission's Conditions of Certification for the Mojave Solar Project.

Sincerely,

Jose Manuel Bravo Romero
Manager
Compliance, Permitting, Quality and Environment Department
ASI Operations LLC
Mojave Solar Project
42134 Harper Lake Rd
Hinkley, CA 92347
(303) 378-7302
jmanuel.bravo@atlanticayield.com

Attachment: 09-AFC-5C Mojave Solar Project 2019 Annual Compliance Report.

**09-AFC-5C Mojave Solar Project
Annual Compliance Report
2019 reporting period**



Prepared by:

AS Industrial Operations LLC.

for

Mojave Solar LLC

42134 Harper Lake Road
Hinkley, California 92347

Plant: ALPHA ☐ BETA ☒ Date: 9-8-19 Operator: Edm:1

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	160	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	160	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	160	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	160	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	160	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	160	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	160	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	160	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	160	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	160	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	160	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	160	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	160	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	160	✓ O/C	✓	Y ✓ N	
9	Over Flow AFFF B2-8	160	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	✓ O/C	✓	Y ✓ N	
2	Transformer Main	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	160	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	160	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	YES	9-8	
2	Maintenance Shop Drive Way #8	✓ O/C	YES	9-8	
3	West Side Power Block by VS-3 # 9	✓ O/C	YES	9-8	
4	West Side Power Block by VS-1 # 10	✓ O/C	YES	9-8	
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	YES	9-8	
6	West side Cooling Tower by VS-4 # 12	✓ O/C	YES	9-8	
7	N.W. Corner Chemical Storage #1	✓ O/C	YES	9-8	
8	N.E. Corner Chemical Storage # 2	✓ O/C	YES	9-8	
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	YES	9-8	
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	YES	9-8	
11	North Side Bldg 10 # 6	✓ O/C	YES	9-8	
12	Between MP-444 s and Water Treat # 4	✓ O/C	YES	9-8	
13	West Side Power Block Valve Shed #1	✓ O/C	YES	9-8	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

Fire Pump Weekly Test Log

General Information	
Plant: Alpha ☒ Beta ☐	Date: 8-31-19
Operator: Phil TOURGELIS	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Jockey Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 155	
Discharge Pressure: 165	
Pump Suction Pressure: 20	Pump Discharge pressure: 165
Comments:	
Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Start the pump on pressure drop. Start up pressure: 145	
Start time: 21:55	
Pump Suction Pressure: 20	Pump Discharge pressure: 155
Stop time: 22:05	Total time running 10 mins
Comments:	
Diesel Pump	
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒	
Fuel level > 2/3: Yes ☐ No ☐	Monthly Fuel Consumption:
Battery volt Crank 1: 26.7 Battery volt Crank 2: 26.7	Battery Condition: GOOD
Starting hour meter: 57.4	Start time: 22:10
Oil pressure start: 68	Oil Pressure finish: 45
Pump Suction Pressure: 20	Pump Discharge pressure: 150
Coolant temperature after 30 minutes running: 190	
Stop time: 22:25	Stop hour meter: 57.6 Total time running: 15 mins
Comments: CHARGE AIR COOLER TEMP OUT OF RANGE	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).	
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.	
Note: Fuel consumption 27 gal/h approximately.	
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]	

Plant: ALPHA ☒ BETA ☐

Date: 9-1-19

Operator: Mike H

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	175	O/C	/	Y ☒ N ☐	
2	SG Unit 2 B1-2	175	O/C	/	Y ☒ N ☐	
3	Reheaters B1-3	175	O/C	/	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	165	O/C	/	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	175	O/C	/	Y ☒ N ☐	
6	North Steel Pro B1-6	175	O/C	/	Y ☒ N ☐	
7	HTF Pumps B1-7	175	O/C	/	Y ☒ N ☐	
8	HTF Heaters B1-8	175	O/C	/	Y ☒ N ☐	
9	South Steel Pro B1-9	175	O/C	/	Y ☒ N ☐	
10	Lube Oil B1-10	175	O/C	/	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	170	O/C	/	Y ☒ N ☐	
12	Turbine Bearings B1-12	170	O/C	/	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	165	O/C	/	Y ☒ N ☐	
2	Lullage Area B2-2	165	O/C	/	Y ☒ N ☐	
3	Lullage Structure B2-11	165	O/C	/	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	170	O/C	/	Y ☒ N ☐	
5	Overflow Tanks B2-9	170	O/C	/	Y ☒ N ☐	
6	Rack 1 South Area B2-6	170	O/C	/	Y ☒ N ☐	
7	Rack 1 West B2-7	170	O/C	/	Y ☒ N ☐	
8	Rack 1 North Area B2-4	170	O/C	/	Y ☒ N ☐	
9	Over flow AFFF B2-8	170	O/C	/	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	170	O/C	/	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	170	O/C	/	Y ☒ N ☐	
2	Transformer Main	170	O/C	/	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	O/C	/	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	175	O/C	/	Y ☒ N ☐	
2	Offices B4-3	170	O/C	/	Y ☒ N ☐	
3	Electrical Room B4-4	170	O/C	/	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	175	O	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	NO	8-2	
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information	
Plant: Alpha ☒ Beta ☐	Date: 8/25/19
Operator: Rico	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Jockey Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 155 psi	
Discharge Pressure: N/A	
Pump Suction Pressure: 15 psi	Pump Discharge pressure: 20 psi
Comments:	
Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Start the pump on pressure drop. Start up pressure: 115	
Start time: 7:36 pm	
Pump Suction Pressure: 25	Pump Discharge pressure: 150
Stop time: 7:46 pm	Total time running: 10 min
Comments:	
Diesel Pump	
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒	
Fuel level > 2/3: Yes ☐ No ☐	Monthly Fuel Consumption:
Battery volt Crank 1: 27.2 Battery volt Crank 2: 27.2	Battery Condition: good
Starting hour meter: 57.0	Start time: 7:48 Start up pressure: 152
Oil pressure start: 72	Oil Pressure finish: 44
Pump Suction Pressure: 25	Pump Discharge pressure: 150
Coolant temperature after 30 minutes running: 194°F	
Stop time: 8:18 pm	Stop hour meter: 57.4 Total time running: 30 min
Comments:	
Air cooler Temp high out of range	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).	
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use [Title 17 CCR 93115 6(a)(4)]	

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 8-24-19

Operator: Phil Burgess

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	81.1	OC	✓	Y ☒ N ☐	
2	SG Unit 2	81.2	OC	✓	Y ☒ N ☐	
3	Reheaters	81.3	OC	✓	Y ☒ N ☐	
4	Rack 2 West HTF	81.4	OC	✓	Y ☒ N ☐	
5	Rack 2 East HTF	81.5	OC	✓	Y ☒ N ☐	
6	North Steel Pro	81.6	OC	✓	Y ☒ N ☐	
7	HTF Pumps	81.7	OC	✓	Y ☒ N ☐	
8	HTF Heaters	81.8	OC	✓	Y ☒ N ☐	
9	South Steel Pro	81.9	OC	✓	Y ☒ N ☐	
10	Lube Oil	81.10	OC	✓	Y ☒ N ☐	
11	Turbine Hose Stations	81.11	OC	✓	Y ☒ N ☐	
12	Turbine Bearings	81.12	OC	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	82.1	OC	✓	Y ☒ N ☐	
2	Ullage Area	82.2	OC	✓	Y ☒ N ☐	
3	Ullage Structure	82.3	OC	✓	Y ☒ N ☐	
4	Rack 1 Middle Area	82.4	OC	✓	Y ☒ N ☐	
5	Overflow Tanks	82.5	OC	✓	Y ☒ N ☐	
6	Rack 1 South Area	82.6	OC	✓	Y ☒ N ☐	
7	Rack 1 West	82.7	OC	✓	Y ☒ N ☐	
8	Rack 1 North Area	82.8	OC	✓	Y ☒ N ☐	
9	Over flow AFFF	82.9	OC	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF	82.10	OC	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	OC	✓	Y ☒ N ☐	
2	Transformer Main	165	OC	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	OC	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	160	OC	✓	Y ☒ N ☐	
2	Offices	160	OC	✓	Y ☒ N ☐	
3	Electrical Room	160	OC	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OC	
2	Bearing 3	Y ☒ N ☐	OC	
3	Bearing 4	Y ☒ N ☐	OC	
4	Bearing 5	Y ☒ N ☐	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OC	
2	MP-200A	Y ☒ N ☐	OC	
3	MP-200B	Y ☒ N ☐	OC	
4	MP-200C	Y ☒ N ☐	OC	
5	MP-200D	Y ☒ N ☐	OC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	OC	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC	N/A	8-2-19	
2	Maintenance Shop Drive Way #8	OC			
3	West Side Power Block by VS-3 # 9	OC			
4	West Side Power Block by VS-1 # 10	OC			
5	West Side Cooling Tower by VS-4 # 11	OC			
6	West side Cooling Tower by VS-4 # 12	OC			
7	N.W. Corner Chemical Storage # 1	OC			
8	N.E. Corner Chemical Storage # 2	OC			
9	East Side W.T. by Multimedia Filters # 3	OC			
10	East Side W.T. by Multimedia Filters # 5	OC			
11	North Side Bldg 10 # 6	OC			
12	Between MP-444's and Water Treat # 4	OC			
13	West side Power Block Valve Shed # 1	OC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant: ☒ Alpha ☐ Beta	Date: 8-18-19		
Operator: Mike Hinton	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A		Pump Discharge pressure: 168	
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1855			
Pump Suction Pressure: 12		Pump Discharge pressure: 185	
Stop time: 1905		Total time running 10 mins	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☒	Monthly Fuel Consumption:		
Battery volt Crank 1: 26.7 Battery volt Crank 2: 26.8	Battery Condition: Good		
Starting hour meter: 56.5	Start time: 1910		Start up pressure: 135
Oil pressure start: 68	Oil Pressure finish: 44		
Pump Suction Pressure: 10	Pump Discharge pressure: 165		
Coolant temperature after 30 minutes running: 176			
Stop time: 1940	Stop hour meter: 57.0	Total time running: 30 mins	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

 Plant: ALPHA ☒

 BETA ☐

Date: 8/18/19

Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	LOC	✓	Y✓ N	
2	SG Unit 2 B1-2	160	LOC	✓	Y✓ N	
3	Reheaters B1-3	160	LOC	✓	Y✓ N	
4	Rack 2 West HTF B1-4	165	LOC	✓	Y✓ N	
5	Rack 2 East HTF B1-5	155	LOC	✓	Y✓ N	
6	North Steel Pm B1-6	155	LOC	✓	Y✓ N	
7	HTF Pumps B1-7	160	LOC	✓	Y✓ N	
8	HTF Heaters B1-8	160	LOC	✓	Y✓ N	
9	South Steel Pm B1-9	160	LOC	✓	Y✓ N	
10	Lube Oil B1-10	165	LOC	✓	Y✓ N	
11	Turbine Hose Stations B1-11	160	LOC	✓	Y✓ N	
12	Turbine Bearings B1-12	160	LOC	✓	Y✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	170	LOC	✓	Y✓ N	
2	Ullage Area B2-2	170	LOC	✓	Y✓ N	
3	Ullage Structure B2-11	175	LOC	✓	Y✓ N	
4	Rack 1 Middle Area B2-5	170	LOC	✓	Y✓ N	
5	Overflow Tanks B2-9	170	LOC	✓	Y✓ N	
6	Rack 1 South Area B2-6	165	LOC	✓	Y✓ N	
7	Rack 1 West B2-7	170	LOC	✓	Y✓ N	
8	Rack 1 North Area B2-4	165	LOC	✓	Y✓ N	
9	Over flow AFFF B2-8	175	LOC	✓	Y✓ N	
10	Expansion Vessel AFFF B2-3	170	LOC	✓	Y✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	170	LOC	✓	Y✓ N	
2	Transformer Main	165	LOC	✓	Y✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	LOC	✓	Y✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	LOC	✓	Y✓ N	
2	Offices B4-3	165	LOC	✓	Y✓ N	
3	Electrical Room B4-4	160	LOC	✓	Y✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y✓ N	LOC	
2	Bearing 3	Y✓ N	LOC	
3	Bearing 4	Y✓ N	LOC	
4	Bearing 5	Y✓ N	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y✓ N	LOC	
2	MP-200A	Y✓ N	LOC	
3	MP-200B	Y✓ N	LOC	
4	MP-200C	Y✓ N	LOC	
5	MP-200D	Y✓ N	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	open	Y✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444's and Water Treat # 4	LOC			
13	West Side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y✓ N	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 8-11-19	
Operator: Mike Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: N/A	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 1800		
Pump Suction Pressure: 10	Pump Discharge pressure: 165	
Stop time: 1810	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☒	Monthly Fuel Consumption:	
Battery volt Crank 1: 26.7 Battery volt Crank 2: 26.7	Battery Condition: Normal	
Starting hour meter: 56.0	Start time: 07845	Start up pressure: 165
Oil pressure start: 66	Oil Pressure finish: 44	
Pump Suction Pressure: 165	Pump Discharge pressure: 170	
Coolant temperature after 30 minutes running: 194		
Stop time: 1915	Stop hour meter: 56.5	Total time running: 30 mins
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Plant: ALPHA ☒ BETA ☐

Date: 8/10/19

Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	150	LOC	✓	Y✓N-	
2	SG Unit 2 B1-2	150	LOC	✓	Y✓N-	
3	Reheaters B1-3	150	LOC	✓	Y✓N-	
4	Rack 2 West HTF B1-4	150	LOC	✓	Y✓N-	
5	Rack 2 East HTF B1-5	160	LOC	✓	Y✓N-	
6	North Steel Pro B1-6	160	LOC	✓	Y✓N-	
7	HTF Pumps B1-7	150	LOC	✓	Y✓N-	
8	HTF Heaters B1-8	160	LOC	✓	Y✓N-	
9	South Steel Pro B1-9	160	LOC	✓	Y✓N-	
10	Lube Oil B1-10	150	LOC	✓	Y✓N-	
11	Turbine Hose Stall B1-11	150	LOC	✓	Y✓N-	
12	Turbine Bearings B1-12	150	LOC	✓	Y✓N-	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	180	LOC	✓	Y✓N-	
2	Ullage Area B2-2	175	LOC	✓	Y✓N-	
3	Ullage Structure B2-11	180	LOC	✓	Y✓N-	
4	Rack 1 Middle Area B2-5	180	LOC	✓	Y✓N-	
5	Overflow Tanks B2-9	180	LOC	✓	Y✓N-	
6	Rack 1 South Area B2-6	180	LOC	✓	Y✓N-	
7	Rack 1 West B2-7	180	LOC	✓	Y✓N-	
8	Rack 1 North Area B2-4	180	LOC	✓	Y✓N-	
9	Overflow AFFF B2-8	170	LOC	✓	Y✓N-	
10	Expansion Vessel AFFF B2-3	180	LOC	✓	Y✓N-	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	LOC	✓	Y✓N-	
2	Transformer Main	170	LOC	✓	Y✓N-	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	LOC	✓	Y✓N-	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	LOC	✓	Y✓N-	
2	Offices B4-3	160	LOC	✓	Y✓N-	
3	Electrical Room B4-4	160	LOC	✓	Y✓N-	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y✓N-	LOC	
2	Bearing 3	Y✓N-	LOC	
3	Bearing 4	Y✓N-	LOC	
4	Bearing 5	Y✓N-	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y✓N-	LOC	
2	MP-200A	Y✓N-	LOC	
3	MP-200B	Y✓N-	LOC	
4	MP-200C	Y✓N-	LOC	
5	MP-200D	Y✓N-	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	OPEN	Y✓N-	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-44's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	LOC			

To be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y - N ✓	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 8/2/19		
Operator: Rico	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: N/A			
Pump Suction Pressure: 24		Pump Discharge pressure: 20	
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 164			
Start time: 8:00pm			
Pump Suction Pressure: 20		Pump Discharge pressure: 150	
Stop time: 8:10pm		Total time running 10 min	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 27 Battery volt Crank 2: 27		Battery Condition: good	
Starting hour meter: 55.8		Start time: 8:11pm Start up pressure:	
Oil pressure start: 70 psi		Oil Pressure finish: 45.	
Pump Suction Pressure: 148		Pump Discharge pressure: 25	
Coolant temperature after 30 minutes running: 192°F			
Stop time: 8:42pm		Stop hour meter: 56.1 Total time running: 30 min	
Comments: Air cooler temp high			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 8-2-19

Operator: Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	LOC	✓	Y ☐ N ☐	
2	SG Unit 2 B1-2	165	LOC	✓	Y ☐ N ☐	
3	Reheaters B1-3	165	LOC	✓	Y ☐ N ☐	
4	Rack 2 West HTF B1-4	165	LOC	✓	Y ☐ N ☐	
5	Rack 2 East HTF B1-5	160	LOC	✓	Y ☐ N ☐	
6	North Steel Pro B1-6	160	LOC	✓	Y ☐ N ☐	
7	HTF Pumps B1-7	165	LOC	✓	Y ☐ N ☐	
8	HTF Heaters B1-8	165	LOC	✓	Y ☐ N ☐	
9	South Steel Pro B1-9	160	LOC	✓	Y ☐ N ☐	
10	Lube Oil B1-10	165	LOC	✓	Y ☐ N ☐	
11	Turbine Hose Stations B1-11		LOC	✓	Y ☐ N ☐	
12	Turbine Bearings B1-12		LOC	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	162	LOC	✓	Y ☐ N ☐	
2	Ullage Area B2-2	165	LOC	✓	Y ☐ N ☐	
3	Ullage Structure B2-11	160	LOC	✓	Y ☐ N ☐	
4	Rack 1 Middle Area B2-5	160	LOC	✓	Y ☐ N ☐	
5	Overflow Tanks B2-9	160	LOC	✓	Y ☐ N ☐	
6	Rack 1 South Area B2-6	165	LOC	✓	Y ☐ N ☐	
7	Rack 1 West B2-7	165	LOC	✓	Y ☐ N ☐	
8	Rack 1 North Area B2-4	165	LOC	✓	Y ☐ N ☐	
9	Over flow AFFF B2-8	165	LOC	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF B2-3	165	LOC	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	LOC	✓	Y ☐ N ☐	
2	Transformer Main		LOC	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	LOC	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	LOC	✓	Y ☐ N ☐	
2	Offices B4-3	165	LOC	✓	Y ☐ N ☐	
3	Electrical Room B4-4	165	LOC	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	LOC	
2	Bearing 3	Y ☐ N ☐	LOC	
3	Bearing 4	Y ☐ N ☐	LOC	
4	Bearing 5	Y ☐ N ☐	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☐ N ☐	LOC	
2	MP-200A	Y ☐ N ☐	LOC	
3	MP-200B	Y ☐ N ☐	LOC	
4	MP-200C	Y ☐ N ☐	LOC	
5	MP-200D	Y ☐ N ☐	LOC	

Fire Pump House Deluge System

No.	System	PSI	D/C	Locked	Comments
1	Fire Pump House Deluge	165	LOC	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC	✓	8/2/19	
2	Maintenance Shop Drive Way #8	LOC	✓	8/2/19	
3	West Side Power Block by VS-3 # 9	LOC	✓	8/2/19	
4	West Side Power Block by VS-1 # 10	LOC	✓	8/2/19	
5	West Side Cooling Tower by VS-4 # 11	LOC	✓	8/2/19	
6	West side Cooling Tower by VS-4 # 12	LOC	✓	8/2/19	
7	N.W. Corner Chemical Storage #1	LOC	✓	8/2/19	
8	N.E. Corner Chemical Storage # 2	LOC	✓	8/2/19	
9	East Side W.T. by Multimedia Filters # 3	LOC	✓	8/2/19	
10	East Side W.T. by Multimedia Filters # 5	LOC	✓	8/2/19	
11	North Side Bldg 10 # 6	LOC	✓	8/2/19	
12	Between MP-444's and Water Treat # 4	LOC	✓	8/2/19	
13	West Side Power Block Valve Shed #1	N/A	LOC		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 7-27-19	
Operator: PHIL TOURGENS	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: 20	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 02:26		
Pump Suction Pressure: 20	Pump Discharge pressure: 160	
Stop time: 02:36	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1: 26.6 Battery volt Crank 2: 26.6	Battery Condition: Good	
Starting hour meter: 55.6	Start time: 02:40	Start up pressure: 135
Oil pressure start: 71	Oil Pressure finish: 84.6	
Pump Suction Pressure: 20	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running:		
Stop time: 02:55	Stop hour meter: 55.8	Total time running: 15 mins
Comments: CHARGE AIR HIGH TEMP		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use [Title 17 CCR 93115 6(a)(4)]		

Plant: ALPHA ☒ BETA ☐ Date: 7-26-19 Operator: E. Spain

Valve Shed # 1 by Condenser						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	11.0	O/C	✓	Y ✓ N -	
2	SG Unit 2 B1.2	11.0	O/C	✓	Y ✓ N -	
3	Reheaters B1.3	11.0	O/C	✓	Y ✓ N -	
4	Rack 2 West HTF B1.4	11.0	O/C	✓	Y ✓ N -	
5	Rack 2 East HTF B1.5	11.0	O/C	✓	Y ✓ N -	
6	North Steel Pro B1.6	11.0	O/C	✓	Y ✓ N -	
7	HTF Pumps B1.7	11.0	O/C	✓	Y ✓ N -	
8	HTF Heaters B1.8	11.0	O/C	✓	Y ✓ N -	
9	South Steel Pro B1.9	11.0	O/C	✓	Y ✓ N -	
10	Lube Oil B1.10	0	O/C	✓	Y ✓ N -	
11	Turbine Hose Stations B1.11	0	O/C	✓	Y ✓ N -	
12	Turbine Bearings B1.12	0	O/C	✓	Y ✓ N -	

Valve Shed # 2 by Overflow						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	17.0	O/C	✓	Y ✓ N -	
2	Ullage Area B2.2	17.0	O/C	✓	Y ✓ N -	
3	Ullage Structure B2.11	17.0	O/C	✓	Y ✓ N -	
4	Rack 1 Middle Area B2.5	17.0	O/C	✓	Y ✓ N -	
5	Overflow Tanks B2.9	17.0	O/C	✓	Y ✓ N -	
6	Rack 1 South Area B2.6	17.0	O/C	✓	Y ✓ N -	
7	Rack 1 West B2.7	17.0	O/C	✓	Y ✓ N -	
8	Rack 1 North Area B2.4	17.0	O/C	✓	Y ✓ N -	
9	Over Flow AFFF B2.8	17.0	O/C	✓	Y ✓ N -	
10	Expansion Vessel AFFF B2.3	17.0	O/C	✓	Y ✓ N -	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.0	O/C	✓	Y ✓ N -	
2	Transformer Main	16.0	O/C	✓	Y ✓ N -	

Valve Shed # 4 by Cooling Tower West Side						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.0	O/C	✓	Y ✓ N -	

Valve Shed # 5 by Control Bldg 10						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4.5	16.0	O/C	✓	Y ✓ N -	
2	Offices B4.3	16.0	O/C	✓	Y ✓ N -	
3	Electrical Room B4.4	16.0	O/C	✓	Y ✓ N -	

Turbine Sprinkler Valves (These are to be locked in the open position)						
No.	System	Locked	Vlv. Pos.	Signage	Locked	Comments
1	Bearing 2	Y ✓ N -	O/C	✓		
2	Bearing 3	Y ✓ N -	O/C	✓		
3	Bearing 4	Y ✓ N -	O/C	✓		
4	Bearing 5	Y ✓ N -	O/C	✓		

HTF Deluge System Valves (To be Locked in the Open Position)						
No.	System	Locked	Vlv. Pos.	Signage	Locked	Comments
1	MP-201	Y ✓ N -	O/C	✓		
2	MP-200A	Y ✓ N -	O/C	✓		
3	MP-200B	Y ✓ N -	O/C	✓		
4	MP-200C	Y ✓ N -	O/C	✓		
5	MP-200D	Y ✓ N -	O/C	✓		

5	IMP-2000	Y	N	O/C	
Fire Pump House Deluge System					
No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	17.0	✓	Y	N -

PIV Checks					
No.	System	Position	Cycled	Date Inspected	Comments
1	Maintenance Shop Drive Way #7	✓ O/C			
2	Maintenance Shop Drive Way #8	✓ O/C			
3	West Side Power Block by VS-3 # 9	✓ O/C			
4	West Side Power Block by VS-1 # 10	✓ O/C			
5	West Side Cooling Tower by VS-4 # 11	✓ O/C			
6	West side Cooling Tower by VS-4 # 12	✓ O/C			
7	N.W. Corner Chemical Storage #1	✓ O/C			
8	N.E. Corner Chemical Storage # 2	✓ O/C			
9	East Side W.T. by Multimedia Filters # 3	✓ O/C			
10	East Side W.T. by Multimedia Filters # 5	✓ O/C			
11	North Side Bldg 10 # 6	✓ O/C			
12	Between MP-444's and Water Treat # 4	O/C-W			
13	West Side Power Block Valve Shed #1	O/C			

13 West side lower block valve check		To Be Cycled First Saturday of Every Month	
No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y - N -	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 7-21-19		
Operator: Efraim Morales	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155 psi			
Discharge Pressure: 161 psi			
Pump Suction Pressure: —		Pump Discharge pressure: —	
Comments: no gauges			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 150 psi			
Start time: 1341			
Pump Suction Pressure: 25 psi		Pump Discharge pressure: 150 psi	
Stop time: 1342		Total time running 1 min	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 27 ✓ Battery volt Crank 2: 27 ✓		Battery Condition: good	
Starting hour meter: 55.2		Start time: 1345 Start up pressure: 145 psi	
Oil pressure start: 1 psi		Oil Pressure finish: 44 psi	
Pump Suction Pressure: 25 psi		Pump Discharge pressure: 150 psi	
Coolant temperature after 30 minutes running: 192 F			
Stop time: 1415		Stop hour meter: 55.6 H Total time running: 30 min	
Comments: 1354 charge air cooler alarm 1408 air cooler alarm cleared			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 7/20/19

Operator: PLAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	150	LOC	YES	Y ☒ N	
2	SG Unit 2 B1.2	160	LOC	YES	Y ☒ N	
3	Reheaters B1.3	160	LOC	YES	Y ☒ N	
4	Rack 2 West HTP B1.4	160	LOC	YES	Y ☒ N	
5	Rack 2 East HTP B1.5	160	LOC	YES	Y ☒ N	
6	North Steel Pro B1.6	160	LOC	YES	Y ☒ N	
7	HTF Pumps B1.7	155	LOC	YES	Y ☒ N	
8	HTF Heaters B1.8	155	LOC	YES	Y ☒ N	
9	South Steel Pro B1.9	160	LOC	YES	Y ☒ N	
10	Lube Oil B1.10	160	LOC	YES	Y ☒ N	
11	Turbine Hose Station B1.11	160	LOC	YES	Y ☒ N	
12	Turbine Bearings B1.12	160	LOC	YES	Y ☒ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	160	LOC	YES	Y ☒ N	
2	Ullage Area B2.2	160	LOC	YES	Y ☒ N	
3	Ullage Structure B2.11	160	LOC	YES	Y ☒ N	
4	Rack 1 Middle Area B2.5	160	LOC	YES	Y ☒ N	
5	Overflow Tanks B2.9	160	LOC	YES	Y ☒ N	
6	Rack 1 South Area B2.6	160	LOC	YES	Y ☒ N	
7	Rack 1 West B2.7	160	LOC	YES	Y ☒ N	
8	Rack 1 North Area B2.4	160	LOC	YES	Y ☒ N	
9	Overflow AFFF B2.8	60	LOC	YES	Y ☒ N	
10	Expansion Vessel AFFF B2.3	160	LOC	YES	Y ☒ N	

Valve Shed # 3 by Bldg 35 Electrical Bldg

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	LOC	YES	Y ☒ N	
2	Transformer Main	160	LOC	YES	Y ☒ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	YES	Y ☒ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Control Room B4.5	160	LOC	YES	Y ☒ N	
2	Offices B4.3	160	LOC	YES	Y ☒ N	
3	Electrical Room B4.4	160	LOC	YES	Y ☒ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Valv. Pos.	Comments
1	Bearing 2	Y ☒ N	LOC	
2	Bearing 3	Y ☒ N	LOC	
3	Bearing 4	Y ☒ N	LOC	
4	Bearing 5	Y ☒ N	LOC	

HTF Deluge System Valves (to be Locked in the Open Position)

No.	System	Locked	Valv. Pos.	Comments
1	MP-201	Y ☒ N	LOC	
2	MP-200A	Y ☒ N	LOC	
3	MP-200B	Y ☒ N	LOC	
4	MP-200C	Y ☒ N	LOC	
5	MP-200D	Y ☒ N	LOC	

Fire Pump House Deluge System

No.	System	PSI	LOC	Locked	Comments
1	Fire Pump House Deluge	160	LOC	Y ☒ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #3	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS 3 # 9	LOC			
4	West Side Power Block by VS 1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage #2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444's and Water Treat # 4	LOC			
13	West Side Power Block Valve Shed #1	LOC			

To be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N	

Fire Pump Weekly Test Log

General Information		
Plant: ☒ Alpha ☐ Beta	Date: 7-14-19	
Operator: Mike Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: N/A	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☐ Mechanical ☐ Valves ☐		
Start the pump on pressure drop. Start up pressure:		
Start time:		
Pump Suction Pressure:	Pump Discharge pressure:	
Stop time:	Total time running	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☐ Oil ☐ Mechanical ☐ Valves ☐ Water Jacket Heater ☐		
Fuel level > 2/3: Yes ☐ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1:	Battery volt Crank 2:	Battery Condition:
Starting hour meter:	Start time:	Start up pressure:
Oil pressure start:	Oil Pressure finish:	
Pump Suction Pressure:	Pump Discharge pressure:	
Coolant temperature after 30 minutes running:		
Stop time:	Stop hour meter:	Total time running:
Comments: <i>Out of service. LOTO and torn apart.</i>		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 7/13/19

Operator: Plaza

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	B1.1	165	O/C	YES	Y/N
2	SG Unit 2	B1.2	160	O/C	YES	Y/N
3	Reheaters	B1.3	160	O/C	YES	Y/N
4	Rack 2 West HTF	B1.4	160	O/C	YES	Y/N
5	Rack 2 East HTF	B1.5	160	O/C	YES	Y/N
6	North Steel Pro	B1.6	160	O/C	YES	Y/N
7	HTF Pumps	B1.7	160	O/C	YES	Y/N
8	HTF Heaters	B1.8	160	O/C	YES	Y/N
9	South Steel Pro	B1.9	160	O/C	YES	Y/N
10	Lube Oil	B1.10	160	O/C	YES	Y/N
11	Turbine Hose Stations	B1.11	160	O/C	YES	Y/N
12	Turbine Bearings	B1.12	160	O/C	YES	Y/N

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	B2.1	165	O/C	YES	Y/N
2	Ullage Area	B2.2	165	O/C	YES	Y/N
3	Ullage Structure	B2.11	160	O/C	YES	Y/N
4	Rack 1 Middle Area	B2.5	160	O/C	YES	Y/N
5	Overflow Tanks	B2.9	160	O/C	YES	Y/N
6	Rack 1 South Area	B2.6	165	O/C	YES	Y/N
7	Rack 1 West	B2.7	160	O/C	YES	Y/N
8	Rack 1 North Area	B2.4	160	O/C	YES	Y/N
9	Over flow AFFF	B2.8	165	O/C	YES	Y/N
10	Expansion Vessel AFFF	B2.3	160	O/C	YES	Y/N

Valve Shed # 3 by Bldg 35 DE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	O/C	YES	Y/N	
2	Transformer Main	160	O/C	YES	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	YES	Y/N	

Valve Shed # 5 by Control Bldg TU

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	B4.5	160	O/C	YES	Y/N
2	Offices	B4.3	160	O/C	YES	Y/N
3	Electrical Room	B4.4	160	O/C	YES	Y/N

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y/N	O/C	
2	Bearing 3	Y/N	O/C	
3	Bearing 4	Y/N	O/C	
4	Bearing 5	Y/N	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y/N	O/C	
2	MP-200A	Y/N	O/C	
3	MP-200B	Y/N	O/C	
4	MP-200C	Y/N	O/C	
5	MP-200D	Y/N	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	168	O	Y/N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage #2	O/C			
9	East Side W.T. by Multimedia Filters #3	O/C			
10	East Side W.T. by Multimedia Filters #5	O/C			
11	North Side Bldg 10 #6	O/C			
12	Between MP-444 s and Water Treat #4	O/C			
13	West Side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Reluse Check	Y/N	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 7-6-19		
Operator: E. Garcia	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 146 psi			
Discharge Pressure: 16.3 psi			
Pump Suction Pressure: —	Pump Discharge pressure: —		
Comments: no issues			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 150 psi			
Start time: 2231			
Pump Suction Pressure: 20 psi	Pump Discharge pressure: 150 psi		
Stop time: 2232	Total time running: 1 min		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption: —		
Battery volt Crank 1: 26.5 ✓ Battery volt Crank 2: 26.1 ✓	Battery Condition: good		
Starting hour meter: 54.8	Start time: 2236 Start up pressure: 150 psi		
Oil pressure start: 1 psi	Oil Pressure finish: 37 psi		
Pump Suction Pressure: 20 psi	Pump Discharge pressure: 150 psi		
Coolant temperature after 30 minutes running: 190			
Stop time: 2306	Stop hour meter: 55.2	Total time running: 3 min	
Comments: Charge air cooler alarm			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use [Title 17 CCR 93115 6(a)(4)]			

Plant: ALPHA ☒ BETA ☐

Date: 7-6-19

Operator PHIL TOURGELIS

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	160	O/C	✓	Y ✓ N	
2	SG Unit 2 B1.2	160	O/C	✓	Y ✓ N	
3	Reheaters B1.3	155	O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1.4	160	O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1.5	160	O/C	✓	Y ✓ N	
6	North Steel Pro B1.6	160	O/C	✓	Y ✓ N	
7	HTF Pumps B1.7	160	O/C	✓	Y ✓ N	
8	HTF Heaters B1.8	160	O/C	✓	Y ✓ N	
9	South Steel Pro B1.9	160	O/C	✓	Y ✓ N	
10	Lube Oil B1.10	160	O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1.11	160	O/C	✓	Y ✓ N	
12	Turbine Bearings B1.12	160	O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	175	O/C	✓	Y ✓ N	
2	Ullage Area B2.2	175	O/C	✓	Y ✓ N	
3	Ullage Structure B2.11	175	O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2.5	175	O/C	✓	Y ✓ N	
5	Overflow Tanks B2.9	175	O/C	✓	Y ✓ N	
6	Rack 1 South Area B2.6	175	O/C	✓	Y ✓ N	
7	Rack 1 West B2.7	175	O/C	✓	Y ✓ N	
8	Rack 1 North Area B2.4	175	O/C	✓	Y ✓ N	
9	Overflow AFFF B2.8	175	O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2.3	175	O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	O/C	✓	Y ✓ N	
2	Transformer Main	160	O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4.5	160	O/C	✓	Y ✓ N	
2	Offices B4.3	160	O/C	✓	Y ✓ N	
3	Electrical Room B4.4	160	O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	O/C	
2	Bearing 3	Y ✓ N	O/C	
3	Bearing 4	Y ✓ N	O/C	
4	Bearing 5	Y ✓ N	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	O/C	
2	MP-200A	Y ✓ N	O/C	
3	MP-200B	Y ✓ N	O/C	
4	MP-200C	Y ✓ N	O/C	
5	MP-200D	Y ✓ N	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	O/C	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West Side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage #2	O/C			
9	East Side W.T. by Multimedia Filters #3	O/C			
10	East Side W.T. by Multimedia Filters #5	O/C			
11	North Side Bldg 10 #6	O/C			
12	Between MP-44's and Water Treat #4	O/C			
13	West Side Power Block Valve Shed #1	O/C			N/A BETA

To Be Cycled First Saturday of Every Month

No.	System	Details	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 6-29-19	
Operator: Efraim	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 152 152 psi		
Discharge Pressure: 165 psi		
Pump Suction Pressure: — Pump Discharge pressure: —		
Comments: no gases		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 150		
Start time: 2046		
Pump Suction Pressure: 20 psi Pump Discharge pressure: 145 psi		
Stop time: 2047 Total time running 1 min		
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 27V Battery volt Crank 2: 27V Battery Condition: good		
Starting hour meter: 54,44 Start time: 2050 Start up pressure: 145 psi		
Oil pressure start: 1 psi Oil Pressure finish: 37 psi		
Pump Suction Pressure: 20 psi Pump Discharge pressure: 140 psi		
Coolant temperature after 30 minutes running: 190		
Stop time: 2120 Stop hour meter: 54.8 Total time running: 30 min		
Comments: Charge air cooler alarm		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/ h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Plant: ALPHA ☒ BETA ☐ Date: 6-29-19 Operator: PHIL TOURGELS

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	OK	✓	Y ✓ N	
2	SG Unit 2 B1-2	155	OK	✓	Y ✓ N	
3	Reheaters B1-3	160	OK	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	155	OK	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	160	OK	✓	Y ✓ N	
6	North Steel Pro B1-6	160	OK	✓	Y ✓ N	
7	HTF Pumps B1-7	155	OK	✓	Y ✓ N	
8	HTF Heaters B1-8	160	OK	✓	Y ✓ N	
9	South Steel Pro B1-9	160	OK	✓	Y ✓ N	
10	Lube Oil B1-10	155	OK	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	155	OK	✓	Y ✓ N	
12	Turbine Bearings B1-12	155	OK	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessel B2-1	170	OK	✓	Y ✓ N	
2	Ullage Area B2-2	175	OK	✓	Y ✓ N	
3	Ullage Structure B2-11	175	OK	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	175	OK	✓	Y ✓ N	
5	Overflow Tanks B2-9	175	OK	✓	Y ✓ N	
6	Rack 1 South Area B2-6	175	OK	✓	Y ✓ N	
7	Rack 1 West B2-7	175	OK	✓	Y ✓ N	
8	Rack 1 North Area B2-4	175	OK	✓	Y ✓ N	
9	Over flow AFFF B2-8	175	OK	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	175	OK	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OK	✓	Y ✓ N	
2	Transformer Main	160	OK	✓	Y ✓ N	

Valve Shed # 4 by Cooling Lower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	OK	✓	Y ✓ N	
2	Offices B4-3	160	OK	✓	Y ✓ N	
3	Electrical Room B4-4	160	OK	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	OK	
2	Bearing 3	Y ✓ N	OK	
3	Bearing 4	Y ✓ N	OK	
4	Bearing 5	Y ✓ N	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	OK	
2	MP-200A	Y ✓ N	OK	
3	MP-200B	Y ✓ N	OK	
4	MP-200C	Y ✓ N	OK	
5	MP-200D	Y ✓ N	OK	

Fire Pump House Deluge System

No.	System	PSI	OK	Locked	Comments
1	Fire Pump House Deluge	170	OK	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	6-29-19	6-1-19	
2	Maintenance Shop Drive Way #8	OK	7-2-19		
3	West Side Power Block by VS-3 # 9	OK	7-2-19		
4	West Side Power Block by VS-1 # 10	OK	7-2-19		
5	West Side Cooling Tower by VS-4 # 11	OK	7-2-19		
6	West Side Cooling Tower by VS-4 # 12	OK	7-2-19		
7	N.W. Corner Chemical Storage #1	OK	7-2-19		
8	N.E. Corner Chemical Storage #2	OK	7-2-19		
9	East Side W.T. by Multimedia Filters # 3	OK	7-2-19		
10	East Side W.T. by Multimedia Filters # 5	OK	7-2-19		
11	North Side Bldg 10 # 6	OK	7-2-19		
12	Between MP-444's and Water Treat # 4	OK	7-2-19		
13	West Side Power Block Valve Shed #1	OK	7-2-19	6-1-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 6/21-19		
Operator: Rico	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☐ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: N/A			
Pump Suction Pressure: 15	Pump Discharge pressure: 20		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 165			
Start time: 8:55 pm			
Pump Suction Pressure: 25	Pump Discharge pressure: 150		
Stop time: 9:05 pm	Total time running 10 min		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☐	Monthly Fuel Consumption:		
Battery volt Crank 1: 27.1 Battery volt Crank 2: 27.2	Battery Condition: ☒		
Starting hour meter: 54.0	Start time: 9:10 pm Start up pressure:		
Oil pressure start: 61 psi	Oil Pressure finish: 37		
Pump Suction Pressure: 20	Pump Discharge pressure: 145		
Coolant temperature after 30 minutes running: 190			
Stop time: 9:40 pm	Stop hour meter: 54.4	Total time running: 30 min	
Comments:			
Charge Air cooler high out of Range			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 6-21-19

Operator: Mike Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	16.5	O/C	/	Y ☒ N ☐	
2	SG Unit 2 B1-2	16.5	O/C	/	Y ☒ N ☐	
3	Reheaters B1-3	16.5	O/C	/	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	16.0	O/C	/	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	16.0	O/C	/	Y ☒ N ☐	
6	North Steel Pro B1-6	16.0	O/C	/	Y ☒ N ☐	
7	HTF Pumps B1-7	16.5	O/C	/	Y ☒ N ☐	
8	HTF Heaters B1-8	16.5	O/C	/	Y ☒ N ☐	
9	South Steel Pro B1-9	16.5	O/C	/	Y ☒ N ☐	
10	Lube Oil B1-10	16.0	O/C	/	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	16.0	O/C	/	Y ☒ N ☐	
12	Turbine Bearings B1-12	16.0	O/C	/	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	16.5	O/C	/	Y ☒ N ☐	
2	Ullage Area B2-2	16.0	O/C	/	Y ☒ N ☐	
3	Ullage Structure B2-11	16.0	O/C	/	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	16.5	O/C	/	Y ☒ N ☐	
5	Overflow Tanks B2-9	16.5	O/C	/	Y ☒ N ☐	
6	Rack 1 South Area B2-6	16.5	O/C	/	Y ☒ N ☐	
7	Rack 1 West B2-7	16.5	O/C	/	Y ☒ N ☐	
8	Rack 1 North Area B2-4	16.5	O/C	/	Y ☒ N ☐	
9	Over Flow AFFF B2-8	16.5	O/C	/	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	16.5	O/C	/	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.5	O/C	/	Y ☒ N ☐	
2	Transformer Main	16.5	O/C	/	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.5	O/C	/	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	16.5	O/C	/	Y ☒ N ☐	
2	Offices B4-3	16.0	O/C	/	Y ☒ N ☐	
3	Electrical Room B4-4	16.0	O/C	/	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	16.5	O	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	N/A		
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	N/A			

To Be Cycled First Saturday of Every Month

No.	System	Delvis	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 6-14-19		
Operator: Mike Hinton	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A	Pump Discharge pressure: 165		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1720			
Pump Suction Pressure: 10	Pump Discharge pressure: 165		
Stop time: 1730	Total time running 10 mins		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☒	Monthly Fuel Consumption:		
Battery volt Crank 1: 27.1 Battery volt Crank 2: 27.1	Battery Condition: Normal		
Starting hour meter: 53.5	Start time: 1740 Start up pressure: 145		
Oil pressure start: 66	Oil Pressure finish: 36		
Pump Suction Pressure: 12	Pump Discharge pressure: 165		
Coolant temperature after 30 minutes running: 192			
Stop time: 1810	Stop hour meter: 54.0	Total time running: 30 mins	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Plant: ALPHA ☒ BETA ☐ Date: 6/15/19 Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	165	LOC	✓	Y-N	
2	SG Unit 2 B1.2	165	LOC	✓	Y-N	
3	Reheaters B1.3	170	LOC	✓	Y-N	
4	Rack 2 West HTF B1.4	168	LOC	✓	Y-N	
5	Rack 2 East HTF B1.5	170	LOC	✓	Y-N	
6	North Steel Pro B1.6	165	LOC	✓	Y-N	
7	HTF Pumps B1.7	165	LOC	✓	Y-N	
8	HTF Heaters B1.8	165	LOC	✓	Y-N	
9	South Steel Pro B1.9	170	LOC	✓	Y-N	
10	Lube Oil B1.10	165	LOC	✓	Y-N	
11	Turbine Hose Stations B1.11	165	LOC	✓	Y-N	
12	Turbine Bearings B1.12	165	LOC	✓	Y-N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	170	LOC	✓	Y-N	
2	Ullage Area B2.2	170	LOC	✓	Y-N	
3	Ullage Structure B2.11	168	LOC	✓	Y-N	
4	Rack 1 Middle Area B2.5	165	LOC	✓	Y-N	
5	Overflow Tanks B2.9	165	LOC	✓	Y-N	
6	Rack 1 South Area B2.6	165	LOC	✓	Y-N	
7	Rack 1 West B2.7	168	LOC	✓	Y-N	
8	Rack 1 North Area B2.4	170	LOC	✓	Y-N	
9	Over flow AFFF B2.8	165	LOC	✓	Y-N	
10	Expansion Vessel AFFF B2.3	165	LOC	✓	Y-N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	LOC	✓	Y-N	
2	Transformer Main	165	LOC	✓	Y-N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	LOC	✓	Y-N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4.5	165	LOC	✓	Y-N	
2	Offices B4.3	165	LOC	✓	Y-N	
3	Electrical Room B4.4	165	LOC	✓	Y-N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y-N	LOC	
2	Bearing 3	Y-N	LOC	
3	Bearing 4	Y-N	LOC	
4	Bearing 5	Y-N	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y-N	LOC	
2	MP-200A	Y-N	LOC	
3	MP-200B	Y-N	LOC	
4	MP-200C	Y-N	LOC	
5	MP-200D	Y-N	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	LOC	Y-N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444 s and Water Treat # 4	LOC			
13	West Side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y-N	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 6-9-19		
Operator: Mike Hinton	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A	Pump Discharge pressure: 165		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 165			
Start time: 1720			
Pump Suction Pressure: 10	Pump Discharge pressure: 165		
Stop time: 1730	Total time running 10 mins		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:		
Battery volt Crank 1: 26.1 Battery volt Crank 2: 26.4	Battery Condition: Good		
Starting hour meter: 53.0	Start time: 1732 Start up pressure: 148		
Oil pressure start: 67	Oil Pressure finish: 37		
Pump Suction Pressure: 12	Pump Discharge pressure: 170		
Coolant temperature after 30 minutes running: 152			
Stop time: 1802	Stop hour meter: 53.5 Total time running: 30 mins		
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Mojave Solar Project

Plant: ALPHA ☒ BETA: ☐ Date: 6/8/19 Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	LOC		Y N	
2	SG Unit 2 B1-2	165	LOC		Y N	
3	Reheaters B1-3	165	LOC		Y N	
4	Rack 2 West HTF B1-4	165	LOC		Y N	
5	Rack 2 East HTF B1-5	165	LOC		Y N	
6	North Steel Pro B1-6	165	LOC		Y N	
7	HTF Pumps B1-7	170	LOC		Y N	
8	HTF Heaters B1-8	175	LOC		Y N	
9	South Steel Pro B1-9	160	LOC		Y N	
10	Lube Oil B1-10	160	LOC		Y N	
11	Turbine Hose Stations B1-11	165	LOC		Y N	
12	Turbine Bearings B1-12	165	LOC		Y N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	165	LOC		Y N	
2	Ullage Area B2-2	170	LOC		Y N	
3	Ullage Structure B2-11	170	LOC		Y N	
4	Rack 1 Middle Area B2-5	165	LOC		Y N	
5	Overflow Tanks B2-9	160	LOC		Y N	
6	Rack 1 South Area B2-6	165	LOC		Y N	
7	Rack 1 West B2-7	165	LOC		Y N	
8	Rack 1 North Area B2-4	165	LOC		Y N	
9	Overflow AFFF B2-8	170	LOC		Y N	
10	Expansion Vessel AFFF B2-3	175	LOC		Y N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	LOC		Y N	
2	Transformer Main	165	LOC		Y N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	LOC		Y N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	LOC		Y N	
2	Offices B4-3	165	LOC		Y N	
3	Electrical Room B4-4	165	LOC		Y N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y N	LOC	
2	Bearing 3	Y N	LOC	
3	Bearing 4	Y N	LOC	
4	Bearing 5	Y N	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y N	LOC	
2	MP-200A	Y N	LOC	
3	MP-200B	Y N	LOC	
4	MP-200C	Y N	LOC	
5	MP-200D	Y N	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	Open	Y N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444's and Water Treat # 4	LOC			
13	West Side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y N	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 6/1/19		
Operator: Rico	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: N/A			
Pump Suction Pressure: 20		Pump Discharge pressure: 20	
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 165			
Start time: 5:52 pm			
Pump Suction Pressure: 30		Pump Discharge pressure: 150	
Stop time: 6:02 pm		Total time running: 10 min	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 26.5 Battery volt Crank 2: 26.6		Battery Condition: good	
Starting hour meter: 52.6		Start time: 6:03 Start up pressure:	
Oil pressure start: 66		Oil Pressure finish:	
Pump Suction Pressure: 20		Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 190			
Stop time: 6:33		Stop hour meter: 53.0 Total time running: 30 min	
Comments: Air cooler out of Range high			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use [Title 17 CCR 93115.6(a)(4)]			

Plant: ALPHA ☒

BETA ☐

Date: 6-1-19

Operator Mike Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	OK	✓	Y ☒ N ☐	
2	SG Unit 2 B1-2	165	OK	✓	Y ☒ N ☐	
3	Reheaters B1-3	165	OK	✓	Y ☒ N ☐	
4	Rack 2 West HTP B1-4	165	OK	✓	Y ☒ N ☐	
5	Rack 2 East HTP B1-5	160	OK	✓	Y ☒ N ☐	
6	North Steel Pro B1-6	165	OK	✓	Y ☒ N ☐	
7	HTF Pumps B1-7	160	OK	✓	Y ☒ N ☐	
8	HTF Heaters B1-8	165	OK	✓	Y ☒ N ☐	
9	South Steel Pro B1-9	160	OK	✓	Y ☒ N ☐	
10	Lube Oil B1-10	160	OK	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	160	OK	✓	Y ☒ N ☐	
12	Turbine Bearings B1-12	165	OK	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	165	OK	✓	Y ☒ N ☐	
2	Ullage Area B2-2	165	OK	✓	Y ☒ N ☐	
3	Ullage Structure B2-11	160	OK	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	160	OK	✓	Y ☒ N ☐	
5	Overflow Tanks B2-9	165	OK	✓	Y ☒ N ☐	
6	Rack 1 South Area B2-6	160	OK	✓	Y ☒ N ☐	
7	Rack 1 West B2-7	165	OK	✓	Y ☒ N ☐	
8	Rack 1 North Area B2-4	165	OK	✓	Y ☒ N ☐	
9	Over flow AFFF B2-8	165	OK	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	160	OK	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	OK	✓	Y ☒ N ☐	
2	Transformer Main	165	OK	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	OK	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	170	OK	✓	Y ☒ N ☐	
2	Offices B4-3	165	OK	✓	Y ☒ N ☐	
3	Electrical Room B4-4	165	OK	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OK	
2	Bearing 3	Y ☒ N ☐	OK	
3	Bearing 4	Y ☒ N ☐	OK	
4	Bearing 5	Y ☒ N ☐	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OK	
2	MP-200A	Y ☒ N ☐	OK	
3	MP-200B	Y ☒ N ☐	OK	
4	MP-200C	Y ☒ N ☐	OK	
5	MP-200D	Y ☒ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	Yes	6-1	
2	Maintenance Shop Drive Way #8	OK	Yes	6-1	
3	West Side Power Block by VS-3 # 9	OK	Yes	6-1	
4	West Side Power Block by VS-1 # 10	OK	Yes	6-1	
5	West Side Cooling Tower by VS-4 # 11	OK	Yes	6-1	
6	West side Cooling Tower by VS-4 # 12	OK	Yes	6-1	
7	N.W. Corner Chemical Storage #1	OK	Yes	6-1	
8	N.E. Corner Chemical Storage # 2	OK	Yes	6-1	
9	East Side W.T. by Multimedia Filters # 3	OK	Yes	6-1	
10	East Side W.T. by Multimedia Filters # 5	OK	Yes	6-1	
11	North Side Bldg 10 # 6	OK	Yes	6-1	
12	Between MP-444's and Water Treat # 4	OK	No		
13	West Side Power Block Valve Shed #1	OK			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☒	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 5-26-19	
Operator: E. P. M.	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: —		
Pump Suction Pressure: —	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 150		
Start time: 1739		
Pump Suction Pressure: 25 psi	Pump Discharge pressure: 145 psi	
Stop time: 1740	Total time running: 1 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1: 26.5	Battery volt Crank 2: 26.5	Battery Condition: Good
Starting hour meter: 52.2	Start time: 1745	Start up pressure: 145
Oil pressure start: 15 psi	Oil Pressure finish: 35 psi	
Pump Suction Pressure: 25 psi	Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 189		
Stop time: 1815	Stop hour meter: 52.6	Total time running: 30 min
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-“Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems” (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/ h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Plant: ALPHA ☒

 BETA: ☐

Date: 5-24-19

Operator: PHIL TOUGHESS

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	B1-1	160	O/C	Y ☒ N ☐	
2	SG Unit 2	B1-2	160	O/C	Y ☒ N ☐	
3	Reheaters	B1-3	160	O/C	Y ☒ N ☐	
4	Rack 2 West HTF	B1-4	165	O/C	Y ☒ N ☐	
5	Rack 2 East HTF	B1-5	160	O/C	Y ☒ N ☐	
6	North Steel Pro	B1-6	160	O/C	Y ☒ N ☐	
7	HTF Pumps	B1-7	155	O/C	Y ☒ N ☐	
8	HTF Heaters	B1-8	155	O/C	Y ☒ N ☐	
9	South Steel Pro	B1-9	155	O/C	Y ☒ N ☐	
10	Lube Oil	B1-10	155	O/C	Y ☒ N ☐	
11	Turbine Hose Station	B1-11	155	O/C	Y ☒ N ☐	
12	Turbine Bearings	B1-12	155	O/C	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	B2-1	165	O/C	Y ☒ N ☐	
2	Udane Area	B2-2	165	O/C	Y ☒ N ☐	
3	Udane Structure	B2-3	165	O/C	Y ☒ N ☐	
4	Rack 1 Middle Area	B2-5	165	O/C	Y ☒ N ☐	
5	Overflow Tanks	B2-9	165	O/C	Y ☒ N ☐	
6	Rack 1 South Area	B2-6	165	O/C	Y ☒ N ☐	
7	Rack 1 West	B2-7	165	O/C	Y ☒ N ☐	
8	Rack 1 North Area	B2-4	165	O/C	Y ☒ N ☐	
9	Overflow ATFF	B2-8	165	O/C	Y ☒ N ☐	
10	Expansion Vessel ATFF	B2-3	165	O/C	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OC	Y ☒ N ☐		
2	Transformer Main	160	OC	Y ☒ N ☐		

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage		Comments
1	Cooling Tower West side	160	O/C	Y ☒ N ☐		

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	B4-5	160	O/C	Y ☒ N ☐	
2	Offices	B4-3	160	O/C	Y ☒ N ☐	
3	Electrical Room	B4-4	160	O/C	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	Y ☒ N ☐		

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-1 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage #2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444 and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Details	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 5-18-17	
Operator: P. W. TOURGELIS	*To be completed each time unit is operated	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: 20	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 23:20		
Pump Suction Pressure: 20	Pump Discharge pressure: 150	
Stop time: 23:30	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.7	Battery volt Crank 2: 26.7	Battery Condition: GOOD
Starting hour meter: 51.8	Start time: 22:55	
Oil pressure start: 60	Oil Pressure finish: 44	
Pump Suction Pressure: 20	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 187		
Stop time: 23:18	Stop hour meter: 52.2	Total time running: 23 mins
Comments: CHARGE AIR COOLER TEMP OUT OF RANGE.		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/h approximately.		
There is no limit on engine operation for emergency use [Title 17 CCR 93115.6(a)(4)]		

Plant: ALPHA ☒ BETA: ☐ Date: 5-17-19 Operator: Efrain

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	155	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	160	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	160	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	160	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	155	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	155	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	155	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	155	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	155	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	175	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	175	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-3	170	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	175	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	170	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	170	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	170	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	176	✓ O/C	✓	Y ✓ N	
9	Over flow AFFF B2-8	170	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	170	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	145	✓ O/C	✓	Y ✓ N	
2	Transformer Main	140	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	160	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	165	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	140	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	✓		
2	Maintenance Shop Drive Way #8	✓ O/C	✗		
3	West Side Power Block by VS-3 #9	✓ O/C	✗		
4	West Side Power Block by VS-1 #10	✓ O/C	✗		
5	West Side Cooling Tower by VS-4 #11	✓ O/C	✗		
6	West side Cooling Tower by VS-4 #12	✓ O/C	✗		
7	N.W. Corner Chemical Storage #1	✓ O/C	✗		
8	N.E. Corner Chemical Storage #2	✓ O/C	✗		
9	East Side W.T. by Multimedia Filters #3	✓ O/C	✗		
10	East Side W.T. by Multimedia Filters #5	✓ O/C	✗		
11	North Side Bldg 10 #6	✓ O/C	✗		
12	Between MP-444 s and Water Treat #4	✓ O/C	✓		
13	West Side Power Block Valve Shed #1	✓ O/C	✓		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 5-6-19	
Operator: Brian Mendes	*To be completed each time unit is operated	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 144 psi		
Discharge Pressure: 161 psi		
Pump Suction Pressure: —	Pump Discharge pressure: —	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 150 psi		
Start time: 1533		
Pump Suction Pressure: 20 psi	Pump Discharge pressure: 150 psi	
Stop time: 1534	Total time running 1 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1: 26v Battery volt Crank 2: 26v	Battery Condition: Good	
Starting hour meter: 51.3	Start time: 1537	
Oil pressure start: 1 psi	Oil Pressure finish: 38 psi	
Pump Suction Pressure: 25 psi	Pump Discharge pressure: 150 psi	
Coolant temperature after 30 minutes running: 189 F		
Stop time: 1607	Stop hour meter: 51.7	Total time running: 30 min
Comments: 1552 - fault charge air cooler temp out of range High		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/ h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 5-11-19

Operator: Ebrah

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	165	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1.2	163	✓ O/C	✓	Y ✓ N	
3	Reheaters B1.3	163	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1.4	163	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1.5	163	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1.6	163	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1.7	163	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1.8	163	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1.9	163	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1.10	163	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1.11	160	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1.12	163	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	173	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2.2	173	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2.11	173	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2.5	173	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2.9	173	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2.6	173	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2.7	173	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2.4	173	✓ O/C	✓	Y ✓ N	
9	Over flow AFFF B2.8	173	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2.3	173	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	163	✓ O/C	✓	Y ✓ N	
2	Transformer Main	163	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	163	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4.5	163	✓ O/C	✓	Y ✓ N	
2	Offices B4.3	163	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4.4	163	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	D/C	Locked	Comments
1	Fire Pump House Deluge	163	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	X		
2	Maintenance Shop Drive Way #8	✓ O/C	X		
3	West Side Power Block by VS-3 # 9	✓ O/C	X		
4	West Side Power Block by VS-1 # 10	✓ O/C	X		
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	X		
6	West side Cooling Tower by VS-4 # 12	✓ O/C	X		
7	N.W. Corner Chemical Storage #1	✓ O/C	X		
8	N.E. Corner Chemical Storage # 2	✓ O/C	X		
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	X		
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	X		
11	North Side Bldg 10 # 6	✓ O/C	X		
12	Between MP-444's and Water Treat # 4	✓ O/C	X		
13	West Side Power Block Valve Shed #1	✓ O/C	X		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☒ Beta ☐	Date: 5-4-19
Operator: Ebrah Mader	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Jockey Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 134	
Discharge Pressure: —	
Pump Suction Pressure: —	Pump Discharge pressure: —
Comments:	

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 150
Start time: 2042
Pump Suction Pressure: 25psi
Pump Discharge pressure: 145 psi
Stop time: 2047
Total time running 1 min
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☒ No ☐
Monthly Fuel Consumption:
Battery volt Crank 1: 26 ✓ Battery volt Crank 2: 26 ✓
Battery Condition: good
Starting hour meter: 50.8
Start time: 2046
Oil pressure start: 1psi
Oil Pressure finish: 38psi
Pump Suction Pressure: 50psi
Pump Discharge pressure: 150psi
Coolant temperature after 30 minutes running: 189F
Stop time: 2116
Stop hour meter: 51.3
Total time running: 30 min
Comments: charge air cooler temp out of range

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately.

There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 4/28/19	
Operator: Rico	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: N/A		
Pump Suction Pressure: 15	Pump Discharge pressure: 20	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 163		
Start time: 5:22 pm		
Pump Suction Pressure: 25	Pump Discharge pressure: 150	
Stop time: 5:32 pm	Total time running 10 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.5	Battery volt Crank 2: 26.5	Battery Condition: good
Starting hour meter: 50.4	Start time: 5:33 pm	
Oil pressure start: 68	Oil Pressure finish: 37	
Pump Suction Pressure: 25	Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 189		
Stop time: 6:03 pm	Stop hour meter: 50.8	Total time running: 30 min
Comments:		
Charge Air Cooler Temp out of Range high		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/h approximately.		
There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 5-7-19 Operator: Efrain

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	✓ O/C	✓	Y ✓ N -	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ✓ N -	
3	Reheaters B1-3	160	✓ O/C	✓	Y ✓ N -	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ✓ N -	
5	Rack 2 East HTF B1-5	160	✓ O/C	✓	Y ✓ N -	
6	North Steel Pro B1-6	160	✓ O/C	✓	Y ✓ N -	
7	HTF Pumps B1-7	160	✓ O/C	✓	Y ✓ N -	
8	HTF Heaters B1-8	160	✓ O/C	✓	Y ✓ N -	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ✓ N -	
10	Lube Oil B1-10	150	✓ O/C	✓	Y ✓ N -	
11	Turbine Hose Stations B1-11	160	✓ O/C	✓	Y ✓ N -	
12	Turbine Bearings B1-12	160	✓ O/C	✓	Y ✓ N -	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	175	✓ O/C	✓	Y ✓ N -	
2	Ullage Area B2-2	170	✓ O/C	✓	Y ✓ N -	
3	Ullage Structure B2-11	175	✓ O/C	✓	Y ✓ N -	
4	Rack 1 Middle Area B2-5	175	✓ O/C	✓	Y ✓ N -	
5	Overflow Tanks B2-9	180	✓ O/C	✓	Y ✓ N -	
6	Rack 1 South Area B2-6	185	✓ O/C	✓	Y ✓ N -	
7	Rack 1 West B2-7	160	✓ O/C	✓	Y ✓ N -	
8	Rack 1 North Area B2-4	165	✓ O/C	✓	Y ✓ N -	
9	Over Flow AFFF B2-8	170	✓ O/C	✓	Y ✓ N -	
10	Expansion Vessel AFFF B2-3	175	✓ O/C	✓	Y ✓ N -	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	155	✓ O/C	✓	Y ✓ N -	
2	Transformer Main	155	✓ O/C	✓	Y ✓ N -	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	✓ O/C	✓	Y ✓ N -	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ✓ N -	
2	Offices B4-3	160	✓ O/C	✓	Y ✓ N -	
3	Electrical Room B4-4	160	✓ O/C	✓	Y ✓ N -	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N -	✓ O/C	
2	Bearing 3	Y ✓ N -	✓ O/C	
3	Bearing 4	Y ✓ N -	✓ O/C	
4	Bearing 5	Y ✓ N -	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N -	✓ O/C	
2	MP-200A	Y ✓ N -	✓ O/C	
3	MP-200B	Y ✓ N -	✓ O/C	
4	MP-200C	Y ✓ N -	✓ O/C	
5	MP-200D	Y ✓ N -	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	145	✓	Y ✓ N -	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	✓	5-7	
2	Maintenance Shop Drive Way #8	✓ O/C	✓	5-7	
3	West Side Power Block by VS-3 # 9	✓ O/C	✓	5-7	
4	West Side Power Block by VS-1 # 10	✓ O/C	✓	5-7	
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	✓	5-7	
6	West side Cooling Tower by VS-4 # 12	✓ O/C	✓	5-7	
7	N.W. Corner Chemical Storage #1	✓ O/C	✓	5-7	
8	N.E. Corner Chemical Storage # 2	✓ O/C	✓	5-7	
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	✓	5-7	
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	✓	5-7	
11	North Side Bldg 10 # 6	✓ O/C	✓	5-7	
12	Between MP-444 s and Water Treat # 4	O/C ✓	✓		
13	West Side Power Block Valve Shed #1	O/C ✓	✓		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N -	

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 4-27-19

Operator: Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	81.1	OK	✓	Y ☐ N ☐	
2	SG Unit 2	81.2	OK	✓	Y ☐ N ☐	
3	Reheaters	81.3	OK	✓	Y ☐ N ☐	
4	Rack 2 West HTF	81.4	OK	✓	Y ☐ N ☐	
5	Rack 2 East HTF	81.5	OK	✓	Y ☐ N ☐	
6	North Steel Pro	81.6	OK	✓	Y ☐ N ☐	
7	HTF Pumps	81.7	OK	✓	Y ☐ N ☐	
8	HTF Heaters	81.8	OK	✓	Y ☐ N ☐	
9	South Steel Pro	81.9	OK	✓	Y ☐ N ☐	
10	Lube Oil	81.10	OK	✓	Y ☐ N ☐	
11	Turbine Hose Stations	81.11	OK	✓	Y ☐ N ☐	
12	Turbine Bearings	81.12	OK	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	82.1	OK	✓	Y ☐ N ☐	
2	Ullage Area	82.2	OK	✓	Y ☐ N ☐	
3	Ullage Structure	82.11	OK	✓	Y ☐ N ☐	
4	Rack 1 Middle Area	82.5	OK	✓	Y ☐ N ☐	
5	Overflow Tanks	82.9	OK	✓	Y ☐ N ☐	
6	Rack 1 South Area	82.6	OK	✓	Y ☐ N ☐	
7	Rack 1 West	82.7	OK	✓	Y ☐ N ☐	
8	Rack 1 North Area	82.4	OK	✓	Y ☐ N ☐	
9	Over flow AFFF	82.8	OK	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF	82.3	OK	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.5	OK	✓	Y ☐ N ☐	
2	Transformer Main	16.5	OK	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.5	OK	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	17.0	OK	✓	Y ☐ N ☐	
2	Offices	16.5	OK	✓	Y ☐ N ☐	
3	Electrical Room	16.5	OK	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	OK	
2	Bearing 3	Y ☐ N ☐	OK	
3	Bearing 4	Y ☐ N ☐	OK	
4	Bearing 5	Y ☐ N ☐	OK	

HTF Deluge System Valves (to be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☐ N ☐	OK	
2	MP-200A	Y ☐ N ☐	OK	
3	MP-200B	Y ☐ N ☐	OK	
4	MP-200C	Y ☐ N ☐	OK	
5	MP-200D	Y ☐ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge			Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	No		
2	Maintenance Shop Drive Way #8	OK			
3	West Side Power Block by VS-3 # 9	OK			
4	West Side Power Block by VS-1 # 10	OK			
5	West Side Cooling Tower by VS-4 # 11	OK			
6	West side Cooling Tower by VS-4 # 12	OK			
7	N.W. Corner Chemical Storage # 1	OK			
8	N.E. Corner Chemical Storage # 2	OK			
9	East Side W.T. by Multimedia Filters # 3	OK			
10	East Side W.T. by Multimedia Filters # 5	OK			
11	North Side Bldg 10 # 6	OK			
12	Between MP-444's and Water Treat # 4	OK			
13	West side Power Block Valve Shed # 1	OK			

To Be Cycled First Saturday of Every Month

No.	System	Dabris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☒ Beta ☐	Date:	
Operator:	Rico	*To be completed each time unit is operated.	
Reason for running pumps:	Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 162			
Discharge Pressure:	N/A		
Pump Suction Pressure:	15	Pump Discharge pressure:	20
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 165			
Start time:	7:30 pm		
Pump Suction Pressure:	25	Pump Discharge pressure:	150
Stop time:	7:40 pm	Total time running	10 min
Comments:			
Diesel Pump			
Pre-start Inspection:	Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3:	Yes ☐ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1:	26.6	Battery volt Crank 2:	26.5
Starting hour meter:	50.0	Battery Condition:	good
Oil pressure start:	67	Start time:	7:41 pm
Pump Suction Pressure:	25	Start up pressure:	
		Oil Pressure finish:	165
		Pump Discharge pressure:	150
Coolant temperature after 30 minutes running: 189°F			
Stop time:	8:12 pm	Stop hour meter:	
Total time running: 30 min			
Comments:			
Charge air cooler Temp out of Range high			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 4-19-19 Operator: Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	165	OK	✓	Y ☐ N ☐	
2	SG Unit 2	165	OK	✓	Y ☐ N ☐	
3	Reheaters	165	OK	✓	Y ☐ N ☐	
4	Rack 2 West HTF	165	OK	✓	Y ☐ N ☐	
5	Rack 2 East HTF	165	OK	✓	Y ☐ N ☐	
6	North Steel Pro	165	OK	✓	Y ☐ N ☐	
7	HTF Pumps	165	OK	✓	Y ☐ N ☐	
8	HTF Heaters	170	OK	✓	Y ☐ N ☐	
9	South Steel Pro	170	OK	✓	Y ☐ N ☐	
10	Lube Oil	170	OK	✓	Y ☐ N ☐	
11	Turbine Hose Stations	165	OK	✓	Y ☐ N ☐	
12	Turbine Bearings	165	OK	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	165	OK	✓	Y ☐ N ☐	
2	Ullage Area	170	OK	✓	Y ☐ N ☐	
3	Ullage Structure	170	OK	✓	Y ☐ N ☐	
4	Rack 1 Middle Area	170	OK	✓	Y ☐ N ☐	
5	Overflow Tanks	165	OK	✓	Y ☐ N ☐	
6	Rack 1 South Area	165	OK	✓	Y ☐ N ☐	
7	Rack 1 West	165	OK	✓	Y ☐ N ☐	
8	Rack 1 North Area	165	OK	✓	Y ☐ N ☐	
9	Over flow AFFF	165	OK	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF	165	OK	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	OK	✓	Y ☐ N ☐	
2	Transformer Main	165	OK	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	OK	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	165	OK	✓	Y ☐ N ☐	
2	Offices	165	OK	✓	Y ☐ N ☐	
3	Electrical Room	165	OK	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	OK	
2	Bearing 3	Y ☐ N ☐	OK	
3	Bearing 4	Y ☐ N ☐	OK	
4	Bearing 5	Y ☐ N ☐	OK	

HTF Deluge System Valves (To be Locked In the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☐ N ☐	OK	
2	MP-200A	Y ☐ N ☐	OK	
3	MP-200B	Y ☐ N ☐	OK	
4	MP-200C	Y ☐ N ☐	OK	
5	MP-200D	Y ☐ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge			Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	No		
2	Maintenance Shop Drive Way #8	OK	No		
3	West Side Power Block by VS-3 # 9	OK	No		
4	West Side Power Block by VS-1 # 10	OK	No		
5	West Side Cooling Tower by VS-4 # 11	OK	No		
6	West side Cooling Tower by VS-4 # 12	OK	No		
7	N.W. Corner Chemical Storage #1	OK	No		
8	N.E. Corner Chemical Storage # 2	OK	No		
9	East Side W.T. by Multimedia Filters # 3	OK	No		
10	East Side W.T. by Multimedia Filters # 5	OK	No		
11	North Side Bldg 10 # 6	OK	No		
12	Between MP-444's and Water Treat # 4	OK	No		
13	West-side Power Block Valve Shed #4	OK	No		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☒	

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☒ Beta ☐	Date: 4-12-19	
Operator:	Michael Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 165/155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A		Pump Discharge pressure: 160	
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1830			
Pump Suction Pressure: 15		Pump Discharge pressure: 165	
Stop time: 1840		Total time running 10 mins	
Comments: 7			
Diesel Pump			
Pre-start Inspection:	Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3:	Yes ☐ No ☒	Monthly Fuel Consumption:	
Battery volt Crank 1: 26.4	Battery volt Crank 2: 26.5	Battery Condition: Good	
Starting hour meter: 49.5	Start time: 1855	Start up pressure: 180	
Oil pressure start: 64	Oil Pressure finish: 38		
Pump Suction Pressure: 12	Pump Discharge pressure:		
Coolant temperature after 30 minutes running: 189			
Stop time: 1825	Stop hour meter: 50.0	Total time running: 30 mins	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 4/13/19 Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	81.1	170	O/C	Y ☐ N ☐	
2	SG Unit 2	81.2	165	O/C	Y ☐ N ☐	
3	Reheaters	81.3	165	O/C	Y ☐ N ☐	
4	Rack 2 West HTF	81.4	170	O/C	Y ☐ N ☐	
5	Rack 2 East HTF	81.5	175	O/C	Y ☐ N ☐	
6	North Steel Pro	81.6	170	O/C	Y ☐ N ☐	
7	HTF Pumps	81.7	165	O/C	Y ☐ N ☐	
8	HTF Heaters	81.8	165	O/C	Y ☐ N ☐	
9	South Steel Pro	81.9	165	O/C	Y ☐ N ☐	
10	Lube Oil	81.10	170	O/C	Y ☐ N ☐	
11	Turbine Hose Stations	81.11	170	O/C	Y ☐ N ☐	
12	Turbine Bearings	81.12	165	O/C	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	82.1	165	O/C	Y ☐ N ☐	
2	Ullage Area	82.2	170	O/C	Y ☐ N ☐	
3	Ullage Structure	82.11	170	O/C	Y ☐ N ☐	
4	Rack 1 Middle Area	82.5	165	O/C	Y ☐ N ☐	
5	Overflow Tanks	82.9	165	O/C	Y ☐ N ☐	
6	Rack 1 South Area	82.6	165	O/C	Y ☐ N ☐	
7	Rack 1 West	82.7	170	O/C	Y ☐ N ☐	
8	Rack 1 North Area	82.4	165	O/C	Y ☐ N ☐	
9	Over flow AFFF	82.8	165	O/C	Y ☐ N ☐	
10	Expansion Vessel AFFF	82.3	170	O/C	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	165	O/C	Y ☐ N ☐	
2	Transformer Main	170	170	O/C	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	175	O/C	Y ☐ N ☐		

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	165	O/C	Y ☐ N ☐		
2	Offices	165	O/C	Y ☐ N ☐		
3	Electrical Room	165	O/C	Y ☐ N ☐		

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	O/C	
2	Bearing 3	Y ☐ N ☐	O/C	
3	Bearing 4	Y ☐ N ☐	O/C	
4	Bearing 5	Y ☐ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☐ N ☐	O/C	
2	MP-200A	Y ☐ N ☐	O/C	
3	MP-200B	Y ☐ N ☐	O/C	
4	MP-200C	Y ☐ N ☐	O/C	
5	MP-200D	Y ☐ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	175	Y ☐	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☒ Beta ☐	Date: 4-6-19	
Operator:	Michael Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A		Pump Discharge pressure: 165	
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☐		
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1930			
Pump Suction Pressure: 10		Pump Discharge pressure: 165	
Stop time: 1940		Total time running 10 mins	
Comments:			
Diesel Pump			
Pre-start Inspection:	Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3:	Yes ☐ No ☒	Monthly Fuel Consumption:	
Battery volt Crank 1:	26.6	Battery volt Crank 2:	26.6
Starting hour meter: 49.0		Battery Condition: Good	
Oil pressure start: 66		Start time: 1940 Start up pressure: 170	
Pump Suction Pressure: 12		Oil Pressure finish: 38	
		Pump Discharge pressure: 170	
Coolant temperature after 30 minutes running: 189			
Stop time: 2010		Stop hour meter: 49.5	
		Total time running: 30 mins	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 4/6/19 Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	OPC	✓	Y ☐ N ☐	
2	SG Unit 2 B1-2	165	OPC	✓	Y ☐ N ☐	
3	Reheaters B1-3	170	OPC	✓	Y ☐ N ☐	
4	Rack 2 West HTF B1-4	170	OPC	✓	Y ☐ N ☐	
5	Rack 2 East HTF B1-5	160	OPC	✓	Y ☐ N ☐	
6	North Steel Pro B1-6	165	OPC	✓	Y ☐ N ☐	
7	HTF Pumps B1-7	170	OPC	✓	Y ☐ N ☐	
8	HTF Heaters B1-8	170	OPC	✓	Y ☐ N ☐	
9	South Steel Pro B1-9	165	OPC	✓	Y ☐ N ☐	
10	Lube Oil B1-10	165	OPC	✓	Y ☐ N ☐	
11	Turbine Hose Stations B1-11	165	OPC	✓	Y ☐ N ☐	
12	Turbine Bearings B1-12	165	OPC	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	170	OPC	✓	Y ☐ N ☐	
2	Ullage Area B2-2	170	OPC	✓	Y ☐ N ☐	
3	Ullage Structure B2-3	160	OPC	✓	Y ☐ N ☐	
4	Rack 1 Middle Area B2-4	165	OPC	✓	Y ☐ N ☐	
5	Overflow Tanks B2-5	165	OPC	✓	Y ☐ N ☐	
6	Rack 1 South Area B2-6	165	OPC	✓	Y ☐ N ☐	
7	Rack 1 West B2-7	165	OPC	✓	Y ☐ N ☐	
8	Rack 1 North Area B2-8	165	OPC	✓	Y ☐ N ☐	
9	Over flow AFFF B2-9	165	OPC	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF B2-10	165	OPC	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	170	OPC	✓	Y ☐ N ☐	
2	Transformer Main	165	OPC	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	OPC	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B5-1	165	OPC	✓	Y ☐ N ☐	
2	Offices B5-2	165	OPC	✓	Y ☐ N ☐	
3	Electrical Room B5-3	165	OPC	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	OPC	
2	Bearing 3	Y ☐ N ☐	OPC	
3	Bearing 4	Y ☐ N ☐	OPC	
4	Bearing 5	Y ☐ N ☐	OPC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☐ N ☐	OPC	
2	MP-200A	Y ☐ N ☐	OPC	
3	MP-200B	Y ☐ N ☐	OPC	
4	MP-200C	Y ☐ N ☐	OPC	
5	MP-200D	Y ☐ N ☐	OPC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	OPC	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OPC			
2	Maintenance Shop Drive Way #8	OPC			
3	West Side Power Block by VS-3 # 9	OPC			
4	West Side Power Block by VS-1 # 10	OPC			
5	West Side Cooling Tower by VS-4 # 11	OPC			
6	West side Cooling Tower by VS-4 # 12	OPC			
7	N.W. Corner Chemical Storage #1	OPC			
8	N.E. Corner Chemical Storage #2	OPC			
9	East Side W.T. by Multimedia Filters # 3	OPC			
10	East Side W.T. by Multimedia Filters # 5	OPC			
11	North Side Bldg 10 # 6	OPC			
12	Between MP-44's and Water Treat # 4	OPC			
13	West side Power Block Valve Shed #1	OPC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☒ Beta ☐	Date: 3-29-19	
Operator:	Phil Tourbellis	*To be completed each time unit is operated.	
Reason for running pumps:	Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: 20		Pump Discharge pressure: 165	
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145			
Start time: 06:10			
Pump Suction Pressure: 20		Pump Discharge pressure: 160	
Stop time: 06:20		Total time running 10 mins	
Comments:			
Diesel Pump			
Pre-start Inspection:	Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3:	Yes ☒ No ☐ 3/4	Monthly Fuel Consumption:	
Battery volt Crank 1: 26.7	Battery volt Crank 2: 26.7	Battery Condition: Good	
Starting hour meter: 48.5	Start time: 05:48	Start up pressure: 135	
Oil pressure start: 59	Oil Pressure finish: 39		
Pump Suction Pressure: 20		Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 181			
Stop time: 06:08	Stop hour meter: 49	Total time running: 30 mins	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA: ☐

Date: 3-22-19

Operator: PHIL TOWRIGLIOS

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	155	OC	✓	Y ☒ N ☐	
2	SG Unit 2 B1.2	160	OC	✓	Y ☒ N ☐	
3	Reheaters B1.3	160	OC	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1.4	155	OC	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1.5	160	OC	✓	Y ☒ N ☐	
6	North Steel Pro B1.6	160	OC	✓	Y ☒ N ☐	
7	HTF Pumps B1.7	160	OC	✓	Y ☒ N ☐	
8	HTF Heaters B1.8	155	OC	✓	Y ☒ N ☐	
9	South Steel Pro B1.9	160	OC	✓	Y ☒ N ☐	
10	Lube Oil B1.10	2	OC	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1.11	160	OC	✓	Y ☒ N ☐	
12	Turbine Bearings B1.12	160	OC	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	170	OC	✓	Y ☒ N ☐	
2	Ullage Area B2.2	170	OC	✓	Y ☒ N ☐	
3	Ullage Structure B2.3	165	OC	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2.4	170	OC	✓	Y ☒ N ☐	
5	Overflow Tanks B2.5	165	OC	✓	Y ☒ N ☐	
6	Rack 1 South Area B2.6	170	OC	✓	Y ☒ N ☐	
7	Rack 1 West B2.7	170	OC	✓	Y ☒ N ☐	
8	Rack 1 North Area B2.8	165	OC	✓	Y ☒ N ☐	
9	Over flow AFFF B2.9	165	OC	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2.3	170	OC	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	OC	✓	Y ☒ N ☐	
2	Transformer Main	165	OC	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	OC	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	165	OC	✓	Y ☒ N ☐	
2	Offices	165	OC	✓	Y ☒ N ☐	
3	Electrical Room	165	OC	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OC	
2	Bearing 3	Y ☒ N ☐	OC	
3	Bearing 4	Y ☒ N ☐	OC	
4	Bearing 5	Y ☒ N ☐	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OC	
2	MP-200A	Y ☒ N ☐	OC	
3	MP-200B	Y ☒ N ☐	OC	
4	MP-200C	Y ☒ N ☐	OC	
5	MP-200D	Y ☒ N ☐	OC	

Fire Pump House Deluge System

No.	System	PSI	OC	Locked	Comments
1	Fire Pump House Deluge	180	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC	✓		
2	Maintenance Shop Drive Way #8	OC	✓		
3	West Side Power Block by VS-3 # 9	OC	✓		
4	West Side Power Block by VS-1 # 10	OC	✓		
5	West Side Cooling Tower by VS-4 # 11	OC	✓		
6	West side Cooling Tower by VS-4 # 12	OC	✓		
7	N.W. Corner Chemical Storage #1	OC	✓		
8	N.E. Corner Chemical Storage # 2	OC	✓		
9	East Side W.T. by Multimedia Filters # 3	OC	✓		
10	East Side W.T. by Multimedia Filters # 5	OC	✓		
11	North Side Bldg 10 # 6	OC	✓		
12	Between MP-44's and Water Treat # 4	OC	✓		
13	West side Power Block Valve Shed #1	OC	✓		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☒ Beta ☐

Date: 3-23-19

Operator: PHIL TOURGELIS

*To be completed each time unit is operated

Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒

Check the jockey pump on pressure drop. Start up pressure: 155

Discharge Pressure: 165

Pump Suction Pressure: 15

Pump Discharge pressure: 165

Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒

Start the pump on pressure drop. Start up pressure: 145

Start time: 06:35

Pump Suction Pressure: 15

Pump Discharge pressure: 150

Stop time: 06:45

Total time running 10 mins

Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒

Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption: 3/4

Battery volt Crank 1: 26.2 Battery volt Crank 2: 26.7

Battery Condition: Good

Starting hour meter: 48.0

Start time: 06:58

Oil pressure start: 64 PSI

Oil Pressure finish: 39 PSI

Pump Suction Pressure: 20

Pump Discharge pressure: 155

Coolant temperature after 30 minutes running: 178

Stop time: 07:28

Stop hour meter: 48.5

Total time running: 30 mins

Comments:

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately.

There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 3-24-17 Operator: PHIL TOURELUS

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	81.1	160	O/C	Y ☐ N ☐	
2	SG Unit 2	81.2	160	O/C	Y ☐ N ☐	
3	Reheaters	81.3	165	O/C	Y ☐ N ☐	
4	Rack 2 West HTF	81.4	160	O/C	Y ☐ N ☐	
5	Rack 2 East HTF	81.5	160	O/C	Y ☐ N ☐	
6	North Steel Pro	81.6	160	O/C	Y ☐ N ☐	
7	HTF Pumps	81.7	160	O/C	Y ☐ N ☐	
8	HTF Heaters	81.8	160	O/C	Y ☐ N ☐	
9	South Steel Pro	81.9	160	O/C	Y ☐ N ☐	
10	Lube Oil	81.10	—	O/C	Y ☐ N ☐	
11	Turbine Hose Stations	81.11	160	O/C	Y ☐ N ☐	
12	Turbine Bearings	81.12	160	O/C	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	82.1	170	O/C	Y ☐ N ☐	
2	Ullage Area	82.2	175	O/C	Y ☐ N ☐	
3	Ullage Structure	82.3	175	O/C	Y ☐ N ☐	
4	Rack 1 Middle Area	82.4	170	O/C	Y ☐ N ☐	
5	Overflow Tanks	82.5	170	O/C	Y ☐ N ☐	
6	Rack 1 South Area	82.6	175	O/C	Y ☐ N ☐	
7	Rack 1 West	82.7	175	O/C	Y ☐ N ☐	
8	Rack 1 North Area	82.8	175	O/C	Y ☐ N ☐	
9	Over flow AFFF	82.9	170	O/C	Y ☐ N ☐	
10	Expansion Vessel AFFF	82.10	170	O/C	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	O/C	—	Y ☐ N ☐	
2	Transformer Main	165	O/C	—	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	O/C	—	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	165	O/C	—	Y ☐ N ☐	
2	Offices	165	O/C	—	Y ☐ N ☐	
3	Electrical Room	165	O/C	—	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	O/C	
2	Bearing 3	Y ☐ N ☐	O/C	
3	Bearing 4	Y ☐ N ☐	O/C	
4	Bearing 5	Y ☐ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☐ N ☐	O/C	
2	MP-200A	Y ☐ N ☐	O/C	
3	MP-200B	Y ☐ N ☐	O/C	
4	MP-200C	Y ☐ N ☐	O/C	
5	MP-200D	Y ☐ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	—	—	
2	Maintenance Shop Drive Way #8	O/C	—	—	
3	West Side Power Block by VS-3 # 9	O/C	—	—	
4	West Side Power Block by VS-1 # 10	O/C	—	—	
5	West Side Cooling Tower by VS-4 # 11	O/C	—	—	
6	West side Cooling Tower by VS-4 # 12	O/C	—	—	
7	N.W. Corner Chemical Storage #1	O/C	—	—	
8	N.E. Corner Chemical Storage # 2	O/C	—	—	
9	East Side W.T. by Multimedia Filters # 3	O/C	—	—	
10	East Side W.T. by Multimedia Filters # 5	O/C	—	—	
11	North Side Bldg 10 # 6	O/C	—	—	
12	Between MP-444's and Water Treat # 4	O/C	—	—	
13	West side Power Block Valve Shed #1	O/C	—	—	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☒ Beta ☐	Date: 3-16-19
Operator: Phil Tourbellis	*To be completed each time unit is operated
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Jockey Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 155	
Discharge Pressure: 165	
Pump Suction Pressure: 20	Pump Discharge pressure: 165
Comments: BROKEN GAUGE	

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Start the pump on pressure drop. Start up pressure: 145	
Start time: 20:30	
Pump Suction Pressure: 20	Pump Discharge pressure: 155
Stop time: 20:40	Total time running 10 mins
Comments:	

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ 3/4 Monthly Fuel Consumption:		
Battery volt Crank 1: 26.7	Battery volt Crank 2: 26.6	Battery Condition: GOOD
Starting hour meter: 47.5	Start time: 20:45	
Oil pressure start: 63	Oil Pressure finish: 40	
Pump Suction Pressure: 20	Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 178		
Stop time: 21:15	Stop hour meter: 48 hrs	Total time running: 30 mins
Comments:		

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately.

There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))

Plant: ALPHA ☒ BETA ☐

Date: 3-16-19

Operator: PAUL TOURTELIS

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	170	OC		Y N	
2	SG Unit 2 B1-2	170	OC		Y N	
3	Reheaters B1-3	170	OC		Y N	
4	Rack 2 West HTF B1-4	165	OC		Y N	
5	Rack 2 East HTF B1-5	170	OC		Y N	
6	North Steel Pro B1-6	170	OC		Y N	
7	HTF Pumps B1-7	170	OC		Y N	
8	HTF Heaters B1-8	170	OC		Y N	
9	South Steel Pro B1-9	170	OC		Y N	
10	Lube Oil B1-10		OC		Y N	
11	Turbine Hose Stations B1-11	170	OC		Y N	
12	Turbine Bearings B1-12	170	OC		Y N	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	170	OC		Y N	
2	Ullage Area B2-2	170	OC		Y N	
3	Ullage Structure B2-11	170	OC		Y N	
4	Rack 1 Middle Area B2-5	165	OC		Y N	
5	Overflow Tanks B2-9	165	OC		Y N	
6	Rack 1 South Area B2-6	170	OC		Y N	
7	Rack 1 West B2-7	170	OC		Y N	
8	Rack 1 North Area B2-4	170	OC		Y N	
9	Over flow AFFF B2-8	165	OC		Y N	
10	Expansion Vessel AFFF B2-3	165	OC		Y N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	OC		Y N	
2	Transformer Main	165	OC		Y N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	OC		Y N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	OC		Y N	
2	Offices B4-3	165	OC		Y N	
3	Electrical Room B4-4	165	OC		Y N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y N	OC	
2	Bearing 3	Y N	OC	
3	Bearing 4	Y N	OC	
4	Bearing 5	Y N	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y N	OC	
2	MP-200A	Y N	OC	
3	MP-200B	Y N	OC	
4	MP-200C	Y N	OC	
5	MP-200D	Y N	OC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	OC	Y N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC	N		
2	Maintenance Shop Drive Way #8	OC	N		
3	West Side Power Block by VS-3 # 9	OC	N		
4	West Side Power Block by VS-1 # 10	OC	N		
5	West Side Cooling Tower by VS-4 # 11	OC	N		
6	West side Cooling Tower by VS-4 # 12	OC	N		
7	N.W. Corner Chemical Storage #1	OC	N		
8	N.E. Corner Chemical Storage # 2	OC	N		
9	East Side W.T. by Multimedia Filters # 3	OC	N		
10	East Side W.T. by Multimedia Filters # 5	OC	N		
11	North Side Bldg 10 # 6	OC	N		
12	Between MP-444's and Water Treat # 4	OC	N		
13	West Side Power Block Valve Shed #1	OC	N		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y N	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information	
Plant: Alpha ☒ Beta ☐	Date: 3-10-19
Operator: Phil Tourgenis	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Jockey Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 155	
Discharge Pressure: 165	
Pump Suction Pressure: 20	Pump Discharge pressure: 165
Comments:	
Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Start the pump on pressure drop. Start up pressure: 145	
Start time: 03:10	
Pump Suction Pressure: 20	Pump Discharge pressure: 150
Stop time: 03:20	Total time running 10 mins
Comments:	
Diesel Pump	
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒	
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:
Battery volt Crank 1: 26.7 Battery volt Crank 2: 0	Battery Condition: Good #1 No Batteries #2
Starting hour meter: 47.0	Start time: 03:28
Oil pressure start: 68	Oil Pressure finish: 40
Pump Suction Pressure: 20	Pump Discharge pressure: 155
Coolant temperature after 30 minutes running: 176	
Stop time: 03:58	Stop hour meter: 47.5
Total time running: 30 mins	
Comments: No Batteries Bank #2	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).	
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.	
Note: Fuel consumption 27 gal/ h approximately.	
There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))	

ABENGOA

NORTH AMERICA

Mojave Solar Project

Automated Fire Systems Inspection Checklist

Plant: ALPHA

BETA

Date 7-9-15

Operator Egan

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	16.5	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	16.5	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	16.0	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	16.0	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	16.5	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	16.5	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	16.5	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	16.0	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	16.0	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	0	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	16.0	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	16.5	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	17.0	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	17.1	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	17.0	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	17.0	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	17.5	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	17.6	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	17.6	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	17.0	✓ O/C	✓	Y ✓ N	
9	Overflow AFFF B2-8	17.0	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	17.8	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.0	✓ O/C	✓	Y ✓ N	
2	Transformer Main	16.0	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.0	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	16.5	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	16.5	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	16.5	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	16.0	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C			
2	Maintenance Shop Drive Way #8	✓ O/C			
3	West Side Power Block by VS-3 #9	✓ O/C			
4	West Side Power Block by VS-1 #10	✓ O/C			
5	West Side Cooling Tower by VS-4 #11	✓ O/C			
6	West side Cooling Tower by VS-4 #12	✓ O/C			
7	N.W. Corner Chemical Storage #1	✓ O/C			
8	N.E. Corner Chemical Storage #2	✓ O/C			
9	East Side W.T. by Multimedia Fillers #3	✓ O/C			
10	East Side W.T. by Multimedia Fillers #5	✓ O/C			
11	North Side Bldg 10 #6	✓ O/C			
12	Between MP-444 s and Water Treat #4	✓ O/C			
13	West Side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

A1-10 O/S - manual / UPS
16.0

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 3-8-19	
Operator: Mike Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: N/A	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 1850		
Pump Suction Pressure: 12	Pump Discharge pressure: 165	
Stop time: 1900	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 28.7	Battery volt Crank 2: N/A	Battery Condition: Battery #1 good. Battery #2 is not hooked up. Darryl is charging them
Starting hour meter: 46.5	Start time: 1900	
Oil pressure start: 62	Oil Pressure finish: 63	
Pump Suction Pressure: 15	Pump Discharge pressure: 160	
Coolant temperature after 30 minutes running: 187		
Stop time: 1930	Stop hour meter: 47	Total time running: 30 mins
Comments:		
Sulfur Concentrations [less than or equal to 0.0015% on a weight per weight basis].		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/ h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]		

Mant: ALPHA ☒ BETA ☐ Date: 3/2/19 Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	O/C	✓	Y✓ N-	
2	SG Unit 2 B1-2	163	O/C	✓	Y✓ N-	
3	Reheaters B1-3	160	O/C	✓	Y✓ N-	
4	Rack 2 West HTF B1-4	160	O/C	✓	Y✓ N-	
5	Rack 2 East HTF B1-5	160	O/C	✓	Y✓ N-	
6	North Steel Pro B1-6	165	O/C	✓	Y✓ N-	
7	HTF Pumps B1-7	165	O/C	✓	Y✓ N-	
8	HTF Heaters B1-8	170	O/C	✓	Y✓ N-	
9	South Steel Pro B1-9	165	O/C	✓	Y✓ N-	
10	Lube Oil B1-10	valued out	O/C	✓	Y✓ N-	valued out
11	Turbine Hose Stations B1-11	165	O/C	✓	Y✓ N-	
12	Turbine Bearings B1-12	165	O/C	✓	Y✓ N-	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	O/C	✓	Y✓ N-	
2	Ullage Area B2-2	165	O/C	✓	Y✓ N-	
3	Ullage Structure B2-11	160	O/C	✓	Y✓ N-	
4	Rack 1 Middle Area B2-5	165	O/C	✓	Y✓ N-	
5	Overflow Tanks B2-9	170	O/C	✓	Y✓ N-	
6	Rack 1 South Area B2-6	160	O/C	✓	Y✓ N-	
7	Rack 1 West B2-7	165	O/C	✓	Y✓ N-	
8	Rack 1 North Area B2-4	165	O/C	✓	Y✓ N-	
9	Over flow AFFF B2-8	165	O/C	✓	Y✓ N-	
10	Expansion Vesse AFFF B2-3	165	O/C	✓	Y✓ N-	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	O/C	✓	Y✓ N-	
2	Transformer Main	165	O/C	✓	Y✓ N-	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	O/C	✓	Y✓ N-	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	O/C	✓	Y✓ N-	
2	Offices B4-3	160	O/C	✓	Y✓ N-	
3	Electrical Room B4-4	165	O/C	✓	Y✓ N-	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y✓ N-	O/C	
2	Bearing 3	Y✓ N-	O/C	
3	Bearing 4	Y✓ N-	O/C	
4	Bearing 5	Y✓ N-	O/C	

HTF Deluge System Valves (to be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y✓ N-	O/C	
2	MP-200A	Y✓ N-	O/C	
3	MP-200B	Y✓ N-	O/C	
4	MP-200C	Y✓ N-	O/C	
5	MP-200D	Y✓ N-	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	O/C	Y✓ N-	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	✓	3/2/19	
2	Maintenance Shop Drive Way #8	O/C	✓	3/2/19	
3	West Side Power Block by VS-3 # 9	O/C	✓	3-2-19	
4	West Side Power Block by VS-1 # 10	O/C	✓	3-2-19	
5	West Side Cooling Tower by VS-4 # 11	O/C	✓	3-2-19	
6	West side Cooling Tower by VS-4 # 12	O/C	✓	3-2-19	
7	N.W. Corner Chemical Storage #1	O/C	✓	3-2-19	
8	N.E. Corner Chemical Storage # 2	O/C	✓	3-2-19	
9	East Side W.T. by Multimedia Filters # 3	O/C	✓	3-2-19	
10	East Side W.T. by Multimedia Filters # 5	O/C	✓	3-2-19	
11	North Side Bldg 10 # 6	O/C	✓	3-2-19	
12	Between MP-444's and Water Treat # 4	O/C	✓	3-2-19	Shut
13	West Side Power Block Valve Shed #1	O/C	✓	3-2-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y- N✓	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 2/24/19	
Operator: Rico	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: N/A		
Pump Suction Pressure: 20	Pump Discharge pressure: 155	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 164		
Start time: 5:57 pm		
Pump Suction Pressure: 25	Pump Discharge pressure: 150	
Stop time: 6:07 pm	Total time running 10 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 27	Battery volt Crank 2: 27	Battery Condition: good
Starting hour meter: 46.4	Start time: 6:08	
Oil pressure start: 69 psi	Oil Pressure finish: 44 psi	
Pump Suction Pressure: 25	Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 178		
Stop time: 6:38	Stop hour meter: 46.5	Total time running: 30 min
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/ h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.5(a)(4)]		

Plant: ALPHA ☒ BETA ☐

Date: 2-24-19

Operator: Michael Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	O/C	/	Y ☒ N ☐	
2	SG Unit 2 B1-2	165	O/C	/	Y ☒ N ☐	
3	Reheaters B1-3	165	O/C	/	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	165	O/C	/	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	165	O/C	/	Y ☒ N ☐	
6	North Steel Pro B1-6	170	O/C	/	Y ☒ N ☐	
7	HTF Pumps B1-7	170	O/C	/	Y ☒ N ☐	
8	HTF Heaters B1-8	170	O/C	/	Y ☒ N ☐	
9	South Steel Pro B1-9	165	O/C	/	Y ☒ N ☐	
10	Lube Oil B1-10	-	O/C	/	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	165	O/C	/	Y ☒ N ☐	
12	Turbine Bearings B1-12	165	O/C	/	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	165	O/C	/	Y ☒ N ☐	
2	Ullage Area B2-2	165	O/C	/	Y ☒ N ☐	
3	Ullage Structure B2-11	165	O/C	/	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	170	O/C	/	Y ☒ N ☐	
5	Overflow Tanks B2-9	170	O/C	/	Y ☒ N ☐	
6	Rack 1 South Area B2-6	170	O/C	/	Y ☒ N ☐	
7	Rack 1 West B2-7	165	O/C	/	Y ☒ N ☐	
8	Rack 1 North Area B2-4	165	O/C	/	Y ☒ N ☐	
9	Over flow AFFF B2-8	165	O/C	/	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	165	O/C	/	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	O/C	/	Y ☒ N ☐	
2	Transformer Main	165	O/C	/	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	/	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	O/C	/	Y ☒ N ☐	
2	Offices B4-3	160	O/C	/	Y ☒ N ☐	
3	Electrical Room B4-4	165	O/C	/	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	2-24-19	2-3	
2	Maintenance Shop Drive Way #8	O/C	NO	2-3	
3	West Side Power Block by VS-3 # 9	O/C	NO	2-3	
4	West Side Power Block by VS-1 # 10	O/C	NO	2-3	
5	West Side Cooling Tower by VS-4 # 11	O/C	NO	2-3	
6	West side Cooling Tower by VS-4 # 12	O/C	NO	2-3	
7	N.W. Corner Chemical Storage #1	O/C	NO	2-3	
8	N.E. Corner Chemical Storage # 2	O/C	NO	2-3	
9	East Side W.T. by Multimedia Filters # 3	O/C	NO	2-3	
10	East Side W.T. by Multimedia Filters # 5	O/C	NO	2-3	
11	North Side Bldg 10 # 6	O/C	NO	2-3	
12	Between MP-444's and Water Treat # 4	O/C	NO	2-3	
13	West Side Power Block Valve Shed #1	O/C	NO	2-3	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 2/16/19		
Operator: Rico	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: N/A			
Pump Suction Pressure: 162		Pump Discharge pressure: 20 N/A	
Comments: Discharge pressure gauge broke			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 164			
Start time: 5:30 pm			
Pump Suction Pressure: 140		Pump Discharge pressure: 25	
Stop time: 5:40 pm		Total time running 10 Min	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 27 Battery volt Crank 2: 27		Battery Condition: ☒	
Starting hour meter: 45.9		Start time: 5:40 pm	
Oil pressure start: 70 psi		Oil Pressure finish: 39 psi	
Pump Suction Pressure: 70 psi 25		Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 185			
Stop time: 6:10 pm		Stop hour meter: 46.9 Total time running: 30 Min	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Plant: ALPHA ☒ BETA ☐

Date: 2-16-19

Operator: Michael Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	OK	✓	Y ☒ N ☐	
2	SG Unit 2 B1-2	163	OK	✓	Y ☒ N ☐	
3	Reheaters B1-3	163	OK	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	163	OK	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	170	OK	✓	Y ☒ N ☐	
6	North Steel Pro B1-6	163	OK	✓	Y ☒ N ☐	
7	HTF Pumps B1-7	165	OK	✓	Y ☒ N ☐	
8	HTF Heaters B1-8	165	OK	✓	Y ☒ N ☐	
9	South Steel Pro B1-9	163	OK	✓	Y ☒ N ☐	
10	Lube Oil B1-10	163	OK	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	160	OK	✓	Y ☒ N ☐	
12	Turbine Bearings B1-12	163	OK	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	163	OK	✓	Y ☒ N ☐	
2	Ullage Area B2-2	163	OK	✓	Y ☒ N ☐	
3	Ullage Structure B2-11	163	OK	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	163	OK	✓	Y ☒ N ☐	
5	Overflow Tanks B2-9	170	OK	✓	Y ☒ N ☐	
6	Rack 1 South Area B2-6	170	OK	✓	Y ☒ N ☐	
7	Rack 1 West B2-7	163	OK	✓	Y ☒ N ☐	
8	Rack 1 North Area B2-4	160	OK	✓	Y ☒ N ☐	
9	Over flow AFFF B2-8	163	OK	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	163	OK	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	163	OK	✓	Y ☒ N ☐	
2	Transformer Main	163	OK	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	163	OK	✓	Y ☒ N ☐	
2	Offices B4-3	163	OK	✓	Y ☒ N ☐	
3	Electrical Room B4-4	160	OK	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OK	
2	Bearing 3	Y ☒ N ☐	OK	
3	Bearing 4	Y ☒ N ☐	OK	
4	Bearing 5	Y ☒ N ☐	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OK	
2	MP-200A	Y ☒ N ☐	OK	
3	MP-200B	Y ☒ N ☐	OK	
4	MP-200C	Y ☒ N ☐	OK	
5	MP-200D	Y ☒ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	163	OK	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	NO	2-3	
2	Maintenance Shop Drive Way #8	OK	NO		
3	West Side Power Block by VS-3 # 9	OK	NO		
4	West Side Power Block by VS-1 # 10	OK	NO		
5	West Side Cooling Tower by VS-4 # 11	OK	NO		
6	West side Cooling Tower by VS-4 # 12	OK	NO		
7	N.W. Corner Chemical Storage #1	OK	NO		
8	N.E. Corner Chemical Storage # 2	OK	NO		
9	East Side W.T. by Multimedia Filters # 3	OK	NO		
10	East Side W.T. by Multimedia Filters # 5	OK	NO		
11	North Side Bldg 10 # 6	OK	NO		
12	Between MP-444's and Water Treat # 4	OK	NO		
13	West Side Power Block Valve Shed #1	OK	NO		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 2-8-19	
Operator: Mike Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: N/A	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 2005		
Pump Suction Pressure: 10	Pump Discharge pressure: 160	
Stop time: 2015	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.7	Battery volt Crank 2: 26.7	Battery Condition: Normal
Starting hour meter: 45.5	Start time: 2017	
Oil pressure start: 67	Oil Pressure finish: 940	
Pump Suction Pressure: 12	Pump Discharge pressure: 165	
Coolant temperature after 30 minutes running: 183		
Stop time: 2047	Stop hour meter: 45.9	Total time running: 30 mins
Comments: Battery #1 Failure.		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Plant: ALPHA ☒ BETA ☐

Date: 2/7/19

Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	155	WPC	✓	Y/N	
2	SG Unit 2 B1-2	160	WPC	✓	Y/N	
3	Reheater B1-3	160	WPC	✓	Y/N	
4	Rack 2 West HTF B1-4	160	WPC	✓	Y/N	
5	Rack 2 East HTF B1-5	165	WPC	✓	Y/N	
6	North Steel Pro B1-6	168	WPC	✓	Y/N	
7	HTF Pumps B1-7	160	WPC	✓	Y/N	
8	HTF Heaters B1-8	165	WPC	✓	Y/N	
9	South Steel Pro B1-9	165	WPC	✓	Y/N	
10	Lube Oil B1-10	0	OP	✓	Y/N	Oil at Service Diagram 12A/C
11	Turbine Hose Stat B1-11	160	WPC	✓	Y/N	
12	Turbine Bearings B1-12	155	WPC	✓	Y/N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	165	WPC	✓	Y/N	
2	Ullage Area B2-2	165	WPC	✓	Y/N	
3	Ullage Structure B2-11	170	WPC	✓	Y/N	
4	Rack 1 Middle Area B2-5	170	WPC	✓	Y/N	
5	Overflow Tanks B2-9	165	WPC	✓	Y/N	
6	Rack 1 South Area B2-6	175	WPC	✓	Y/N	
7	Rack 1 West B2-7	165	WPC	✓	Y/N	
8	Rack 1 North Area B2-4	175	WPC	✓	Y/N	
9	Over Flow: AFFF B2-8	175	WPC	✓	Y/N	
10	Expansion Vessel AFFF B2-3	160	WPC	✓	Y/N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	WPC	✓	Y/N	
2	Transformer Main	160	WPC	✓	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	WPC	✓	Y/N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	WPC	✓	Y/N	
2	Offices B4-3	160	WPC	✓	Y/N	
3	Electrical Room B4-4	160	WPC	✓	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y/N	WPC	
2	Bearing 3	Y/N	WPC	
3	Bearing 4	Y/N	WPC	
4	Bearing 5	Y/N	WPC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y/N	WPC	
2	MP-200A	Y/N	WPC	
3	MP-200B	Y/N	WPC	
4	MP-200C	Y/N	WPC	
5	MP-200D	Y/N	WPC	

Fire Pump House Deluge System

No.	System	PSI	OPC	Locked	Comments
1	Fire Pump House Deluge	170	OPC	Y/N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OPC			
2	Maintenance Shop Drive Way #8	OPC			
3	West Side Power Block by VS-3 # 9	WPC			
4	West Side Power Block by VS-1 # 10	WPC			
5	West Side Cooling Tower by VS-4 # 11	WPC			
6	West side Cooling Tower by VS-4 # 12	WPC			
7	N.W. Corner Chemical Storage #1	OPC			
8	N.E. Corner Chemical Storage #2	OPC			
9	East Side W.T. by Multimedia Filters # 3	WPC			
10	East Side W.T. by Multimedia Filters # 5	OPC			
11	North Side Bldg 10 # 6	OPC			
12	Between MP-444's and Water Treat # 4	OPC			
13	West Side Power Block Valve Shed #1	WPC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y/N	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 2-3-19	
Operator: Phil Tarkenton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: 20	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 00:50		
Pump Suction Pressure: 20	Pump Discharge pressure: 160	
Stop time: 00:50 01:00	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.7	Battery volt Crank 2: 26.7	Battery Condition: BATT#1 FAIL TO START
Starting hour meter: 45	Start time: 00:18	
Oil pressure start: 60	Oil Pressure finish: 41	
Pump Suction Pressure: 20	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 178		
Stop time: 00:48	Stop hour meter: 45.5	Total time running: 30
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))		

Plant: ALPHA-R

BETA-C

Date: 2-3-19

Operator: E. Garcia

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	155	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	155	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	155	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	153	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	150	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	152	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	155	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	155	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	155	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	153	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	165	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	170	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	170	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	165	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	165	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	170	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	165	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	165	✓ O/C	✓	Y ✓ N	
9	Over flow AFFF B2-8	165	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	165	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	150	✓ O/C	✓	Y ✓ N	
2	Transformer Main	150	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	150	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	155	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	155	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	✓	2-3-19	
2	Maintenance Shop Drive Way #8	✓ O/C	✓	2-3-19	
3	West Side Power Block by VS-3 # 9	✓ O/C	✓	2-3-19	
4	West Side Power Block by VS-1 # 10	✓ O/C	✓	2-3-19	
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	✓	2-3-19	
6	West Side Cooling Tower by VS-4 # 12	✓ O/C	✓	2-3-19	
7	N.W. Corner Chemical Storage #1	✓ O/C	✓	2-3-19	
8	N.E. Corner Chemical Storage #2	✓ O/C	✓	2-3-19	
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	✓	2-3-19	
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	✓	2-3-19	
11	North Side Bldg 10 # 6	✓ O/C	✓	2-3-19	
12	Between MP-444's and Water Treat # 4	O/C	✓		
13	West Side Power Block Valve Shed #1	O/C	✓		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 1-26-19	
Operator: Efrain Marks	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 152 psi		
Discharge Pressure: 163 psi		
Pump Suction Pressure: ~	Pump Discharge pressure: ~	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 18 psi		
Start time: 2245		
Pump Suction Pressure: 25 psi	Pump Discharge pressure: 145 psi	
Stop time: 2246	Total time running 4 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption: —	
Battery volt Crank 1: 27V Battery volt Crank 2: 27V	Battery Condition: fair	
Starting hour meter: 44.6 H	Start time: 2250	
Oil pressure start: 1 psi	Oil Pressure finish: 39 psi	
Pump Suction Pressure: 25 psi	Pump Discharge pressure: 150 psi	
Coolant temperature after 30 minutes running: 187 F		
Stop time: 2250	Stop hour meter: 2320	Total time running: 30 min
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 1-27-19 Operator: PHIL TOWNSEND

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	B1-1	165	O/C	Y ☒ N ☐	
2	SG Unit 2	B1-2	165	O/C	Y ☒ N ☐	
3	Reheaters	B1-3	165	O/C	Y ☒ N ☐	
4	Rack 2 West HTF	B1-4	165	O/C	Y ☒ N ☐	
5	Rack 2 East HTF	B1-5	165	O/C	Y ☒ N ☐	
6	North Steel Pro	B1-6	165	O/C	Y ☒ N ☐	
7	HTF Pumps	B1-7	165	O/C	Y ☒ N ☐	
8	HTF Heaters	B1-8	165	O/C	Y ☒ N ☐	
9	South Steel Pro	B1-9	165	O/C	Y ☒ N ☐	
10	Lube Oil	B1-10	165	O/C	Y ☒ N ☐	
11	Turbine Hose Stations	B1-11	165	O/C	Y ☒ N ☐	
12	Turbine Bearings	B1-12	165	O/C	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	B2-1	165	O/C	Y ☒ N ☐	
2	Ullage Area	B2-2	165	O/C	Y ☒ N ☐	
3	Ullage Structure	B2-11	165	O/C	Y ☒ N ☐	
4	Rack 1 Middle Area	B2-5	165	O/C	Y ☒ N ☐	
5	Overflow Tanks	B2-9	165	O/C	Y ☒ N ☐	
6	Rack 1 South Area	B2-6	165	O/C	Y ☒ N ☐	
7	Rack 1 West	B2-7	165	O/C	Y ☒ N ☐	
8	Rack 1 North Area	B2-4	165	O/C	Y ☒ N ☐	
9	Over flow AFFF	B2-8	165	O/C	Y ☒ N ☐	
10	Expansion Vessel AFFF	B2-3	165	O/C	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	O/C		Y ☒ N ☐	
2	Transformer Main	165	O/C		Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C		Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	B4-5	165	O/C	Y ☒ N ☐	
2	Offices	B4-3	165	O/C	Y ☒ N ☐	
3	Electrical Room	B4-4	165	O/C	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	O	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-3 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage #2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	O/C	N/A	N/A	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 1-20-19	
Operator: Phil Tourgelis	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: 20 Pump Discharge pressure: 165		
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 14:20		
Pump Suction Pressure: 20 Pump Discharge pressure: 155		
Stop time: 14:30 Total time running 10 mins		
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.6 Battery volt Crank 2: 26.7	Battery Condition: BATT BANK #1 BAD	
Starting hour meter: 44.1	Start time: 14:40	
Oil pressure start: 57	Oil Pressure finish:	
Pump Suction Pressure: 20 Pump Discharge pressure: 150		
Coolant temperature after 30 minutes running: 174		
Stop time: 15:10 Stop hour meter: 44.5 Total time running: 30		
Comments: BATT #1 FAIL		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis)		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/ h approximately.		
There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐

Date: 1-19-19

Operator: E. Smith

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	150	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	200	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	200	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	165	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	200	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	200	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	165	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	175	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	165	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	100	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	160	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessel B2-1	200	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	200	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	200	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	200	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	200	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	200	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	200	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	200	✓ O/C	✓	Y ✓ N	
9	Over flow AFFF B2-8	200	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	200	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	155	✓ O/C	✓	Y ✓ N	
2	Transformer Main	155	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	160	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	160	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	150	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	✓		
2	Maintenance Shop Drive Way #8	✓ O/C	✓		
3	West Side Power Block by VS 3 # 9	✓ O/C	✓		
4	West Side Power Block by VS 1 # 10	✓ O/C	✓		
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	✓		
6	West side Cooling Tower by VS-4 # 12	✓ O/C	✓		
7	N.W. Corner Chemical Storage #1	✓ O/C	✓		
8	N.E. Corner Chemical Storage # 2	✓ O/C	✓		
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	✓		
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	✓		
11	North Side Bldg 10 # 6	✓ O/C	✓		
12	Between MP-444's and Water Treat # 4	O/C	✓		
13	West Side Power Block Valve Shed #1	O/C	✓		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒ Beta ☐	Date: 1-13-19		
Operator: PHIL TAUPEUS	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: 20		Pump Discharge pressure: 165	
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 01:02			
Pump Suction Pressure: 20		Pump Discharge pressure: 160	
Stop time: 01:12		Total time running 10 mins	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐ 3/4 Monthly Fuel Consumption:			
Battery volt Crank 1: 16.7		Battery volt Crank 2: 26.0	
Starting hour meter: 43.6		Battery Condition: Good	
Oil pressure start: 62		Start time: 01:20	
Oil pressure finish: 44		Oil Pressure finish: 44	
Pump Suction Pressure: 20		Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 174			
Stop time: 01:50		Stop hour meter: 44.0	
Total time running: 10 30 mins			
Comments: BATT #1 FAIL TO START			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 1-12-19 Operator: Efrain

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	155	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	160	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	160	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	160	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	160	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	155	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	155	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	155	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	155	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	155	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	175	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	175	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	175	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	175	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	175	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	175	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	170	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	165	✓ O/C	✓	Y ✓ N	
9	Over flow AFFF B2-8	170	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	175	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	155	✓ O/C	✓	Y ✓ N	
2	Transformer Main	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side		✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	165	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	165	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	155	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C			
2	Maintenance Shop Drive Way #8	✓ O/C			
3	West Side Power Block by VS-3 # 9	✓ O/C			
4	West Side Power Block by VS-1 # 10	✓ O/C			
5	West Side Cooling Tower by VS-4 # 11	✓ O/C			
6	West side Cooling Tower by VS-4 # 12	✓ O/C			
7	N.W. Corner Chemical Storage #1	✓ O/C			
8	N.E. Corner Chemical Storage # 2	✓ O/C			
9	East Side W.T. by Multimedia Filters # 3	✓ O/C			
10	East Side W.T. by Multimedia Filters # 5	✓ O/C			
11	North Side Bldg 10 # 6	✓ O/C			
12	Between MP-44A's and Water Treat # 4	✓ O/C			
13	West Side Power Block Valve Shed #1	✓ O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☒	Beta ☐	Date: 1-5-18	
Operator: Mike Hunter		*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 160			
Pump Suction Pressure: N/A		Pump Discharge pressure: 160	
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1740			
Pump Suction Pressure: 10		Pump Discharge pressure: 155	
Stop time: 1750		Total time running 10 mins	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 26.6		Battery volt Crank 2: 26.6	
Starting hour meter: 43.2		Battery Condition: Normal / Good	
Oil pressure start: 64		Start time: 1755	
Pump Suction Pressure: 15 approx.		Oil Pressure finish: 41	
Pump Discharge pressure: 160		Coolant temperature after 30 minutes running: 174	
Stop time: 1825		Stop hour meter: 43.6	
Total time running: 30 mins		Comments:	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Plant: ALPHA ☒ BETA ☐ Date: 1-4-19 Operator: Rico

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	B1-1	155	LOC	☒ Y ☐ N	
2	SG Unit 2	B1-2	155	LOC	☒ Y ☐ N	
3	Reheaters	B1-3	165	LOC	☒ Y ☐ N	
4	Rack 2 West HTF	B1-4	160	LOC	☒ Y ☐ N	
5	Rack 2 East HTF	B1-5	160	LOC	☒ Y ☐ N	
6	North Steel Pro	B1-6	160	LOC	☒ Y ☐ N	
7	HTF Pumps	B1-7	155	LOC	☒ Y ☐ N	
8	HTF Heaters	B1-8	155	LOC	☒ Y ☐ N	
9	South Steel Pro	B1-9	160	LOC	☒ Y ☐ N	
10	Lube Oil	B1-10	0	LOC	☒ Y ☐ N	
11	Turbine Hose Slat	B1-11	90	LOC	☒ Y ☐ N	
12	Turbine Bearings	B1-12	0	LOC	☒ Y ☐ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	B2-1	160	LOC	☒ Y ☐ N	
2	Ullage Area	B2-2	160	LOC	☒ Y ☐ N	
3	Ullage Structure	B2-11	165	LOC	☒ Y ☐ N	
4	Rack 1 Middle Area	B2-5	170	LOC	☒ Y ☐ N	
5	Overflow Tanks	B2-9	165	LOC	☒ Y ☐ N	
6	Rack 1 South Area	B2-6	165	LOC	☒ Y ☐ N	
7	Rack 1 West	B2-7	158	LOC	☒ Y ☐ N	
8	Rack 1 North Area	B2-4	160	LOC	☒ Y ☐ N	
9	Over Flow AFFF	B2-8	160	LOC	☒ Y ☐ N	
10	Expansion Vessel AFFF	B2-3	160	LOC	☒ Y ☐ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	LOC	☒ Y ☐ N		
2	Transformer Main	155	LOC	☒ Y ☐ N		

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	☒ Y ☐ N		

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	B4-5	165	LOC	☒ Y ☐ N	
2	Offices	B4-3	160	LOC	☒ Y ☐ N	
3	Electrical Room	B4-4	160	LOC	☒ Y ☐ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	☒ Y ☐ N	LOC	
2	Bearing 3	☒ Y ☐ N	LOC	
3	Bearing 4	☒ Y ☐ N	LOC	
4	Bearing 5	☒ Y ☐ N	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	☒ Y ☐ N	LOC	
2	MP-200A	☒ Y ☐ N	LOC	
3	MP-200B	☒ Y ☐ N	LOC	
4	MP-200C	☒ Y ☐ N	LOC	
5	MP-200D	☒ Y ☐ N	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge			☒ Y ☐ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC	☒ 1/4/19	1/4/19	
2	Maintenance Shop Drive Way #8	LOC	☒ 1/4/19	1/4/19	
3	West Side Power Block by VS-3 # 9	LOC	☒ 1/4/19	1/4/19	
4	West Side Power Block by VS-1 # 10	LOC	☒ 1/4/19	1/4/19	
5	West Side Cooling Tower by VS-4 # 11	LOC	☒ 1/4/19	1/4/19	
6	West side Cooling Tower by VS-4 # 12	LOC	☒ 1/4/19	1/4/19	
7	N.W. Corner Chemical Storage #1	LOC	☒ 1/4/19	1/4/19	
8	N.E. Corner Chemical Storage #2	LOC	☒ 1/4/19	1/4/19	
9	East Side W.T. by Multimedia Filters # 3	LOC	☒ 1/4/19	1/4/19	
10	East Side W.T. by Multimedia Filters # 5	LOC	☒ 1/4/19	1/4/19	
11	North Side Bldg 10 # 6	O/C	☒ 1/4/19	1/4/19	
12	Between MP-440's and Water Treat # 11	O/C	☒ 1/4/19	1/4/19	
13	West Side Power Block Valve Shed #1	O/C	☒ 1/4/19	1/4/19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Relieve Check	☒ Y ☐ N	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 12-30-18	
Operator: Michael Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: N/A Pump Discharge pressure: 165		
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 1800		
Pump Suction Pressure: 10 Pump Discharge pressure: 160		
Stop time: 1810 Total time running 10 mins		
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.6 Battery volt Crank 2: 26.6		Battery Condition: Normal
Starting hour meter: 42.7		Start time: 1814
Oil pressure start: 65		Oil Pressure finish: 41
Pump Suction Pressure: 15 Pump Discharge pressure: 160		
Coolant temperature after 30 minutes running: 174		
Stop time: 1844 Stop hour meter: 43.2 Total time running: 30 mins		
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/ h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☒ BETA ☐ Date: 12/29/18 Operator: Rico T

Valve Shed # 1 by Condenser						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	155	LOC	✓	Y/N	
2	SG Unit 2 B1-2	155	LOC	✓	Y/N	
3	Reheaters B1-3	155	LOC	✓	Y/N	
4	Rack 2 West HTF B1-4	155	LOC	✓	Y/N	
5	Rack 2 East HTF B1-5	155	LOC	✓	Y/N	
6	North Steel Pro B1-6	155	LOC	✓	Y/N	
7	HTF Pumps B1-7	155	LOC	✓	Y/N	
8	HTF Heaters B1-8	155	LOC	✓	Y/N	
9	South Steel Pro B1-9	155	LOC	✓	Y/N	
10	Lube Oil B1-10	0	LOC	✓	Y/N	
11	Turbine Hose Stalks B1-11	155	LOC	✓	Y/N	
12	Turbine Bearings B1-12	155	LOC	✓	Y/N	

Valve Shed # 2 by Overflow						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	155	LOC	✓	Y/N	
2	Ullage Area B2-2	155	LOC	✓	Y/N	
3	Ullage Structure B2-3	155	LOC	✓	Y/N	
4	Rack 1 Middle Area B2-4	155	LOC	✓	Y/N	
5	Overflow Tanks B2-5	155	LOC	✓	Y/N	
6	Rack 1 South Area B2-6	155	LOC	✓	Y/N	
7	Rack 1 West B2-7	155	LOC	✓	Y/N	
8	Rack 1 North Area B2-8	155	LOC	✓	Y/N	
9	Over flow AFFF B2-9	155	LOC	✓	Y/N	
10	Expansion Vessel AFFF B2-10	155	LOC	✓	Y/N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	155	LOC	✓	Y/N	
2	Transformer Main	155	LOC	✓	Y/N	

Valve Shed # 4 by Cooling Lower West Side						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	155	LOC	✓	Y/N	

Valve Shed # 5 by Control Bldg 10						
No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	155	LOC	✓	Y/N	
2	Offices B4-3	155	LOC	✓	Y/N	
3	Electrical Room B4-4	155	LOC	✓	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)				
No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y - N -	O/C	
2	Bearing 3	Y - N -	O/C	
3	Bearing 4	Y - N -	O/C	
4	Bearing 5	Y - N -	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)				
No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	LOC ☒ N ☐	
2	MP-200A	Y ☒ N ☐	LOC ☒ N ☐	
3	MP-200B	Y ☒ N ☐	LOC ☒ N ☐	
4	MP-200C	Y ☒ N ☐	LOC ☒ N ☐	
5	MP-200D	Y ☒ N ☐	LOC ☒ N ☐	

Fire Pump House Deluge System					
No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	CO2	Y/N	

PIV Checks					
No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 13	LOC			
7	N.W. Corner Chemical Storage # 1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444's and Water Treat # 4	LOC			
13	West Side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month			
No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y / N	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☐ Beta ☒	Date: 12-13-19
Operator: E. Brown	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 142
Discharge Pressure: 160
Pump Suction Pressure: - Pump Discharge pressure: 160
Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 150
Start time: 2019
Pump Suction Pressure: 25psi Pump Discharge pressure: 155psi
Stop time: 2020 Total time running 1 min
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☐ No ☒ Monthly Fuel Consumption:
Battery volt Crank 1: 26.5 Battery volt Crank 2: 26.5 Battery Condition: Good
Starting hour meter: 73.74 Start time: 2024
Oil pressure start: 1 psi Oil Pressure finish: 38psi
Pump Suction Pressure: 50psi Pump Discharge pressure: 150psi
Coolant temperature after 30 minutes running: 176
Stop time: 2054 Stop hour meter: 74.2 Total time running: 30 min
Comments:

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately.

There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA: ☒ Date: 12-15-19 Operator: Efraim

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	16.5	✓ O/C	✓	☐ ☐ ☐	
2	SG Unit 2 B1-2	16.6	✓ O/C	✓	☐ ☐ ☐	
3	Reheaters B1-3	16.1	✓ O/C	✓	☐ ☐ ☐	
4	Rack 2 West HTF B1-4	16.5	✓ O/C	✓	☐ ☐ ☐	
5	Rack 2 East HTF B1-5	16.6	✓ O/C	✓	☐ ☐ ☐	
6	North Steel Pro B1-6	16.5	✓ O/C	✓	☐ ☐ ☐	
7	HTF Pumps B1-7	16.5	✓ O/C	✓	☐ ☐ ☐	
8	HTF Heaters B1-8	16.6	✓ O/C	✓	☐ ☐ ☐	
9	South Steel Pro B1-9	16.5	✓ O/C	✓	☐ ☐ ☐	
10	Lube Oil B1-10	16.6	✓ O/C	✓	☐ ☐ ☐	
11	Turbine Hose Stations B1-11	16.6	✓ O/C	✓	☐ ☐ ☐	
12	Turbine Bearings B1-12	16.6	✓ O/C	✓	☐ ☐ ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	17.0	✓ O/C	✓	☐ ☐ ☐	
2	Ullage Area B2-2	17.0	✓ O/C	✓	☐ ☐ ☐	
3	Ullage Structure B2-11	17.0	✓ O/C	✓	☐ ☐ ☐	
4	Rack 1 Middle Area B2-5	17.0	✓ O/C	✓	☐ ☐ ☐	
5	Overflow Tanks B2-9	17.0	✓ O/C	✓	☐ ☐ ☐	
6	Rack 1 South Area B2-6	17.0	✓ O/C	✓	☐ ☐ ☐	
7	Rack 1 West B2-7	17.0	✓ O/C	✓	☐ ☐ ☐	
8	Rack 1 North Area B2-4	17.0	✓ O/C	✓	☐ ☐ ☐	
9	Over Flow AFFF B2-8	17.0	✓ O/C	✓	☐ ☐ ☐	
10	Expansion Vessel AFFF B2-3	17.0	✓ O/C	✓	☐ ☐ ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.5	✓ O/C	✓	☐ ☐ ☐	
2	Transformer Main	16.5	✓ O/C	✓	☐ ☐ ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.6	✓ O/C	✓	☐ ☐ ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	16.0	✓ O/C	✓	☐ ☐ ☐	
2	Offices B4-3	16.6	✓ O/C	✓	☐ ☐ ☐	
3	Electrical Room B4-4	16.6	✓ O/C	✓	☐ ☐ ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	☐ ☐ ☐	✓ O/C	
2	Bearing 3	☐ ☐ ☐	✓ O/C	
3	Bearing 4	☐ ☐ ☐	✓ O/C	
4	Bearing 5	☐ ☐ ☐	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	☐ ☐ ☐	✓ O/C	
2	MP-200A	☐ ☐ ☐	✓ O/C	
3	MP-200B	☐ ☐ ☐	✓ O/C	
4	MP-200C	☐ ☐ ☐	✓ O/C	
5	MP-200D	☐ ☐ ☐	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	16.5	✓	☐ ☐ ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	✓		
2	Maintenance Shop Drive Way #8	✓ O/C			
3	West Side Power Block by VS-3 # 9	✓ O/C			
4	West Side Power Block by VS-1 # 10	✓ O/C			
5	West Side Cooling Tower by VS-4 # 11	✓ O/C			
6	West side Cooling Tower by VS-4 # 12	✓ O/C			
7	N.W. Corner Chemical Storage #1	✓ O/C			
8	N.E. Corner Chemical Storage #2	✓ O/C			
9	East Side W.T. by Multimedia Filters # 3	✓ O/C			
10	East Side W.T. by Multimedia Filters # 5	✓ O/C			
11	North Side Bldg 10 # 6	✓ O/C			
12	Between MP-444's and Water Treat # 4	✓ O/C			
13	West Side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	☐ ☐ ☐	

Fire Pump Weekly Test Log

General Information

Plant: ☒ Alpha ☐ Beta ☒ Date: 12/7/19
 Operator: MANUEL GARCIA *To be completed each time unit is operated.
 Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐

Jockey/Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
 Check the jockey pump on pressure drop. Start up pressure: 151 PSI
 Discharge Pressure: 165
 Pump Suction Pressure: N/A Pump Discharge pressure: 165
 Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
 Start the pump on pressure drop. Start up pressure: Drop 11 PSI
 Start time: 1849
 Pump Suction Pressure: 155 Pump Discharge pressure: 15 PSI
 Stop time: 1851 Total time running 2 MINUTES
 Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
 Fuel level > 2/3: Yes ☐ No ☒ 1/2 Monthly Fuel Consumption: 54 gallons APPROX
 Battery volt Crank 1: 27 Battery volt Crank 2: 27v Battery Condition: Good
 Starting hour meter: 73.3 HOURS Start time: 1853
 Oil pressure start: 69 PSI Oil Pressure finish: 38 PSI
 Pump Suction Pressure: 25 PSI Pump Discharge pressure: 150 PSI
 Coolant temperature after 30 minutes running: 183°F
 Stop time: 1923 Stop hour meter: 73.7 Total time running: 30 MINUTES
 Comments: COOLING TEMP START 122°F
 ALARM @ 27 HOURS INTO RUNNING, TEMP OUT OF RANGE, INCREASE RAW WATER FLOW

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately

There is no limit on engine operation for emergency use [Title 17 CCR 93115.6(a)(4)]

Mojave Solar LLC

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA: ☒

Date: 12/6/19

Operator: PUAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	180	LOC	YES	Y ☐ N ☐	
2	SG Unit 2 B1-2	180	LOC	YES	Y ☐ N ☐	
3	Reheaters B1-3	180	LOC	YES	Y ☐ N ☐	
4	Rack 2 West HTF B1-4	180	LOC	YES	Y ☐ N ☐	
5	Rack 2 East HTF B1-5	180	LOC	YES	Y ☐ N ☐	
6	North Steel Pro B1-6	155	LOC	YES	Y ☐ N ☐	
7	HTF Pumps B1-7	180	LOC	YES	Y ☐ N ☐	
8	HTF Heaters B1-8	155	LOC	YES	Y ☐ N ☐	
9	South Steel Pro B1-9	180	LOC	YES	Y ☐ N ☐	
10	Lube Oil B1-10	180	LOC	YES	Y ☐ N ☐	
11	Turbine Hose Stations B1-11	180	LOC	YES	Y ☐ N ☐	
12	Turbine Bearings B1-12	180	LOC	YES	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	180	LOC	YES	Y ☐ N ☐	
2	Ullage Area B2-2	180	LOC	YES	Y ☐ N ☐	VALVE SHED LIGHTS
3	Ullage Structure B2-11	180	LOC	YES	Y ☐ N ☐	NOT WORKING
4	Rack 1 Middle Area B2-5	180	LOC	YES	Y ☐ N ☐	
5	Overflow Tanks B2-9	180	LOC	YES	Y ☐ N ☐	
6	Rack 1 South Area B2-6	180	LOC	YES	Y ☐ N ☐	
7	Rack 1 West B2-7	180	LOC	YES	Y ☐ N ☐	
8	Rack 1 North Area B2-4	180	LOC	YES	Y ☐ N ☐	
9	Over flow AFFF B2-8	180	LOC	YES	Y ☐ N ☐	
10	Expansion Vessel AFFF B2-3	180	LOC	YES	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Transformer Aux	180	LOC	YES	Y ☐ N ☐	
2	Transformer Main	180	LOC	YES	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	180	LOC	YES	Y ☐ N ☐	NO LIGHTS, MIN NOT WORKING

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Control Room B4-5	180	LOC	YES	Y ☐ N ☐	
2	Offices B4-3	180	LOC	YES	Y ☐ N ☐	
3	Electrical Room B4-4	180	LOC	YES	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vis. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	LOC	
2	Bearing 3	Y ☐ N ☐	LOC	
3	Bearing 4	Y ☐ N ☐	LOC	
4	Bearing 5	Y ☐ N ☐	LOC	

HTF Deluge System Valves (To Be Locked in the Open Position)

No.	System	Locked	Vis. Pos.	Comments
1	MP-201	Y ☐ N ☐	LOC	
2	MP-200A	Y ☐ N ☐	LOC	
3	MP-200B	Y ☐ N ☐	LOC	
4	MP-200C	Y ☐ N ☐	LOC	
5	MP-200D	Y ☐ N ☐	LOC	

Fire Pump House Deluge System

No.	System	PSI	Vis. Pos.	Locked	Comments
1	Fire Pump House Deluge	180	LOC	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444's and Water Treat # 4	LOC			
13	West Side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☒	

Fire Pump Weekly Test Log

General Information

Plant: ☒ Alpha ☐ Beta ☒	Date: 11-30-19
Operator: Phil Toubertus	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 155
Discharge Pressure: 165
Pump Suction Pressure: 20 Pump Discharge pressure: 165
Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 145
Start time: 15:37
Pump Suction Pressure: 20 Pump Discharge pressure: 155
Stop time: 16:47 Total time running 10 mins
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☐ No ☒ 1/2 Monthly Fuel Consumption:
Battery volt Crank 1: 26.7 Battery volt Crank 2: 26.7 Battery Condition: OK
Starting hour meter: 72.9 Start time: 15:09
Oil pressure start: 61 Oil Pressure finish: 38
Pump Suction Pressure: 25 Pump Discharge pressure: 155
Coolant temperature after 30 minutes running: 185
Stop time: 15:34 Stop hour meter: 73.2 Total time running: 25 mins
Comments: HIGH AIR INTAKE TEMP

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately.

There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA: ☒

Date: 11-30-19

Operator: PHIL TOLLENS

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	O/C	✓	☒ ☐ ☐	
2	SG Unit 2 B1-2	160	O/C	✓	☒ ☐ ☐	
3	Reheaters B1-3	160	O/C	✓	☒ ☐ ☐	
4	Rack 2 West HTF B1-4	160	O/C	✓	☒ ☐ ☐	
5	Rack 2 East HTF B1-5	160	O/C	✓	☒ ☐ ☐	
6	North Steel Pro B1-6	155	O/C	✓	☒ ☐ ☐	
7	HTF Pumps B1-7	155	O/C	✓	☒ ☐ ☐	
8	HTF Heaters B1-8	155	O/C	✓	☒ ☐ ☐	
9	South Steel Pro B1-9	160	O/C	✓	☒ ☐ ☐	
10	Lube Oil I B1-10	160	O/C	✓	☒ ☐ ☐	
11	Turbine Hose Stations B1-11	160	O/C	✓	☒ ☐ ☐	
12	Turbine Bearings B1-12	160	O/C	✓	☒ ☐ ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	O/C	✓	☒ ☐ ☐	
2	Ullage Area B2-2	160	O/C	✓	☒ ☐ ☐	
3	Ullage Structure B2-11	155	O/C	✓	☒ ☐ ☐	
4	Rack 1 Middle Area B2-5	160	O/C	✓	☒ ☐ ☐	
5	Overflow Tanks B2-9	160	O/C	✓	☒ ☐ ☐	
6	Rack 1 South Area B2-6	155	O/C	✓	☒ ☐ ☐	
7	Rack 1 West B2-7	155	O/C	✓	☒ ☐ ☐	
8	Rack 1 North Area B2-4	155	O/C	✓	☒ ☐ ☐	
9	Overflow AFFF B2-8	160	O/C	✓	☒ ☐ ☐	
10	Expansion Vessel AFFF B2-3	160	O/C	✓	☒ ☐ ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	O/C	✓	☒ ☐ ☐	
2	Transformer Main	160	O/C	✓	☒ ☐ ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	✓	☒ ☐ ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	O/C	✓	☒ ☐ ☐	
2	Offices B4-3	160	O/C	✓	☒ ☐ ☐	
3	Electrical Room B4-4	160	O/C	✓	☒ ☐ ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	☒ ☐ ☐	O/C	
2	Bearing 3	☒ ☐ ☐	O/C	
3	Bearing 4	☒ ☐ ☐	O/C	
4	Bearing 5	☒ ☐ ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	☒ ☐ ☐	O/C	
2	MP-200A	☒ ☐ ☐	O/C	
3	MP-200B	☒ ☐ ☐	O/C	
4	MP-200C	☒ ☐ ☐	O/C	
5	MP-200D	☒ ☐ ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	O	☒ ☐ ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debays	Comments / Actions
1	Transformer Yard Refuse Check	☒ ☐ ☐	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☐ Beta ☒	Date: 11-22-19
Operator: Mike Hinton	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 155
Discharge Pressure: 165
Pump Suction Pressure: 10 Pump Discharge pressure: 165
Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 145
Start time: 1900
Pump Suction Pressure: 10 Pump Discharge pressure: 165
Stop time: 1910 Total time running 10 mins
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:
Battery volt Crank 1: 27.2 Battery volt Crank 2: 27.3 Battery Condition: Normal
Starting hour meter: 72.4 Start time: 1910
Oil pressure start: 66 Oil Pressure finish: 37
Pump Suction Pressure: 12.8 Pump Discharge pressure: 165
Coolant temperature after 30 minutes running: 187
Stop time: 1940 Stop hour meter: 72.9 Total time running: 30 mins
Comments:

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately.

is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA: ☒

Date: 11/24/19

Operator: Manuel Garcia

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	O/C	✓	☐ Y ☐ N	
2	SG Unit 2 B1-2	160	O/C	✓	☐ Y ☐ N	
3	Reheaters B1-3	165	O/C	✓	☐ Y ☐ N	
4	Rack 2 West HTF B1-4	165	O/C	✓	☐ Y ☐ N	
5	Rack 2 East HTF B1-5	165	O/C	✓	☐ Y ☐ N	
6	North Steel Pro. B1-6	160	O/C	✓	☐ Y ☐ N	
7	HTF Pumps B1-7	160	O/C	✓	☐ Y ☐ N	
8	HTF Heaters B1-8	160	O/C	✓	☐ Y ☐ N	
9	South Steel Pro. B1-9	160	O/C	✓	☐ Y ☐ N	
10	Lube Oil B1-10	165	O/C	✓	☐ Y ☐ N	
11	Turbine Hose Stations B1-11	160	O/C	✓	☐ Y ☐ N	
12	Turbine Bearings B1-12	160	O/C	✓	☐ Y ☐ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	O/C	✓	☐ Y ☐ N	
2	Ullage Area B2-2	160	O/C	✓	☐ Y ☐ N	
3	Ullage Structure B2-11	160	O/C	✓	☐ Y ☐ N	
4	Rack 1 Middle Area B2-54	165	O/C	✓	☐ Y ☐ N	
5	Overflow Tanks B2-9	160	O/C	✓	☐ Y ☐ N	
6	Rack 1 South Area B2-6	165	O/C	✓	☐ Y ☐ N	
7	Rack 1 West B2-7	160	O/C	✓	☐ Y ☐ N	
8	Rack 1 North Area B2-4	160	O/C	✓	☐ Y ☐ N	
9	Over Flow AFFF B2-8	160	O/C	✓	☐ Y ☐ N	
10	Expansion Vessel AFFF B2-3	160	O/C	✓	☐ Y ☐ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	O/C	✓	☐ Y ☐ N	
2	Transformer Main	160	O/C	✓	☐ Y ☐ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	✓	☐ Y ☐ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	O/C	✓	☐ Y ☐ N	
2	Offices B4-3	160	O/C	✓	☐ Y ☐ N	
3	Electrical Room B4-4	160	O/C	✓	☐ Y ☐ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	☐ Y ☐ N	O/C	
2	Bearing 3	☐ Y ☐ N	O/C	
3	Bearing 4	☐ Y ☐ N	O/C	
4	Bearing 5	☐ Y ☐ N	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	☐ Y ☐ N	O/C	
2	MP-200A	☐ Y ☐ N	O/C	
3	MP-200B	☐ Y ☐ N	O/C	
4	MP-200C	☐ Y ☐ N	O/C	
5	MP-200D	☐ Y ☐ N	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	☐ Y ☐ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	N/D		
2	Maintenance Shop Drive Way #8	O/C	N/D		
3	West Side Power Block by VS-3 # 9	O/C	N/D		
4	West Side Power Block by VS-1 # 10	O/C	N/D		
5	West Side Cooling Tower by VS-4 # 11	O/C	N/D		
6	West side Cooling Tower by VS-4 # 12	O/C	N/D		
7	N.W. Corner Chemical Storage #1	O/C	N/D		
8	N.E. Corner Chemical Storage # 2	O/C	N/D		
9	East Side W.T. by Multimedia Filters # 3	O/C	N/D		
10	East Side W.T. by Multimedia Filters # 5	O/C	N/D		
11	North Side Bldg 10 # 6	O/C	N/D		
12	Between MP-444's and Water Treat # 4	O/C	N/D		
13	West Side Power Block Valve Shed #1	O/C	N/D		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	☐ Y ☐ N	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☐ Beta ☒	Date: 11/16/2019
Operator: Manuel Garcia	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 131 psi
Discharge Pressure: 165 psi
Pump Suction Pressure: N/A Pump Discharge pressure: 165 psi
Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 19
Start time: 0541
Pump Suction Pressure: 15 Pump Discharge pressure: 155
Stop time: 592 Total time running: 1 min
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☐ No ☒ 1/2 Monthly Fuel Consumption: 54 gal (approx)
Battery volt Crank 1: 27V Battery volt Crank 2: 27V Battery Condition: Good
Starting hour meter: 720 Start time: 05:45
Oil pressure start: 69 psi Oil Pressure finish: 37 psi (Low)
Pump Suction Pressure: 25 Pump Discharge pressure: 155
Coolant temperature after 30 minutes running: (111° start) — 189°F
Stop time: 0615 Stop hour meter: 72.4 Total time running: 30 mins
Comments: AIR COOLER Temp out of Range (High) — (10 mins after start) INCREASE RAW WATER FLOW

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately

There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA: ☒

Date: 11/16/19

Operator: Manuel Garcia

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	O/C	✓	Y ☐ N ☐	
2	SG Unit 2 B1-2	160	O/C	✓	Y ☐ N ☐	
3	Reheaters B1-3	160	O/C	✓	Y ☐ N ☐	
4	Rack 2 West HTF B1-4	160	O/C	✓	Y ☐ N ☐	
5	Rack 2 East HTF B1-5	165	O/C	✓	Y ☐ N ☐	
6	North Steel Pro B1-6	160	O/C	✓	Y ☐ N ☐	
7	HTF Pumps B1-7	160	O/C	✓	Y ☐ N ☐	
8	HTF Heaters B1-8	165	O/C	✓	Y ☐ N ☐	
9	South Steel Pro B1-9	165	O/C	✓	Y ☐ N ☐	
10	Lube Oil B1-10	160	O/C	✓	Y ☐ N ☐	
11	Turbine Hose Stations B1-11	160	O/C	✓	Y ☐ N ☐	
12	Turbine Bearings B1-12	160	O/C	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	O/C	✓	Y ☐ N ☐	
2	Ullage Area B2-2	160	O/C	✓	Y ☐ N ☐	
3	Ullage Structure B2-11	165	O/C	✓	Y ☐ N ☐	
4	Rack 1 Middle Area B2-5	165	O/C	✓	Y ☐ N ☐	
5	Overflow Tanks B2-9	160	O/C	✓	Y ☐ N ☐	
6	Rack 1 South Area B2-6	160	O/C	✓	Y ☐ N ☐	
7	Rack 1 West B2-7	160	O/C	✓	Y ☐ N ☐	
8	Rack 1 North Area B2-4	165	O/C	✓	Y ☐ N ☐	
9	Over Flow AFFF B2-8	160	O/C	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF B2-3	160	O/C	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	O/C	✓	Y ☐ N ☐	
2	Transformer Main	165	O/C	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	O/C	✓	Y ☐ N ☐	
2	Offices B4-3	160	O/C	✓	Y ☐ N ☐	
3	Electrical Room B4-4	160	O/C	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	O/C	
2	Bearing 3	Y ☐ N ☐	O/C	
3	Bearing 4	Y ☐ N ☐	O/C	
4	Bearing 5	Y ☐ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☐ N ☐	O/C	
2	MP-200A	Y ☐ N ☐	O/C	
3	MP-200B	Y ☐ N ☐	O/C	
4	MP-200C	Y ☐ N ☐	O/C	
5	MP-200D	Y ☐ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	✓	11/16/19	
2	Maintenance Shop Drive Way #8	O/C	✓	11/16/19	
3	West Side Power Block by VS-3 # 9	O/C	✓	11/16/19	
4	West Side Power Block by VS-1 # 10	O/C	✓	11/16/19	
5	West Side Cooling Tower by VS-4 # 11	O/C	✓	11/16/19	
6	West side Cooling Tower by VS-4 # 12	O/C	✓	11/16/19	
7	N.W. Corner Chemical Storage # 1	O/C	✓	11/16/19	
8	N.E. Corner Chemical Storage # 2	O/C	✓	11/16/19	
9	East Side W.T. by Multimedia Filters # 3	O/C	✓	11/16/19	
10	East Side W.T. by Multimedia Filters # 5	O/C	✓	11/16/19	
11	North Side Bldg 10 # 6	O/C	✓	11/16/19	
12	Between MP-444's and Water Treat # 4	O/C	✓	11/16/19	
13	West Side Power Block Valve Shed # 1	O/C	✓	11/16/19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 11-10-19	
Operator: E & M	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155 psi		
Discharge Pressure: 160 psi		
Pump Suction Pressure: -	Pump Discharge pressure: 160 psi	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 150 psi		
Start time: 1901		
Pump Suction Pressure: 50 psi	Pump Discharge pressure: 155 psi	
Stop time: 1902	Total time running 30 sec	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☒ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.5	Battery volt Crank 2: 26.5	Battery Condition: Good
Starting hour meter: 71.7		Start time: 1904
Oil pressure start: 1 psi		Oil Pressure finish: 39 psi
Pump Suction Pressure: 29 psi	Pump Discharge pressure: 150 psi	
Coolant temperature after 30 minutes running: 183 at 19 min		
Stop time: 1923	Stop hour meter: 72.0	Total time running: 19 min
Comments: Alarm change air cooler temp out of range		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Fuel consumption 27 gal/ h approximately There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA: ☒

Date: 11-10-19

Operator: Caleb Sowards

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	180	✓ O/C	✓	Y ☒ N ☐	
2	SG Unit 2 B1-2	175	✓ O/C	✓	Y ☒ N ☐	
3	Reheaters B1-3	150	✓ O/C	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	170	✓ O/C	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	170	✓ O/C	✓	Y ☒ N ☐	
6	North Steel Pro B1-6	165	✓ O/C	✓	Y ☒ N ☐	
7	HTF Pumps B1-7	170	✓ O/C	✓	Y ☒ N ☐	
8	HTF Heaters B1-8	180	✓ O/C	✓	Y ☒ N ☐	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ☒ N ☐	
10	Lube Oil B1-10	55	✓ O/C	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	85	✓ O/C	✓	Y ☒ N ☐	
12	Turbine Bearings B1-12	85	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	175	✓ O/C	✓	Y ☒ N ☐	
2	Lillage Area B2-2	180	✓ O/C	✓	Y ☒ N ☐	
3	Lillage Structure B2-11	175	✓ O/C	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	155	✓ O/C	✓	Y ☒ N ☐	
5	Overflow Tanks B2-9	165	✓ O/C	✓	Y ☒ N ☐	
6	Rack 1 South Area B2-6	165	✓ O/C	✓	Y ☒ N ☐	
7	Rack 1 West B2-7	165	✓ O/C	✓	Y ☒ N ☐	
8	Rack 1 North Area B2-4	170	✓ O/C	✓	Y ☒ N ☐	
9	Over-flow AFFF B2-8	165	✓ O/C	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	170	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	185	✓ O/C	✓	Y ☒ N ☐	
2	Transformer Main	180	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	50	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ☒ N ☐	
2	Offices B4-3	160	✓ O/C	✓	Y ☒ N ☐	
3	Electrical Room B4-4	160	✓ O/C	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	✓ O/C	
2	Bearing 3	Y ☒ N ☐	✓ O/C	
3	Bearing 4	Y ☒ N ☐	✓ O/C	
4	Bearing 5	Y ☒ N ☐	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☒ N ☐	✓ O/C	
2	MP-200A	Y ☒ N ☐	✓ O/C	
3	MP-200B	Y ☒ N ☐	✓ O/C	
4	MP-200C	Y ☒ N ☐	✓ O/C	
5	MP-200D	Y ☒ N ☐	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	✓	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	✓	11-10-19	
2	Maintenance Shop Drive Way #8	O/C	✓	11-10-19	
3	West Side Power Block by VS-3 # 9	O/C	✓	11-10-19	
4	West Side Power Block by VS-1 # 10	✓ O/C	✓	11-10-19	
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	✓	11-10-19	
6	West side Cooling Tower by VS-4 # 12	✓ O/C	✓	11-10-19	
7	N.W. Corner Chemical Storage #1	✓ O/C	✓	11-10-19	
8	N.E. Corner Chemical Storage # 2	✓ O/C	✓	11-10-19	
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	✓	11-10-19	
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	✓	11-10-19	
11	North Side Bldg 10 # 6	✓ O/C	✓	11-10-19	
12	Between MP-444's and Water Treat # 4	✓ O/C	✓	11-10-19	
13	West Side Power Block Valve Shed #1	✓ O/C	✓	11-10-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☐ Beta ☒	Date: 11-3-19
Operator: Edm	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Jockey Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 149	
Discharge Pressure: 165 psi	
Pump Suction Pressure: 160	Pump Discharge pressure: 165 psi
Comments:	

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Start the pump on pressure drop. Start up pressure: 150	
Start time: 2301	
Pump Suction Pressure: 50 psi	Pump Discharge pressure: 155 psi
Stop time: 2311	Total time running: 1 min
Comments:	

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒	
Fuel level > 2/3: Yes ☐ No ☒ 50%	Monthly Fuel Consumption:
Battery volt Crank 1: 26.5 ✓ Battery volt Crank 2: 26.5 ✓	Battery Condition: 60%
Starting hour meter: 71.4	Start time: 2310
Oil pressure start: 115 psi	Oil Pressure finish:
Pump Suction Pressure: 50 psi	Pump Discharge pressure: 155
Coolant temperature after 30 minutes running: 181 after 21 min	
Stop time: 2331	Stop hour meter: 71.7 Total time running: 21 min
Comments: Change	
High temp on AV cooler Alarm	

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

a: Fuel consumption 27 gal/h approximately.

There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐ BETA: ☒

Date: 11-21-19

Operator: Caleb Sowards

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	175	✓ O/C	✓	Y ☒ N ☐	
2	SG Unit 2 B1-2	175	✓ O/C	✓	Y ☒ N ☐	
3	Reheaters B1-3	175	✓ O/C	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	175	✓ O/C	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	175	✓ O/C	✓	Y ☒ N ☐	
6	North Steel Pro B1-6	165	✓ O/C	✓	Y ☒ N ☐	
7	HTF Pumps B1-7	160	✓ O/C	✓	Y ☒ N ☐	
8	HTF Heaters B1-8	160	✓ O/C	✓	Y ☒ N ☐	
9	South Steel Pro B1-9	165	✓ O/C	✓	Y ☒ N ☐	
10	Lube Oil B1-10	175	✓ O/C	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	160	✓ O/C	✓	Y ☒ N ☐	
12	Turbine Bearings B1-12	165	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	175	✓ O/C	✓	Y ☒ N ☐	
2	Ullage Area B2-2	175	✓ O/C	✓	Y ☒ N ☐	
3	Ullage Structure B2-11	175	✓ O/C	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	150	✓ O/C	✓	Y ☒ N ☐	
5	Overflow Tanks B2-9	165	✓ O/C	✓	Y ☒ N ☐	
6	Rack 1 South Area B2-6	165	✓ O/C	✓	Y ☒ N ☐	
7	Rack 1 West B2-7	155	✓ O/C	✓	Y ☒ N ☐	
8	Rack 1 North Area B2-4	160	✓ O/C	✓	Y ☒ N ☐	
9	Over Flow AFFF B2-8	160	✓ O/C	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	165	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	✓ O/C	✓	Y ☒ N ☐	
2	Transformer Main	175	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	50	✓ O/C	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ☒ N ☐	
2	Offices B4-3	160	✓ O/C	✓	Y ☒ N ☐	
3	Electrical Room B4-4	165	✓ O/C	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	✓ O/C	
2	Bearing 3	Y ☒ N ☐	✓ O/C	
3	Bearing 4	Y ☒ N ☐	✓ O/C	
4	Bearing 5	Y ☒ N ☐	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	✓ O/C	
2	MP-200A	Y ☒ N ☐	✓ O/C	
3	MP-200B	Y ☒ N ☐	✓ O/C	
4	MP-200C	Y ☒ N ☐	✓ O/C	
5	MP-200D	Y ☒ N ☐	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	Y ☒ N ☐	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	✓	11/0	
2	Maintenance Shop Drive Way #8	✓ O/C	✓	11/0	
3	West Side Power Block by VS-3 # 9	✓ O/C	✓	11/0	
4	West Side Power Block by VS-1 # 10	✓ O/C	✓	11/0	
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	✓	11/0	
6	West side Cooling Tower by VS-4 # 12	✓ O/C	✓	11/0	
7	N.W. Corner Chemical Storage #1	✓ O/C	✓	11/0	
8	N.E. Corner Chemical Storage #2	✓ O/C	✓	11/0	
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	✓	11/0	
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	✓	11/0	
11	North Side Bldg 10 # 6	✓ O/C	✓	11/0	
12	Between MP-444s and Water Treat # 4	✓ O/C	✓	11/0	
13	West Side Power Block Valve Shed #1	✓ O/C	✓	11/0	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☒	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☐ Beta ☒	Date: 12-28-15
Operator: Caleb Sowards	*To be completed each time unit is operated
Reason for running pumps: Weekly test ☒ Maintenance ☒ Emergency ☐	

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 155
Discharge Pressure: 166
Pump Suction Pressure: 20 Pump Discharge pressure: 166
Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 145
Start time: 0150
Pump Suction Pressure: 20 Pump Discharge pressure: 167
Stop time: 0800 Total time running: 10 min
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☐ No ☒ Monthly Fuel Consumption: 1/2
Battery volt Crank 1: 26 Battery volt Crank 2: 26 Battery Condition: good
Starting hour meter: 71.0 Start time: 0205
Oil pressure start: 65 Oil Pressure finish: 40
Pump Suction Pressure: 20 Pump Discharge pressure: 155
Coolant temperature after 30 minutes running: 183
Stop time: 0235 Stop hour meter: 71.4 Total time running: 30 min
Comments: 17 minutes High air intake temp alarm

Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately

There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA: ☒ Date: 10-27-19 Operator: PHIL TOUBELUS

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	O/C	✓	☐ N ☐	
2	SG Unit 2 B1-2	165	O/C	✓	☐ N ☐	
3	Reheaters B1-3	165	O/C	✓	☐ N ☐	
4	Rack 2 West HTF B1-4	165	O/C	✓	☐ N ☐	
5	Rack 2 East HTF B1-5	165	O/C	✓	☐ N ☐	
6	North Steel Pro B1-6	160	O/C	✓	☐ N ☐	
7	HTF Pumps B1-7	160	O/C	✓	☐ N ☐	
8	HTF Heaters B1-8	161	O/C	✓	☐ N ☐	
9	South Steel Pro B1-9	165	O/C	✓	☐ N ☐	
10	Lube Oil B1-10	165	O/C	✓	☐ N ☐	
11	Turbine Hose Stations B1-11	165	O/C	✓	☐ N ☐	
12	Turbine Bearings B1-12	165	O/C	✓	☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	O/C	✓	☐ N ☐	
2	Ullage Area B2-2	160	O/C	✓	☐ N ☐	
3	Ullage Structure B2-11	160	O/C	✓	☐ N ☐	
4	Rack 1 Middle Area B2-5	165	O/C	✓	☐ N ☐	
5	Overflow Tanks B2-9	165	O/C	✓	☐ N ☐	
6	Rack 1 South Area B2-6	165	O/C	✓	☐ N ☐	
7	Rack 1 West B2-7	165	O/C	✓	☐ N ☐	
8	Rack 1 North Area B2-4	165	O/C	✓	☐ N ☐	
9	Over flow AFFF B2-8	160	O/C	✓	☐ N ☐	
10	Expansion Vessel AFFF B2-3	165	O/C	✓	☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	O/C	✓	☐ N ☐	
2	Transformer Main	165	O/C	✓	☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	161	O/C	✓	☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	161	O/C	✓	☐ N ☐	
2	Offices B4-3	165	O/C	✓	☐ N ☐	
3	Electrical Room B4-4	165	O/C	✓	☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	☐ N ☐	O/C	
2	Bearing 3	☐ N ☐	O/C	
3	Bearing 4	☐ N ☐	O/C	
4	Bearing 5	☐ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP 201	☐ N ☐	O/C	
2	MP 200A	☐ N ☐	O/C	
3	MP-200B	☐ N ☐	O/C	
4	MP-200C	☐ N ☐	O/C	
5	MP 200D	☐ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O/C	☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS 3 # 9	O/C			
4	West Side Power Block by VS 1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS 4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage #2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP 444's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	☐ N ☐	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 10-20-19	
Operator: Caleb Sowards	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 166		
Pump Suction Pressure: 20	Pump Discharge pressure: 166	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 0305		
Pump Suction Pressure: 20	Pump Discharge pressure: 167	
Stop time: 0315	Total time running 10 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good
Starting hour meter: 70.8	Start time: 0245	
Oil pressure start: 65	Oil Pressure finish:	
Pump Suction Pressure: 20	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 189		
Stop time: 0301	Stop hour meter: 71.0	Total time running: 16 min
Comments: High charge air intake temp alarm test stopped early		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA: ☒

Date: 10-18-19

Operator: E. B. M. A.

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	✓ O/C	✓	Y ☐ N ☐	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ☐ N ☐	
3	Reheaters B1-3	160	✓ O/C	✓	Y ☐ N ☐	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ☐ N ☐	
5	Rack 2 East HTF B1-5	155	✓ O/C	✓	Y ☐ N ☐	
6	North Steel Pro. B1-6	160	✓ O/C	✓	Y ☐ N ☐	
7	HTF Pumps B1-7	135	✓ O/C	✓	Y ☐ N ☐	
8	HTF Heaters B1-8	160	✓ O/C	✓	Y ☐ N ☐	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ☐ N ☐	
10	Lube Oil B1-10	160	✓ O/C	✓	Y ☐ N ☐	
11	Turbine Hose Stations B1-11	165	✓ O/C	✓	Y ☐ N ☐	
12	Turbine Bearings B1-12	165	✓ O/C	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	✓ O/C	✓	Y ☐ N ☐	
2	Ullage Area B2-2	160	✓ O/C	✓	Y ☐ N ☐	
3	Ullage Structure B2-11	160	✓ O/C	✓	Y ☐ N ☐	
4	Rack 1 Middle Area B2-5	160	✓ O/C	✓	Y ☐ N ☐	
5	Overflow Tanks B2-9	165	✓ O/C	✓	Y ☐ N ☐	
6	Rack 1 South Area B2-6	165	✓ O/C	✓	Y ☐ N ☐	
7	Rack 1 West B2-7	135	✓ O/C	✓	Y ☐ N ☐	
8	Rack 1 North Area B2-4	160	✓ O/C	✓	Y ☐ N ☐	
9	Overflow AFFF B2-8	160	✓ O/C	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF B2-3	160	✓ O/C	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	✓ O/C	✓	Y ☐ N ☐	
2	Transformer Main	160	✓ O/C	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	135	✓ O/C	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ☐ N ☐	
2	Offices B4-3	160	✓ O/C	✓	Y ☐ N ☐	
3	Electrical Room B4-4	160	✓ O/C	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	✓ O/C	
2	Bearing 3	Y ☐ N ☐	✓ O/C	
3	Bearing 4	Y ☐ N ☐	✓ O/C	
4	Bearing 5	Y ☐ N ☐	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☐ N ☐	✓ O/C	
2	MP-200A	Y ☐ N ☐	✓ O/C	
3	MP-200B	Y ☐ N ☐	✓ O/C	
4	MP-200C	Y ☐ N ☐	✓ O/C	
5	MP-200D	Y ☐ N ☐	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	✓	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	✓		
2	Maintenance Shop Drive Way #8	✓ O/C			
3	West Side Power Block by VS-3 # 9	✓ O/C			
4	West Side Power Block by VS-1 # 10	✓ O/C			
5	West Side Cooling Tower by VS-4 # 11	✓ O/C			
6	West side Cooling Tower by VS-4 # 12	✓ O/C			
7	N.W. Corner Chemical Storage #1	✓ O/C			
8	N.E. Corner Chemical Storage # 2	✓ O/C			
9	East Side W.T. by Multimedia Filters # 3	✓ O/C			
10	East Side W.T. by Multimedia Filters # 5	✓ O/C			
11	North Side Bldg 10 # 6	✓ O/C			
12	Between MP-444's and Water Treat # 4	✓ O/C			
13	West Side Power Block Valve Shed #1	✓ O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 10-13-19	
Operator: Mike Hinton	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: 7	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 1810		
Pump Suction Pressure: 12	Pump Discharge pressure: 165	
Stop time: 1820	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☒ Monthly Fuel Consumption:		
Battery volt Crank 1: 26.6	Battery volt Crank 2: 26.7	Battery Condition: Normal
Starting hour meter: 70.3	Start time: 1820	
Oil pressure start: 63	Oil Pressure finish: 38	
Pump Suction Pressure: 12	Pump Discharge pressure: 160	
Coolant temperature after 30 minutes running: 189		
Stop time: 1850	Stop hour meter: 70.7	Total time running: 30 mins
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/h approximately.		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐BETA: ☒

Date: 10/3/19

Operator

Manuel Garcia

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	OK	✓	☐ Y ☐ N ☐ O	
2	SG Unit 2 B1-2	160	OK	✓	☐ Y ☐ N ☐ O	
3	Reheaters B1-3	160	OK	✓	☐ Y ☐ N ☐ O	
4	Rack 2 West HTF B1-4	165	OK	✓	☐ Y ☐ N ☐ O	
5	Rack 2 East HTF B1-5	160	OK	✓	☐ Y ☐ N ☐ O	
6	North Steel Pro B1-6	160	OK	✓	☐ Y ☐ N ☐ O	
7	HTF Pumps B1-7	165	OK	✓	☐ Y ☐ N ☐ O	
8	HTF Heaters B1-8	165	OK	✓	☐ Y ☐ N ☐ O	
9	South Steel Pro B1-9	160	OK	✓	☐ Y ☐ N ☐ O	
10	Lube Oil B1-10	160	OK	✓	☐ Y ☐ N ☐ O	
11	Turbine Hose Stations B1-11	160	OK	✓	☐ Y ☐ N ☐ O	
12	Turbine Bearings B1-12	160	OK	✓	☐ Y ☐ N ☐ O	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	OK	✓	☐ Y ☐ N ☐ O	
2	Village Area B2-2	160	OK	✓	☐ Y ☐ N ☐ O	
3	Village Structure B2-11	160	OK	✓	☐ Y ☐ N ☐ O	
4	Rack 1 Middle Area B2-5	165	OK	✓	☐ Y ☐ N ☐ O	
5	Overflow Tanks B2-9	165	OK	✓	☐ Y ☐ N ☐ O	
6	Rack 1 South Area B2-6	165	OK	✓	☐ Y ☐ N ☐ O	
7	Rack 1 West B2-7	160	OK	✓	☐ Y ☐ N ☐ O	
8	Rack 1 North Area B2-4	160	OK	✓	☐ Y ☐ N ☐ O	
9	Over Flow AFFF B2-8	160	OK	✓	☐ Y ☐ N ☐ O	
10	Expansion Vessel AFFF B2-3	160	OK	✓	☐ Y ☐ N ☐ O	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OK	✓	☐ Y ☐ N ☐ O	
2	Transformer Main	160	OK	✓	☐ Y ☐ N ☐ O	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	OK	✓	☐ Y ☐ N ☐ O	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	OK	✓	☐ Y ☐ N ☐ O	
2	Offices B4-3	160	OK	✓	☐ Y ☐ N ☐ O	
3	Electrical Room B4-4	160	OK	✓	☐ Y ☐ N ☐ O	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	☐ Y ☐ N ☐ O	OK	
2	Bearing 3	☐ Y ☐ N ☐ O	OK	
3	Bearing 4	☐ Y ☐ N ☐ O	OK	
4	Bearing 5	☐ Y ☐ N ☐ O	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	☐ Y ☐ N ☐ O	OK	
2	MP-200A	☐ Y ☐ N ☐ O	OK	
3	MP-200B	☐ Y ☐ N ☐ O	OK	
4	MP-200C	☐ Y ☐ N ☐ O	OK	
5	MP-200D	☐ Y ☐ N ☐ O	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge			☐ Y ☐ N ☐ O	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	ND		
2	Maintenance Shop Drive Way #8	OK	ND		
3	West Side Power Block by VS-3 # 9	OK	ND		
4	West Side Power Block by VS-1 # 10	OK	ND		
5	West Side Cooling Tower by VS-4 # 11	OK	ND		
6	West side Cooling Tower by VS-4 # 12	OK	ND		
7	N.W. Corner Chemical Storage #1	OK	ND		
8	N.E. Corner Chemical Storage #2	OK	ND		
9	East Side W.T. by Multimedia Filters # 3	OK	ND		
10	East Side W.T. by Multimedia Filters # 5	OK	ND		
11	North Side Bldg 10 # 6	OK	ND		
12	Between MP-44's and Water Treat # 4	OK	ND		
13	West Side Power Block Valve Shed #1	OK	ND		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	☐ Y ☐ N ☐ O	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☐ Beta ☒	Date: 10/4/19
Operator: Manny Garcia	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 153
Discharge Pressure: 165
Pump Suction Pressure: — Pump Discharge pressure: 165
Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 19 psi
Start time: 1922
Pump Suction Pressure: 15 Pump Discharge pressure: 155
Stop time: 1924 Total time running 2 MINS
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:
Battery volt Crank 1: 27 Battery volt Crank 2: 27 Battery Condition: Good
Starting hour meter: 69.9 Start time: 1926
Oil pressure start: 67 psi Oil Pressure finish: 38 psi
Pump Suction Pressure: 25 Pump Discharge pressure: 150
Coolant temperature after 30 minutes running (start 127) 189°F
Stop time: 1956 Stop hour meter: 70.3 Total time running: 30 MINS
Comments: Fault @ 1941 Change air cooler temp out of range High Corrective Action: Increase raw water flow
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water-Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately.

There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA: ☒ Date: 10-5-19 Operator: Shell

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	O/C		☒ ☐	
2	SG Unit 2 B1-2	158	O/C		☒ ☐	
3	Reheaters B1-3	160	O/C		☒ ☐	
4	Rack 2 West HTF B1-4	158	O/C		☒ ☐	
5	Rack 2 East HTF B1-5	158	O/C		☒ ☐	
6	North Steel Pro B1-6	155	O/C		☒ ☐	
7	HTF Pumps B1-7	155	O/C		☒ ☐	
8	HTF Heaters B1-8	155	O/C		☒ ☐	
9	South Steel Pro B1-9	160	O/C		☒ ☐	
10	Lube Oil B1-10	160	O/C		☒ ☐	
11	Turbine Hose Stations B1-11	160	O/C		☒ ☐	
12	Turbine Bearings B1-12	160	O/C		☒ ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	O/C	Yes	☒ ☐	
2	Ullage Area B2-2	160	O/C	Yes	☒ ☐	
3	Ullage Structure B2-11	160	O/C	Yes	☒ ☐	
4	Rack 1 Middle Area B2-5	158	O/C	Yes	☒ ☐	
5	Overflow Tanks B2-9	155	O/C	Yes	☒ ☐	
6	Rack 1 South Area B2-6	160	O/C	Yes	☒ ☐	
7	Rack 1 West B2-7	160	O/C	Yes	☒ ☐	
8	Rack 1 North Area B2-4	160	O/C	Yes	☒ ☐	
9	Overflow AFFF B2-8	158	O/C	Yes	☒ ☐	
10	Expansion Vessel AFFF B2-3	160	O/C	Yes	☒ ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	158	O/C	Yes	☒ ☐	
2	Transformer Main	155	O/C	Yes	☒ ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	155	O/C	Yes	☒ ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	158	O/C	Yes	☒ ☐	
2	Offices B4-3	160	O/C	Yes	☒ ☐	
3	Electrical Room B4-4	160	O/C	Yes	☒ ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	☒ ☐	O/C	
2	Bearing 3	☒ ☐	O/C	
3	Bearing 4	☒ ☐	O/C	
4	Bearing 5	☒ ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	☒ ☐	O/C	
2	MP-200A	☒ ☐	O/C	
3	MP-200B	☒ ☐	O/C	
4	MP-200C	☒ ☐	O/C	
5	MP-200D	☒ ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	☒ ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	Yes	10-5	
2	Maintenance Shop Drive Way #8	O/C	Yes	10-5	
3	West Side Power Block by VS-3 # 9	O/C	Yes	10-5	
4	West Side Power Block by VS-1 # 10	O/C	Yes	10-5	
5	West Side Cooling Tower by VS-4 # 11	O/C	Yes	10-5	
6	West Side Cooling Tower by VS-4 # 12	O/C	Yes	10-5	
7	N.W. Corner Chemical Storage #1	O/C	Yes	10-5	
8	N.E. Corner Chemical Storage # 2	O/C	Yes	10-5	
9	East Side W.T. by Multimedia Filters # 3	O/C	Yes	10-5	
10	East Side W.T. by Multimedia Filters # 5	O/C	Yes	10-5	
11	North Side Bldg 10 # 6	O/C	Yes	10-5	
12	Between MP-444's and Water Treat # 4	O/C	Yes	10-5	
13	West Side Power Block Valve Shed #1	O/C	Yes	10-5	

To Be Cycled First Saturday of Every Month

No.	System	Deliberate	Comments / Actions
1	Transformer Yard Refuse Check	☒ ☐	

Fire Pump Weekly Test Log

General Information

Plant: Alpha ☐ Beta ☒	Date: 9/27/19
Operator: Manuel Garcia	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	

Jockey Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 84
Discharge Pressure: 165
Pump Suction Pressure: N/A Pump Discharge pressure: 165
Comments:

Electric Pump

Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒
Start the pump on pressure drop. Start up pressure: 25 psi
Start time: 19:19
Pump Suction Pressure: 15 Pump Discharge pressure: 155
Stop time: 19:21 Total time running: 2 minutes
Comments:

Diesel Pump

Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:
Battery volt Crank 1: 27v Battery volt Crank 2: 27v Battery Condition: Good
Starting hour meter: 695 Start time: 19:23
Oil pressure start: 1 PSI Oil Pressure finish: 37 psi
Pump Suction Pressure: 25 psi Pump Discharge pressure: 150
Coolant temperature after 30 minutes running: 198°F
Stop time: 19:53 Stop hour meter: 699 Total time running: 30 mins
Comments: fault: Charge air cooler Temp out of range high Flow rate corrective: Increase raw water
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).

This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.

Note: Fuel consumption 27 gal/h approximately

There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]

Plant: ALPHA ☒ BETA ☐

Date: 9-27-19

Operator: Hinton

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	O/C	✓	Y ☒ N ☐	
2	SG Unit 2 B1-2	165	O/C	✓	Y ☒ N ☐	
3	Reheaters B1-3	170	O/C	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	170	O/C	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	170	O/C	✓	Y ☒ N ☐	
6	North Steel Pro B1-6	165	O/C	✓	Y ☒ N ☐	
7	HTF Pumps B1-7	165	O/C	✓	Y ☒ N ☐	
8	HTF Heaters B1-8	165	O/C	✓	Y ☒ N ☐	
9	South Steel Pro B1-9	170	O/C	✓	Y ☒ N ☐	
10	Lube Oil B1-10	170	O/C	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	170	O/C	✓	Y ☒ N ☐	
12	Turbine Bearings B1-12	170	O/C	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	175	O/C	✓	Y ☒ N ☐	
2	Ullage Area B2-2	175	O/C	✓	Y ☒ N ☐	
3	Ullage Structure B2-11	170	O/C	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	175	O/C	✓	Y ☒ N ☐	
5	Overflow Tanks B2-9	165	O/C	✓	Y ☒ N ☐	
6	Rack 1 South Area B2-6	165	O/C	✓	Y ☒ N ☐	
7	Rack 1 West B2-7	165	O/C	✓	Y ☒ N ☐	
8	Rack 1 North Area B2-4	165	O/C	✓	Y ☒ N ☐	
9	Overflow AFFF B2-8	165	O/C	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	170	O/C	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	170	O/C	✓	Y ☒ N ☐	
2	Transformer Main	165	O/C	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	O/C	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	O/C	✓	Y ☒ N ☐	
2	Offices B4-3	170	O/C	✓	Y ☒ N ☐	
3	Electrical Room B4-4	170	O/C	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	No		
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	NW Corner Chemical Storage #1	O/C			
8	NE Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1 N/A	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 9-21-19	
Operator: Shell	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 110 PSI		
Discharge Pressure: 76.5		
Pump Suction Pressure: No PSI	Pump Discharge pressure:	
Comments: In Auto		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 30		
Start time: 0434		
Pump Suction Pressure: 15	Pump Discharge pressure: 155	
Stop time: 0435	Total time running 1 min.	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☐ 1/2 Monthly Fuel Consumption:		
Battery volt Crank 1: 26.5	Battery volt Crank 2: 26.2	Battery Condition: Good
Starting hour meter: 68.6	Start time: 01:01	
Oil pressure start: 60	Oil Pressure finish: 39	
Pump Suction Pressure: 28 PSI	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 187		
Stop time: 0121	Stop hour meter: 69.0	Total time running: 30 min
Comments: RPM's 1760		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA ☒

Date: 9/20/19

Operator: Manuel Garcia

Valve Shed # 1 by Condenser

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	SG Unit 1	1100	OK	✓	Y ☐ N ☐	
2	SG Unit 2	1100	OK	✓	Y ☐ N ☐	
3	Reheaters	1100	OK	✓	Y ☐ N ☐	
4	Rack 2 West HTF	1100	OK	✓	Y ☐ N ☐	
5	Rack 2 East HTF	1105	OK	✓	Y ☐ N ☐	
6	North Steel Pro	1100	OK	✓	Y ☐ N ☐	
7	HTF Pumps	1105	OK	✓	Y ☐ N ☐	
8	HTF Heaters	1100	OK	✓	Y ☐ N ☐	
9	South Steel Pro	1105	OK	✓	Y ☐ N ☐	
10	Lube Oil	1100	OK	✓	Y ☐ N ☐	
11	Turbine Hose Stations	1100	OK	✓	Y ☐ N ☐	
12	Turbine Bearings	1100	OK	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Expansion Vessels	1105	OK	✓	Y ☐ N ☐	
2	Ullage Area	1105	OK	✓	Y ☐ N ☐	
3	Ullage Structure	1105	OK	✓	Y ☐ N ☐	
4	Rack 1 Middle Area	1105	OK	✓	Y ☐ N ☐	
5	Overflow Tanks	1100	OK	✓	Y ☐ N ☐	
6	Rack 1 South Area	1100	OK	✓	Y ☐ N ☐	
7	Rack 1 West	1100	OK	✓	Y ☐ N ☐	
8	Rack 1 North Area	1100	OK	✓	Y ☐ N ☐	
9	Over Flow AFFF	1100	OK	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF	1100	OK	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Transformer Aux	1100	OK	✓	Y ☐ N ☐	
2	Transformer Main	1100	OK	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	1105	OK	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vis. Pos.	Signage	Locked	Comments
1	Control Room	1100	OK	✓	Y ☐ N ☐	
2	Offices	1100	OK	✓	Y ☐ N ☐	
3	Electrical Room	1100	OK	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vis. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	OK	
2	Bearing 3	Y ☐ N ☐	OK	
3	Bearing 4	Y ☐ N ☐	OK	
4	Bearing 5	Y ☐ N ☐	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vis. Pos.	Comments
1	MP-201	Y ☐ N ☐	OK	
2	MP-200A	Y ☐ N ☐	OK	
3	MP-200B	Y ☐ N ☐	OK	
4	MP-200C	Y ☐ N ☐	OK	
5	MP-200D	Y ☐ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	1105	OK	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	—	—	
2	Maintenance Shop Drive Way #8	OK	NO	—	
3	West Side Power Block by VS-3 #9	OK	NO	—	
4	West Side Power Block by VS-1 #10	OK	NO	—	
5	West Side Cooling Tower by VS-4 #11	OK	NO	—	
6	West side Cooling Tower by VS-4 #12	OK	NO	—	
7	N.W. Corner Chemical Storage #1	OK	NO	—	
8	N.E. Corner Chemical Storage #2	OK	NO	—	
9	East Side W.T. by Multimedia Filters #3	OK	NO	—	
10	East Side W.T. by Multimedia Filters #5	OK	NO	—	
11	North Side Bldg 10 #6	OK	NO	—	
12	Between MP-414's and Water Treat #4	OK	NO	—	
13	West side Power Block Valve Shed #1	OK	NO	—	

To Be Cycled First Saturday of Every Month

No.	System	Dgbls	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☐	

ABENGOA

ave Solar LLC

Fire Pump Weekly Test Log

General Information	
Plant: Alpha ☐ Beta ☒	Date: 9-15-19
Operator: Efraim	*To be completed each time unit is operated
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Source: Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 154 psi	
Discharge Pressure: 165 psi	
Pump Suction Pressure: —	Pump Discharge pressure: 165 psi
Comments:	
Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Start the pump on pressure drop. Start up pressure: 155	
Start time: 0634	
Pump Suction Pressure: 25 psi	Pump Discharge pressure: 195 psi
Stop time: 0633	Total time running: 1 min
Comments:	
Diesel Pump	
Pre-start Inspection: Coolant ☒ Oil ☐ Mechanical ☒ Valves ☐ Water Jacket Heater ☒	
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption: —
Battery volt Crank 1: 27.5 Battery volt Crank 2: 27.5	Battery Condition: Good
Starting hour meter: 68.2 H	Start time: 0637
Oil pressure start: 2 psi	Oil Pressure finish: 39 psi
Pump Suction Pressure: 45 psi	Pump Discharge pressure: 150 psi
Coolant temperature after 30 minutes running: 185	
Stop time: 0707	Stop hour meter: 68.6 H
Total time running: 30 min	
Comments:	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).	
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]	

Plant: ALPHA

BETA

Date: 9-15-19

Operator: Ebn

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	160	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	160	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	160	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	160	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	160	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	160	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	160	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessel B2-1	160	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	160	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	160	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	160	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	160	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	160	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	160	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	160	✓ O/C	✓	Y ✓ N	
9	Overflow AFFF B2-8	160	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	✓ O/C	✓	Y ✓ N	
2	Transformer Main	165	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	115	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	165	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	165	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	✓	9-9	
2	Maintenance Shop Drive Way #8	✓ O/C	✓		
3	West Side Power Block by VS-3 # 9	✓ O/C	✓		
4	West Side Power Block by VS-1 # 10	✓ O/C	✓		
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	✓		
6	West side Cooling Tower by VS-4 # 12	✓ O/C	✓		
7	N.W. Corner Chemical Storage #1	✓ O/C	✓		
8	N.E. Corner Chemical Storage #2	✓ O/C	✓		
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	✓		
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	✓		
11	North Side Bldg 10 # 6	✓ O/C	✓		
12	Between MP-444's and Water Treat # 4	✓ O/C	✓		
13	West Side Power Block Valve Shed #1	✓ O/C	✓		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☒ Beta ☐	Date: 9-6-19	
Operator: PHV	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure: 20	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 23:36		
Pump Suction Pressure: 20	Pump Discharge pressure: 155	
Stop time: 23:46	Total time running 10 mins	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☒ 50% Monthly Fuel Consumption:		
Battery volt Crank 1: 26.7	Battery volt Crank 2: 26.7	Battery Condition: GOOD
Starting hour meter: 57.6	Start time: 23:22	
Oil pressure start: 64	Oil Pressure finish: 45	
Pump Suction Pressure: 20	Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 188		
Stop time: 23:34	Stop hour meter: 57.8	Total time running: 12 mins
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Plant: ALPHA ☒ BETA ☐

Date: 9-8-19

Operator: Efrin

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	175	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	175	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	175	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	175	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	175	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	175	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	175	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	175	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	175	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	175	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	175	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	165	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	165	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	165	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	170	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	165	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	170	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	170	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	170	✓ O/C	✓	Y ✓ N	
9	Over Flow AFFF B2-8	170	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	170	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	✓ O/C	✓	Y ✓ N	
2	Transformer Main	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	170	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	170	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	170	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	170	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	175	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	Yes	9/8	
2	Maintenance Shop Drive Way #8	✓ O/C	Yes	9/8	
3	West Side Power Block by VS-3 # 9	✓ O/C	Yes	9/8	
4	West Side Power Block by VS-1 # 10	✓ O/C	Yes	9/8	
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	Yes	9/8	
6	West side Cooling Tower by VS-4 # 12	✓ O/C	Yes	9/8	
7	N.W. Corner Chemical Storage #1	✓ O/C	Yes	9/8	
8	N.E. Corner Chemical Storage # 2	✓ O/C	Yes	9/8	
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	Yes	9/8	
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	Yes	9/8	
11	North Side Bldg 10 # 6	✓ O/C	Yes	9/8	
12	Between MP-444's and Water Treat # 4	✓ O/C	Yes	9/8	
13	West Side Power Block Valve Shed #1	✓ O/C	Yes	9/8	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 8-31-19		Plant: Alpha ☐ Beta ☒
Operator:		* To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 166		Pump Suction Pressure: 20	
Pump Discharge pressure: 166		Comments:	
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1617			
Pump Suction Pressure: 15		Pump Discharge pressure: 167	
Stop time: 1627		Total time running 10 min	
Comments: 1627			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☒ Monthly Fuel Consumption: 112			
Battery volt Crank 1: 26		Battery volt Crank 2: 26	
Starting hour meter: 67.3		Battery Condition: good	
Oil pressure start: 63		Start time: 1545	
Pump Suction Pressure: 20		Oil Pressure finish: 39	
Pump Discharge pressure: 155		Coolant temperature after 30 minutes running: 185	
Stop time: 1615		Stop hour meter: 67.7	
Total time running: 30 min		Comments:	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))			

Plant: ALPHA ☐

BETA ☒

Date: 8-21-19

Operator: ESM/19

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	✓ O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	160	✓ O/C	✓	Y ✓ N	
3	Reheaters B1-3	160	✓ O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	160	✓ O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	160	✓ O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	160	✓ O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	160	✓ O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	160	✓ O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	160	✓ O/C	✓	Y ✓ N	
10	Lube Oil B1-10	160	✓ O/C	✓	Y ✓ N	
11	Turbine Hose Stations B1-11	160	✓ O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	✓ O/C	✓	Y ✓ N	
2	Ullage Area B2-2	160	✓ O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	160	✓ O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	160	✓ O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	160	✓ O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	160	✓ O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	160	✓ O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	160	✓ O/C	✓	Y ✓ N	
9	Overflow AFFF B2-8	160	✓ O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	✓ O/C	✓	Y ✓ N	
2	Transformer Main	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	✓ O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	✓ O/C	✓	Y ✓ N	
2	Offices B4-3	160	✓ O/C	✓	Y ✓ N	
3	Electrical Room B4-4	160	✓ O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	✓ O/C	
2	Bearing 3	Y ✓ N	✓ O/C	
3	Bearing 4	Y ✓ N	✓ O/C	
4	Bearing 5	Y ✓ N	✓ O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	✓ O/C	
2	MP-200A	Y ✓ N	✓ O/C	
3	MP-200B	Y ✓ N	✓ O/C	
4	MP-200C	Y ✓ N	✓ O/C	
5	MP-200D	Y ✓ N	✓ O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	✓	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	✓ O/C	✓		
2	Maintenance Shop Drive Way #8	✓ O/C	✓		
3	West Side Power Block by VS-3 # 9	✓ O/C	✓		
4	West Side Power Block by VS-1 # 10	✓ O/C	✓		
5	West Side Cooling Tower by VS-4 # 11	✓ O/C	✓		
6	West side Cooling Tower by VS-4 # 12	✓ O/C	✓		
7	N.W. Corner Chemical Storage #1	✓ O/C	✓		
8	N.E. Corner Chemical Storage # 2	✓ O/C	✓		
9	East Side W.T. by Multimedia Filters # 3	✓ O/C	✓		
10	East Side W.T. by Multimedia Filters # 5	✓ O/C	✓		
11	North Side Bldg 10 # 6	✓ O/C	✓		
12	Between MP-444 s and Water Treat # 4	✓ O/C	✓		
13	West Side Power Block Valve Shed #1	✓ O/C	✓		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓	

ABENGOA

ave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 8-25-19		
Operator: Caleb Sowards	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 15.5			
Discharge Pressure: 166			
Pump Suction Pressure: 1.5	Pump Discharge pressure: 166		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 14.5			
Start time: 0300			
Pump Suction Pressure: 1.5	Pump Discharge pressure: 16.7		
Stop time: 0310	Total time running 10 min		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☐ Oil ☐ Mechanical ☐ Valves ☐ Water Jacket Heater ☐			
Fuel level > 2/3: Yes ☐ No ☒ 1/2	Monthly Fuel Consumption:		
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good	
Starting hour meter: 67.1	Start time: 0235		
Oil pressure start: 67	Oil Pressure finish: 44		
Pump Suction Pressure: 20	Pump Discharge pressure: 15.55		
Coolant temperature after 30 minutes running:			
Stop time: 0250	Stop hour meter: 67.3	Total time running: 15 min	
Comments: test ended Early High intake air alarm			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h is approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA ☒

Date: 8/24/19

Operator: Manny Garcia

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	11.0	OK	✓	Y/N	
2	SG Unit 2	16.0	OK	✓	Y/N	
3	Reheaters	16.0	OK	✓	Y/N	
4	Rack 2 West HTF	16.0	OK	✓	Y/N	
5	Rack 2 East HTF	16.5	OK	✓	Y/N	
6	North Steel Pro	16.0	OK	✓	Y/N	
7	HTF Pumps	16.5	OK	✓	Y/N	
8	HTF Heaters	16.0	OK	✓	Y/N	
9	South Steel Pro	16.0	OK	✓	Y/N	
10	Lube Oil	16.0	OK	✓	Y/N	
11	Turbine Hose Stations	16.0	OK	✓	Y/N	
12	Turbine Bearings	16.0	OK	✓	Y/N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	11.0	OK	✓	Y/N	
2	Ullage Area	16.0	OK	✓	Y/N	
3	Ullage Structure	16.0	OK	✓	Y/N	
4	Rack 1 Middle Area	16.0	OK	✓	Y/N	
5	Overflow Tanks	16.0	OK	✓	Y/N	
6	Rack 1 South Area	11.0	OK	✓	Y/N	
7	Rack 1 West	16.0	OK	✓	Y/N	
8	Rack 1 North Area	16.0	OK	✓	Y/N	
9	Over flow AFFF	16.0	OK	✓	Y/N	
10	Expansion Vessel AFFF	16.0	OK	✓	Y/N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.0	OK	✓	Y/N	
2	Transformer Main	16.0	OK	✓	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.0	OK	✓	Y/N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	16.0	OK	✓	Y/N	
2	Offices	16.0	OK	✓	Y/N	
3	Electrical Room	16.0	OK	✓	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y/N	OK	
2	Bearing 3	Y/N	OK	
3	Bearing 4	Y/N	OK	
4	Bearing 5	Y/N	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y/N	OK	
2	MP-200A	Y/N	OK	
3	MP-200B	Y/N	OK	
4	MP-200C	Y/N	OK	
5	MP-200D	Y/N	OK	

Fire Pump House Deluge System

No.	System	PSI	OK	Locked	Comments
1	Fire Pump House Deluge	16.5	OK	Y/N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	NO		
2	Maintenance Shop Drive Way #8	OK	NO		
3	West Side Power Block by VS-3 # 9	OK	NO		
4	West Side Power Block by VS-1 # 10	OK	NO		
5	West Side Cooling Tower by VS-4 # 11	OK	NO		
6	West side Cooling Tower by VS-4 # 12	OK	NO		
7	N.W. Corner Chemical Storage #1	OK	NO		
8	N.E. Corner Chemical Storage #2	OK	NO		
9	East Side W.T. by Multimedia Filters #3	OK	NO		
10	East Side W.T. by Multimedia Filters #5	OK	NO		
11	North Side Bldg 10 # 6	OK	NO		
12	Between MP-444's and Water Treat # 4	OK	NO		
13	West side Power Block Valve Shed #1	OK	NO		

To Be Cycled First Saturday of Every Month

No.	System	Dabris	Comments / Actions
1	Transformer Yard Refuse Check	Y/N	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 8-18-19		
Operator: Larry Shull	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure:			
Discharge Pressure: 128			
Pump Suction Pressure: No Press gauge.		Pump Discharge pressure: 162	
Comments: In Auto			
Suction Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 25			
Start time: 2842			
Pump Suction Pressure: 15		Pump Discharge pressure: 155	
Stop time: 2843		Total time running: 1 min.	
Comments: In Auto			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☐ 1/2	Monthly Fuel Consumption:		
Battery volt Crank 1: 26.5	Battery volt Crank 2: 26.5	Battery Condition: Good	
Starting hour meter: 66.6		Start time: 23:49	
Oil pressure start: 61		Oil Pressure finish: 37.	
Pump Suction Pressure: 25 PSI		Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 185			
Stop time: 00:19		Stop hour meter: 67.1	Total time running: 30 min
Comments: RPM's 1743 Back in Auto			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance instructions. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒

Date: 8/17/2019

Operator: Manny

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	OC	✓	Y ☒ N ☐	
2	SG Unit 2	160	OC	✓	Y ☒ N ☐	
3	Reheaters	160	OC	✓	Y ☒ N ☐	
4	Rack 2 West HTF	160	OC	✓	Y ☒ N ☐	
5	Rack 2 East HTF	160	OC	✓	Y ☒ N ☐	
6	North Steel Pro	160	OC	✓	Y ☒ N ☐	
7	HTF Pumps	160	OC	✓	Y ☒ N ☐	
8	HTF Heaters	160	OC	✓	Y ☒ N ☐	
9	South Steel Pro	160	OC	✓	Y ☒ N ☐	
10	Lube Oil	160	OC	✓	Y ☒ N ☐	
11	Turbine Hose Stations	160	OC	✓	Y ☒ N ☐	
12	Turbine Bearings	160	OC	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	OC	✓	Y ☒ N ☐	
2	Ullage Area	160	OC	✓	Y ☒ N ☐	
3	Ullage Structure	160	OC	✓	Y ☒ N ☐	
4	Rack 1 Middle Area	160	OC	✓	Y ☒ N ☐	
5	Overflow Tanks	160	OC	✓	Y ☒ N ☐	
6	Rack 1 South Area	160	OC	✓	Y ☒ N ☐	
7	Rack 1 West	160	OC	✓	Y ☒ N ☐	
8	Rack 1 North Area	160	OC	✓	Y ☒ N ☐	
9	Over flow AFFF	160	OC	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF	160	OC	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OC	✓	Y ☒ N ☐	
2	Transformer Main	160	OC	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OC	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	160	OC	✓	Y ☒ N ☐	
2	Offices	160	OC	✓	Y ☒ N ☐	
3	Electrical Room	160	OC	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OC	
2	Bearing 3	Y ☒ N ☐	OC	
3	Bearing 4	Y ☒ N ☐	OC	
4	Bearing 5	Y ☒ N ☐	OC	

HTF Deluge System Valves (To be Locked In the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OC	
2	MP-200A	Y ☒ N ☐	OC	
3	MP-200B	Y ☒ N ☐	OC	
4	MP-200C	Y ☒ N ☐	OC	
5	MP-200D	Y ☒ N ☐	OC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	OC	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC	—		
2	Maintenance Shop Drive Way #8	OC	NO		
3	West Side Power Block by VS-3 # 9	OC	NO		
4	West Side Power Block by VS-1 # 10	OC	NO		
5	West Side Cooling Tower by VS-4 # 11	OC	NO		
6	West side Cooling Tower by VS-4 # 12	OC	NO		
7	N.W. Corner Chemical Storage #1	OC	NO		
8	N.E. Corner Chemical Storage #2	OC	NO		
9	East Side W.T. by Multimedia Filters # 3	OC	NO		
10	East Side W.T. by Multimedia Filters # 5	OC	NO		
11	North Side Bldg 10 # 6	OC	NO		
12	Between MP-44-1's and Water Treat # 4	OC	NO		
13	West side Power Block Valve Shed #1	OC	NO		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 8-11-19		
Operator: Shell	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 144			
Discharge Pressure: 165			
Pump Suction Pressure: No Gauge		Pump Discharge pressure: 165	
Comments:			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 26			
Start time: 00:29			
Pump Suction Pressure: 15		Pump Discharge pressure: 156	
Stop time: 00:30		Total time running 1.5 min	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☐ @ 1/2 Monthly Fuel Consumption:			
Battery volt Crank 1: 26.5		Battery volt Crank 2: 26.5	
Starting hour meter: 66.3		Battery Condition: Good	
Oil pressure start: 59		Start time: 00:01	
Pump Suction Pressure: 24		Oil Pressure finish:	
		Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running:			
Stop time: 12:24		Stop hour meter: 66.6	
		Total time running: 21.9 min	
Comments: Got High Temp/change air filter alarm with 8.10 minutes Remaining Had Both Emergency cooling Valves open.			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93.115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA ☒

Date: 8/10/19

Operator: Manuel Garcia

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	OK	✓	Y ☒ N ☐	
2	SG Unit 2	160	OK	✓	Y ☒ N ☐	
3	Reheaters	160	OK	✓	Y ☒ N ☐	
4	Rack 2 West HTF	165	OK	✓	Y ☒ N ☐	
5	Rack 2 East HTF	160	OK	✓	Y ☒ N ☐	
6	North Steel Pro	160	OK	✓	Y ☒ N ☐	
7	HTF Pumps	160	OK	✓	Y ☒ N ☐	
8	HTF Heaters	165	OK	✓	Y ☒ N ☐	
9	South Steel Pro	160	OK	✓	Y ☒ N ☐	
10	Lube Oil	170	OK	✓	Y ☒ N ☐	
11	Turbine Hose Stations	160	OK	✓	Y ☒ N ☐	
12	Turbine Bearings	160	OK	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	OK	✓	Y ☒ N ☐	
2	Ullage Area	160	OK	✓	Y ☒ N ☐	
3	Ullage Structure	160	OK	✓	Y ☒ N ☐	
4	Rack 1 Middle Area	160	OK	✓	Y ☒ N ☐	
5	Overflow Tanks	160	OK	✓	Y ☒ N ☐	
6	Rack 1 South Area	160	OK	✓	Y ☒ N ☐	
7	Rack 1 West	160	OK	✓	Y ☒ N ☐	
8	Rack 1 North Area	160	OK	✓	Y ☒ N ☐	
9	Over flow AFFF	160	OK	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF	160	OK	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OK	✓	Y ☒ N ☐	
2	Transformer Main	160	OK	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room	165	OK	✓	Y ☒ N ☐	
2	Offices	165	OK	✓	Y ☒ N ☐	
3	Electrical Room	165	OK	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OK	
2	Bearing 3	Y ☒ N ☐	OK	
3	Bearing 4	Y ☒ N ☐	OK	
4	Bearing 5	Y ☒ N ☐	OK	

HTF Deluge System Valves (To be Locked In the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OK	
2	MP-200A	Y ☒ N ☐	OK	
3	MP-200B	Y ☒ N ☐	OK	
4	MP-200C	Y ☒ N ☐	OK	
5	MP-200D	Y ☒ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	NO		
2	Maintenance Shop Drive Way #8	OK	NO		
3	West Side Power Block by VS-3 # 9	OK	NO		
4	West Side Power Block by VS-1 # 10	OK	NO		
5	West Side Cooling Tower by VS-4 # 11	OK	NO		
6	West side Cooling Tower by VS-4 # 12	OK	NO		
7	N.W. Corner Chemical Storage #1	OK	NO		
8	N.E. Corner Chemical Storage #2	OK	NO		
9	East Side W.T. by Multimedia Filters # 3	OK	NO		
10	East Side W.T. by Multimedia Filters # 5	OK	NO		
11	North Side Bldg 10 # 6	OK	NO		
12	Between MP-444's and Water Treat # 4	OK	NO		
13	West side Power Block Valve Shed #1	OK	NO		

To Be Cycled First Saturday of Every Month

No.	System	Done	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 8/2/19		
Operator: Manuel Garcia	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	Reason for running pumps		
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 153 psi		Check the jockey pump	
Discharge Pressure: 164 psi		Discharge pressure	
Pump Suction Pressure: -	Pump Discharge pressure: 164 psi	Pump Suction Pressure	
Comments:		Comments:	
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure:		Start the pump on pressure drop	
Start time: 2048		Start time	
Pump Suction Pressure: 10 psi	Pump Discharge pressure: 150 psi	Pump Suction Pressure	
Stop time: 2049	Total time running: 2 mins	Stop time	
Comments:		Comments:	
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 26.5	Battery volt Crank 2: 26.5	Battery Condition: Good	
Starting hour meter: 65.9	Start time: 20:51	Starting hour meter	
Oil pressure start: 1 psi	Oil Pressure finish: 39 psi	Oil pressure start	
Pump Suction Pressure: 25 psi	Pump Discharge pressure: 150 psi	Pump Suction Pressure	
Coolant temperature after 30 minutes running: 131°F start after 30 min - 189°F			
Stop time: 2121	Stop hour meter: 66.3	Total time running: 30 minutes	
Comments: RPM 1765 Highest			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

BEINGOA

Mojave Solar LLC

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒ Date: 8-2-19 Operator: Shell

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	163	O/C	Yes	Yes No	
2	SG Unit 2	160	O/C	Yes	Yes No	
3	Reheaters	163	O/C	Yes	Yes No	
4	Rack 2 West HTF	160	O/C	Yes	Yes No	
5	Rack 2 East HTF	160	O/C	Yes	Yes No	
6	North Steel Pro	160	O/C	Yes	Yes No	
7	HTF Pumps	160	O/C	Yes	Yes No	
8	HTF Heaters	160	O/C	Yes	Yes No	
9	South Steel Pro	160	O/C	Yes	Yes No	
10	Lube Oil	163	O/C	Yes	Yes No	
11	Turbine Hose Stations	160	O/C	Yes	Yes No	
12	Turbine Bearings	163	O/C	Yes	Yes No	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	O/C	Yes	Yes No	
2	Ullage Area	163	O/C	Yes	Yes No	
3	Ullage Structure	162	O/C	Yes	Yes No	
4	Rack 1 Middle Area	160	O/C	Yes	Yes No	
5	Overflow Tanks	163	O/C	Yes	Yes No	
6	Rack 1 South Area	160	O/C	Yes	Yes No	
7	Rack 1 West	162	O/C	Yes	Yes No	
8	Rack 1 North Area	163	O/C	Yes	Yes No	
9	Over flow AFFF	160	O/C	Yes	Yes No	
10	Expansion Vessel AFFF	160	O/C	Yes	Yes No	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	O/C	Yes	Yes No	
2	Transformer Main	163	O/C	Yes	Yes No	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	Yes	Yes No	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	163	O/C	Y	Yes No	
2	Offices	163	O/C	Y	Yes No	
3	Electrical Room	163	O/C	Y	Yes No	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Yes No	O/C	
2	Bearing 3	Yes No	O/C	
3	Bearing 4	Yes No	O/C	
4	Bearing 5	Yes No	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Yes No	O/C	
2	MP-200A	Yes No	O/C	
3	MP-200B	Yes No	O/C	
4	MP-200C	Yes No	O/C	
5	MP-200D	Yes No	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	163	O	Yes No	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	Yes	8-4-19	
2	Maintenance Shop Drive Way #8	O/C	Yes	8-4-19	
3	West Side Power Block by VS-3 # 9	O/C	Yes	8-4-19	
4	West Side Power Block by VS-1 # 10	O/C	Yes	8-4-19	
5	West Side Cooling Tower by VS-4 # 11	O/C	Yes	8-4-19	
6	West side Cooling Tower by VS-4 # 12	O/C	Yes	8-4-19	
7	N.W. Corner Chemical Storage #1	O/C	Yes	8-4-19	
8	N.E. Corner Chemical Storage #2	O/C	Yes	8-4-19	
9	East Side W.T. by Multimedia Filters #3	O/C	Yes	8-4-19	
10	East Side W.T. by Multimedia Filters #5	O/C	Yes	8-4-19	
11	North Side Bldg. 10 # 6	O/C	Yes	8-4-19	
12	Between MP-44's and Water Treat #4	O/C	Yes	8-4-19	
13	West side Power Block Valve Shed #1	O/C	Yes	8-4-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Yes No	

ABENGOA

Abengoa Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 7-28-19	* To be completed each time unit is operated.	
Operator: <i>Calder</i>			
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 166			
Pump Suction Pressure: 20		Pump Discharge pressure: 166	
Comments:			
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1445			
Pump Suction Pressure: 20		Pump Discharge pressure: 163	
Stop time: 1455		Total time running: 10 min	
Comments:			
Diesel Pump			
Pre-start Inspection: ☐ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption: 54 gal	
Battery volt Crank 1: 26		Battery Condition: good	
Starting hour meter: 65.5		Start time: 1455	
Oil pressure start: 70		Oil Pressure finish: 41	
Pump Suction Pressure: 15		Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 180			
Stop time: 1525		Total time running: 30 min	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))			

Automated Fire Systems Inspection Checklist

Mojave Solar Project

Plant: ALPHA

BETA ☒

Date: 7-28-19

Operator PHIL TOLGELIS

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	81-1	165	OC	☒ N	
2	SG Unit 2	81-2	160	OC	☒ N	
3	Reheaters	81-3	165	OC	☒ N	
4	Rack 2 West HTF	81-4	160	OC	☒ N	
5	Rack 2 East HTF	81-5	160	OC	☒ N	
6	North Steel Pro	81-6	160	OC	☒ N	
7	HTF Pumps	81-7	160	OC	☒ N	
8	HTF Heaters	81-8	165	OC	☒ N	
9	South Steel Pro	81-9	165	OC	☒ N	
10	Lube Oil	81-10	160	OC	☒ N	
11	Turbine Hose Stations	81-11	165	OC	☒ N	
12	Turbine Bearings	81-12	165	OC	☒ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	82-1	160	OC	☒ N	
2	Ullage Area	82-2	165	OC	☒ N	
3	Ullage Structure	82-11	165	OC	☒ N	
4	Rack 1 Middle Area	82-5	165	OC	☒ N	
5	Overflow Tanks	82-9	165	OC	☒ N	
6	Rack 1 South Area	82-6	165	OC	☒ N	
7	Rack 1 West	82-7	165	OC	☒ N	
8	Rack 1 North Area	82-4	165	OC	☒ N	
9	Over Flow AFFF	82-8	160	OC	☒ N	
10	Expansion Vessel AFFF	82-3	165	OC	☒ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OC	☒ N		
2	Transformer Main	160	OC	☒ N		

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	OC	☒ N		

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	84-5	165	OC	☒ N	
2	Offices	84-3	165	OC	☒ N	
3	Electrical Room	84-4	165	OC	☒ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	☒ N	OC	
2	Bearing 3	☒ N	OC	
3	Bearing 4	☒ N	OC	
4	Bearing 5	☒ N	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	☒ N	OC	
2	MP-200A	☒ N	OC	
3	MP-200B	☒ N	OC	
4	MP-200C	☒ N	OC	
5	MP-200D	☒ N	OC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	☒ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC			
2	Maintenance Shop Drive Way #8	OC			
3	West Side Power Block by VS-3 # 9	OC			
4	West Side Power Block by VS-1 # 10	OC			
5	West Side Cooling Tower by VS-4 # 11	OC			
6	West side Cooling Tower by VS-4 # 12	OC			
7	N.W. Corner Chemical Storage #1	OC			
8	N.E. Corner Chemical Storage #2	OC			
9	East Side W.T. by Multimedia Filters # 3	OC			
10	East Side W.T. by Multimedia Filters # 5	OC			
11	North Side Bldg 10 # 6	OC			
12	Between MP-444's and Water Treat # 4	OC			
13	West Side Power Block Valve Shed #1	OC			

To Be Cycled First Saturday of Every Month

No.	System	Deluge	Comments / Actions
1	Transformer Yard Deluge Check	☒ N	

ABENGOA

Abengoa Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 7-21-19	Plant: ☐ Alpha ☒ Beta	
Operator: Caleb Sowards		*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155		Check the jockey pump on pressure drop.	
Discharge Pressure: 167		Discharge pressure:	
Pump Suction Pressure: 15	Pump Discharge pressure: 167		Pump Suction Pressure:
Comments:		Comments:	
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145		Start the pump on pressure drop.	
Start time: 2345		Start time:	
Pump Suction Pressure: 15	Pump Discharge pressure: 163		Pump Suction Pressure:
Stop time: 2355		Total time running: 10 min	
Comments:		Comments:	
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good	
Starting hour meter: 65.1		Start time: 2310	
Oil pressure start: 67		Oil Pressure finish: 40	
Pump Suction Pressure: 10	Pump Discharge pressure: 155		
Coolant temperature after 30 minutes running: 185			
Stop time: 2340		Stop hour meter: 65.5	Total time running: 30 min
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Mojave Solar Project

Plant: ALPHA

BETA ☒

Date: 7-21-19

Operator PHIL Toulbous

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	165	O/C	✓	Y ✓ N	
2	SG Unit 2 B1-2	160	O/C	✓	Y ✓ N	
3	Reheaters B1-3	165	O/C	✓	Y ✓ N	
4	Rack 2 West HTF B1-4	160	O/C	✓	Y ✓ N	
5	Rack 2 East HTF B1-5	165	O/C	✓	Y ✓ N	
6	North Steel Pro B1-6	160	O/C	✓	Y ✓ N	
7	HTF Pumps B1-7	160	O/C	✓	Y ✓ N	
8	HTF Heaters B1-8	160	O/C	✓	Y ✓ N	
9	South Steel Pro B1-9	160	O/C	✓	Y ✓ N	
10	Lube Oil B1-10	160	O/C	✓	Y ✓ N	
11	Turbine Hise Stations B1-11	160	O/C	✓	Y ✓ N	
12	Turbine Bearings B1-12	165	O/C	✓	Y ✓ N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	170	O/C	✓	Y ✓ N	
2	Ullage Area B2-2	165	O/C	✓	Y ✓ N	
3	Ullage Structure B2-11	170	O/C	✓	Y ✓ N	
4	Rack 1 Middle Area B2-5	170	O/C	✓	Y ✓ N	
5	Overflow Tanks B2-9	160	O/C	✓	Y ✓ N	
6	Rack 1 South Area B2-6	165	O/C	✓	Y ✓ N	
7	Rack 1 West B2-7	160	O/C	✓	Y ✓ N	
8	Rack 1 North Area B2-4	160	O/C	✓	Y ✓ N	
9	Over Flow AFFF B2-8	160	O/C	✓	Y ✓ N	
10	Expansion Vessel AFFF B2-3	165	O/C	✓	Y ✓ N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	165	O/C	✓	Y ✓ N	
2	Transformer Main	165	O/C	✓	Y ✓ N	

Valve Shed # 4 by Cooling Lower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	O/C	✓	Y ✓ N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	165	O/C	✓	Y ✓ N	
2	Offices B4-3	165	O/C	✓	Y ✓ N	
3	Electrical Room B4-4	165	O/C	✓	Y ✓ N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ✓ N	O/C	
2	Bearing 3	Y ✓ N	O/C	
3	Bearing 4	Y ✓ N	O/C	
4	Bearing 5	Y ✓ N	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ✓ N	O/C	
2	MP-200A	Y ✓ N	O/C	
3	MP-200B	Y ✓ N	O/C	
4	MP-200C	Y ✓ N	O/C	
5	MP-200D	Y ✓ N	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O/C	Y ✓ N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	N/A		
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage #2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West Side Power Block Valve Shed #1	O/C			

To be Cycled First Saturday of Every Month

No.	System	Date	Comments / Actions
1	Transformer Yard Refuse Check	Y ✓ N	

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 7-17-19	Plant: Alpha	
Operator: Caleb Saunders	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	Reason for running pumps:		
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 55		Check the jockey pump on pressure drop:	
Discharge Pressure: 166		Discharge Pressure:	
Pump Suction Pressure: 15	Pump Discharge pressure: 166	Pump Suction Pressure:	
Comments:		Comments:	
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145		Start the pump on pressure drop:	
Start time: 2247		Start time:	
Pump Suction Pressure: 15	Pump Discharge pressure: 165	Pump Suction Pressure:	
Stop time: 2257		Stop time:	
Total time running: 10 min		Total time running:	
Comments:		Comments:	
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good	
Starting hour meter: 64.6		Start time: 1015	
Oil pressure start: 70		Oil Pressure finish: 41	
Pump Suction Pressure: 5	Pump Discharge pressure: 155	Pump Suction Pressure:	
Coolant temperature after 30 minutes running: 185			
Stop time: 1045		Stop hour meter: 65.1	
Total time running: 30 min		Total time running:	
Comments:		Comments:	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒

Date: 7-14-19

Operator PHIL TOWBEN

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	O/C	✓	Y ☒ N ☐	
2	SG Unit 2	160	O/C	✓	Y ☒ N ☐	
3	Reheaters	165	O/C	✓	Y ☒ N ☐	
4	Rack 2 West HTF	165	O/C	✓	Y ☒ N ☐	
5	Rack 2 East HTF	160	O/C	✓	Y ☒ N ☐	
6	North Steel Pro	160	O/C	✓	Y ☒ N ☐	
7	HTF Pumps	160	O/C	✓	Y ☒ N ☐	
8	HTF Heaters	160	O/C	✓	Y ☒ N ☐	
9	South Steel Pro	165	O/C	✓	Y ☒ N ☐	
10	Lube Oil	160	O/C	✓	Y ☒ N ☐	
11	Turbine Hose Stations	160	O/C	✓	Y ☒ N ☐	
12	Turbine Bearings	165	O/C	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	O/C	✓	Y ☒ N ☐	
2	Ullage Area	165	O/C	✓	Y ☒ N ☐	
3	Ullage Structure	165	O/C	✓	Y ☒ N ☐	
4	Rack 1 Middle Area	165	O/C	✓	Y ☒ N ☐	
5	Overflow Tanks	165	O/C	✓	Y ☒ N ☐	
6	Rack 1 South Area	165	O/C	✓	Y ☒ N ☐	
7	Rack 1 West	165	O/C	✓	Y ☒ N ☐	
8	Rack 1 North Area	165	O/C	✓	Y ☒ N ☐	
9	Over flow AFFF	160	O/C	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF	165	O/C	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	O/C	✓	Y ☒ N ☐	
2	Transformer Main	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	O/C	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	165	O/C	✓	Y ☒ N ☐	
2	Offices	165	O/C	✓	Y ☒ N ☐	
3	Electrical Room	165	O/C	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	170	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

ABENGOA

ave Solar LLC

Fire Pump Weekly Test Log

General information			
Plant: ☐ Alpha ☒ Beta	Date: 7/6/19		
Operator: PLAZA	* To be completed each time unit is operated		
Reason for running pump: Weekly test ☒ Maintenance ☐ Emergency ☐			
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure:		Pump Discharge pressure: 165	
Comments:			
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 2159			
Pump Suction Pressure: 15		Pump Discharge pressure: 153	
Stop time: 2159		Total time running: 45 seconds	
Comments:			
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 27		Battery Condition: Good	
Starting hour meter: 64.1		Start time: 2204	
Oil pressure start: 61		Oil Pressure finish: 40	
Pump Suction Pressure: 28		Pump Discharge pressure: 150	
Coolant temperature after 30 minutes running: 189			
Stop time: 2234		Total time running: 30 minutes	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒

Date: 7/5/19

Operator: [Signature]

Valve Shed # 1 by Condenser

No.	System	PSI	Vic. Pos.	Signage	Locked	Comments
1	SG Unit 1	165	LOC	YES	YES NO	
2	SG Unit 2	160	LOC	YES	YES NO	
3	Reheaters	165	LOC	YES	YES NO	
4	Rack 2 West HTF	160	LOC	YES	YES NO	
5	Rack 2 East HTF	160	LOC	YES	YES NO	
6	North Steel Pro	160	LOC	YES	YES NO	
7	HTF Pumps	160	LOC	YES	YES NO	
8	HTF Heaters	160	LOC	YES	YES NO	
9	South Steel Pro	160	LOC	YES	YES NO	
10	Lube Oil	160	LOC	YES	YES NO	
11	Turbine Hose Stations	160	LOC	YES	YES NO	
12	Turbine Bearings	160	LOC	YES	YES NO	

Valve Shed # 2 by Overflow

No.	System	PSI	Vic. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	LOC	YES	YES NO	
2	Ullage Area	160	LOC	YES	YES NO	
3	Ullage Structure	160	LOC	YES	YES NO	
4	Rack 1 Middle Area	160	LOC	YES	YES NO	
5	Overflow Tanks	160	LOC	YES	YES NO	
6	Rack 1 South Area	160	LOC	YES	YES NO	
7	Rack 1 West	160	LOC	YES	YES NO	
8	Rack 1 North Area	160	LOC	YES	YES NO	
9	Over flow AFFF	160	LOC	YES	YES NO	
10	Expansion Vessel AFFF	160	LOC	YES	YES NO	

Valve Shed # 3 by Bldg 35 (at Electrical Bldg)

No.	System	PSI	Vic. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	LOC	YES	YES NO	
2	Transformer Main	160	LOC	YES	YES NO	

Valve Shed # 4 by Cooling Lower West Side

No.	System	PSI	Vic. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	YES	YES NO	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vic. Pos.	Signage	Locked	Comments
1	Control Room	160	LOC	YES	YES NO	
2	Offices	160	LOC	YES	YES NO	
3	Electrical Room	160	LOC	YES	YES NO	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vic. Pos.	Comments
1	Bearing 2	YES NO	LOC	
2	Bearing 3	YES NO	LOC	
3	Bearing 4	YES NO	LOC	
4	Bearing 5	YES NO	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vic. Pos.	Comments
1	MP-201	YES NO	LOC	
2	MP-200A	YES NO	LOC	
3	MP-200B	YES NO	LOC	
4	MP-200C	YES NO	LOC	
5	MP-200D	YES NO	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	0	YES NO	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC	NO		
2	Maintenance Shop Drive Way #8	LOC	NO		
3	West Side Power Block by VS-3 # 9	LOC	NO		
4	West Side Power Block by VS-1 # 10	LOC	NO		
5	West Side Cooling Tower by VS-4 # 11	LOC	NO		
6	West side Cooling Tower by VS-4 # 12	LOC	NO		
7	N.W. Corner Chemical Storage #1	LOC	NO		
8	N.E. Corner Chemical Storage #2	LOC	NO		
9	East Side W.T. by Multimedia Filters # 3	LOC	NO		
10	East Side W.T. by Multimedia Filters # 5	LOC	NO		
11	North Side Bldg 10 # 6	LOC	NO		
12	Between MP-44's and Water Treat # 4	LOC	NO		
13	West Side Power Block Valve Shed #1	LOC	NO		

To be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Chute	YES NO	

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 6/28/19	Plant: Alpha ☐ Beta ☒	
Operator: PLAZA	* To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		Reason for running pumps:	
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155		Check the jockey pump on pressure drop:	
Discharge Pressure: 167		Discharge Pressure:	
Pump Suction Pressure:		Pump Discharge pressure: 167	
Comments:		Comments:	
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145		Start the pump on pressure drop:	
Start time: 2305		Start time:	
Pump Suction Pressure: 15		Pump Discharge pressure: 155	
Stop time: 2306		Total time running: 1 MINUTE	
Comments:		Comments:	
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 27		Battery Condition: 6000	
Starting hour meter: 63.6		Start time: 2310	
Oil pressure start: 63		Oil Pressure finish:	
Pump Suction Pressure: 28		Pump Discharge pressure: 152	
Coolant temperature after 30 minutes running: 183			
Stop time: 2340		Stop hour meter: 64.1	
		Total time running: 30 MINUTES	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐BETA ☒

Date:

6/28/19

Operator

PLAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	165	LOC	YES	Y/N	
2	SG Unit 2	165	LOC	YES	Y/N	
3	Reheaters	165	LOC	YES	Y/N	
4	Rack 2 West HTF	165	LOC	YES	Y/N	
5	Rack 2 East HTF	160	LOC	YES	Y/N	
6	North Steel Pro	165	LOC	YES	Y/N	
7	HTF Pumps	165	LOC	YES	Y/N	
8	HTF Heaters	165	LOC	YES	Y/N	
9	South Steel Pro	165	LOC	YES	Y/N	
10	Lube Oil	165	LOC	YES	Y/N	
11	Turbine Hose Stations	160	LOC	YES	Y/N	
12	Turbine Bearings	160	LOC	YES	Y/N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	165	LOC	YES	Y/N	
2	Ullage Area	165	LOC	YES	Y/N	
3	Ullage Structure	160	LOC	YES	Y/N	
4	Rack 1 Middle Area	160	LOC	YES	Y/N	
5	Overflow Tanks	160	LOC	YES	Y/N	
6	Rack 1 South Area	165	LOC	YES	Y/N	
7	Rack 1 West	165	LOC	YES	Y/N	
8	Rack 1 North Area	160	LOC	YES	Y/N	
9	Overflow AFFF	160	LOC	YES	Y/N	
10	Expansion Vessel AFFF	160	LOC	YES	Y/N	

Valve Shed # 3 by Bldg 35 & Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	LOC	YES	Y/N	
2	Transformer Main	160	LOC	YES	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	YES	Y/N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	160	LOC	YES	Y/N	
2	Offices	160	LOC	YES	Y/N	
3	Electrical Room	160	LOC	YES	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y/N	LOC	
2	Bearing 3	Y/N	LOC	
3	Bearing 4	Y/N	LOC	
4	Bearing 5	Y/N	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y/N	LOC	
2	MP-200A	Y/N	LOC	
3	MP-200B	Y/N	LOC	
4	MP-200C	Y/N	LOC	
5	MP-200D	Y/N	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	O	Y/N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC	N/A		
2	Maintenance Shop Drive Way #8	LOC	N/A		
3	West Side Power Block by VS-3 # 9	LOC	N/A		
4	West Side Power Block by VS-1 # 10	LOC	N/A		
5	West Side Cooling Tower by VS-4 # 11	LOC	N/A		
6	West side Cooling Tower by VS-4 # 12	LOC	N/A		
7	N.W. Corner Chemical Storage #1	LOC	N/A		
8	N.E. Corner Chemical Storage #2	LOC	N/A		
9	East Side W.T. by Multimedia Filters # 3	LOC	N/A		
10	East Side W.T. by Multimedia Filters # 5	LOC	N/A		
11	North Side Bldg 10 # 6	LOC	N/A		
12	Between MP-44's and Water Treat # 4	LOC	N/A		
13	West side Power Block Valve Shed #1	LOC	N/A		

To be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refurb Check	Y/N	

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ave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 6/21/19	Plant: Alpha	
Operator: Plaza	* To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		Reason for running:	
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155		Check the jockey pump	
Discharge Pressure: 167		Discharge Pressure:	
Pump Suction Pressure:		Pump Discharge pressure: 167	
Comments:		Comments:	
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145		Start the pump on pressure drop	
Start time: 1908		Start time:	
Pump Suction Pressure: 15		Pump Discharge pressure: 155	
Stop time: 1909		Total time running: 1 MINUTE	
Comments:		Comments:	
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: 27		Battery Condition: 6000	
Starting hour meter: 63.2		Start time: 1918	
Oil pressure start: 50		Oil Pressure finish: 40	
Pump Suction Pressure: 28		Pump Discharge pressure: 153	
Coolant temperature after 30 minutes running: 184			
Stop time: 1948		Stop hour meter: 63.6	
		Total time running: 30 MINUTES	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA ☒

Date: 6-22-19

Operator: Shell

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1	16.3	O/C	Yes	Y/N	
2	SG Unit 2	16.0	O/C	Yes	Y/N	
3	Reheaters	16.5	O/C	Yes	Y/N	
4	Rack 2 West HTF	16.3	O/C	Yes	Y/N	
5	Rack 2 East HTF	16.0	O/C	Yes	Y/N	
6	North Steel Pro	16.0	O/C	Yes	Y/N	
7	HTF Pumps	16.0	O/C	Yes	Y/N	
8	HTF Heaters	16.0	O/C	Yes	Y/N	
9	South Steel Pro	16.5	O/C	Yes	Y/N	
10	Lube Oil	16.2	O/C	Yes	Y/N	
11	Turbine Hose Stations	16.0	O/C	Yes	Y/N	
12	Turbine Bearings	16.2	O/C	Yes	Y/N	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	16.5	O/C	Yes	Y/N	
2	Ullage Area	16.5	O/C	Yes	Y/N	
3	Ullage Structure	16.5	O/C	Yes	Y/N	
4	Rack 1 Middle Area	16.5	O/C	Yes	Y/N	
5	Overflow Tanks	16.5	O/C	Yes	Y/N	
6	Rack 1 South Area	16.5	O/C	Yes	Y/N	
7	Rack 1 West	16.5	O/C	Yes	Y/N	
8	Rack 1 North Area	16.5	O/C	Yes	Y/N	
9	Over flow AFFF	16.5	O/C	Yes	Y/N	
10	Expansion Vessel AFFF	16.0	O/C	Yes	Y/N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.0	O/C	Yes	Y/N	
2	Transformer Main	16.0	O/C	Yes	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.0	O/C	No	Y/N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room	16.5	O/C	Yes	Y/N	
2	Offices	16.5	O/C	Yes	Y/N	
3	Electrical Room	16.5	O/C	Yes	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y/N	O/C	
2	Bearing 3	Y/N	O/C	
3	Bearing 4	Y/N	O/C	
4	Bearing 5	Y/N	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y/N	O/C	
2	MP-200A	Y/N	O/C	
3	MP-200B	Y/N	O/C	
4	MP-200C	Y/N	O/C	
5	MP-200D	Y/N	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	15.3	O	Y/N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	NO		
2	Maintenance Shop Drive Way #8	O/C	NO		
3	West Side Power Block by VS-3 # 9	O/C	NO		
4	West Side Power Block by VS-1 # 10	O/C	NO		
5	West Side Cooling Tower by VS-4 # 11	O/C	NO		
6	West side Cooling Tower by VS-4 # 12	O/C	NO		
7	N.W. Corner Chemical Storage #1	O/C	NO		
8	N.E. Corner Chemical Storage #2	O/C	NO		
9	East Side W.T. by Multimedia Filters # 3	O/C	NO		
10	East Side W.T. by Multimedia Filters # 5	O/C	NO		
11	North Side Bldg 10 # 6	O/C	NO		
12	Between MP-414's and Water Treat # 4	O/C	NO		
13	West side Power Block Valve Shed #1	O/C	NO		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y/N	

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Emergency Diesel Generator Weekly Test Log

Plant: <u>Beta</u>		Date: <u>6-15-19</u>	
Operator: <u>Shell</u>			
Open	☒		
Closed	☐		
Start Time:	<u>00:40</u>		
Stop Time:	<u>00:50</u>		
Total Run Time:	<u>10 min.</u>		
Starting Hour Meter Reading	<u>468.7</u>		
Monthly Fuel Consumption(gal)			
Oil Level	<u>OK</u>		
Coolant Level	<u>OK</u>	Coolant Temp. @ Start <u>51</u> °C	Finish= <u>75</u> °C
Belt Condition	<u>Good</u>		
Oil Pressure	Finish= <u>bar</u>	Start = <u>7.9</u> bar	Finish= <u>6.7</u> bar
Battery Condition	<u>Good</u>		
Battery Voltage	<u>25.6</u>		
Engine RPMs	<u>1799/1800</u>		
Generator Volts			
Generator Amps			
Generator "KVA"			
Testing	☒		
Emergency	☐		
Maintenance	☐		
Fuel Delivered			
Fuel Level	<u>1/4</u> <u>1/2</u> <u>3/4</u> <u>F</u>	<u>86%</u>	
Sulfur Concentrations			
<0.0015% (15ppm)			

This Emergency Generator shall be limited to use for emergency power, as defined as in response to a fire or when utility back-feed power is not available. In addition, this unit shall be operated no more than 30 minutes during any hour and 50 hours per year for testing and maintenance excluding compliance source testing. There is no limit on engine operation for Emergency use.

This engine may operate in response to notification of impending loss of utility back-feed power if the interconnected utility has ordered an outage. The plant or expects to order such outages at a particular time the engine is operated no more than 30 minutes prior to the forecasted outage. The engine is shut immediately after the utility advises that the outage no longer imminent or in effect.

Note: Fuel consumption 114.01 gal/h (431.57 l/h) of load approximately.

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA ☒

Date: 6-15-19

Operator: Collin Anderson

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	O/C	✓	Y ☒ N ☐	
2	SG Unit 2	160	O/C	✓	Y ☒ N ☐	
3	Reheaters	160	O/C	✓	Y ☒ N ☐	
4	Rack 2 West HTF	160	O/C	✓	Y ☒ N ☐	
5	Rack 2 East HTF	160	O/C	✓	Y ☒ N ☐	
6	North Steel Pro	160	O/C	✓	Y ☒ N ☐	
7	HTF Pumps	160	O/C	✓	Y ☒ N ☐	
8	HTF Heaters	160	O/C	✓	Y ☒ N ☐	
9	South Steel Pro	160	O/C	✓	Y ☒ N ☐	
10	Lube Oil	160	O/C	✓	Y ☒ N ☐	
11	Turbine Hose Stations	160	O/C	✓	Y ☒ N ☐	
12	Turbine Bearings	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	O/C	✓	Y ☒ N ☐	
2	Ullage Area	160	O/C	✓	Y ☒ N ☐	
3	Ullage Structure	160	O/C	✓	Y ☒ N ☐	
4	Rack 1 Middle Area	160	O/C	✓	Y ☒ N ☐	
5	Overflow Tanks	160	O/C	✓	Y ☒ N ☐	
6	Rack 1 South Area	160	O/C	✓	Y ☒ N ☐	
7	Rack 1 West	160	O/C	✓	Y ☒ N ☐	
8	Rack 1 North Area	160	O/C	✓	Y ☒ N ☐	
9	Over flow AFFF	160	O/C	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	O/C	✓	Y ☒ N ☐	
2	Transformer Main	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	160	O/C	✓	Y ☒ N ☐	
2	Offices	160	O/C	✓	Y ☒ N ☐	
3	Electrical Room	160	O/C	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	180	O	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-444's and Water Treat # 4	O/C			
13	West side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

ABENGOA

Java Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 6-9-19	Plant: Alpha ☐ Beta ☒	
Operator: Shell	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	Reason for running pumps:		
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 148		Check the jockey pump on pressure drop:	
Discharge Pressure: 162		Discharge Pressure:	
Pump Suction Pressure: No P.S.		Pump Discharge pressure: 162	
Comments: Back in Auto after test.		Comments:	
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 25		Start the pump on pressure drop:	
Start time: 21:11		Start time:	
Pump Suction Pressure: 15		Pump Discharge pressure: 255	
Stop time: 21:12		Total time running	
Comments: In Auto after test		Comments:	
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☐ No ☐ 3/4		Monthly Fuel Consumption:	
Battery volt Crank 1: 26.5 Battery volt Crank 2: 26.5		Battery Condition: Good	
Starting hour meter: 62.4		Start time: 20:41	
Oil pressure start:		Oil Pressure finish: 14	
Pump Suction Pressure: 16 PSI		Pump Discharge pressure: 150 PSI	
Coolant temperature after 30 minutes running: 184			
Stop time: 21:11		Stop hour meter: 62.8	
Total time running: 30 min			
Comments: 1759 RPM In Auto after test			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐BETA: ☒

Date: 6-8-19

Operator: Colin A

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	O/C	✓	Y ☒ N ☐	
2	SG Unit 2	160	O/C	✓	Y ☒ N ☐	
3	Reheaters	160	O/C	✓	Y ☒ N ☐	
4	Rack 2 West HTF	160	O/C	✓	Y ☒ N ☐	
5	Rack 2 East HTF	160	O/C	✓	Y ☒ N ☐	
6	North Steel Pro	160	O/C	✓	Y ☒ N ☐	
7	HTF Pumps	160	O/C	✓	Y ☒ N ☐	
8	HTF Heaters	160	O/C	✓	Y ☒ N ☐	
9	South Steel Pro	160	O/C	✓	Y ☒ N ☐	
10	Lube Oil	160	O/C	✓	Y ☒ N ☐	
11	Turbine Hose Stations	160	O/C	✓	Y ☒ N ☐	
12	Turbine Bearings	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	O/C	✓	Y ☒ N ☐	
2	Ullage Area	160	O/C	✓	Y ☒ N ☐	
3	Ullage Structure	160	O/C	✓	Y ☒ N ☐	
4	Rack 1 Middle Area	160	O/C	✓	Y ☒ N ☐	
5	Overflow Tanks	160	O/C	✓	Y ☒ N ☐	
6	Rack 1 South Area	160	O/C	✓	Y ☒ N ☐	
7	Rack 1 West	160	O/C	✓	Y ☒ N ☐	
8	Rack 1 North Area	160	O/C	✓	Y ☒ N ☐	
9	Overflow AFFF	160	O/C	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux		O/C		Y ☒ N ☐	
2	Transformer Main		O/C		Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room	160	O/C		Y ☒ N ☐	
2	Offices	160	O/C		Y ☒ N ☐	
3	Electrical Room	160	O/C		Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	180	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C			
2	Maintenance Shop Drive Way #8	O/C			
3	West Side Power Block by VS-3 # 9	O/C			
4	West Side Power Block by VS-1 # 10	O/C			
5	West Side Cooling Tower by VS-4 # 11	O/C			
6	West side Cooling Tower by VS-4 # 12	O/C			
7	N.W. Corner Chemical Storage #1	O/C			
8	N.E. Corner Chemical Storage # 2	O/C			
9	East Side W.T. by Multimedia Filters # 3	O/C			
10	East Side W.T. by Multimedia Filters # 5	O/C			
11	North Side Bldg 10 # 6	O/C			
12	Between MP-144's and Water Treat # 4	O/C			
13	West side Power Block Valve Shed #1	O/C			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 6.1.19	Plant: Alpha	
Operator: Collin Anderson		*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A		Pump Discharge pressure: 165	
Comments:			
Pre-start Inspection: ☒ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1835			
Pump Suction Pressure: 20		Pump Discharge pressure: 155	
Stop time: 1845		Total time running: 10 minutes	
Comments:			
Diesel Pump			
Pre-start Inspection: ☒ Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: Battery volt Crank 2: ☒		Battery Condition: good	
Starting hour meter: 61.8		Start time: 1850	
Oil pressure start: 70		Oil Pressure finish: 41	
Pump Suction Pressure: 27		Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 189			
Stop time: 1920		Stop hour meter: 62.4	
Total time running: 30 minutes			
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA ☒

Date: 5-31-19

Operator: Shell

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1	165	OK	Yes	Yes N	
2	SG Unit 2	165	OK	Yes	Yes N	
3	Reheaters	165	OK	Yes	Yes N	
4	Rack 2 West HTF	165	OK	Yes	Yes N	
5	Rack 2 East HTF	165	OK	Yes	Yes N	
6	North Steel Pro	165	OK	Yes	Yes N	
7	HTF Pumps	165	OK	Yes	Yes N	
8	HTF Heaters	165	OK	Yes	Yes N	
9	South Steel Pro	165	OK	Yes	Yes N	
10	Lube Oil	165	OK	Yes	Yes N	
11	Turbine Hose Stations	160	OK	Yes	Yes N	
12	Turbine Bearings	165	OK	Yes	Yes N	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	165	OK	Yes	Yes N	
2	Ullage Area	165	OK	Yes	Yes N	
3	Ullage Structure	165	OK	Yes	Yes N	
4	Rack 1 Middle Area	165	OK	Yes	Yes N	
5	Overflow Tanks	165	OK	Yes	Yes N	
6	Rack 1 South Area	165	OK	Yes	Yes N	
7	Rack 1 West	165	OK	Yes	Yes N	
8	Rack 1 North Area	165	OK	Yes	Yes N	
9	Over flow AFFF	160	OK	Yes	Yes N	
10	Expansion Vessel AFFF	165	OK	Yes	Yes N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	215	OK	Yes	Yes N	
2	Transformer Main	215	OK	Yes	Yes N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	Yes	Yes N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room	165	OK	Yes	Yes N	
2	Offices	165	OK	Yes	Yes N	
3	Electrical Room	165	OK	Yes	Yes N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Yes N	OK	
2	Bearing 3	Yes N	OK	
3	Bearing 4	Yes N	OK	
4	Bearing 5	Yes N	OK	

HTF Deluge System Valves (to be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Yes N	OK	
2	MP-200A	Yes N	OK	
3	MP-200B	Yes N	OK	
4	MP-200C	Yes N	OK	
5	MP-200D	Yes N	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	190	0	Yes N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	Yes	5-31-19	
2	Maintenance Shop Drive Way #8	OK	Yes	5-31-19	
3	West Side Power Block by VS-3 # 9	OK	Yes	5-31-19	
4	West Side Power Block by VS-1 # 10	OK	Yes	5-31-19	
5	West Side Cooling Tower by VS-4 # 11	OK	Yes	5-31-19	
6	West side Cooling Tower by VS-4 # 12	OK	Yes	5-31-19	
7	N.W. Corner Chemical Storage #1	OK	Yes	5-31-19	
8	N.E. Corner Chemical Storage # 2	OK	Yes	5-31-19	
9	East Side W.T. by Multimedia Filters # 3	OK	Yes	5-31-19	
10	East Side W.T. by Multimedia Filters # 5	OK	Yes	5-31-19	
11	North Side Bldg 10 # 6	OK	Yes	5-31-19	
12	Between MP-444's and Water Treat # 4	OK	Yes	5-31-19	
13	West side Power Block Valve Shed #1	OK	Yes	5-31-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Yes N	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 5-25-19	
Operator: <i>Caldero</i>	*To be completed each time unit is operated	
Reason for running pumps: Weekly test ☒ Maintenance ☒ Emergency ☒		
Handy Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 166		
Pump Suction Pressure: 15	Pump Discharge pressure: 166	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 1527		
Pump Suction Pressure: 15	Pump Discharge pressure: 163	
Stop time: 1537	Total time running 10 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☒	Monthly Fuel Consumption:	
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good
Starting hour meter: 61.4	Start time: 1540	
Oil pressure start: 70	Oil Pressure finish: 43	
Pump Suction Pressure: 15	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 182		
Stop time: 1610	Stop hour meter: 61.8	Total time running: 30 min
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA ☒

Date: 5/24/19

Operator: PLAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	OK	YES	Y/N	
2	SG Unit 2	160	OK	YES	Y/N	
3	Reheaters	160	OK	YES	Y/N	
4	Rack 2 West HTF	160	OK	YES	Y/N	
5	Rack 2 East HTF	160	OK	YES	Y/N	
6	North Steel Pro	160	OK	YES	Y/N	
7	HTF Pumps	160	OK	YES	Y/N	
8	HTF Heaters	160	OK	YES	Y/N	
9	South Steel Pro	160	OK	YES	Y/N	
10	Lube Oil	160	OK	YES	Y/N	
11	Turbine Hose Stations	160	OK	YES	Y/N	
12	Turbine Bearings	160	OK	YES	Y/N	

Valve Shed # 2 by Overflow

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	OK	YES	Y/N	
2	Ullage Area	160	OK	YES	Y/N	
3	Ullage Structure	160	OK	YES	Y/N	
4	Rack 1 Middle Area	160	OK	YES	Y/N	
5	Overflow Tanks	160	OK	YES	Y/N	
6	Rack 1 South Area	160	OK	YES	Y/N	
7	Rack 1 West	160	OK	YES	Y/N	
8	Rack 1 North Area	160	OK	YES	Y/N	
9	Over flow AFFF	160	OK	YES	Y/N	
10	Expansion Vessel AFFF	160	OK	YES	Y/N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Transformer Aux	725	OK	YES	Y/N	
2	Transformer Main	725	OK	YES	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	165	OK	YES	Y/N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Control Room	165	OK	YES	Y/N	
2	Offices	165	OK	YES	Y/N	
3	Electrical Room	165	OK	YES	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Valv. Pos.	Comments
1	Bearing 2	Y/N	OK	
2	Bearing 3	Y/N	OK	
3	Bearing 4	Y/N	OK	
4	Bearing 5	Y/N	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Valv. Pos.	Comments
1	MP-201	Y/N	OK	
2	MP-200A	Y/N	OK	
3	MP-200B	Y/N	OK	
4	MP-200C	Y/N	OK	
5	MP-200D	Y/N	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	165	0	Y/N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK		5/24/19	
2	Maintenance Shop Drive Way #8	OK		5/24/19	
3	West Side Power Block by VS-3 # 9	OK		5/24/19	
4	West Side Power Block by VS-1 # 10	OK		5/24/19	
5	West Side Cooling Tower by VS-4 # 11	OK		5/24/19	
6	West side Cooling Tower by VS-4 # 12	OK		5/24/19	
7	N.W. Corner Chemical Storage #1	OK		5/24/19	
8	N.E. Corner Chemical Storage #2	OK		5/24/19	
9	East Side W.T. by Multimedia Filters # 3	OK		5/24/19	
10	East Side W.T. by Multimedia Filters # 5	OK		5/24/19	
11	North Side Bldg 10 # 6	OK		5/24/19	
12	Between MP-444's and Water Treat # 4	OK		5/24/19	
13	West side Power Block Valve Shed #1	OK		5/24/19	

To be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y/N	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 5-20-19		
Operator: Caleb Sowards	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Water Based Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the Jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 167			
Pump Suction Pressure: 70	Pump Discharge pressure: 167		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 0230			
Pump Suction Pressure: 20	Pump Discharge pressure: 163		
Stop time: 0240	Total time running 10min		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:			
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good	
Starting hour meter: 609		Start time: 0242	
Oil pressure start: 67		Oil Pressure finish: 44	
Pump Suction Pressure: 15	Pump Discharge pressure: 153		
Coolant temperature after 30 minutes running: 180			
Stop time: 0312	Stop hour meter: 61.3	Total time running: 30min	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance instructions. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐BETA ☒

Date:

5/17/19

Operator

RAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	100	LOC	YES	YES NO	
2	SG Unit 2	100	LOC	YES	YES NO	
3	Reheaters	100	LOC	YES	YES NO	
4	Rack 2 West HTF	100	LOC	YES	YES NO	
5	Rack 2 East HTF	100	LOC	YES	YES NO	
6	North Steel Pro	100	LOC	YES	YES NO	
7	HTF Pumps	100	LOC	YES	YES NO	
8	HTF Heaters	100	LOC	YES	YES NO	
9	South Steel Pro	100	LOC	YES	YES NO	
10	Lube Oil	100	LOC	YES	YES NO	
11	Turbine Hose Stations	100	LOC	YES	YES NO	
12	Turbine Bearings	100	LOC	YES	YES NO	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	100	LOC	YES	YES NO	
2	Ullage Area	100	LOC	YES	YES NO	
3	Ullage Structure	100	LOC	YES	YES NO	
4	Rack 1 Middle Area	100	LOC	YES	YES NO	
5	Overflow Tanks	100	LOC	YES	YES NO	
6	Rack 1 South Area	100	LOC	YES	YES NO	
7	Rack 1 West	100	LOC	YES	YES NO	
8	Rack 1 North Area	100	LOC	YES	YES NO	
9	Over Flow ATFE	100	LOC	YES	YES NO	
10	Expansion Vessel ATFE	100	LOC	YES	YES NO	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	100	LOC	YES	YES NO	
2	Transformer Main	100	LOC	YES	YES NO	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	100	LOC	YES	YES NO	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	100	LOC	YES	YES NO	
2	Offices	100	LOC	YES	YES NO	
3	Electrical Room	100	LOC	YES	YES NO	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	YES NO	LOC	
2	Bearing 3	YES NO	LOC	
3	Bearing 4	YES NO	LOC	
4	Bearing 5	YES NO	LOC	

HTF Deluge System Valves (to be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	YES NO	LOC	
2	MP-200A	YES NO	LOC	
3	MP-200B	YES NO	LOC	
4	MP-200C	YES NO	LOC	
5	MP-200D	YES NO	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	100	0	YES NO	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC	YES	5/2/19	
2	Maintenance Shop Drive Way #8	LOC	YES	5/17/19	
3	West Side Power Block by VS-3 #9	LOC	YES	5/17/19	
4	West Side Power Block by VS-1 #10	LOC	YES	5/17/19	
5	West Side Cooling Tower by VS-4 #11	LOC	YES	5/17/19	
6	West side Cooling Tower by VS-4 #12	LOC	YES	5/17/19	
7	N.W. Corner Chemical Storage #1	LOC	YES	5/17/19	
8	N.E. Corner Chemical Storage #2	LOC	YES	5/17/19	
9	East Side W.T. by Multimedia Filters #3	LOC	YES	5/17/19	
10	East Side W.T. by Multimedia Filters #5	LOC	YES	5/17/19	
11	North Side Bldg 10 #6	LOC	YES	5/17/19	
12	Between MP-444's and Water Treat #4	LOC	YES	5/17/19	
13	West side Power Block Valve Shed #1	LOC	YES	5/17/19	

To Be Cycled First Saturday or Every Month

No.	System	Debris	Comments / Action
1	Transformer Yard Refuse Check	YES NO	

ABENGOA

lave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 5-12-19		
Operator: Caleb Sowards	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 145			
Discharge Pressure: 167			
Pump Suction Pressure: 15	Pump Discharge pressure: 167		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 0100			
Pump Suction Pressure: 15	Pump Discharge pressure: 163		
Stop time: 0110	Total time running: 10 min		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:		
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good	
Starting hour meter: 60.7	Start time: 0130		
Oil pressure start: 75	Oil Pressure finish: 45		
Pump Suction Pressure: 10	Pump Discharge pressure: 155		
Coolant temperature after 30 minutes running: 182			
Stop time: 145	Stop hour meter: 60.8	Total time running: 15 min	
Comments: test ended early high air intake alarm			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
e: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA ☒

Date:

5/10/19

Operator:

PLAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	160	LOC	YES	☒ YES ☐ NO	
2	SG Unit 2 B1.2	160	LOC	YES	☒ YES ☐ NO	
3	Reheaters B1.3	160	LOC	YES	☒ YES ☐ NO	
4	Rack 2 West HTF B1.4	160	LOC	YES	☒ YES ☐ NO	
5	Rack 2 East HTF B1.5	160	LOC	YES	☒ YES ☐ NO	
6	North Steel Pro B1.6	160	LOC	YES	☒ YES ☐ NO	
7	HTF Pumps B1.7	160	LOC	YES	☒ YES ☐ NO	
8	HTF Heaters B1.8	160	LOC	YES	☒ YES ☐ NO	
9	South Steel Pro B1.9	160	LOC	YES	☒ YES ☐ NO	
10	Lube Oil B1.10	160	LOC	YES	☒ YES ☐ NO	
11	Turbine Hose Stations B1.11	155	LOC	YES	☒ YES ☐ NO	
12	Turbine Bearings B1.12	160	LOC	YES	☒ YES ☐ NO	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	160	LOC	YES	☒ YES ☐ NO	
2	Ullage Area B2.2	160	LOC	YES	☒ YES ☐ NO	
3	Ullage Structure B2.11	160	LOC	YES	☒ YES ☐ NO	
4	Rack 1 Middle Area B2.5	160	LOC	YES	☒ YES ☐ NO	
5	Overflow Tanks B2.6	160	LOC	YES	☒ YES ☐ NO	
6	Rack 1 South Area B2.6	160	LOC	YES	☒ YES ☐ NO	
7	Rack 1 West B2.7	160	LOC	YES	☒ YES ☐ NO	
8	Rack 1 North Area B2.8	160	LOC	YES	☒ YES ☐ NO	
9	Over flow AFFF B2.8	160	LOC	YES	☒ YES ☐ NO	
10	Expansion Vessel AFFF B2.3	160	LOC	YES	☒ YES ☐ NO	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	LOC	YES	☒ YES ☐ NO	
2	Transformer Main	160	LOC	YES	☒ YES ☐ NO	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	YES	☒ YES ☐ NO	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B1.5	160	LOC	YES	☒ YES ☐ NO	
2	Offices B1.6	160	LOC	YES	☒ YES ☐ NO	
3	Electrical Room B1.7	160	LOC	YES	☒ YES ☐ NO	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	☒ YES ☐ NO	LOC	
2	Bearing 3	☒ YES ☐ NO	LOC	
3	Bearing 4	☒ YES ☐ NO	LOC	
4	Bearing 5	☒ YES ☐ NO	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	☒ YES ☐ NO	LOC	
2	MP-200A	☒ YES ☐ NO	LOC	
3	MP-200B	☒ YES ☐ NO	LOC	
4	MP-200C	☒ YES ☐ NO	LOC	
5	MP-200D	☒ YES ☐ NO	LOC	

Fire Pump House Deluge System

No.	System	PSI	Vlv. Pos.	Locked	Comments
1	Fire Pump House Deluge	160	LOC	☒ YES ☐ NO	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444's and Water Treat # 4	LOC			
13	West side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	☒ YES ☐ NO	

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 5-4-19		
Operator: Caleb Sowards	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☒ Emergency ☒			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 166			
Pump Suction Pressure: 18	Pump Discharge pressure: 167		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1548			
Pump Suction Pressure:	Pump Discharge pressure: 167		
Stop time: 1558	Total time running 10min		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:		
Battery volt Crank 1: 26 Battery volt Crank 2: 26	Battery Condition: good		
Starting hour meter: 60.6	Start time: 1535		
Oil pressure start: 68	Oil Pressure finish: 45		
Pump Suction Pressure: 150	Pump Discharge pressure: 155		
Coolant temperature after 30 minutes running: 188			
Stop time: 1547	Stop hour meter: 60.7	Total time running: 14min	
Comments: test ended early high air intake temp alarm			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA: ☒

Date: 5/3/19

Operator: PIAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	165	LOC	YES	Y ☒ N ☐	
2	SG Unit 2 B1.2	160	LOC	YES	Y ☒ N ☐	
3	Reheaters B1.3	165	LOC	YES	Y ☒ N ☐	
4	Rack 2 West HTF B1.4	160	LOC	YES	Y ☒ N ☐	
5	Rack 2 East HTF B1.5	160	LOC	YES	Y ☒ N ☐	
6	North Steel Pro B1.6	160	LOC	YES	Y ☒ N ☐	
7	HTF Pumps B1.7	160	LOC	YES	Y ☒ N ☐	
8	HTF Heaters B1.8	160	LOC	YES	Y ☒ N ☐	
9	South Steel Pro B1.9	160	LOC	YES	Y ☒ N ☐	
10	Lube Oil B1.10	160	LOC	YES	Y ☒ N ☐	
11	Turbine Hose Stations B1.11	160	LOC	YES	Y ☒ N ☐	
12	Turbine Bearings B1.12	160	LOC	YES	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	160	LOC	YES	Y ☒ N ☐	
2	Ullage Area B2.2	160	LOC	YES	Y ☒ N ☐	
3	Ullage Structure B2.3	160	LOC	YES	Y ☒ N ☐	
4	Rack 1 Middle Area B2.4	160	LOC	YES	Y ☒ N ☐	
5	Overflow Tanks B2.5	160	LOC	YES	Y ☒ N ☐	
6	Rack 1 South Area B2.6	165	LOC	YES	Y ☒ N ☐	
7	Rack 1 West B2.7	160	LOC	YES	Y ☒ N ☐	
8	Rack 1 North Area B2.8	160	LOC	YES	Y ☒ N ☐	
9	Over flow AFFF B2.9	160	LOC	YES	Y ☒ N ☐	
10	Expansion Vessel AFFF B2.3	160	LOC	YES	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	230	LOC	YES	Y ☒ N ☐	
2	Transformer Main	230	LOC	YES	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	YES	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B1.5	160	LOC	YES	Y ☒ N ☐	
2	Offices B1.7	160	LOC	YES	Y ☒ N ☐	
3	Electrical Room B1.8	160	LOC	YES	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	LOC	
2	Bearing 3	Y ☒ N ☐	LOC	
3	Bearing 4	Y ☒ N ☐	LOC	
4	Bearing 5	Y ☒ N ☐	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	LOC	
2	MP-200A	Y ☒ N ☐	LOC	
3	MP-200B	Y ☒ N ☐	LOC	
4	MP-200C	Y ☒ N ☐	LOC	
5	MP-200D	Y ☒ N ☐	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	180	O	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-444's and Water Treat # 4	LOC			
13	West side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information		
Plant: ☐ Alpha ☒ Beta	Date: 4-29-19	
Operator:		<i>To be completed each time unit is operated</i>
Reason for running pumps: Weekly test ☐ Maintenance ☐ Emergency ☐		
Electric Pump		
Pre-start Inspection: Electrical Feed ☐ Mechanical ☐ Valves ☐		
Check the jockey pump on pressure drop. Start up pressure:		
Discharge Pressure:		
Pump Suction Pressure:	Pump Discharge pressure:	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure:		
Start time:		
Pump Suction Pressure:	Pump Discharge pressure:	
Stop time:	Total time running	
Comments:		
<i>AQMD Test 7/20/18</i>		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☐ 3/4 Monthly Fuel Consumption:		
Battery volt Crank 1: 26.5	Battery volt Crank 2: 26.5	Battery Condition: Good
Starting hour meter: 60.6	Start time: 10:44	
Oil pressure start:	Oil Pressure finish:	
Pump Suction Pressure: 10 PSI	Pump Discharge pressure: 15.3	
Coolant temperature after 30 minutes running:		
Stop time: 10:46	Stop hour meter: 60.6	Total time running: 2.5 min.
Comments:		
<i>AQMD Test May 1763 RPM</i>		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))		

Fire Pump Weekly Test Log

General Information			
Plant: ☐ Alpha ☒ Beta	Date: 4-28-19		
Operator: Collin Andersson	*To be completed each time unit is operated		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A		Pump Discharge pressure: 165	
Comments:			
Electric Pump			
Pre-start Inspection: ☐ Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1755			
Pump Suction Pressure: 20		Pump Discharge pressure: 155	
Stop time: 1805		Total time running 10 Minutes	
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐		Monthly Fuel Consumption:	
Battery volt Crank 1: Battery volt Crank 2: ☒		Battery Condition: Good	
Starting hour meter: 60-1		Start time: 1810	
Oil pressure start: 70		Oil Pressure finish: ..	
Pump Suction Pressure: 20		Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 189			
Stop time: 1840		Stop hour meter: 60-6 Total time running: 30 Minutes	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒

Date: 4-26-19

Operator: Shell

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	16.5	OK	Yes	Y/N	
2	SG Unit 2 B1.2	16.0	OK	Yes	Y/N	
3	Reheaters B1.3	16.5	OK	Yes	Y/N	
4	Rack 2 West HTF B1.4	16.0	OK	Yes	Y/N	
5	Rack 2 East HTF B1.5	16.0	OK	Yes	Y/N	
6	North Steel Pro B1.6	16.0	OK	Yes	Y/N	
7	HTF Pumps B1.7	16.0	OK	Yes	Y/N	
8	HTF Heaters B1.8	16.0	OK	Yes	Y/N	
9	South Steel Pro B1.9	16.0	OK	Yes	Y/N	
10	Lube Oil B1.10	16.0	OK	Yes	Y/N	
11	Turbine Hose Stations B1.11	15.8	OK	Yes	Y/N	
12	Turbine Bearings B1.12	16.5	OK	Yes	Y/N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	16.3	OK	Yes	Y/N	
2	Ullage Area B2.2	16.5	OK	Yes	Y/N	
3	Ullage Structure B2.11	16.3	OK	Yes	Y/N	
4	Rack 1 Middle Area B2.5	16.5	OK	Yes	Y/N	
5	Overflow Tanks B2.9	16.0	OK	Yes	Y/N	
6	Rack 1 South Area B2.6	16.0	OK	Yes	Y/N	
7	Rack 1 West B2.7	16.0	OK	Yes	Y/N	
8	Rack 1 North Area B2.4	16.5	OK	Yes	Y/N	
9	Over flow AFFF B2.8	15.8	OK	Yes	Y/N	
10	Expansion Vessel AFFF B2.3	16.0	OK	Yes	Y/N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	20.7	OK	Yes	Y/N	
2	Transformer Main	20.5	OK	Yes	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.0	OK	Yes	Y/N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B5.5	8.5	OK	Yes	Y/N	
2	Offices B5.4	9.0	OK	Yes	Y/N	
3	Electrical Room B5.3	8.5	OK	Yes	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y/N	OK	
2	Bearing 3	Y/N	OK	
3	Bearing 4	Y/N	OK	
4	Bearing 5	Y/N	OK	

HTF Deluge System Valves (To be Locked In the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y/N	OK	
2	MP-200A	Y/N	OK	
3	MP-200B	Y/N	OK	
4	MP-200C	Y/N	OK	
5	MP-200D	Y/N	OK	

Fire Pump House Deluge System

No.	System	PSI	OK	Locked	Comments
1	Fire Pump House Deluge	19.0	OK	Y/N	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	NO		
2	Maintenance Shop Drive Way #8	OK	NO		
3	West Side Power Block by VS-3 # 9	OK	NO		
4	West Side Power Block by VS-1 # 10	OK	NO		
5	West Side Cooling Tower by VS-4 # 11	OK	NO		
6	West side Cooling Tower by VS-4 # 12	OK	NO		
7	N.W. Corner Chemical Storage #1	OK	NO		
8	N.E. Corner Chemical Storage #2	OK	NO		
9	East Side W.T. by Multimedia Filters # 3	OK	NO		
10	East Side W.T. by Multimedia Filters # 5	OK	NO		
11	North Side Bldg 10 # 6	OK	NO		
12	Between MP-444's and Water Treat # 4	OK	NO		
13	West side Power Block Valve Shed #13	OK	NO		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y/N	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☐ Beta ☒	Date: 4-19-19	
Operator:	Caleb Sowards		*To be completed each time unit is operated.
Reason for running pumps:	Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 167			
Pump Suction Pressure: 15		Pump Discharge pressure: 167	
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1250			
Pump Suction Pressure:		Pump Discharge pressure: 166	
Stop time: 0100		Total time running: 10 min	
Comments: parking adjusted			
Diesel Pump			
Pre-start Inspection:	Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3:	Yes ☒ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1:	26	Battery volt Crank 2:	26
Starting hour meter: 59.3		Battery Condition: good	
Oil pressure start: 68		Start time: 0335	
Pump Suction Pressure: 10		Oil Pressure finish: 45	
		Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 186			
Stop time: 0348		Stop hour meter: 59.5	
		Total time running: 12 min	
Comments: High charge air intake alarm test ended early			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/ h approximately. There is no limit on engine operation for emergency use. (Title 17 CCR 93115 6(a)(4))			

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 4-21-19		
Operator: <i>Colin Anderson</i>	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure:	155		
Discharge Pressure: 165			
Pump Suction Pressure: N/A	Pump Discharge pressure: 165		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure:	145		
Start time: 1947			
Pump Suction Pressure: 20	Pump Discharge pressure: 155		
Stop time: 1957	Total time running 10 minutes		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:		
Battery volt Crank 1: Battery volt Crank 2: ✓	Battery Condition: Good		
Starting hour meter: 59.5	Start time: 2000		
Oil pressure start: 67	Oil Pressure finish:		
Pump Suction Pressure: 20	Pump Discharge pressure: 155		
Coolant temperature after 30 minutes running: 189			
Stop time: 2030	Stop hour meter: 60.1	Total time running: 30 minutes	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In operation, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA ☒

Date: 4-19-19

Operator: Shell

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1	16.5	OK	yes	YES NO	
2	SG Unit 2	16.5	OK	yes	YES NO	
3	Reheaters	16.5	OK	yes	YES NO	
4	Rack 2 West HTF	16.5	OK	yes	YES NO	
5	Rack 2 East HTF	16.0	OK	yes	YES NO	
6	North Steel Pro	16.0	OK	yes	YES NO	
7	HTF Pumps	16.0	OK	yes	YES NO	
8	HTF Heaters	16.3	OK	yes	YES NO	
9	South Steel Pro	16.5	OK	yes	YES NO	
10	Lube Oil	16.3	OK	yes	YES NO	
11	Turbine Hose Stations	16.5	OK	yes	YES NO	
12	Turbine Bearings	16.5	OK	yes	YES NO	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	16.5	OK	yes	YES NO	
2	Ullage Area	16.5	OK	yes	YES NO	
3	Ullage Structure	16.5	OK	yes	YES NO	
4	Rack 1 Middle Area	16.5	OK	yes	YES NO	
5	Overflow Tanks	16.5	OK	yes	YES NO	
6	Rack 1 South Area	16.3	OK	yes	YES NO	
7	Rack 1 West	16.3	OK	yes	YES NO	
8	Rack 1 North Area	16.5	OK	yes	YES NO	
9	Over flow AFFF	16.0	OK	yes	YES NO	
10	Expansion Vessel AFFF	16.0	OK	yes	YES NO	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	16.0	OK	yes	YES NO	
2	Transformer Main	16.5	OK	yes	YES NO	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.0	OK	yes	YES NO	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room	16.5	OK	yes	YES NO	
2	Offices	16.5	OK	yes	YES NO	
3	Electrical Room	16.5	OK	yes	YES NO	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	YES NO	OK	
2	Bearing 3	YES NO	OK	
3	Bearing 4	YES NO	OK	
4	Bearing 5	YES NO	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	YES NO	OK	
2	MP-200A	YES NO	OK	
3	MP-200B	YES NO	OK	
4	MP-200C	YES NO	OK	
5	MP-200D	YES NO	OK	

Fire Pump House Deluge System

No.	System	PSI	OK	Locked	Comments
1	Fire Pump House Deluge	19.5	OK	YES NO	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	NO		
2	Maintenance Shop Drive Way #8	OK	NO		
3	West Side Power Block by VS-3 # 9	OK	NO		
4	West Side Power Block by VS-1 # 10	OK	NO		
5	West Side Cooling Tower by VS-4 # 11	OK	NO		
6	West side Cooling Tower by VS-4 # 12	OK	NO		
7	N.W. Corner Chemical Storage #1	OK	NO		
8	N.E. Corner Chemical Storage # 2	OK	NO		
9	East Side W.T. by Multimedia Filters # 3	OK	NO		
10	East Side W.T. by Multimedia Filters # 5	OK	NO		
11	North Side Bldg 10 # 6	OK	NO		
12	Between MP-444's and Water Treat # 4	OK	NO		
13	West side Power Block Valve Shed #1	OK	NO		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	YES NO	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 4-14-19	
Operator: Shell	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 125		
Discharge Pressure: 161		
Pump Suction Pressure: No P.I.	Pump Discharge pressure: 161	
Comments: In Auto		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 25		
Start time: 01:02		
Pump Suction Pressure: 15	Pump Discharge pressure: 155	
Stop time: 01:03	Total time running: 1 min.	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☐ No ☒ 5/4	Monthly Fuel Consumption:	
Battery volt Crank 1: Battery volt Crank 2:	Battery Condition: Good	
Starting hour meter: 59.0	Start time: 01:09	
Oil pressure start: 61	Oil Pressure finish: 44	
Pump Suction Pressure: 28 PSI	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 183		
Stop time: 01:30	Stop hour meter: 59.3	Total time running: 20 min.
Comments: 1762 RPM Got High temp Alarm.		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/h approximately		
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA ☒

Date: 4-13-19

Operator: C. Anderson

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	OC	✓	Y/N	
2	SG Unit 2	160	OC	✓	Y/N	
3	Reheaters	160	OC	✓	Y/N	
4	Rack 2 West HTF	160	OC	✓	Y/N	
5	Rack 2 East HTF	160	OC	✓	Y/N	
6	North Steel Pro	160	OC	✓	Y/N	
7	HTF Pumps	160	OC	✓	Y/N	
8	HTF Heaters	160	OC	✓	Y/N	
9	South Steel Pro	160	OC	✓	Y/N	
10	Lube Oil	160	OC	✓	Y/N	
11	Turbine Hose Stations	160	OC	✓	Y/N	
12	Turbine Bearings	160	OC	✓	Y/N	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	OC	✓	Y/N	
2	Ullage Area	160	OC	✓	Y/N	
3	Ullage Structure	160	OC	✓	Y/N	
4	Rack 1 Middle Area	160	OC	✓	Y/N	
5	Overflow Tanks	160	OC	✓	Y/N	
6	Rack 1 South Area	160	OC	✓	Y/N	
7	Rack 1 West	160	OC	✓	Y/N	
8	Rack 1 North Area	160	OC	✓	Y/N	
9	Over flow AFFF	160	OC	✓	Y/N	
10	Expansion Vessel AFFF	160	OC	✓	Y/N	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OC	✓	Y/N	
2	Transformer Main	160	OC	✓	Y/N	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OC	✓	Y/N	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	175	OC	✓	Y/N	
2	Offices	175	OC	✓	Y/N	
3	Electrical Room	175	OC	✓	Y/N	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y/N	OC	
2	Bearing 3	Y/N	OC	
3	Bearing 4	Y/N	OC	
4	Bearing 5	Y/N	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y/N	OC	
2	MP-200A	Y/N	OC	
3	MP-200B	Y/N	OC	
4	MP-200C	Y/N	OC	
5	MP-200D	Y/N	OC	

Fire Pump House Deluge System

No.	System	PSI	OC	Locked	Comments
1	Fire Pump House Deluge	160	OC	Y/N	

PIC Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC	NO	4-2-19	
2	Maintenance Shop Drive Way #8	OC	NO	4-2-19	
3	West Side Power Block by VS-3 # 9	OC	NO	4-2-19	
4	West Side Power Block by VS-1 # 10	OC	NO	4-2-19	
5	West Side Cooling Tower by VS-4 # 11	OC	NO	4-2-19	
6	West side Cooling Tower by VS-4 # 12	OC	NO	4-2-19	
7	N.W. Corner Chemical Storage #1	OC	NO	4-2-19	
8	N.E. Corner Chemical Storage # 2	OC	NO	4-2-19	
9	East Side W.T. by Multimedia Filters # 3	OC	NO	4-2-19	
10	East Side W.T. by Multimedia Filters # 5	OC	NO	4-2-19	
11	North Side Bldg 10 # 6	OC	NO	4-2-19	
12	Between MP-444's and Water Treat # 4	OC	NO	4-2-19	
13	West side Power Block Valve Shed #1	OC	NO	4-2-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y/N	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☐ Beta ☒	Date:	1-8-19
Operator:	Caleb Sowards		
*To be completed each time unit is operated.			
Reason for running pumps:	Weekly test ☒ Maintenance ☒ Emergency ☒		
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure:	155		
Discharge Pressure:	166		
Pump Suction Pressure:	15	Pump Discharge pressure:	166
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure:	145		
Start time:	03:32		
Pump Suction Pressure:		Pump Discharge pressure:	166
Stop time:	03:42	Total time running:	10 min
Comments:			
Diesel Pump			
Pre-start Inspection:	Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3:	Yes ☒ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1:	26	Battery volt Crank 2:	26
Starting hour meter:	58.8	Battery Condition:	good
Oil pressure start:	21	Start time:	03:17
		Oil Pressure finish:	45
Pump Suction Pressure:	10	Pump Discharge pressure:	155
Coolant temperature after 30 minutes running:	189		
Stop time:	3:30	Stop hour meter:	59.0
		Total time running:	14 min
Comments: test ended early. High intake air temp needs to be topped up with coolant			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA: ☒

Date: 4-6-19

Operator: Anderson

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	OC	✓	Y ☐ N ☐	
2	SG Unit 2	160	OC	✓	Y ☐ N ☐	
3	Reheaters	160	OC	✓	Y ☐ N ☐	
4	Rack 2 West HTF	160	OC	✓	Y ☐ N ☐	
5	Rack 2 East HTF	160	OC	✓	Y ☐ N ☐	
6	North Steel Pro	160	OC	✓	Y ☐ N ☐	
7	HTF Pumps	160	OC	✓	Y ☐ N ☐	
8	HTF Heaters	160	OC	✓	Y ☐ N ☐	
9	South Steel Pro	160	OC	✓	Y ☐ N ☐	
10	Lube Oil	160	OC	✓	Y ☐ N ☐	
11	Turbine Hose Stations	160	OC	✓	Y ☐ N ☒	
12	Turbine Bearings	160	OC	✓	Y ☐ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	OC	✓	Y ☐ N ☐	
2	Ullage Area	160	OC	✓	Y ☐ N ☐	
3	Ullage Structure	160	OC	✓	Y ☐ N ☐	
4	Rack 1 Middle Area	160	OC	✓	Y ☐ N ☐	
5	Overflow Tanks	160	OC	✓	Y ☐ N ☐	
6	Rack 1 South Area	160	OC	✓	Y ☐ N ☐	
7	Rack 1 West	160	OC	✓	Y ☐ N ☐	
8	Rack 1 North Area	160	OC	✓	Y ☐ N ☐	
9	Over flow AFFF	160	OC	✓	Y ☐ N ☐	
10	Expansion Vessel AFFF	160	OC	✓	Y ☐ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OC	✓	Y ☐ N ☐	
2	Transformer Main	160	OC	✓	Y ☐ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OC	✓	Y ☐ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room	175	OC	✓	Y ☐ N ☐	
2	Offices	175	OC	✓	Y ☐ N ☐	
3	Electrical Room	175	OC	✓	Y ☐ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☐ N ☐	OC	
2	Bearing 3	Y ☐ N ☐	OC	
3	Bearing 4	Y ☐ N ☐	OC	
4	Bearing 5	Y ☐ N ☐	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☐ N ☐	OC	
2	MP-200A	Y ☐ N ☐	OC	
3	MP-200B	Y ☐ N ☐	OC	
4	MP-200C	Y ☐ N ☐	OC	
5	MP-200D	Y ☐ N ☐	OC	

Fire Pump House Deluge System

No.	System	PSI	OC	Locked	Comments
1	Fire Pump House Deluge	150	0	Y ☐ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC			
2	Maintenance Shop Drive Way #8	OC			
3	West Side Power Block by VS-3 # 9	OC			
4	West Side Power Block by VS-1 # 10	OC			
5	West Side Cooling Tower by VS-4 # 11	OC			
6	West side Cooling Tower by VS-4 # 12	OC			
7	N.W. Corner Chemical Storage #1	OC			
8	N.E. Corner Chemical Storage # 2	OC			
9	East Side W.T. by Multimedia Filters # 3	OC			
10	East Side W.T. by Multimedia Filters # 5	OC			
11	North Side Bldg 10 # 6	OC			
12	Between MP-444's and Water Treat # 4	OC			
13	West side Power Block Valve Shed #1	OC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☒	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 3-30-19	
Operator: Caleb Saunders	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☒ Emergency ☒		
Jockey Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 166		
Pump Suction Pressure: 15 Pump Discharge pressure: 166		
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 0630		
Pump Suction Pressure: Pump Discharge pressure: 167		
Stop time: 0640 Total time running: 10 min		
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26 Battery volt Crank 2: 26 Battery Condition: good		
Starting hour meter: 58.6 Start time: 628		
Oil pressure start: 70 Oil Pressure finish:		
Pump Suction Pressure: 15 Pump Discharge pressure: 155		
Coolant temperature after 30 minutes running: 185		
Stop time: 0646 Stop hour meter: 58.8 Total time running: 12 min		
Comments: Test ended early High intake temp		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒ Date: 3-31-19 Operator: Pinza

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1	160	LOC	YES	YES	
2	SG Unit 2	160	LOC	YES	YES	
3	Reheaters	160	LOC	YES	YES	
4	Rack 2 West HTF	160	LOC	YES	YES	
5	Rack 2 East HTF	160	LOC	YES	YES	
6	North Steel Pro	160	LOC	YES	YES	
7	HTF Pumps	160	LOC	YES	YES	
8	HTF Heaters	160	LOC	YES	YES	
9	South Steel Pro	160	LOC	YES	YES	
10	Lube Oil	155	LOC	YES	YES	
11	Turbine Hose Stations	155	LOC	YES	YES	
12	Turbine Bearings	160	LOC	YES	YES	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	160	LOC	YES	YES	
2	Ullage Area	205	LOC	YES	YES	
3	Ullage Structure	205	LOC	YES	YES	
4	Rack 1 Middle Area	175	LOC	YES	YES	
5	Overflow Tanks	170	LOC	YES	YES	
6	Rack 1 South Area	175	LOC	YES	YES	
7	Rack 1 West	160	LOC	YES	YES	
8	Rack 1 North Area	170	LOC	YES	YES	
9	Over flow AFFF	160	LOC	YES	YES	
10	Expansion Vessel AFFF	160	LOC	YES	YES	

Valve Shed # 3 by Bldg 35/Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	155	LOC	YES	YES	
2	Transformer Main	155	LOC	YES	YES	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	YES	YES	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room	160	LOC	YES	YES	
2	Offices	160	LOC	YES	YES	
3	Electrical Room	160	LOC	YES	YES	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	YES	LOC	
2	Bearing 3	YES	LOC	
3	Bearing 4	YES	LOC	
4	Bearing 5	YES	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	YES	LOC	
2	MP-200A	YES	LOC	
3	MP-200B	YES	LOC	
4	MP-200C	YES	LOC	
5	MP-200D	YES	LOC	

Fire Pump House Deluge System

No.	System	PSI	LOC	Locked	Comments
1	Fire Pump House Deluge	160	LOC	YES	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC	C		
2	Maintenance Shop Drive Way #8	LOC	C		
3	West Side Power Block by VS-3 # 9	LOC	C		
4	West Side Power Block by VS-1 # 10	LOC	C		
5	West Side Cooling Tower by VS-4 # 11	LOC	C		
6	West side Cooling Tower by VS-4 # 12	LOC	C		
7	N.W. Corner Chemical Storage #1	LOC	C		
8	N.E. Corner Chemical Storage # 2	LOC	C		
9	East Side W.T. by Multimedia Filters # 3	LOC	C		
10	East Side W.T. by Multimedia Filters # 5	LOC	C		
11	North Side Bldg 10 # 6	LOC	C		
12	Between MP-444's and Water Treat # 4	LOC	C		
13	West side Power Block Valve Shed #1	LOC	C		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	YES	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 3/23/19	
Operator: PLAZA	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 160		
Pump Suction Pressure:	Pump Discharge pressure: 160	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☐ Mechanical ☐ Valves ☐		
Start the pump on pressure drop. Start up pressure: 145		
Start time:		
Pump Suction Pressure: 27	Pump Discharge pressure: 152	
Stop time:	Total time running 1 MINUTE	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 27	Battery volt Crank 2: 27	Battery Condition: Good
Starting hour meter: 58.2	Start time: 2148	
Oil pressure start: 65	Oil Pressure finish:	
Pump Suction Pressure: 29	Pump Discharge pressure: 153	
Coolant temperature after 30 minutes running: 185		
Stop time: 2018	Stop hour meter: 58.6	Total time running: 30 MINUTES
Comments: COOLANT START 135		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/h approximately.		
There is no limit on engine operation for emergency use [Title 17 CCR 93115 6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒

Date: 3/23/19

Operator: PLAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	OK	YES	YES	
2	SG Unit 2 B1-2	160	OK	YES	YES	
3	Reheaters B1-3	160	OK	YES	YES	
4	Rack 2 West HTF B1-4	160	OK	YES	YES	
5	Rack 2 East HTF B1-5	160	OK	YES	YES	
6	North Steel Pro B1-6	160	OK	YES	YES	
7	HTF Pumps B1-7	160	OK	YES	YES	
8	HTF Heaters B1-8	160	OK	YES	YES	
9	South Steel Pro B1-9	160	OK	YES	YES	
10	Lube Oil B1-10		OK	YES	YES	MANUAL OPS
11	Turbine Hose Stations B1-11		OK	YES	YES	MANUAL OPS
12	Turbine Bearings B1-12	160	OK	YES	YES	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	OK	YES	YES	
2	Ullage Area B2-2	160	OK	YES	YES	
3	Ullage Structure B2-3	160	OK	YES	YES	
4	Rack 1 Middle Area B2-4	160	OK	YES	YES	
5	Overflow Tanks B2-5	160	OK	YES	YES	
6	Rack 1 South Area B2-6	160	OK	YES	YES	
7	Rack 1 West B2-7	160	OK	YES	YES	
8	Rack 1 North Area B2-8	160	OK	YES	YES	
9	Over flow AFFF B2-9	160	OK	YES	YES	
10	Expansion Vessel AFFF B2-10	160	OK	YES	YES	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OK	YES	YES	
2	Transformer Main	160	OK	YES	YES	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	YES	YES	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	OK	YES	YES	
2	Offices B4-3	160	OK	YES	YES	
3	Electrical Room B4-4	160	OK	YES	YES	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	YES	OK	
2	Bearing 3	YES	OK	
3	Bearing 4	YES	OK	
4	Bearing 5	YES	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	YES	OK	
2	MP-200A	YES	OK	
3	MP-200B	YES	OK	
4	MP-200C	YES	OK	
5	MP-200D	YES	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	1125	0	YES	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK			
2	Maintenance Shop Drive Way #8	OK			
3	West Side Power Block by VS-3 # 9	OK			
4	West Side Power Block by VS-1 # 10	OK			
5	West Side Cooling Tower by VS-4 # 11	OK			
6	West side Cooling Tower by VS-4 # 12	OK			
7	N.W. Corner Chemical Storage #1	OK			
8	N.E. Corner Chemical Storage # 2	OK			
9	East Side W.T. by Multimedia Filters # 3	OK			
10	East Side W.T. by Multimedia Filters # 5	OK			
11	North Side Bldg 10 # 6	OK			
12	Between MP-44's and Water Treat # 4	OK			
13	West side Power Block Valve Shed #1	OK			

To Be Cycled First Saturday of Every Month

No.	System	Debts	Comments / Actions
1	Transformer Yard Reluse Check	YES	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 03/17/19		
Operator: Caleb Saunders	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: 15		Pump Discharge pressure: 166	
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 0205			
Pump Suction Pressure: 15		Pump Discharge pressure: 163	
Stop time: 0210		Total time running 10min	
Comments:			
Diesel Pump			
Pre-start inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:			
Battery volt Crank 1: 26		Battery volt Crank 2: 26	
Starting hour meter: 57.9		Battery Condition: good	
Oil pressure start: 78		Start time: 0220	
Pump Suction Pressure: 5		Oil Pressure finish: 45	
Pump Discharge pressure: 155		Coolant temperature after 30 minutes running: 189	
Stop time: 0240		Stop hour meter: 58.2	
Total time running: 20min		Comments: test ended early high charge air coolant is needed temp	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ META ☒

Date: 3/15/19

Operator: PLAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	LOC	Yes	Y ☒ N ☐	
2	SG Unit 2 B1-2	160	LOC	Yes	Y ☒ N ☐	
3	Reheaters B1-3	160	LOC	Yes	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	160	LOC	Yes	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	160	LOC	Yes	Y ☒ N ☐	
6	North Steel Pro B1-6	160	LOC	Yes	Y ☒ N ☐	
7	HTF Pumps B1-7	160	LOC	Yes	Y ☒ N ☐	
8	HTF Heaters B1-8	160	LOC	Yes	Y ☒ N ☐	
9	South Steel Pro B1-9	160	LOC	Yes	Y ☒ N ☐	
10	Lube Oil B1-10		LOC	Yes	Y ☒ N ☐	MANUAL OPS
11	Turbine Hose Stations B1-11		LOC	Yes	Y ☒ N ☐	MANUAL OPS
12	Turbine Bearings B1-12	160	LOC	Yes	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	LOC	Yes	Y ☒ N ☐	
2	Ullage Area B2-2	160	LOC	Yes	Y ☒ N ☐	
3	Ullage Structure B2-11	160	LOC	Yes	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	160	LOC	Yes	Y ☒ N ☐	
5	Overflow Tanks B2-9	160	LOC	Yes	Y ☒ N ☐	
6	Rack 1 South Area B2-6	160	LOC	Yes	Y ☒ N ☐	
7	Rack 1 West B2-7	160	LOC	Yes	Y ☒ N ☐	
8	Rack 1 North Area B2-4	160	LOC	Yes	Y ☒ N ☐	
9	Over flow AFFF B2-8	160	LOC	Yes	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	160	LOC	Yes	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Transformer Aux	150	LOC	Yes	Y ☒ N ☐	
2	Transformer Main	150	LOC	Yes	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	LOC	Yes	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Valv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	180	LOC	Yes	Y ☒ N ☐	
2	Offices B4-3	180	LOC	Yes	Y ☒ N ☐	
3	Electrical Room B4-4	180	LOC	Yes	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Valv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	LOC	
2	Bearing 3	Y ☒ N ☐	LOC	
3	Bearing 4	Y ☒ N ☐	LOC	
4	Bearing 5	Y ☒ N ☐	LOC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Valv. Pos.	Comments
1	MP-201	Y ☒ N ☐	LOC	
2	MP-200A	Y ☒ N ☐	LOC	
3	MP-200B	Y ☒ N ☐	LOC	
4	MP-200C	Y ☒ N ☐	LOC	
5	MP-200D	Y ☒ N ☐	LOC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	190	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	LOC			
2	Maintenance Shop Drive Way #8	LOC			
3	West Side Power Block by VS-3 # 9	LOC			
4	West Side Power Block by VS-1 # 10	LOC			
5	West Side Cooling Tower by VS-4 # 11	LOC			
6	West side Cooling Tower by VS-4 # 12	LOC			
7	N.W. Corner Chemical Storage #1	LOC			
8	N.E. Corner Chemical Storage # 2	LOC			
9	East Side W.T. by Multimedia Filters # 3	LOC			
10	East Side W.T. by Multimedia Filters # 5	LOC			
11	North Side Bldg 10 # 6	LOC			
12	Between MP-44's and Water Treat # 4	LOC			
13	West side Power Block Valve Shed #1	LOC			

To Be Cycled First Saturday of Every Month

No.	System	Diagable	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 3-10-19	
Operator: Caleb Sowards	*To be completed each time unit is operated	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 166		
Pump Suction Pressure: 15	Pump Discharge pressure: 166	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 145		
Start time: 0334		
Pump Suction Pressure: 15	Pump Discharge pressure: 166	
Stop time: 0344	Total time running 10min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good
Starting hour meter: 57.4	Start time: 0349	
Oil pressure start: 71	Oil Pressure finish: 45	
Pump Suction Pressure: 15	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 186		
Stop time: 0417	Stop hour meter: 57.9	Total time running: 30min
Comments: timing chain Housing Leaks Oil		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. (Title 17 CCR 93115.6(a)(4))		

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐

BETA ☒

Date:

3/9/19

Operator

Phazat

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	OK	Yes	Y ☒ N ☐	
2	SG Unit 2 B1-2	160	OK	Yes	Y ☒ N ☐	
3	Reheaters B1-3	160	OK	Yes	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	160	OK	Yes	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	160	OK	Yes	Y ☒ N ☐	
6	North Steel Pro B1-6	160	OK	Yes	Y ☒ N ☐	
7	HTF Pumps B1-7	160	OK	Yes	Y ☒ N ☐	
8	HTF Heaters B1-8	160	OK	Yes	Y ☒ N ☐	
9	South Steel Pro B1-9	160	OK	Yes	Y ☒ N ☐	
10	Lube Oil B1-10	75	OK	Yes	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	110	OK	Yes	Y ☒ N ☐	
12	Turbine Bearings B1-12	160	OK	Yes	Y ☒ N ☐	

MANUAL OPS
MANUAL OPS

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	OK	Yes	Y ☒ N ☐	
2	Ullage Area B2-2	160	OK	Yes	Y ☒ N ☐	
3	Ullage Structure B2-11	160	OK	Yes	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	160	OK	Yes	Y ☒ N ☐	
5	Overflow Tanks B2-9	160	OK	Yes	Y ☒ N ☐	
6	Rack 1 South Area B2-6	160	OK	Yes	Y ☒ N ☐	
7	Rack 1 West B2-7	160	OK	Yes	Y ☒ N ☐	
8	Rack 1 North Area B2-4	160	OK	Yes	Y ☒ N ☐	
9	Over flow AFFF B2-8	160	OK	Yes	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OK	Yes	Y ☒ N ☐	
2	Transformer Main	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	OK	Yes	Y ☒ N ☐	
2	Offices B4-3	160	OK	Yes	Y ☒ N ☐	
3	Electrical Room B4-1	160	OK	Yes	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OK	
2	Bearing 3	Y ☒ N ☐	OK	
3	Bearing 4	Y ☒ N ☐	OK	
4	Bearing 5	Y ☒ N ☐	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OK	
2	MP-200A	Y ☒ N ☐	OK	
3	MP-200B	Y ☒ N ☐	OK	
4	MP-200C	Y ☒ N ☐	OK	
5	MP-200D	Y ☒ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	OK	Locked	Comments
1	Fire Pump House Deluge	165	OK	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK			
2	Maintenance Shop Drive Way #8	OK			
3	West Side Power Block by VS-3 # 9	OK			
4	West Side Power Block by VS-1 # 10	OK			
5	West Side Cooling Tower by VS-4 # 11	OK			
6	West side Cooling Tower by VS-4 # 12	OK			
7	N.W. Corner Chemical Storage #1	OK			
8	N.E. Corner Chemical Storage # 2	OK			
9	East Side W.T. by Multimedia Filters # 3	OK			
10	East Side W.T. by Multimedia Filters # 5	OK			
11	North Side Bldg 10 # 6	OK			
12	Between MP-444's and Water Treat # 4	OK			
13	West side Power Block Valve Shed #1	OK			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 3-4-19	
Operator: Shell	*To be completed each time unit is operated	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 125		
Discharge Pressure: 130		
Pump Suction Pressure: No Gauge	Pump Discharge pressure: 130	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 30		
Start time: 01:10		
Pump Suction Pressure: 18 PSI	Pump Discharge pressure: 155	
Stop time: 01:12	Total time running 2 min	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ 1/2	Monthly Fuel Consumption:	
Battery volt Crank 1: 26.5 Battery volt Crank 2: 26.5	Battery Condition: Good	
Starting hour meter: 57.0	Start time: 01:16	
Oil pressure start: 63	Oil Pressure finish: 45	
Pump Suction Pressure: 28 PSI	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 177		
Stop time: 01:46	Stop hour meter: 57.4	Total time running: 10 min
Comments: 1760 RPM		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.		
Note: Fuel consumption 27 gal/h approximately		
There is no limit on engine operation for emergency use [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒

Date: 3-2-19

Operator: Curtin Anderson

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	175	O/C	✓	Y ☒ N ☐	
2	SG Unit 2 B1.2	175	O/C	✓	Y ☒ N ☐	
3	Reheaters B1.3	175	O/C	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1.4	175	O/C	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1.5	175	O/C	✓	Y ☒ N ☐	
6	North Steel Pro B1.6	175	O/C	✓	Y ☒ N ☐	
7	HTF Pumps B1.7	175	O/C	✓	Y ☒ N ☐	
8	HTF Heaters B1.8	175	O/C	✓	Y ☒ N ☐	
9	South Steel Pro B1.9	175	O/C	✓	Y ☒ N ☐	
10	Lube Oil B1.10	0	O/C	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1.11	0	O/C	✓	Y ☒ N ☐	
12	Turbine Bearings B1.12	0	O/C	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	160	O/C	✓	Y ☒ N ☐	
2	Ullage Area B2.2	160	O/C	✓	Y ☒ N ☐	
3	Ullage Structure B2.11	160	O/C	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2.5	160	O/C	✓	Y ☒ N ☐	
5	Overflow Tanks B2.9	160	O/C	✓	Y ☒ N ☐	
6	Rack 1 South Area B2.6	160	O/C	✓	Y ☒ N ☐	
7	Rack 1 West B2.7	0	O/C	✓	Y ☒ N ☐	
8	Rack 1 North Area B2.4	160	O/C	✓	Y ☒ N ☐	
9	Over Flow AFFF B2.8	160	O/C	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2.3	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	175	O/C	✓	Y ☒ N ☐	
2	Transformer Main	175	O/C	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	O/C	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4.5	175	O/C	✓	Y ☒ N ☐	
2	Offices B4.3	175	O/C	✓	Y ☒ N ☐	
3	Electrical Room B4.4	175	O/C	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	O/C	
2	Bearing 3	Y ☒ N ☐	O/C	
3	Bearing 4	Y ☒ N ☐	O/C	
4	Bearing 5	Y ☒ N ☐	O/C	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	O/C	
2	MP-200A	Y ☒ N ☐	O/C	
3	MP-200B	Y ☒ N ☐	O/C	
4	MP-200C	Y ☒ N ☐	O/C	
5	MP-200D	Y ☒ N ☐	O/C	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	150	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/C	✓		
2	Maintenance Shop Drive Way #8	O/C	✓	3-2-19	
3	West Side Power Block by VS-3 # 9	O/C	✓	3-2-19	
4	West Side Power Block by VS-1 # 10	O/C	✓	3-2-19	
5	West Side Cooling Tower by VS-4 # 11	O/C	✓	3-2-19	
6	West side Cooling Tower by VS-4 # 12	O/C	✓	3-2-19	
7	N.W. Corner Chemical Storage #1	O/C	✓	3-2-19	
8	N.E. Corner Chemical Storage # 2	O/C	✓	3-2-19	
9	East Side W.T. by Multimedia Filters # 3	O/C	✓	3-2-19	
10	East Side W.T. by Multimedia Filters # 5	O/C	✓	3-2-19	
11	North Side Bldg 10 # 6	O/C	✓	3-2-19	
12	Between MP-444's and Water Treat # 4	O/C	X		
13	West side Power Block Valve Shed #1	O/C	✓	3-2-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☐ N ☒	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information		
Plant: Alpha ☐ Beta ☒	Date: 2-23-19	
Operator: Collin Anderson	*To be completed each time unit is operated.	
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure: 155		
Discharge Pressure: 165		
Pump Suction Pressure:	Pump Discharge pressure: 165	
Comments:		
Electric Pump		
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure: 1		
Start time: 1747		
Pump Suction Pressure: 20	Pump Discharge pressure: 155	
Stop time: 1757	Total time running 10 minutes	
Comments:		
Diesel Pump		
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3: Yes ☒ No ☐ Monthly Fuel Consumption:		
Battery volt Crank 1:	Battery volt Crank 2:	Battery Condition: Good
Starting hour meter: 56.9	Start time: 1800	
Oil pressure start: 72	Oil Pressure finish:	
Pump Suction Pressure: 30	Pump Discharge pressure: 155	
Coolant temperature after 30 minutes running: 174		
Stop time: 1830	Stop hour meter: 57.0	Total time running: 30 minutes
Comments:		
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).		
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]		

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐

BETA ☒

Date: 2-26-19

Operator: Collin Anderson

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1.1	175	OC	✓	Y ☒ N ☐	
2	SG Unit 2 B1.2	175	OC	✓	Y ☒ N ☐	
3	Reheaters B1.3	175	OC	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1.4	175	OC	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1.5	175	OC	✓	Y ☒ N ☐	
6	North Steel Pro B1.6	175	OC	✓	Y ☒ N ☐	
7	HTF Pumps B1.7	175	OC	✓	Y ☒ N ☐	
8	HTF Heaters B1.8	175	OC	✓	Y ☒ N ☐	
9	South Steel Pro B1.9	175	OC	✓	Y ☒ N ☐	
10	Lube Oil B1.10	0	O/O	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1.11	0	O/O	✓	Y ☒ N ☐	
12	Turbine Bearings B1.12	0	O/O	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2.1	175	OC	✓	Y ☒ N ☐	
2	Ullage Area B2.2	175	OC	✓	Y ☒ N ☐	
3	Ullage Structure B2.11	175	OC	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2.5	175	OC	✓	Y ☒ N ☐	
5	Overflow Tanks B2.9	175	OC	✓	Y ☒ N ☐	
6	Rack 1 South Area B2.6	175	OC	✓	Y ☒ N ☐	
7	Rack 1 West B2.7	175	OC	✓	Y ☒ N ☐	
8	Rack 1 North Area B2.4	175	OC	✓	Y ☒ N ☐	
9	Over flow AFFF B2.8	175	OC	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2.3	175	OC	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	175	OC	✓	Y ☒ N ☐	
2	Transformer Main	175	OC	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	175	OC	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4.5	175	OC	✓	Y ☒ N ☐	
2	Offices B4.3	175	OC	✓	Y ☒ N ☐	
3	Electrical Room B4.4	175	OC	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OC	
2	Bearing 3	Y ☒ N ☐	OC	
3	Bearing 4	Y ☒ N ☐	OC	
4	Bearing 5	Y ☒ N ☐	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OC	
2	MP-200A	Y ☒ N ☐	OC	
3	MP-200B	Y ☒ N ☐	OC	
4	MP-200C	Y ☒ N ☐	OC	
5	MP-200D	Y ☒ N ☐	OC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	175	OC	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	O/O			
2	Maintenance Shop Drive Way #8	OC			
3	West Side Power Block by VS-3 # 9	OC			
4	West Side Power Block by VS-1 # 10	OC			
5	West Side Cooling Tower by VS-4 # 11	OC			
6	West side Cooling Tower by VS-4 # 12	OC			
7	N.W. Corner Chemical Storage #1	OC			
8	N.E. Corner Chemical Storage # 2	OC			
9	East Side W.T. by Multimedia Filters # 3	OC			
10	East Side W.T. by Multimedia Filters # 5	OC			
11	North Side Bldg 10 # 6	OC			
12	Between MP-444's and Water Treat # 4	O/O			
13	West side Power Block Valve Shed #1	OC			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☐	Beta ☒	Date: 2-5-19
Operator:	Collin Anderson		*To be completed each time unit is operated.
Reason for running pumps:	Weekly test ☒	Maintenance ☐	Emergency ☐
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒	Mechanical ☒	Valves ☒
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure: N/A		Pump Discharge pressure: 165	
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒	Mechanical ☒	Valves ☒
Start the pump on pressure drop. Start up pressure: 145			
Start time: 1752			
Pump Suction Pressure: 15		Pump Discharge pressure: 150	
Stop time: 1802		Total time running: 10 minutes	
Comments:			
Diesel Pump			
Pre-start Inspection:	Coolant ☒	Oil ☒	Mechanical ☒ Valves ☒ Water Jacket Heater ☒
Fuel level > 2/3:	Yes ☒ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1:	Battery volt Crank 2: ☒	Battery Condition: Good	
Starting hour meter: 55.9	Start time: 1805		
Oil pressure start: 68	Oil Pressure finish: 45		
Pump Suction Pressure: 20	Pump Discharge pressure: 150		
Coolant temperature after 30 minutes running: 176			
Stop time: 1835	Stop hour meter: 56.4	Total time running: 30 minutes	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately			
There is no limit on engine operation for emergency use. [Title 17 CCR 93115 6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐ BETA ☒ Date: 2-13-19 Operator Shell

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	16.5	OC	YES	YES NO	OPEN
2	SG Unit 2 B1-2	16.3	OC	YES	YES NO	
3	Reheaters B1-3	16.8	OC	YES	YES NO	
4	Rack 2 West HTF B1-4	16.5	OC	YES	YES NO	
5	Rack 2 East HTF B1-5	16.3	OC	YES	YES NO	
6	North Steel Pro B1-6	16.0	OC	YES	YES NO	
7	HTF Pumps B1-7	16.0	OC	YES	YES NO	
8	HTF Heaters B1-8	16.3	OC	YES	YES NO	
9	South Steel Pro B1-9	16.3	OC	YES	YES NO	
10	Lube Oil B1-10	0	OC	YES	YES NO	
11	Turbine Hose Stations B1-11	0	OC	YES	YES NO	
12	Turbine Bearings B1-12	0	OC	YES	YES NO	

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	16.5	OC	YES	YES NO	
2	Ullage Area B2-2	16.5	OC	YES	YES NO	
3	Ullage Structure B2-11	16.5	OC	YES	YES NO	
4	Rack 1 Middle Area B2-5	16.5	OC	YES	YES NO	
5	Overflow Tanks B2-9	16.5	OC	YES	YES NO	
6	Rack 1 South Area B2-6	16.3	OC	YES	YES NO	
7	Rack 1 West B2-7	0	OC	YES	YES NO	
8	Rack 1 North Area B2-4	16.3	OC	YES	YES NO	
9	Over flow AFFF B2-8	16.8	OC	YES	YES NO	
10	Expansion Vessel AFFF B2-3	16.0	OC	YES	YES NO	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	19.0	OC	YES	YES NO	
2	Transformer Main	19.0	OC	YES	YES NO	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	16.5	OC	YES	YES NO	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	17.7	OC	YES	YES NO	
2	Offices B4-3	17.7	OC	YES	YES NO	
3	Electrical Room B4-4	17.7	OC	YES	YES NO	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	YES NO	OC	
2	Bearing 3	YES NO	OC	
3	Bearing 4	YES NO	OC	
4	Bearing 5	YES NO	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	YES NO	OC	
2	MP-200A	YES NO	OC	
3	MP-200B	YES NO	OC	
4	MP-200C	YES NO	OC	
5	MP-200D	YES NO	OC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	18.5	OPEN	YES NO	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC	NO	2-8-19	
2	Maintenance Shop Drive Way #8	OC	NO	2-8-19	
3	West Side Power Block by VS-3 # 9	OC	NO	2-8-19	
4	West Side Power Block by VS-1 # 10	OC	NO	2-8-19	
5	West Side Cooling Tower by VS-4 # 11	OC	NO	2-8-19	
6	West side Cooling Tower by VS-4 # 12	OC	NO	2-8-19	
7	N.W. Corner Chemical Storage #1	OC	NO	2-8-19	
8	N.E. Corner Chemical Storage # 2	OC	NO	2-8-19	
9	East Side W.T. by Multimedia Filters # 3	OC	NO	2-8-19	
10	East Side W.T. by Multimedia Filters # 5	OC	NO	2-8-19	
11	North Side Bldg 10 # 6	OC	NO	2-8-19	
12	Between MP-44's and Water Treat # 4	OC	NO	2-8-19	
13	West side Power Block Valve Shed #1	OC	NO	2-8-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	YES NO	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 2-13-19		
Operator: Caleb Sowards	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☒			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 135			
Discharge Pressure: 167			
Pump Suction Pressure: 15	Pump Discharge pressure: 187		
Comments: Pump is over pressurizing			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 23:45			
Pump Suction Pressure: 15	Pump Discharge pressure: 163		
Stop time: 23:55	Total time running: 10min		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:		
Battery volt Crank 1: 26	Battery volt Crank 2: 26	Battery Condition: good	
Starting hour meter: 55.5	Start time: 24:05		
Oil pressure start: 70	Oil Pressure finish: 96		
Pump Suction Pressure: 15	Pump Discharge pressure: 155		
Coolant temperature after 30 minutes running: 174			
Stop time: 01:35	Stop hour meter: 60.0	Total time running: 30min	
Comments:			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25- "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/ h approximately.			
There is no limit on engine operation for emergency use. (Title 17 CCR 93115 6(a)(4))			

Automated Fire Systems Inspection Checklist

Plant: ALPHA ☐ BETA ☒ Date: 2-8-19 Operator: Collin A.

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	175	OC	✓	Y ☒ N ☐	
2	SG Unit 2 B1-2	175	OC	✓	Y ☒ N ☐	
3	Reheaters B1-3	175	OC	✓	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	175	OC	✓	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	175	OC	✓	Y ☒ N ☐	
6	North Steel Pro B1-6	175	OC	✓	Y ☒ N ☐	
7	HTF Pumps B1-7	175	OC	✓	Y ☒ N ☐	
8	HTF Heaters B1-8	175	OC	✓	Y ☒ N ☐	
9	South Steel Pro B1-9	175	OC	✓	Y ☒ N ☐	
10	Lube Oil B1-10	0	OC	✓	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	0	OC	✓	Y ☒ N ☐	
12	Turbine Bearings B1-12	0	OC	✓	Y ☒ N ☐	

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	175	OC	✓	Y ☒ N ☐	
2	Ullage Area B2-2	175	OC	✓	Y ☒ N ☐	
3	Ullage Structure B2-1.1	175	OC	✓	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	175	OC	✓	Y ☒ N ☐	
5	Overflow Tanks B2-9	175	OC	✓	Y ☒ N ☐	
6	Rack 1 South Area B2-6	175	OC	✓	Y ☒ N ☐	
7	Rack 1 West B2-7	0	OC	✓	Y ☒ N ☐	
8	Rack 1 North Area B2-4	175	OC	✓	Y ☒ N ☐	
9	Over flow AFFF B2-8	175	OC	✓	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	175	OC	✓	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	175	OC	✓	Y ☒ N ☐	
2	Transformer Main	175	OC	✓	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	175	OC	✓	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	OC	✓	Y ☒ N ☐	
2	Offices B4-3	160	OC	✓	Y ☒ N ☐	
3	Electrical Room B4-4	160	OC	✓	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OC	
2	Bearing 3	Y ☒ N ☐	OC	
3	Bearing 4	Y ☒ N ☐	OC	
4	Bearing 5	Y ☒ N ☐	OC	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OC	
2	MP-200A	Y ☒ N ☐	OC	
3	MP-200B	Y ☒ N ☐	OC	
4	MP-200C	Y ☒ N ☐	OC	
5	MP-200D	Y ☒ N ☐	OC	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	175	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OC	✓	2-4-19	
2	Maintenance Shop Drive Way #8	OC	✓	2-8-19	
3	West Side Power Block by VS-3 # 9	OC	✓	2-8-19	
4	West Side Power Block by VS-1 # 10	OC	✓	2-8-19	
5	West Side Cooling Tower by VS-4 # 11	OC	✓	2-8-19	
6	West side Cooling Tower by VS-4 # 12	OC	✓	2-8-19	
7	N.W. Corner Chemical Storage #1	OC	✓	2-8-19	
8	N.E. Corner Chemical Storage # 2	OC	✓	2-8-19	
9	East Side W.T. by Multimedia Filters # 3	OC	✓	2-8-19	
10	East Side W.T. by Multimedia Filters # 5	OC	✓	2-8-19	
11	North Side Bldg 10 # 6	OC	✓	2-8-19	
12	Between MP-44's and Water Treat # 4	OC	✓	2-	
13	West side Power Block Valve Shed #1	OC	✓	2-8-19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information	
Plant: Alpha ☐ Beta ☒	Date: 2-3-19
Operator: Caleb Saunders	*To be completed each time unit is operated.
Reason for running pumps: Weekly test ☒ Maintenance ☐ Emergency ☐	
Jockey Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Check the jockey pump on pressure drop. Start up pressure: 155	
Discharge Pressure: 167	
Pump Suction Pressure: 15	Pump Discharge pressure: 167
Comments:	
Electric Pump	
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒	
Start the pump on pressure drop. Start up pressure: 145	
Start time: 0155	
Pump Suction Pressure: 15	Pump Discharge pressure: 163
Stop time: 0205	Total time running 10 min
Comments:	
Diesel Pump	
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒	
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:
Battery volt Crank 1: 26 Battery volt Crank 2: 26	Battery Condition: good
Starting hour meter: 55.1	Start time: 0210
Oil pressure start: 68	Oil Pressure finish: 45
Pump Suction Pressure: 5	Pump Discharge pressure: 165
Coolant temperature after 30 minutes running: 178	
Stop time: 0241	Stop hour meter: 55.5
Total time running: 30 min	
Comments: oil Leak timing chain cover	
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).	
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.	
Note: Fuel consumption 27 gal/ h approximately.	
There is no limit on engine operation for emergency use (Title 17 CCR 93115.6(a)(4))	

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐

BETA ☒

Date:

2/2/19

Operator

PLAZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	OK	Yes	Y ☒ N ☐	
2	SG Unit 2 B1-2	160	OK	Yes	Y ☒ N ☐	
3	Reheaters B1-3	160	OK	Yes	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	160	OK	Yes	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	160	OK	Yes	Y ☒ N ☐	
6	North Steel Pro B1-6	160	OK	Yes	Y ☒ N ☐	
7	HTF Pumps B1-7	160	OK	Yes	Y ☒ N ☐	
8	HTF Heaters B1-8	160	OK	Yes	Y ☒ N ☐	
9	South Steel Pro B1-9	160	OK	Yes	Y ☒ N ☐	
10	Lube Oil B1-10	0	OK	Yes	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	0	OK	Yes	Y ☒ N ☐	OUTAGE CLOSING
12	Turbine Bearings B1-12	0	OK	Yes	Y ☒ N ☐	OUTAGE CLOSING

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	OK	Yes	Y ☒ N ☐	
2	Ullage Area B2-2	160	OK	Yes	Y ☒ N ☐	
3	Ullage Structure B2-11	160	OK	Yes	Y ☒ N ☐	
4	Rack 1 Middle Area B2-5	160	OK	Yes	Y ☒ N ☐	
5	Overflow Tanks B2-9	160	OK	Yes	Y ☒ N ☐	
6	Rack 1 South Area B2-6	160	OK	Yes	Y ☒ N ☐	
7	Rack 1 West B2-7	0	OK	Yes	Y ☒ N ☐	MECHANICAL ISSUE
8	Rack 1 North Area B2-4	160	OK	Yes	Y ☒ N ☐	
9	Overflow AFFF B2-8	160	OK	Yes	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-3	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OK	Yes	Y ☒ N ☐	
2	Transformer Main	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	OK	Yes	Y ☒ N ☐	
2	Offices B4-3	160	OK	Yes	Y ☒ N ☐	
3	Electrical Room B4-4	160	OK	Yes	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OK	
2	Bearing 3	Y ☒ N ☐	OK	
3	Bearing 4	Y ☒ N ☐	OK	
4	Bearing 5	Y ☒ N ☐	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OK	
2	MP-200A	Y ☒ N ☐	OK	
3	MP-200B	Y ☒ N ☐	OK	
4	MP-200C	Y ☒ N ☐	OK	
5	MP-200D	Y ☒ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	0	Y ☒ N ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	Yes		
2	Maintenance Shop Drive Way #8	OK	Yes		
3	West Side Power Block by VS-3 # 9	OK	Yes		
4	West Side Power Block by VS-1 # 10	OK	Yes		
5	West Side Cooling Tower by VS-4 # 11	OK	Yes		
6	West side Cooling Tower by VS-4 # 12	OK	Yes		
7	N.W. Corner Chemical Storage #1	OK	Yes		
8	N.E. Corner Chemical Storage #2	OK	Yes		
9	East Side W.T. by Multimedia Filters # 3	OK	Yes		
10	East Side W.T. by Multimedia Filters # 5	OK	Yes		
11	North Side Bldg 10 # 6	OK	Yes		
12	Between MP-444's and Water Treat # 4	OK	Yes		
13	West side Power Block Valve Shed #1	OK	Yes		

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	

ABENGOA

Mojave Solar LLC

Fire Pump Weekly Test Log

General Information			
Plant:	Alpha ☐ Beta ☒	Date:	1/26/19
Operator:	PLAZA	*To be completed each time unit is operated.	
Reason for running pumps:	Weekly test ☒ Maintenance ☐ Emergency ☐		
Jockey Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Check the jockey pump on pressure drop. Start up pressure:	155		
Discharge Pressure:	165		
Pump Suction Pressure:	Pump Discharge pressure: 165		
Comments:			
Electric Pump			
Pre-start Inspection:	Electrical Feed ☒ Mechanical ☒ Valves ☒		
Start the pump on pressure drop. Start up pressure:	145		
Start time:	1935		
Pump Suction Pressure:	17	Pump Discharge pressure:	155
Stop time:	1936	Total time running	1 MINUTE
Comments:			
Diesel Pump			
Pre-start Inspection:	Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒		
Fuel level > 2/3:	Yes ☒ No ☐	Monthly Fuel Consumption:	
Battery volt Crank 1:	27	Battery volt Crank 2:	27
Starting hour meter:	54.3	Battery Condition:	Good
Oil pressure start:	64	Start time:	1940
Oil pressure finish:	44	Oil Pressure finish:	44
Pump Suction Pressure:	27	Pump Discharge pressure:	153
Coolant temperature after 30 minutes running:			
Stop time:	2010	Stop hour meter:	54.8
		Total time running:	30 MINUTES
Comments: OIL LEAKS, LOW OIL PRESSURE ALARMING IN.			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 "Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above. Note: Fuel consumption 27 gal/h approximately. There is no limit on engine operation for emergency use. [Title 17 CCR 93115.6(a)(4)]			

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐

BETA ☒

Date:

1/26/19

Operator

PURZA

Valve Shed # 1 by Condenser

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	SG Unit 1 B1-1	160	OK	Yes	Y ☒ N ☐	
2	SG Unit 2 B1-2	160	OK	Yes	Y ☒ N ☐	
3	Reheaters B1-3	160	OK	Yes	Y ☒ N ☐	
4	Rack 2 West HTF B1-4	160	OK	Yes	Y ☒ N ☐	
5	Rack 2 East HTF B1-5	160	OK	Yes	Y ☒ N ☐	
6	North Steel Pro B1-6	160	OK	Yes	Y ☒ N ☐	
7	HTF Pumps B1-7	160	OK	Yes	Y ☒ N ☐	
8	HTF Heaters B1-8	160	OK	Yes	Y ☒ N ☐	
9	South Steel Pro B1-9	160	OK	Yes	Y ☒ N ☐	
10	Lube Oil B1-10	0	OK	Yes	Y ☒ N ☐	
11	Turbine Hose Stations B1-11	0	OK	Yes	Y ☒ N ☐	OUTAGE
12	Turbine Bearings B1-12	0	OK	Yes	Y ☒ N ☐	OUTAGE

Valve Shed # 2 by Overflow

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Expansion Vessels B2-1	160	OK	Yes	Y ☒ N ☐	
2	Ullage Area B2-2	160	OK	Yes	Y ☒ N ☐	
3	Ullage Structure B2-3	160	OK	Yes	Y ☒ N ☐	
4	Rack 1 Middle Area B2-4	160	OK	Yes	Y ☒ N ☐	
5	Overflow Tanks B2-5	160	OK	Yes	Y ☒ N ☐	
6	Rack 1 South Area B2-6	160	OK	Yes	Y ☒ N ☐	
7	Rack 1 West B2-7	0	OK	Yes	Y ☒ N ☐	OUTAGE
8	Rack 1 North Area B2-8	160	OK	Yes	Y ☒ N ☐	
9	Over flow AFFF B2-9	160	OK	Yes	Y ☒ N ☐	
10	Expansion Vessel AFFF B2-10	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Transformer Aux	160	OK	Yes	Y ☒ N ☐	
2	Transformer Main	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	Yes	Y ☒ N ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Vlv. Pos.	Signage	Locked	Comments
1	Control Room B4-5	160	OK	Yes	Y ☒ N ☐	
2	Offices B4-6	160	OK	Yes	Y ☒ N ☐	
3	Electrical Room B4-7	160	OK	Yes	Y ☒ N ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Vlv. Pos.	Comments
1	Bearing 2	Y ☒ N ☐	OK	
2	Bearing 3	Y ☒ N ☐	OK	
3	Bearing 4	Y ☒ N ☐	OK	
4	Bearing 5	Y ☒ N ☐	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Vlv. Pos.	Comments
1	MP-201	Y ☒ N ☐	OK	
2	MP-200A	Y ☒ N ☐	OK	
3	MP-200B	Y ☒ N ☐	OK	
4	MP-200C	Y ☒ N ☐	OK	
5	MP-200D	Y ☒ N ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	O/C	Locked	Comments
1	Fire Pump House Deluge	160	0	Y ☒ N ☐	

PV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK	Yes	1/26/19	
2	Maintenance Shop Drive Way #8	OK	Yes	1/26/19	
3	West Side Power Block by VS-3 # 9	OK	Yes	1/26/19	
4	West Side Power Block by VS-1 # 10	OK	Yes	1/26/19	
5	West Side Cooling Tower by VS-4 # 11	OK	Yes	1/26/19	
6	West side Cooling Tower by VS-4 # 12	OK	Yes	1/26/19	
7	N.W. Corner Chemical Storage #1	OK	Yes	1/26/19	
8	N.E. Corner Chemical Storage # 2	OK	Yes	1/26/19	
9	East Side W.T. by Multimedia Filters # 3	OK	Yes	1/26/19	
10	East Side W.T. by Multimedia Filters # 5	OK	Yes	1/26/19	
11	North Side Bldg 10 # 6	OK	Yes	1/26/19	
12	Between MP-44's and Water Treat # 4	OK	Yes	1/26/19	
13	West side Power Block Valve Shed #1	OK	Yes	1/26/19	

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Y ☒ N ☐	ALL CLEAR

Fire Pump Weekly Test Log

General Information			
Plant: Alpha ☐ Beta ☒	Date: 1/19/19		
Operator: Plaza	*To be completed each time unit is operated.		
Reason for running pumps: Weekly test ☒ Maintenance ☒ Emergency ☒			
Jockey Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Check the jockey pump on pressure drop. Start up pressure: 155			
Discharge Pressure: 165			
Pump Suction Pressure:	Pump Discharge pressure:		
Comments:			
Electric Pump			
Pre-start Inspection: Electrical Feed ☒ Mechanical ☒ Valves ☒			
Start the pump on pressure drop. Start up pressure: 145			
Start time: 2041			
Pump Suction Pressure: 17	Pump Discharge pressure: 155		
Stop time: 2042	Total time running: 1 MINUTE		
Comments:			
Diesel Pump			
Pre-start Inspection: Coolant ☒ Oil ☒ Mechanical ☒ Valves ☒ Water Jacket Heater ☒			
Fuel level > 2/3: Yes ☒ No ☐	Monthly Fuel Consumption:		
Battery volt Crank 1: 27	Battery volt Crank 2: 27	Battery Condition: GOOD	
Starting hour meter: 53.7	Start time: 2050		
Oil pressure start: 64	Oil Pressure finish:		
Pump Suction Pressure: 22	Pump Discharge pressure: 153		
Coolant temperature after 30 minutes running: 176			
Stop time: 2120	Stop hour meter: 54.7	Total time running: 30 MINUTES	
Comments: ENGINE HAS OIL LEAKS, LOW OIL PRESSURE AGAIN 15 IN.			
Sulfur Concentrations (less than or equal to 0.0015% on a weight per weight basis).			
This new direct drive fire pump engine shall be limited to use for emergency fire suppression, defined as in response to a fire or due to low fire water pressure. In addition, this engine shall be operated no more than 30 minutes in any one hour and no more than 10 hours per year for initial start-up testing and compliance demonstrations. Additionally, this engine shall not be operated more than the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25-"Standards for the Inspection, Testing, and Maintenance of Water Based Fire Systems" (current edition). The hours of operation for source testing will not be counted towards either of the allowable annual limits above.			
Note: Fuel consumption 27 gal/h approximately.			
There is no limit on engine operation for emergency use. (Title 17 CCR 93115 6(a)(4))			

Automated Fire Systems Inspection Checklist

Plant ALPHA ☐

BETA ☒

Date:

1/20/19

Operator

Plaza

Valve Shed # 1 by Condenser

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	SG Unit 1	B1.1	OK	Yes	Yes ☐	
2	SG Unit 2	B1.2	OK	Yes	Yes ☐	
3	Reheaters	B1.3	OK	Yes	Yes ☐	
4	Rack 2 West HTF	B1.4	OK	Yes	Yes ☐	
5	Rack 2 East HTF	B1.5	OK	Yes	Yes ☐	
6	North Steel Pro	B1.6	OK	Yes	Yes ☐	
7	HTF Pumps	B1.7	OK	Yes	Yes ☐	
8	HTF Heaters	B1.8	OK	Yes	Yes ☐	
9	South Steel Pro	B1.9	OK	Yes	Yes ☐	
10	Lube Oil	B1.10	OK	Yes	Yes ☐	
11	Turbine Hose Stations	B1.11	OK	Yes	Yes ☐	TURBINE CLEANANCE
12	Turbine Bearings	B1.12	OK	Yes	Yes ☐	TURBINE CLEANANCE

Valve Shed # 2 by Overflow

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Expansion Vessels	B2.1	OK	Yes	Yes ☐	
2	Ullage Area	B2.2	OK	Yes	Yes ☐	
3	Ullage Structure	B2.11	OK	Yes	Yes ☐	
4	Rack 1 Middle Area	B2.5	OK	Yes	Yes ☐	
5	Overflow Tanks	B2.9	OK	Yes	Yes ☐	
6	Rack 1 South Area	B2.6	OK	Yes	Yes ☐	
7	Rack 1 West	B2.7	OK	Yes	Yes ☐	
8	Rack 1 North Area	B2.4	OK	Yes	Yes ☐	
9	Over flow AFFF	B2.8	OK	Yes	Yes ☐	
10	Expansion Vessel AFFF	B2.3	OK	Yes	Yes ☐	

Valve Shed # 3 by Bldg 35 GE Electrical Bldg

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Transformer Aux	170	OK	Yes	Yes ☐	
2	Transformer Main	170	OK	Yes	Yes ☐	

Valve Shed # 4 by Cooling Tower West Side

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Cooling Tower West Side	160	OK	Yes	Yes ☐	

Valve Shed # 5 by Control Bldg 10

No.	System	PSI	Viv. Pos.	Signage	Locked	Comments
1	Control Room	B4.5	OK	Yes	Yes ☐	
2	Offices	B4.3	OK	Yes	Yes ☐	
3	Electrical Room	B4.4	OK	Yes	Yes ☐	

Turbine Sprinkler Valves (These are to be locked in the open position)

No.	System	Locked	Viv. Pos.	Comments
1	Bearing 2	Yes ☐	OK	
2	Bearing 3	Yes ☐	OK	
3	Bearing 4	Yes ☐	OK	
4	Bearing 5	Yes ☐	OK	

HTF Deluge System Valves (To be Locked in the Open Position)

No.	System	Locked	Viv. Pos.	Comments
1	MP-201	Yes ☐	OK	
2	MP-200A	Yes ☐	OK	
3	MP-200B	Yes ☐	OK	
4	MP-200C	Yes ☐	OK	
5	MP-200D	Yes ☐	OK	

Fire Pump House Deluge System

No.	System	PSI	Q/C	Locked	Comments
1	Fire Pump House Deluge	165	0	Yes ☐	

PIV Checks

No.	System	Position	Cycled	Date Cycled	Comments
1	Maintenance Shop Drive Way #7	OK			
2	Maintenance Shop Drive Way #8	OK			
3	West Side Power Block by VS-3 # 9	OK			
4	West Side Power Block by VS-1 # 10	OK			
5	West Side Cooling Tower by VS-4 # 11	OK			
6	West side Cooling Tower by VS-4 # 12	OK			
7	N.W. Corner Chemical Storage #1	OK			
8	N.E. Corner Chemical Storage #2	OK			
9	East Side W.T. by Multimedia Filters # 3	OK			
10	East Side W.T. by Multimedia Filters # 5	OK			
11	North Side Bldg 1D # 6	OK			
12	Between MP-444's and Water Treat # 4	OK			
13	West side Power Block Valve Shed #1	OK			

To Be Cycled First Saturday of Every Month

No.	System	Debris	Comments / Actions
1	Transformer Yard Refuse Check	Yes ☐	