



1/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 1
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 1, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 1
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
July 1, 2022 - December 31, 2022**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 1
MATS Semiannual Report
2nd Half 2022**

ORIS Code: 6041

Facility Registration System ID: 110012142127

EGU ID: Unit 1

Spurlock Unit 1 is a pulverized coal-fired and wall-fired boiler rated at 3500 mmBtu/hr. Control equipment includes low-NO_x burners, SCR, ESP, WFGD, and WESP.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
SO ₂	0.20 lb/MMBtu	30-Day Rolling	SO ₂ CEMS
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system, SO₂ CEMS and PM CEMS during periods of startup and shutdown.

EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 1 burns bituminous coal and fuel oil for startup and stabilization.

EKPC has determined neither to be a waste.

No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	Fuel Oil Used (gals)
Jul-22	76,705	17,342
Aug-22	83,302	12,220
Sep-22	56,461	35,445
Oct-22	56,949	37,597
Nov-22	61,274	8,197
Dec-22	65,713	52,203

Boiler Tune-up Work Practice Standards

Date Last Completed: 6/23/2020

No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT01
Parameter(s): AKHG#T_M, PM#MM_M, SO2#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT01
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	07/28/2022 09:00	07/28/2022 10:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
2	07/28/2022 12:00	07/28/2022 15:59	0d - 4h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
3	07/28/2022 17:00	07/28/2022 20:59	0d - 4h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
4	07/29/2022 05:00	07/29/2022 07:59	0d - 3h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
5	08/16/2022 12:00	08/16/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
6	09/28/2022 08:00	09/28/2022 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
7	10/05/2022 07:00	10/05/2022 07:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
8	11/03/2022 13:00	11/03/2022 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
9	12/17/2022 05:00	12/17/2022 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 9
Total Duration: 0d - 18h - 0m

Source: UNIT01
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
10	07/11/2022 04:00	07/11/2022 06:59	0d - 3h - 0m	04 - Monitor Failure 58 - Continuous Emissions Monitor Maintenance.
11	07/28/2022 09:00	07/28/2022 10:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
12	07/28/2022 12:00	07/28/2022 15:59	0d - 4h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
13	07/28/2022 17:00	07/28/2022 20:59	0d - 4h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
14	07/29/2022 05:00	07/29/2022 07:59	0d - 3h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
15	08/16/2022 12:00	08/16/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
16	09/28/2022 08:00	09/28/2022 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT01
 Parameter: PM#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
17	10/05/2022 07:00	10/05/2022 07:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
18	11/03/2022 13:00	11/03/2022 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 9
Total Duration: 0d - 20h - 0m

Source: UNIT01
 Parameter: SO2#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
19	07/28/2022 09:00	07/28/2022 10:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
20	07/28/2022 12:00	07/28/2022 15:59	0d - 4h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
21	07/28/2022 17:00	07/28/2022 20:59	0d - 4h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
22	07/29/2022 05:00	07/29/2022 07:59	0d - 3h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
23	08/16/2022 12:00	08/16/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
24	09/28/2022 08:00	09/28/2022 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
25	10/05/2022 07:00	10/05/2022 07:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
26	11/03/2022 13:00	11/03/2022 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 8
Total Duration: 0d - 17h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
Time Online Criteria: 1 minute(s)

Source: UNIT01
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	07/11/2022 04:00	07/11/2022 06:59	0d - 3h - 0m	04 - Monitor Failure 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 1
Total Duration: 0d - 3h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
Time Online Criteria: 1 minute(s)

No Downtime found during the report period for:

Source (s): UNIT01
Parameter(s): AKHG#T_M, SO2#MM_M
Reason Code(s): 04, 10, 11, 13

* Indicates duration incident could have additional data prior to the start date or following the end date.

SIGNATURE BLOCK

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

BY *Jerry Purvis* 1/27/2023
Authorized Signature Date

Jerry Purvis Vice President, Environmental Affairs
Typed or Printed Name of Signatory Title of Signatory



1/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 2
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 2, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 2
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
July 1, 2022 - December 31, 2022**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 2
MATS Semiannual Report
2nd Half 2022**

ORIS Code: 6041

Facility Registration System ID: 110012142127

EGU ID: Unit 2

Spurlock Unit 2 is a tangentially-fired and pulverized coal-fired boiler rated at 5600 mmBtu/hr. Control equipment includes low-NO_x burners, SCR, ESP, WFGD, and WESP.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
SO ₂	0.20 lb/MMBtu	30-Day Rolling	SO ₂ CEMS
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system, SO₂ CEMS and PM CEMS during periods of startup and shutdown.

EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 2 burns bituminous coal and fuel oil for startup and stabilization.

EKPC has determined neither to be a waste.

No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	Fuel Oil Used (gals)
Jul-22	147,547	730
Aug-22	154,313	840
Sep-22	100,118	20,185
Oct-22	113,876	66,315
Nov-22	111,370	35,557
Dec-22	121,249	23,057

Boiler Tune-up Work Practice Standards

Date Last Completed: 12/22/2020

No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT02
Parameter(s): AKHG#T_M, PM#MM_M, SO2#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT02
 Parameter: AKHG#T_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	07/28/2022 04:00	07/28/2022 05:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	07/29/2022 04:00	07/29/2022 09:59	0d - 6h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	09/09/2022 14:00	09/09/2022 14:59	0d - 1h - 0m	02 - Unit Shutdown 54 - Lost Power to CEMS.
4	10/10/2022 08:00	10/10/2022 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
5	10/10/2022 10:00	10/10/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
6	10/24/2022 10:00	10/25/2022 10:59	1d - 1h - 0m	10 - Monitor Equipment Malfunction 55 - Polling/Software Problem
7	11/07/2022 09:00	11/07/2022 09:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
Number of Events:			7	
Total Duration:			1d - 13h - 0m	

Source: UNIT02
 Parameter: PM#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
8	07/28/2022 04:00	07/28/2022 05:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
9	07/29/2022 04:00	07/29/2022 09:59	0d - 6h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
10	10/10/2022 08:00	10/10/2022 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
11	10/10/2022 10:00	10/10/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
12	11/05/2022 08:00	11/05/2022 08:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			5	
Total Duration:			0d - 11h - 0m	

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT02
Parameter: SO2#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
13	07/28/2022 04:00	07/28/2022 05:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
14	07/29/2022 04:00	07/29/2022 09:59	0d - 6h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
15	10/10/2022 08:00	10/10/2022 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
16	10/10/2022 10:00	10/10/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 4
Total Duration: 0d - 10h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT02
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	07/28/2022 04:00	07/28/2022 05:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	07/29/2022 04:00	07/29/2022 09:59	0d - 6h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	10/24/2022 10:00	10/25/2022 10:59	1d - 1h - 0m	10 - Monitor Equipment Malfunction 55 - Polling/Software Problem
Number of Events:			3	
Total Duration:			1d - 9h - 0m	

Source: UNIT02
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
4	07/28/2022 04:00	07/28/2022 05:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
5	11/05/2022 08:00	11/05/2022 08:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			2	
Total Duration:			0d - 3h - 0m	

Source: UNIT02
Parameter: SO2#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
6	07/28/2022 04:00	07/28/2022 05:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			1	
Total Duration:			0d - 2h - 0m	

* Indicates duration incident could have additional data prior to the start date or following the end date.

SIGNATURE BLOCK

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

BY *Jerry Purvis* 1/27/2023
Authorized Signature Date

Jerry Purvis Vice President, Environmental Affairs
Typed or Printed Name of Signatory Title of Signatory



1/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 3
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 3, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 3
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
July 1, 2022 - December 31, 2022**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 3
MATS Semiannual Report
2nd Half 2022**

ORIS Code: 6041
Facility Registration System ID: 110012142127
EGU ID: Unit 3

Spurlock Unit 3 is a coal-fired circulating fluidized bed boiler rated at 2500 mmBtu/hr. Control equipment includes a SNCR, dry lime scrubber, and baghouse.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
HCl	0.020 lb/MWh	NA	Every 36 months (LEE Status)
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system and PM CEMS during periods of startup and shutdown. EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 3 burns bituminous coal, tire derived fuel (TDF) and fuel oil for startup and stabilization. EKPC has determined none of the above fuels to be a waste. TDF is not a waste pursuant to 40 CFR 241.4(a)(i), as confirmed by the TDF supplier.

No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	TDF Burned (tons)	Fuel Oil Used (gals)
Jul-22	72,408	2,188	0
Aug-22	73,958	1,826	0
Sep-22	62,593	2,512	0
Oct-22	56,416	2,101	41,713
Nov-22	58,454	1,479	0
Dec-22	64,802	1,710	5,371

Boiler Tune-up Work Practice Standards

Date Last Completed: 6/8/2021

No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT03
Parameter(s): AKHG#T_M, PM#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT03
 Parameter: AKHG#T_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	07/05/2022 09:00	07/05/2022 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	07/10/2022 07:00	07/10/2022 07:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	07/11/2022 12:00	07/11/2022 13:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
4	07/12/2022 10:00	07/12/2022 10:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
5	08/01/2022 08:00	08/01/2022 08:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
6	08/07/2022 05:00	08/07/2022 05:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
7	08/23/2022 06:00	08/23/2022 06:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
8	08/23/2022 12:00	08/23/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
9	08/24/2022 12:00	08/24/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
10	09/13/2022 13:00	09/13/2022 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
11	10/01/2022 19:00	10/01/2022 19:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
12	10/09/2022 09:00	10/09/2022 09:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
13	10/11/2022 09:00	10/11/2022 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
14	10/12/2022 10:00	10/12/2022 10:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
15	10/13/2022 06:00	10/13/2022 06:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
16	10/14/2022 07:00	10/14/2022 07:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
17	10/17/2022 09:00	10/17/2022 09:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
18	10/18/2022 05:00	10/18/2022 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
19	10/18/2022 16:00	10/18/2022 16:59	0d - 1h - 0m	02 - Unit Shutdown 50 - Minimum data requirement not met for hour due to shutdown.
20	10/20/2022 02:00	10/20/2022 02:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT03
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
21	10/24/2022 10:00	10/24/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
22	10/24/2022 12:00	10/24/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
23	11/10/2022 13:00	11/10/2022 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
24	11/27/2022 14:00	11/27/2022 14:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
25	12/21/2022 09:00	12/21/2022 09:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			25	
Total Duration:			1d - 2h - 0m	

Source: UNIT03
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
26	07/05/2022 09:00	07/05/2022 09:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
27	07/10/2022 07:00	07/10/2022 07:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
28	07/11/2022 12:00	07/11/2022 13:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
29	07/12/2022 10:00	07/12/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
30	07/21/2022 18:00	07/22/2022 05:59	0d - 12h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
31	08/01/2022 08:00	08/01/2022 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
32	08/07/2022 05:00	08/07/2022 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
33	08/23/2022 06:00	08/23/2022 06:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
34	08/23/2022 12:00	08/23/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
35	08/24/2022 12:00	08/24/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
36	09/13/2022 13:00	09/13/2022 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT03
 Parameter: PM#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
37	10/01/2022 19:00	10/01/2022 19:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
38	10/11/2022 09:00	10/11/2022 09:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
39	10/12/2022 10:00	10/12/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
40	10/13/2022 06:00	10/13/2022 06:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
41	10/14/2022 07:00	10/14/2022 07:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
42	10/17/2022 09:00	10/17/2022 09:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
43	10/18/2022 05:00	10/18/2022 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
44	10/24/2022 10:00	10/24/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
45	10/24/2022 12:00	10/24/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
46	11/10/2022 13:00	11/10/2022 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
47	11/27/2022 14:00	11/27/2022 14:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
48	12/21/2022 09:00	12/21/2022 09:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 23
Total Duration: 1d - 11h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT03
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	07/05/2022 09:00	07/05/2022 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	07/10/2022 07:00	07/10/2022 07:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	07/11/2022 12:00	07/11/2022 13:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
4	07/12/2022 10:00	07/12/2022 10:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
5	08/01/2022 08:00	08/01/2022 08:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
6	08/07/2022 05:00	08/07/2022 05:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
7	08/23/2022 06:00	08/23/2022 06:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
8	10/09/2022 09:00	10/09/2022 09:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
9	10/11/2022 09:00	10/11/2022 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
10	10/12/2022 10:00	10/12/2022 10:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
11	10/13/2022 06:00	10/13/2022 06:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
12	10/14/2022 07:00	10/14/2022 07:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
13	10/17/2022 09:00	10/17/2022 09:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 13
Total Duration: 0d - 14h - 0m

Source: UNIT03
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
14	07/21/2022 18:00	07/22/2022 05:59	0d - 12h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
15	12/21/2022 09:00	12/21/2022 09:59	0d - 1h - 0m	10 - Monitor Equipment Malfunction

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
Time Online Criteria: 1 minute(s)

Source: UNIT03
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
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58 - Continuous Emissions Monitor Maintenance.

Number of Events: 2
Total Duration: 0d - 13h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

**Spurlock Generating Station Unit 3
MATS Semiannual Report
2nd Half 2022**

Summary of HCl Quarterly Stack Testing

Test Method: EPA Method 26A
Emission Limit: 0.020 lb/MWh

Spurlock Unit 3 qualified for LEE Status on 2/1/2018. Test results for the last 3 years are listed below.

Stack Test Results

Year	Test Dates	Test Results	50% Limit Threshold
2020	12/22/2020	0.0013 lb/MWh	0.010 lb/MWh
2021	No tests required. Qualified for LEE Status.		0.010 lb/MWh
2022	No tests required. Qualified for LEE Status.		0.010 lb/MWh

No deviations during the reporting period. No operational changes since the last stack test that could increase emissions.

SIGNATURE BLOCK

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

BY Jerry Purvis

1/27/2023

Authorized Signature

Date

Jerry Purvis

Vice President, Environmental Affairs

Typed or Printed Name of Signatory

Title of Signatory



1/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 4
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 4, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 4
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
July 1, 2022 - December 31, 2022**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 4
MATS Semiannual Report
2nd Half 2022**

ORIS Code: 6041
Facility Registration System ID: 110012142127
EGU ID: Unit 4

Spurlock Unit 4 is a coal-fired circulating fluidized bed boiler rated at 2800 mmBtu/hr. Control equipment includes a baghouse, dry lime scrubber and SNCR.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
HCl	0.020 lb/MWh	NA	Every 36 months (LEE Status)
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system and PM CEMS during periods of startup and shutdown. EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 4 burns bituminous coal and fuel oil for startup and stabilization. EKPC has determined none of the above fuels to be a waste. No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	Fuel Oil Used (gals)
Jul-22	75,720	59,923
Aug-22	80,895	0
Sep-22	72,814	0
Oct-22	47,640	0
Nov-22	20,839	88,548
Dec-22	71,086	25,854

Boiler Tune-up Work Practice Standards

Date Last Completed: 6/23/2020*

*The unit was offline 3/14/2020 - 6/7/2020. The tune-up work practice requirements were completed within 30 days of the unit coming back online.

No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT04
Parameter(s): AKHG#T_M, PM#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT04
 Parameter: AKHG#T_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	08/09/2022 13:00	08/09/2022 15:59	0d - 3h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
2	08/15/2022 12:00	08/15/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
3	08/18/2022 05:00	08/18/2022 06:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
4	08/19/2022 10:00	08/19/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
5	10/07/2022 05:00	10/07/2022 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
6	11/21/2022 08:00	11/21/2022 09:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
7	11/27/2022 14:00	11/27/2022 14:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
8	12/03/2022 05:00	12/03/2022 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
9	12/14/2022 15:00	12/14/2022 16:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
10	12/23/2022 17:00	12/23/2022 17:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			10	
Total Duration:			0d - 15h - 0m	

Source: UNIT04
 Parameter: PM#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
11	08/09/2022 13:00	08/09/2022 15:59	0d - 3h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
12	08/15/2022 12:00	08/15/2022 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
13	08/18/2022 05:00	08/18/2022 06:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
14	08/19/2022 10:00	08/19/2022 10:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
15	10/07/2022 05:00	10/07/2022 05:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
16	11/21/2022 08:00	11/21/2022 09:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT04
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
17	11/27/2022 14:00	11/27/2022 14:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
18	12/03/2022 05:00	12/03/2022 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
19	12/14/2022 15:00	12/14/2022 16:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			9	
Total Duration:			0d - 14h - 0m	

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 07/01/2022 00:00 Through 12/31/2022 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT04
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	08/18/2022 05:00	08/18/2022 06:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 1
Total Duration: 0d - 2h - 0m

Source: UNIT04
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
2	10/07/2022 05:00	10/07/2022 05:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 1
Total Duration: 0d - 1h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

SUMMARY REPORT
GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: Hg Recorded in hours using Hg sorbent trap monitoring system

Reporting Period Date: From: 7/1/2022 To 1/1/2023
 Emission Limitation: 1.2 lb/Tbtu 30 Day Rolling Average
 Company Name: East Kentucky Power Cooperative
 Address: Spurlock Generating Station
 Maysville, Kentucky 41056

Monitor Manufacturer: APEX Model: Appendix K
 Date of Latest: CMS Certification: 6/3/2009

Process Unit(s) Description: Spurlock Unit 4 (300 Megawatts)
 Coal Fired Unit

Total Source Operating Time in Reporting Period: 3681 24
 Hours Minutes

No changes in the CMS, processes, or controls have occurred since the last reporting period.

EMISSION DATA SUMMARY
(30 Day Rolling Periods)

1. Duration of Excess Emissions in Reporting Period Due To:
 - A. Startup/Shutdown: 0
 - B. Control Equipment Problems: 0
 - C. Process Problems: 0
 - D. Other Known Causes: 0
 - E. Unknown Causes: 0
2. Total Duration Excess Emission: 0
3. (Total Dur. Excess Emiss)
 ----- X 100 = 0
 (Total Source Oper. Time)

CMS PERFORMANCE SUMMARY
(1 HOUR PERIODS)

1. CMS Downtime in Reporting Period Due To:
 - A. Monitor Equipment Malf: 0
 - B. Non-Monitor Equipment Malf: 2
 - C. QA/QC Calibration: 13
 - D. Other Known Causes: 0
 - E. Unknown Causes: 0
2. Total CMS Downtime: 15
3. (Total CMS Downtime)
 ----- X 100 = 0.41
 (Total Source Oper. Time)

On a separate Page, Describe any changes which have occurred since the last quarterly submittal concerning CMS, Process, Controls

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
 Title: Air Quality Manager

Signature: Kevin Moore

Date: 1/27/2023

SUMMARY REPORT
GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: Filterable PM Recorded in hours using PM CEMS

Reporting Period Date: From: 7/1/2022 To 1/1/2023
Emission Threshold: 0.030 lb/mmbtu PM Recorded in 30 Day Rolling Averages
Company Name East Kentucky Power Cooperative
Address: Spurlock Generating Station
 Maysville, Kentucky 41056

Monitor Manufacturer: Sick Maihak Model: FWE200
Date of Latest: CMS Certification: 9/6/2013 CMS Audit: N/A

Process Unit(s) Description: Spurlock Unit 4 (300 Megawatts)
 Coal Fired Unit

Total Source Operating Time in Reporting Period: 3645 0
 Hours Minutes

EMISSION DATA SUMMARY (30 DAY ROLLING PERIODS)		CMS PERFORMANCE SUMMARY (1 HOUR PERIODS)	
1. Duration of Excess Emissions in Reporting Period Due To:		1. CMS Downtime in Reporting Period Due To:	
A. Startup/Shutdown:	0	A. Monitor Equipment Malf:	0
B. Control Equipment Problems:	0	B. Non-Monitor Equipment Malf:	1
C. Process Problems:	0	C. QA/QC Calibration:	13
D. Other Known Causes:	0	D. Other Known Causes:	0
E. Unknown Causes:	0	E. Unknown Causes:	0
2. Total Duration Excess Emission:	0	2. Total CMS Downtime:	14
3. (Total Dur. Excess Emiss)		3. (Total CMS Downtime)	
----- X 100 =	0	----- X 100 =	0.38
(Total Source Oper. Time)		(Total Source Oper. Time)	

On a separate Page, Describe any changes which have occurred since the last quarterly submittal concerning CMS, Process, Controls

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
Title: Air Quality Manager

Signature: Kevin Moore

Date: 1/27/2023

**Spurlock Generating Station Unit 4
MATS Semiannual Report
2nd Half 2022**

Summary of HCl Quarterly Stack Testing

Test Method: EPA Method 26A
Emission Limit: 0.020 lb/MWh

Spurlock Unit 4 qualified for LEE Status on 1/31/2017. Test results for the last 3 years are listed below.

Stack Test Results

Year	Test Dates	Test Results	50% Limit Threshold
2020	1/13/2020	0.0013 lb/MWh	0.010 lb/MWh
2021	No tests required. Qualified for LEE Status.		0.010 lb/MWh
2022	12/13/2022	0.0037 lb/MWh	0.010 lb/MWh

No deviations during the reporting period. No operational changes since the last stack test that could increase emissions.

SIGNATURE BLOCK

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

BY *Jerry Purvis*

Authorized Signature

1/27/2023

Date

Jerry Purvis

Typed or Printed Name of Signatory

Vice President, Environmental Affairs

Title of Signatory



7/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 1
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 1, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 1
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
January 1, 2023 - June 30, 2023**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 1
MATS Semiannual Report
1st Half 2023**

ORIS Code: 6041

Facility Registration System ID: 110012142127

EGU ID: Unit 1

Spurlock Unit 1 is a pulverized coal-fired and wall-fired boiler rated at 3500 mmBtu/hr. Control equipment includes low-NO_x burners, SCR, ESP, WFGD, and WESP.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
SO ₂	0.20 lb/MMBtu	30-Day Rolling	SO ₂ CEMS
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system, SO₂ CEMS and PM CEMS during periods of startup and shutdown.

EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 1 burns bituminous coal and fuel oil for startup and stabilization.

EKPC has determined neither to be a waste.

No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	Fuel Oil Used (gals)
Jan-23	55,179	15,429
Feb-23	43,153	10,535
Mar-23	42,030	32,570
Apr-23	53,138	34,621
May-23	76,584	36,793
Jun-23	82,935	3,241

Boiler Tune-up Work Practice Standards

Date Last Completed: 10/11/2022

No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT01
Parameter(s): AKHG#T_M, PM#MM_M, SO2#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT01
 Parameter: AKHG#T_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	01/03/2023 07:00	01/03/2023 08:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	01/04/2023 07:00	01/04/2023 07:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	01/10/2023 13:00	01/10/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
4	01/10/2023 15:00	01/10/2023 15:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
5	01/20/2023 14:00	01/20/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
6	03/24/2023 08:00	03/24/2023 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
7	05/03/2023 07:00	05/03/2023 09:59	0d - 3h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
8	05/03/2023 12:00	05/03/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
9	05/03/2023 14:00	05/03/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
10	05/04/2023 13:00	05/04/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
11	06/05/2023 13:00	06/05/2023 14:59	0d - 2h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
12	06/23/2023 12:00	06/23/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 12
Total Duration: 0d - 16h - 0m

Source: UNIT01
 Parameter: PM#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
13	01/04/2023 04:00	01/04/2023 04:59	0d - 1h - 0m	04 - Monitor Failure 58 - Continuous Emissions Monitor Maintenance.
14	01/04/2023 07:00	01/04/2023 07:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
15	01/10/2023 13:00	01/10/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
16	01/10/2023 15:00	01/10/2023 15:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT01
 Parameter: PM#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
17	01/20/2023 14:00	01/20/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
18	03/24/2023 08:00	03/24/2023 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
19	05/03/2023 07:00	05/03/2023 09:59	0d - 3h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
20	05/03/2023 12:00	05/03/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
21	05/03/2023 14:00	05/03/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
22	05/04/2023 13:00	05/04/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
23	06/12/2023 04:00	06/12/2023 06:59	0d - 3h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
24	06/23/2023 12:00	06/23/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 12
Total Duration: 0d - 16h - 0m

Source: UNIT01
 Parameter: SO2#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
25	01/04/2023 04:00	01/04/2023 06:59	0d - 3h - 0m	04 - Monitor Failure 58 - Continuous Emissions Monitor Maintenance.
26	01/04/2023 07:00	01/04/2023 07:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
27	01/10/2023 13:00	01/10/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
28	01/10/2023 15:00	01/10/2023 15:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
29	01/20/2023 14:00	01/20/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
30	03/24/2023 08:00	03/24/2023 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
31	05/03/2023 07:00	05/03/2023 09:59	0d - 3h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
32	05/03/2023 12:00	05/03/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT01
Parameter: SO2#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
33	05/03/2023 14:00	05/03/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
34	05/04/2023 13:00	05/04/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
35	06/23/2023 12:00	06/23/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			11	
Total Duration:			0d - 15h - 0m	

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT01
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	01/03/2023 07:00	01/03/2023 08:59	0d - 2h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	01/04/2023 07:00	01/04/2023 07:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	06/05/2023 13:00	06/05/2023 14:59	0d - 2h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			3	
Total Duration:			0d - 5h - 0m	

Source: UNIT01
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
4	01/04/2023 04:00	01/04/2023 04:59	0d - 1h - 0m	04 - Monitor Failure 58 - Continuous Emissions Monitor Maintenance.
5	06/12/2023 04:00	06/12/2023 06:59	0d - 3h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			2	
Total Duration:			0d - 4h - 0m	

Source: UNIT01
Parameter: SO2#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
6	01/04/2023 04:00	01/04/2023 06:59	0d - 3h - 0m	04 - Monitor Failure 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			1	
Total Duration:			0d - 3h - 0m	

* Indicates duration incident could have additional data prior to the start date or following the end date.

SUMMARY REPORT
 GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: Hg Recorded in hours using Hg sorbent trap monitoring system

Reporting Period Date: From: 1/1/2023 To 7/1/2023
 Emission Limitation: 1.2 lb/Tbtu 30 Day Rolling Average
 Company Name: East Kentucky Power Cooperative
 Address: Spurlock Generating Station
 Maysville, Kentucky 41056

Monitor Manufacturer: APEX Model: Appendix K
 Date of Latest: CMS Certification: 4/9/2014

Process Unit(s) Description: Spurlock Unit 1 (340 Megawatts)
 Coal Fired Unit

Total Source Operating Time in Reporting Period: 3716 18
 Hours Minutes

EMISSION DATA SUMMARY
 (30 Day Rolling Periods)

1. Duration of Excess Emissions in Reporting Period Due To:
 - A. Startup/Shutdown: 0
 - B. Control Equipment Problems: 0
 - C. Process Problems: 0
 - D. Other Known Causes: 0
 - E. Unknown Causes: 0
2. Total Duration Excess Emission: 0
3. (Total Dur. Excess Emiss)
 ----- X 100 = 0
 (Total Source Oper. Time)

CMS PERFORMANCE SUMMARY
 (1 HOUR PERIODS)

1. CMS Downtime in Reporting Period Due To:
 - A. Monitor Equipment Malf: 2
 - B. Non-Monitor Equipment Malf: 3
 - C. QA/QC Calibration: 11
 - D. Other Known Causes: 0
 - E. Unknown Causes: 0
2. Total CMS Downtime: 16
3. (Total CMS Downtime)
 ----- X 100 = 0.43
 (Total Source Oper. Time)

On a separate Page, Describe any changes which have occurred since the last quarterly submittal concerning CMS, Process, Controls

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
 Title: Air Quality Manager

Signature: Kevin Moore

Date: 7/27/2023



7/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 2
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 2, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 2
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
January 1, 2023 - June 30, 2023**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 2
MATS Semiannual Report
1st Half 2023**

ORIS Code: 6041

Facility Registration System ID: 110012142127

EGU ID: Unit 2

Spurlock Unit 2 is a tangentially-fired and pulverized coal-fired boiler rated at 5600 mmBtu/hr. Control equipment includes low-NO_x burners, SCR, ESP, WFGD, and WESP.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
SO ₂	0.20 lb/MMBtu	30-Day Rolling	SO ₂ CEMS
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system, SO₂ CEMS and PM CEMS during periods of startup and shutdown.

EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 2 burns bituminous coal and fuel oil for startup and stabilization.

EKPC has determined neither to be a waste.

No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	Fuel Oil Used (gals)
Jan-23	106,344	766
Feb-23	95,329	282
Mar-23	122,975	159
Apr-23	77,867	69,672
May-23	32,148	18,566
Jun-23	12,966	90,862

Boiler Tune-up Work Practice Standards

Date Last Completed: 12/22/2020

No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT02
Parameter(s): AKHG#T_M, PM#MM_M, SO2#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT02
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	01/30/2023 11:00	01/30/2023 11:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
2	02/28/2023 08:00	02/28/2023 08:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 57 - Continuous Emissions Monitor Q/A Test.
3	02/28/2023 11:00	02/28/2023 13:59	0d - 3h - 0m	11 - Non-Monitor Malfunction 57 - Continuous Emissions Monitor Q/A Test.
4	03/01/2023 17:00	03/02/2023 06:59	0d - 14h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
5	04/06/2023 01:00	04/06/2023 01:59	0d - 1h - 0m	01 - Unit Startup 50 - Minimum data requirement not met for hour due to shutdown.
6	06/29/2023 08:00	06/29/2023 08:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 6
Total Duration: 0d - 21h - 0m

Source: UNIT02
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
7	06/29/2023 08:00	06/29/2023 08:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.

Number of Events: 1
Total Duration: 0d - 1h - 0m

Source: UNIT02
Parameter: SO2#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
8	06/29/2023 08:00	06/29/2023 08:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.

Number of Events: 1
Total Duration: 0d - 1h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
Time Online Criteria: 1 minute(s)

No Downtime found during the report period for:

Source (s): UNIT02
Parameter(s): PM#MM_M, SO2#MM_M
Reason Code(s): 10, 11, 13, 04

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT02
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	02/28/2023 08:00	02/28/2023 08:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 57 - Continuous Emissions Monitor Q/A Test.
2	02/28/2023 11:00	02/28/2023 13:59	0d - 3h - 0m	11 - Non-Monitor Malfunction 57 - Continuous Emissions Monitor Q/A Test.
3	03/01/2023 17:00	03/02/2023 06:59	0d - 14h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 3
Total Duration: 0d - 18h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

SUMMARY REPORT
 GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: Hg Recorded in hours using Hg sorbent trap monitoring system

Reporting Period Date: From: 1/1/2023 To 7/1/2023
 Emission Limitation: 1.2 lb/Tbtu 30 Day Rolling Average
 Company Name: East Kentucky Power Cooperative
 Address: Spurlock Generating Station
 Maysville, Kentucky 41056

Monitor Manufacturer: APEX Model: Appendix K
 Date of Latest: CMS Certification: 3/29/2012

Process Unit(s) Description: Spurlock Unit 2 (574 Megawatts)
 Coal Fired Unit

Total Source Operating Time in Reporting Period: 2824 37
 Hours Minutes

EMISSION DATA SUMMARY
 (30 Day Rolling Periods)

1. Duration of Excess Emissions in Reporting Period Due To:
- A. Startup/Shutdown: 0
 - B. Control Equipment Problems: 0
 - C. Process Problems: 0
 - D. Other Known Causes: 0
 - E. Unknown Causes: 0
2. Total Duration Excess Emission: 0
3. (Total Dur. Excess Emiss)
 ----- X 100 = 0
 (Total Source Oper. Time)

CMS PERFORMANCE SUMMARY
 (1 HOUR PERIODS)

1. CMS Downtime in Reporting Period Due To:
- A. Monitor Equipment Malf: 14
 - B. Non-Monitor Equipment Malf: 4
 - C. QA/QC Calibration: 2
 - D. Other Known Causes: 1
 - E. Unknown Causes: 0
2. Total CMS Downtime: 21
3. (Total CMS Downtime)
 ----- X 100 = 0.74
 (Total Source Oper. Time)

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE,
 ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
 Title: Air Quality Manager

Signature: Kevin Moore

Date: 7/27/2023

SUMMARY REPORT

GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: Filterable PM Recorded in hours using PM CEMS

Reporting Period Date: From: 1/1/2023 To: 7/1/2023
Emission Threshold: 0.030 lb/mmbtu PM Recorded in 30 Day Rolling Averages
Company Name: East Kentucky Power Cooperative
Address: Spurlock Generating Station
Maysville, Kentucky 41056

Monitor Manufacturer: Sick Maihak Model: FWE200
Date of Latest: CMS Certification: 9/6/2013

Process Unit(s) Description: Spurlock Unit 2 (574 Megawatts)
Coal Fired Unit

Total Source Operating Time in Reporting Period: 2802 0
Hours Minutes

EMISSION DATA SUMMARY
(30 DAY ROLLING PERIODS)

- 1. Duration of Excess Emissions in Reporting Period Due To:
A. Startup/Shutdown: 0
B. Control Equipment Problems: 0
C. Process Problems: 0
D. Other Known Causes: 0
E. Unknown Causes: 0
2. Total Duration Excess Emission: 0
3. (Total Dur. Excess Emiss) X 100 = 0
(Total Source Oper. Time)

CMS PERFORMANCE SUMMARY
(1 HOUR PERIODS)

- 1. CMS Downtime in Reporting Period Due To:
A. Monitor Equipment Malf: 0
B. Non-Monitor Equipment Malf: 0
C. QA/QC Calibration: 1
D. Other Known Causes: 0
E. Unknown Causes: 0
2. Total CMS Downtime: 1
3. (Total CMS Downtime) X 100 = 0.04
(Total Source Oper. Time)

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
Title: Air Quality Manager

Signature: Kevin Moore

Date: 7/27/2023

SUMMARY REPORT
GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: SO2 Recorded in hours using SO2 CEMS

Reporting Period Date: From: 1/1/2023 To: 7/1/2023
Emission Limitation: 0.20 lb/mmbtu 30 Day Rolling Average
Company Name: East Kentucky Power Cooperative
Address: Spurlock Generating Station
Maysville, Kentucky 41056

Monitor Manufacturer: TECO Analyzer Model: 43 I
Date of Latest: CMS Certification: 10/28/2008

Process Unit(s) Description: Spurlock Unit 2 (574 Megawatts)
Coal Fired Unit

Total Source Operating Time in Reporting Period: 2802 Hours 0 Minutes

EMISSION DATA SUMMARY
(30 DAY ROLLING PERIODS)

1. Duration of Excess Emissions in Reporting Period Due To:
A. Startup/Shutdown: 0
B. Control Equipment Problems: 0
C. Process Problems: 0
D. Other Known Causes: 0
E. Unknown Causes: 0
2. Total Duration Excess Emission: 0
3. (Total Dur. Excess Emiss)
----- X 100 = 0
(Total Source Oper. Time)

CMS PERFORMANCE SUMMARY
(1 HOUR PERIODS)

1. CMS Downtime in Reporting Period Due To:
A. Monitor Equipment Malf: 0
B. Non-Monitor Equipment Malf: 0
C. QA/QC Calibration: 1
D. Other Known Causes: 0
E. Unknown Causes: 0
2. Total CMS Downtime: 1
3. (Total CMS Downtime)
----- X 100 = 0.04
(Total Source Oper. Time)

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE,
ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
Title: Air Quality Manager

Signature: Kevin Moore

Date: 7/27/2023



7/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 3
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 3, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 3
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
January 1, 2023 - June 30, 2023**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 3
MATS Semiannual Report
1st Half 2023**

ORIS Code: 6041
Facility Registration System ID: 110012142127
EGU ID: Unit 3

Spurlock Unit 3 is a coal-fired circulating fluidized bed boiler rated at 2500 mmBtu/hr. Control equipment includes a SNCR, dry lime scrubber, and baghouse.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
HCl	0.020 lb/MWh	NA	Every 36 months (LEE Status)
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system and PM CEMS during periods of startup and shutdown. EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 3 burns bituminous coal, tire derived fuel (TDF) and fuel oil for startup and stabilization. EKPC has determined none of the above fuels to be a waste. TDF is not a waste pursuant to 40 CFR 241.4(a)(i), as confirmed by the TDF supplier.

No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	TDF Burned (tons)	Fuel Oil Used (gals)
Jan-23	48,530	2,831	6
Feb-23	48,281	2,283	0
Mar-23	2,555	0	9,633
Apr-23	32,063	914	59,783
May-23	44,287	913	59,817
Jun-23	72,347	1,826	27

Boiler Tune-up Work Practice Standards

Date Last Completed: 6/8/2021

No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT03
Parameter(s): AKHG#T_M, PM#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT03
 Parameter: AKHG#T_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	01/03/2023 02:00	01/03/2023 04:59	0d - 3h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	01/03/2023 09:00	01/03/2023 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	01/12/2023 10:00	01/12/2023 10:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
4	01/12/2023 12:00	01/12/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
5	01/12/2023 14:00	01/12/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
6	01/14/2023 06:00	01/16/2023 07:59	2d - 2h - 0m	10 - Monitor Equipment Malfunction 55 - Polling/Software Problem
7	02/27/2023 13:00	02/27/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
8	04/20/2023 07:00	04/20/2023 07:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
9	05/01/2023 12:00	05/01/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
10	05/08/2023 12:00	05/08/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
11	05/25/2023 00:00	05/27/2023 19:59	2d - 20h - 0m	10 - Monitor Equipment Malfunction 55 - Polling/Software Problem
12	06/06/2023 12:00	06/06/2023 13:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 12
Total Duration: 5d - 11h - 0m

Source: UNIT03
 Parameter: PM#MM_M
 Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
13	01/03/2023 02:00	01/03/2023 04:59	0d - 3h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
14	01/03/2023 09:00	01/03/2023 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
15	01/12/2023 10:00	01/12/2023 10:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
16	01/12/2023 12:00	01/12/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.

* Indicates duration incident could have additional data prior to the start date or following the end date.

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT03
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
17	01/12/2023 14:00	01/12/2023 14:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
18	02/15/2023 13:00	02/15/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
19	02/27/2023 13:00	02/27/2023 13:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
20	04/20/2023 07:00	04/20/2023 07:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
21	05/01/2023 12:00	05/01/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
22	05/08/2023 12:00	05/08/2023 12:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
23	06/06/2023 12:00	06/06/2023 13:59	0d - 2h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 11
Total Duration: 0d - 14h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT03
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	01/03/2023 02:00	01/03/2023 04:59	0d - 3h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	01/03/2023 09:00	01/03/2023 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	01/14/2023 06:00	01/16/2023 07:59	2d - 2h - 0m	10 - Monitor Equipment Malfunction 55 - Polling/Software Problem
4	05/25/2023 00:00	05/27/2023 19:59	2d - 20h - 0m	10 - Monitor Equipment Malfunction 55 - Polling/Software Problem

Number of Events: 4
Total Duration: 5d - 2h - 0m

Source: UNIT03
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
5	01/03/2023 02:00	01/03/2023 04:59	0d - 3h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
6	01/03/2023 09:00	01/03/2023 09:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 2
Total Duration: 0d - 4h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

SUMMARY REPORT
GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: Hg Recorded in hours using Hg sorbent trap monitoring system

Reporting Period Date: From: 1/1/2023 To: 7/1/2023
 Emission Limitation: 1.2 lb/Tbtu 30 Day Rolling Average
 Company Name: East Kentucky Power Cooperative
 Address: Spurlock Generating Station
 Maysville, Kentucky 41056

Monitor Manufacturer: APEX Model: Appendix K
 Date of Latest: CMS Certification: 12/5/2014

Process Unit(s) Description: Gilbert Unit (300 Megawatts)
 Coal Fired Unit

Total Source Operating Time in Reporting Period: 2978 49
 Hours Minutes

No changes in the CMS, processes, or controls have occurred since the last reporting period.

EMISSION DATA SUMMARY
(30 Day Rolling Periods)

1. Duration of Excess Emissions in Reporting Period Due To:
 A. Startup/Shutdown: 0
 B. Control Equipment Problems: 0
 C. Process Problems: 0
 D. Other Known Causes: 0
 E. Unknown Causes: 0
 2. Total Duration Excess Emission: 0
 3. (Total Dur. Excess Emiss)
 ----- X 100 = 0
 (Total Source Oper. Time)

CMS PERFORMANCE SUMMARY
(1 HOUR PERIODS)

1. CMS Downtime in Reporting Period Due To:
 A. Monitor Equipment Malf: 118
 B. Non-Monitor Equipment Malf: 4
 C. QA/QC Calibration: 9
 D. Other Known Causes: 0
 E. Unknown Causes: 0
 2. Total CMS Downtime: 131
 3. (Total CMS Downtime)
 ----- X 100 = 4.40
 (Total Source Oper. Time)

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
 Title: Air Quality Manager

Signature: Kevin Moore

Date: 7/27/2023

**Spurlock Generating Station Unit 3
MATS Semiannual Report
1st Half 2023**

Summary of HCl Quarterly Stack Testing

Test Method: EPA Method 26A
Emission Limit: 0.020 lb/MWh

Spurlock Unit 3 qualified for LEE Status on 2/1/2018. Test results for the last 3 years are listed below.

Stack Test Results

Year	Test Dates	Test Results	50% Limit Threshold
2021	No tests required. Qualified for LEE Status.		0.010 lb/MWh
2022	No tests required. Qualified for LEE Status.		0.010 lb/MWh
2023	Due by 12/22/2023. Qualified for LEE Status.		0.010 lb/MWh

No deviations during the reporting period. No operational changes since the last stack test that could increase emissions.



7/27/2023

Ms. Carol Kemker
United States Environmental Protection Agency
Region IV, Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Subject: East Kentucky Power Cooperative, Spurlock Station Unit 4
Mercury Air and Toxics Standards (MATS) Semiannual Report

Dear Ms. Kemker:

Enclosed please find East Kentucky Power Cooperative, Inc.'s (EKPC) MATS Semiannual Report required by 40 CFR § 63.10031(c) for Spurlock Station Unit 4, which has been filed via the Emissions Collection and Monitoring Plan System (ECMPS) in compliance with MATS, 40 CFR Part 63, Subpart UUUUU.

Please let us know if you have any questions.

Sincerely,

Jerry Purvis

Jerry Purvis
Vice President, Environmental Affairs

Enclosure



**East Kentucky Power Cooperative, Inc.
Spurlock Unit 4
MATS Semi-Annual Compliance Report**

**Hugh L. Spurlock Generating Station
1301 West 2nd Street
Maysville, KY 41056**

**Reporting Period
January 1, 2023 - June 30, 2023**

Submitted to:

**U.S. EPA
via the ECMPS Client Tool
Pursuant to 40 CFR 63.10031(c)**

**Spurlock Generating Station Unit 4
MATS Semiannual Report
1st Half 2023**

ORIS Code: 6041
Facility Registration System ID: 110012142127
EGU ID: Unit 4

Spurlock Unit 4 is a coal-fired circulating fluidized bed boiler rated at 2800 mmBtu/hr. Control equipment includes a baghouse, dry lime scrubber and SNCR.

Hazardous Air Pollutants Monitored and Applicable Emission Limitations

<u>MATS Pollutant</u>	<u>Emission Limit</u>	<u>Averaging Period</u>	<u>Continuous Compliance Method</u>
Mercury (Hg)	1.2 lb/Tbtu	30-Day Rolling	Hg sorbent trap monitoring system
HCl	0.020 lb/MWh	NA	Every 36 months (LEE Status)
Filterable PM	0.030 lb/MMBtu	30-Day Rolling	PM CEMS

Hazardous Air Pollutants Applicable Operating Limitations

EKPC must operate the Hg sorbent trap monitoring system and PM CEMS during periods of startup and shutdown. EKPC must comply with the startup and shutdown work practice standards. EKPC is complying with Startup Definition #1. There were no deviations from those standards.

Fuel Usage Information

Spurlock Unit 4 burns bituminous coal and fuel oil for startup and stabilization. EKPC has determined none of the above fuels to be a waste. TDF is not a waste pursuant to 40 CFR 241.4(a)(i), as confirmed by the TDF supplier. No new fuel was burned during the reporting period.

Month	Coal Burned (tons)	TDF Burned (tons)	Fuel Oil Used (gals)
Jan-23	63,596	0	2
Feb-23	25,347	0	52,085
Mar-23	65,203	1,001	53,193
Apr-23	70,413	583	55,284
May-23	72,348	2,401	37,677
Jun-23	70,571	1,653	0

Boiler Tune-up Work Practice Standards

Date Last Completed: 12/13/2022
No deviations from the boiler tune-up work practice standard.

Exceedance Events

Plant: H.L. SPURLOCK POWER STATION
Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
Time Online Criteria: 1 minute(s)

No Excess Emissions found during the report period for:

Source (s): UNIT04
Parameter(s): AKHG#T_M, PM#MM_M
Interval: 030D
Reason Code(s): 00, 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 99

Downtime Events - Duration

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT04
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	01/03/2023 07:00	01/03/2023 08:59	0d - 2h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	01/19/2023 08:00	01/19/2023 09:59	0d - 2h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
3	02/26/2023 06:00	02/26/2023 06:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
4	03/06/2023 09:00	03/06/2023 11:59	0d - 3h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
5	03/09/2023 09:00	03/09/2023 09:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
6	05/05/2023 05:00	05/05/2023 05:59	0d - 1h - 0m	12 - Monitor Calibration 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			6	
Total Duration:			0d - 10h - 0m	

Source: UNIT04
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
7	01/03/2023 02:00	01/03/2023 05:59	0d - 4h - 0m	11 - Non-Monitor Malfunction 54 - Lost Power to CEMS.
8	05/02/2023 11:00	05/02/2023 11:59	0d - 1h - 0m	12 - Monitor Calibration 57 - Continuous Emissions Monitor Q/A Test.
9	05/05/2023 05:00	05/05/2023 05:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.
Number of Events:			3	
Total Duration:			0d - 6h - 0m	

* Indicates duration incident could have additional data prior to the start date or following the end date.

CMS Downtime Deviation Events

Plant: H.L. SPURLOCK POWER STATION
 Report Period: 01/01/2023 00:00 Through 06/30/2023 23:59
 Time Online Criteria: 1 minute(s)

Source: UNIT04
Parameter: AKHG#T_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
1	01/03/2023 07:00	01/03/2023 08:59	0d - 2h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.
2	01/19/2023 08:00	01/19/2023 09:59	0d - 2h - 0m	10 - Monitor Equipment Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 2
Total Duration: 0d - 4h - 0m

Source: UNIT04
Parameter: PM#MM_M
Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (dd:hh:mm)	Reason Code - Description Action Code - Description
3	01/03/2023 02:00	01/03/2023 05:59	0d - 4h - 0m	11 - Non-Monitor Malfunction 54 - Lost Power to CEMS.
4	05/05/2023 05:00	05/05/2023 05:59	0d - 1h - 0m	11 - Non-Monitor Malfunction 58 - Continuous Emissions Monitor Maintenance.

Number of Events: 2
Total Duration: 0d - 5h - 0m

* Indicates duration incident could have additional data prior to the start date or following the end date.

SUMMARY REPORT
GASEOUS AND OPACITY EXCESS EMISSION AND CONTINUOUS MONITORING SYSTEM PERFORMANCE

Pollutant: **Filterable PM** Recorded in hours using **PM CEMS**

Reporting Period Date: From: 1/1/2023 To 7/1/2023
 Emission Threshold: 0.030 lb/mmbtu PM Recorded in 30 Day Rolling Averages
 Company Name East Kentucky Power Cooperative
 Address: Spurlock Generating Station
 Maysville, Kentucky 41056

Monitor Manufacturer: Sick Maihak Model: FWE200
 Date of Latest: CMS Certification: 9/6/2013 CMS Audit: N/A

Process Unit(s) Description: Spurlock Unit 4 (300 Megawatts)
 Coal Fired Unit

Total Source Operating Time in Reporting Period: 3898 0
 Hours Minutes

EMISSION DATA SUMMARY (30 DAY ROLLING PERIODS)	CMS PERFORMANCE SUMMARY (1 HOUR PERIODS)
1. Duration of Excess Emissions in Reporting Period Due To:	1. CMS Downtime in Reporting Period Due To:
A. Startup/Shutdown: 0	A. Monitor Equipment Malf: 0
B. Control Equipment Problems: 0	B. Non-Monitor Equipment Malf: 5
C. Process Problems: 0	C. QA/QC Calibration: 1
D. Other Known Causes: 0	D. Other Known Causes: 0
E. Unknown Causes: 0	E. Unknown Causes: 0
2. Total Duration Excess Emission: 0	2. Total CMS Downtime: 6
3. (Total Dur. Excess Emiss) ----- X 100 = 0	3. (Total CMS Downtime) ----- X 100 = 0.15
(Total Source Oper. Time)	(Total Source Oper. Time)

On a separate Page, Describe any changes which have occurred since the last quarterly submittal concerning CMS, Process, Controls

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

Name: Kevin Moore
 Title: Air Quality Manager

Signature: *Kevin Moore*

Date: 7/27/2023

**Spurlock Generating Station Unit 4
MATS Semiannual Report
1st Half 2023**

Summary of HCl Quarterly Stack Testing

Test Method: EPA Method 26A
Emission Limit: 0.020 lb/MWh

Spurlock Unit 4 qualified for LEE Status on 1/31/2017. Test results for the last 3 years are listed below.

Stack Test Results

Year	Test Dates	Test Results	50% Limit Threshold
2021	No tests required. Qualified for LEE Status.		0.010 lb/MWh
2022	12/13/2022	0.0037 lb/MWh	0.010 lb/MWh
2023	No tests required. Qualified for LEE Status.		0.010 lb/MWh

No deviations during the reporting period. No operational changes since the last stack test that could increase emissions.

SIGNATURE BLOCK

I, THE UNDERSIGNED, HEREBY CERTIFY UNDER PENALTY OF LAW, THAT I AM A RESPONSIBLE OFFICIAL, AND THAT I HAVE PERSONALLY EXAMINED, AND AM FAMILIAR WITH, THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ITS ATTACHMENTS. BASED ON MY INQUIRY OF THOSE INDIVIDUALS WITH PRIMARY RESPONSIBILITY FOR OBTAINING THE INFORMATION, I CERTIFY THAT THE INFORMATION IS ON KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE OR INCOMPLETE INFORMATION, INCLUDING THE POSSIBILITY OF FINE OR IMPRISONMENT.

BY *Jerry Purvis* 7/27/2023
Authorized Signature Date
Jerry Purvis Vice President, Environmental Affairs
Typed or Printed Name of Signatory Title of Signatory