

February 27, 2019

HAND DELIVERED

Gwen R. Pinson
Executive Director
Public Service Commission
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Frankfort, KY 40602-0615

Mark R. Overstreet
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RECEIVED

FEB 27 2019

PUBLIC SERVICE
COMMISSION

RE: **Case No. 2012-00578 (Post-Case Correspondence File)**

Dear Ms. Pinson:

Please accept for filing the original and ten copies of Kentucky Power Company's Mitchell Generating Plant Annual Performance Report. The report is being filed in conformity with the Commission's October 7, 2013 order in Case No. 2012-00578.

Kentucky Power may seek an order amending the Commission's October 7, 2013 order in Case No. 2012-00578 to eliminate the requirement to file the Mitchell Generating Plant Annual Performance Report. The Company is contacting the intervenors in the proceeding to solicit their agreement.

A copy of the report and this letter is being served on counsel of record in the case.

Very truly yours,


Mark R. Overstreet

MRO

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Application Of Kentucky Power Company For:)
(1) A Certificate Of Public Convenience And Necessity)
Authorizing The Transfer To The Company Of An)
Undivided Fifty Percent Interest In The Mitchell)
Generating Station And Associated Assets; (2) Approval)
Of The Assumption By Kentucky Power Company Of)
Certain Liabilities In Connection With The Transfer Of)
The Mitchell Generating Station; (3) Declaratory Rulings;)
(4) Deferral Of Costs Incurred In Connection With The)
Company's Efforts To Meet Federal Clean Air Act And)
Related Requirements; And (5) For All Other Required)
Approvals And Relief)

RECEIVED

FEB 27 2019

**PUBLIC SERVICE
COMMISSION**

Case No. 2012-00578

MITCHELL GENERATING PLANT: MARCH 1, 2019 ANNUAL PERFORMANCE
REPORT AND REPORT ON POTENTIAL IMPACTS OF FUTURE ENVIRONMENTAL
REGULATIONS

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1) **Introduction**

Kentucky Power Company files this report in conformity with the Kentucky Public Service Commission's October 7, 2013 Order in Case No. 2012-00578. Portions of the required information are provided in the following attachments:

Attachment 1: 2018 Plant Performance Data

- i. Forced Outage Rate
- ii. Equivalent Forced Outage Rate ("EFOR")
- iii. Equivalent Availability Factor
- iv. Net Capacity Factor
- v. Net Unit Heat Rate

Attachment 2: 2018 Unplanned System Outages

2) **Mitchell Plant Performance**

Attachment 1 to this report includes 2018 performance data for Mitchell Unit 1 and Unit 2. Capacity factors at both units were lower than 2017 due to significant scheduled outage work. Annual Net Capacity Factors were 38.12% for Unit 1 and 42.37% for Unit 2. The 2018 Equivalent Forced Outage Rate (EFOR) was 21.72% for Unit 1 and 13.84% for Unit 2.

3) **Mitchell Plant Unplanned System Outages**

Attachment 2 to this report identifies the unplanned outage events that occurred at Mitchell Units 1 and 2 during the 2018 calendar year. Unplanned outages are those outage events not included on the planned maintenance schedule. Because the planned maintenance schedule is prepared at least a year in advance, any previously unscheduled outage that occurs before the next planned outage is classified as an unplanned outage regardless of whether it is a scheduled maintenance outage or a forced outage. Scheduled maintenance outages are those necessary to conduct any type of predictive, preventive, or corrective maintenance that can only be done when the unit is not operating. These scheduled maintenance outages are distinct from forced outages, which require immediate removal of a unit from service, another outage state, or a reserve shutdown state. Forced outages can result from such conditions as mechanical/electrical/hydraulic control system trips and operator-initiated trips in response to unit alarms.

The longest 2018 forced outage event at Mitchell Unit 1 was caused by a stator water leak that lasted approximately 15 days in June 2018. The longest 2018 forced outage event at Mitchell Unit 2 was due to the repair of a leak in the electro-hydraulic control system that lasted approximately 5 days in May 2018.

4) **Mitchell Plant Operations & Maintenance ("O&M") Expense**

Kentucky Power's share of the 2018 budgeted and actual O&M expenses for the Mitchell Plant, as well as the Company's share of the budgeted O&M expenses for 2019, are included in Table 1 below. The actual Company share of O&M expense in 2018 was \$33.4 million, compared to a budgeted amount of \$31.1 million. This variance is due to non-outage maintenance work that was not anticipated in the budget.

Kentucky Power's share of the 2019 budgeted O&M expense of \$27.7 million reflects an 11% decrease from 2018 budgeted amount and an approximate 17% decrease from 2018 actual. The decrease is primarily due to less scheduled outage work in 2019 as compared to 2018.

Table 1

| Mitchell Plant O&M Expense | | |
|---|---------------------|---------------------|
| 2018 | | 2019 |
| Actuals | Budget | Budget |
| \$33,380,364 | \$31,062,166 | \$27,696,981 |
| NOTES: Totals reflect Kentucky Power's 50% ownership share of the Mitchell Plant. | | |

5) **Mitchell Plant Capital Investments**

Kentucky Power's share of the 2018 actual and budgeted level of capital investment for the Mitchell Plant, as well as the Company's forecasted share of capital investment for 2019, are included in Table 2.

In 2018, the Company's share of capital spending at the Mitchell Plant was approximately \$17.4 million compared to a budget of \$20.2 million. The capital spend in 2018 was less than the budget amount mostly due to the work on the landfill expansion costing less than anticipated and as a result of lower product cost for SCR catalyst replacement. The increase in the 2019 budget as compared to the 2018 budget is primarily due to projects at Mitchell Unit 1 on the electrostatic-precipitator and the generator step-up transformer, as well as the Mitchell haul road.

Table 2

| Mitchell Plant Capital Investment | | |
|--|---------------------|---------------------|
| 2018 | | 2019 |
| Actuals | Budget | Budget |
| \$17,474,995 | \$20,162,310 | \$22,909,764 |

NOTES:

Totals reflect Kentucky Power’s 50% ownership share of the Mitchell Plant.

6) Discussion of Environmental Regulations and Potential Future Impacts

The Mitchell Plant is subject to air, water, and solid waste regulations. Both units are fully controlled units with respect to air emissions. They are equipped with Electrostatic Precipitators (“ESPs”) for the removal of approximately 99% of Particulate Matter (PM); Selective Catalytic Reduction (“SCR”) systems for reduction of approximately 90% of nitrogen oxide (“NO_x”) emissions; and flue gas desulfurization (“FGD”) systems for the reduction of sulfur dioxide (“SO₂”) emissions by approximately 98%. These systems are instrumental in maintaining compliance with existing air pollution control regulations. The Mitchell Plant operates in compliance with all applicable environmental regulations.

Mercury and Air Toxics Standards (“MATS Rule”)

The MATS Rule is a Clean Air Act regulation that creates additional environmental requirements for coal- and oil-fired electric generating units with respect to emissions of hazardous air pollutants. It became effective February 16, 2012 and had a compliance date of April 16, 2015. The emission parameters regulated by this rule are: 1) mercury; 2) several non-mercury metals such as arsenic, lead, cadmium and selenium; 3) various acid gases including hydrochloric acid (“HCl”); and 4) certain organic hazardous air pollutants. The MATS Rule establishes stringent emission rate limits for mercury, filterable particulate matter as a surrogate for all non-mercury toxic metals, and HCl as a surrogate for all acid gases. Alternative emission limits were also established for the individual non-mercury metals and for sulfur dioxide SO₂ (alternate to HCl) for generating units that have operating FGD systems. The rule regulates organic hazardous air pollutants through work practice standards.

The installed Mitchell SCR and FGD systems achieve co-benefit removal of mercury from the flue gas while the ESPs remove particulate bound mercury and other particulate hazardous air pollutants. The FGD systems allow the plant to meet the SO₂ alternate measurement for mitigation of acid gas emissions. These systems enabled the Mitchell Plant to meet the emissions requirements of the MATS Rule in 2018.

Cross-State Air Pollution Rule (“CSAPR”)

In 2011, the Federal EPA issued CSAPR as a replacement for the Clean Air Interstate Rule, a regional trading program designed to address interstate transport of emissions that contributed significantly to downwind non-attainment of the 1997 ozone and PM National Ambient Air Quality Standards (NAAQS). Certain revisions to the rule were finalized in 2012. CSAPR relies on newly-created SO₂ and NO_x allowances and individual state budgets to compel further emission reductions from electric utility generating units. Interstate trading of allowances is allowed on a restricted sub-regional basis.

Numerous affected entities, states and other parties filed petitions to review the CSAPR in the U.S. Court of Appeals for the District of Columbia Circuit. The rule was vacated, but that decision was reversed on appeal to the U.S. Supreme Court. On remand, the U.S. Court of Appeals for the District of Columbia Circuit allowed Phase I of CSAPR to take effect on January 1, 2015 and Phase II to take effect on January 1, 2017. In July 2015, the court found that the Federal EPA over-controlled the SO₂ and/or NO_x budgets of 14 states. The court remanded the rule to the Federal EPA for revision consistent with the court’s opinion while CSAPR remained in place.

In October 2016, the Federal EPA issued a final rule to address the remand and to incorporate additional changes necessary to address the 2008 ozone standard. The final rule significantly reduced ozone season budgets in many states and discounted the value of banked CSAPR ozone season allowances beginning with the 2017 ozone season. The rule has been challenged in the courts and petitions for administrative reconsideration have been filed. Collectively, the installed Mitchell Plant SCR and FGD systems’ respective emission reductions of NO_x and SO₂, the use of allocated NO_x and SO₂ emission allowances in conjunction with adjusted banked allowances, and the purchase of additional allowances as needed through the open market will permit the Mitchell Plant to comply with CSAPR.

Clean Water Act (“316(b)”) Rule

A final rule under Section 316(b) of the Clean Water Act became effective on October 14, 2014. The final rule affects all existing power plants withdrawing more than two million gallons per day (“mgd”) of cooling water. The rule offers seven technology options to comply with a standard that addresses impingement of aquatic organisms on cooling water intake screens, and requires site-specific studies to determine appropriate compliance measures to address entrainment of organisms in cooling water systems for those facilities withdrawing more than 125 mgd. The overall goal of the rule is to decrease impacts on fish and other aquatic organisms from operation of cooling water systems. Additional requirements may be imposed as a result of consultation with other federal agencies to protect threatened and endangered species and their habitats.

Mitchell Plant cooling water withdrawal rate is 31 mgd, and thus is well below the entrainment study threshold of 125 mgd. In addition, facilities with existing closed cycle recirculating cooling systems, such as Mitchell, may not be required to make any technology changes. This determination will be made by the West Virginia Department of Environmental Protection as part

of its current permit renewal review of Mitchell Plant's National Pollutant Discharge Elimination System permit. If additional capital investment is required, the magnitude is expected to be relatively small compared to the investment that would be needed if the plant was not equipped with cooling towers.

Coal Combustion Residuals Rule

In April 2015, the Federal EPA published a final rule to regulate the disposal and beneficial re-use of coal combustion residuals (CCR), including fly ash and bottom ash generated at coal-fired electric generating units, as well as FGD gypsum generated at some coal-fired plants. The rule applies to new and existing active CCR landfills and CCR surface impoundments at operating electric utility or independent power production facilities. The rule imposes construction and operating obligations, including location restrictions, liner criteria, structural integrity requirements for impoundments, operating criteria and additional groundwater monitoring requirements to be implemented on a schedule spanning an approximate four-year implementation period.

The final 2015 rule has been challenged in the courts. In August 2018, the U.S. Circuit Court of Appeals for the District of Columbia Circuit issued its decision vacating and remanding certain provisions of the 2015 rule. The remaining issues on appeal were dismissed. None of the parties filed a motion for rehearing. The provisions addressed by the Court's decision, including changes to the provisions for unlined impoundments and legacy sites, will be the subject of further rulemaking consistent with the Court's decision.

In September 2017, the Federal EPA granted industry petitions to reconsider the CCR rule. In March 2018, the Federal EPA issued a proposed rule to modify certain provisions of the solid waste management standards and provide additional flexibility to facilities regulated under approved state programs. A final rule was signed in July 2018 that modifies certain compliance deadlines and other requirements in the rule. Additional changes to the minimum performance standards that were contained in the March proposed rule, and changes to respond to the decision of the U.S. Court of Appeals for the District of Columbia Circuit will be addressed in future rulemakings. Management supports the adoption of more flexible compliance alternatives subject to the Federal EPA or state oversight.

Installation of a groundwater monitoring network has been completed at the Mitchell Plant and groundwater sampling commenced in late 2016. The eight background sampling events were completed and an analysis of the compliance monitoring data shows Mitchell Plant does not exceed the standards set by the CCR rule. Mitchell Plant currently is equipped with a dry fly ash handling system and a dry ash landfill to meet current permit requirements. While the site-specific analysis to determine CCR Rule requirements at Mitchell Plant is ongoing, these existing dry fly ash handling and disposal systems may mitigate the impact of the CCR Rule on the plant's future compliance costs.

Effluent Limitation Guidelines and Standards

On September 30, 2015 EPA finalized a revision to the Effluent Limitation Guidelines and Standards for the Steam Electric Power Generating category (ELG Rule). The ELG Rule requires compliance with technology-based limits for wastewater discharges from power plants. The main focus of the rule is on process water and wastewater associated with the handling of coal combustion wastes and by-products from coal-fired generation. Specifically, the ELG Rule will prohibit the discharge of fly ash and bottom ash transport water. It also requires the installation of physical, chemical, and biological treatment for FGD wastewater.

On September 18, 2017, USEPA issued the: “Postponement of Certain Compliance Dates for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category” (82 Fed Reg. at 43,494) (“Postponement Rule”). In this Postponement Rule, USEPA postponed the earliest compliance dates for the new, more stringent, BAT effluent limitations for FGD wastewaters and bottom ash transport wastewaters in the 2015 Rule for a period of two years. (82 Fed Reg. at 43,494). This postponement will make the “as soon as possible date” November 1, 2020 instead of November 1, 2018 for FGD wastewater and bottom ash transport waters. The postponement is intended as a temporary measure to preserve the status quo for FGD wastewater and bottom ash transport water while USEPA conducts and completes its next rulemaking concerning those waste streams. (82 Fed Reg. at 43,494) USEPA has stated it will take approximately three years to propose and finalize a new rule (Fall 2020) and anticipates the next rulemaking will necessarily address compliance dates in some fashion. (82 Fed Reg. at 43,498)

Kentucky Power is awaiting the results of the USEPA rulemaking described in the Postponement Rule prior to evaluating what, if any impact, any change to the ELG Rule will have on the Mitchell Plant.

National Ambient Air Quality Standards

The Federal EPA issued new, more stringent NAAQS for SO₂ in 2010, PM in 2012 and ozone in 2015; the existing standards for NO₂ were retained after review by the Federal EPA in 2018. Implementation of these standards is underway. In December 2017, the Federal EPA published final designations for certain areas’ compliance with the 2010 SO₂ NAAQS. Additional designations will be made in 2020. States may develop additional requirements for AEP’s facilities as a result of these designations. In June 2018, the Federal EPA proposed to retain the current primary standard for SO₂ of 75 parts per billion, without change.

In December 2016, the Federal EPA completed an integrated review plan for the 2012 PM standard. Work is currently underway on scientific, risk and policy assessments necessary to develop a proposed rule, which is anticipated in 2021.

Most areas of the country were designated attainment or unclassifiable for the 2015 ozone standard in November 2017. The Federal EPA finalized non-attainment designations for the remaining areas in April and July 2018. The Federal EPA has also issued information to assist the states in developing plans that address their obligations under the interstate transport provisions of the CAA for the 2008 and 2015 ozone standards. The Federal EPA has confirmed that for states included

in the CSAPR program, there are no additional interstate transport obligations, as all areas of the country are expected to attain the 2008 ozone standard before 2023. State implementation plans for the 2015 ozone standard were submitted in October 2018. Challenges to the 2015 ozone standard are pending in the U.S. Court of Appeals for the District of Columbia Circuit. In November 2018, the Federal EPA proposed final requirements for implementing the 2015 ozone standard. Management cannot currently predict the nature, stringency or timing of additional requirements based on the outcome of these activities.

Regarding the revised NAAQS for SO₂, the West Virginia Department of Environmental Protection submitted a nonattainment State Implementation Plan with supporting modeling files, to EPA in late 2016. The State Implementation Plan included a lower SO₂ emission rate for the Mitchell Plant than currently permitted, but still significantly higher than the plant's current emission rate. This lower SO₂ emission rate is currently in effect pursuant to a consent decree with the West Virginia Department of Environmental Protection and is not expected to negatively impact operations. For the remaining revised NAAQS, the scope and timing of potential requirements is uncertain. However, because both units at the Mitchell Plant have already been retrofitted with SCR and FGD systems, the risk from more stringent SO₂ and NO_x limits is expected to be manageable.

Clean Power Plan

In October 2015, the Federal EPA published the final CO₂ emissions standards for new, modified and reconstructed fossil fuel-fired steam generating units and combustion turbines, and final guidelines for the development of state plans to regulate CO₂ emissions from existing sources, known as the Clean Power Plan (CPP).

The final rules are being challenged in the courts. In February 2016, the U.S. Supreme Court issued a stay on the final CPP, including all of the deadlines for submission of initial or final state plans. The stay will remain in effect until a final decision is issued by the U.S. Court of Appeals for the District of Columbia Circuit and the U.S. Supreme Court considers any petition for review. In March 2017, the President issued an Executive Order directing the Federal EPA to reconsider the CPP and the associated standards for new sources. The Federal EPA filed a motion to hold the challenges to the CPP in abeyance, and the cases are still pending.

In October 2017, the Federal EPA issued a proposed rule repealing the CPP. In December 2017, the Federal EPA issued an advanced notice of proposed rulemaking seeking information that should be considered by the Federal EPA in developing revised guidelines for state programs. In August 2018, the Federal EPA proposed the Affordable Clean Energy (ACE) rule to replace the CPP with new emission guidelines for regulating CO₂ from existing sources. ACE would establish a framework for states to adopt standards of performance for utility boilers based on heat rate improvements for such boilers. Comments were accepted until the end of October 2018. In December 2018, the Federal EPA filed a proposed rule revising the standards for new sources and

determined that partial carbon capture and storage is not the best system of emission reduction because it is not available throughout the U.S. and is not cost-effective. Management is actively monitoring rulemaking activities.

Mitchell Generating Plant
Performance Data
2018

Mitchell Unit 1

Net Max Capacity: 770

| Month | Forced Outage Rate (%) | Equiv Forced Outage Rate (%) | Equiv. Avail. Factor (%) | Net Cap. Factor (%) | Heat Rate Actual (BTU/KWH) |
|------------------|------------------------|------------------------------|--------------------------|---------------------|----------------------------|
| Jan-18 | 0.53 | 5.06 | 55.03 | 44.80 | 10,413 |
| Feb-18 | 12.79 | 13.27 | 87.89 | 24.26 | 9,685 |
| Mar-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| Apr-18 | 16.38 | 19.46 | 6.75 | 5.41 | 11,986 |
| May-18 | 6.68 | 7.57 | 91.29 | 71.10 | 10,431 |
| Jun-18 | 86.96 | 87.39 | 15.74 | 8.60 | 10,948 |
| Jul-18 | 21.87 | 28.06 | 71.94 | 54.12 | 10,176 |
| Aug-18 | 2.03 | 16.37 | 78.11 | 61.69 | 10,784 |
| Sep-18 | 17.70 | 21.16 | 64.62 | 48.57 | 11,037 |
| Oct-18 | 7.85 | 11.87 | 75.72 | 44.21 | 11,808 |
| Nov-18 | 0.00 | 0.94 | 97.44 | 51.09 | 11,342 |
| Dec-18 | 13.64 | 14.43 | 78.01 | 40.93 | 7,663 |
| YTD Total | 17.99 | 21.72 | 60.15 | 38.12 | 10,485 |

Mitchell Unit 2

Net Max Capacity: 790

| Month | Forced Outage Rate (%) | Equiv Forced Outage Rate (%) | Equiv. Avail. Factor (%) | Net Cap. Factor (%) | Heat Rate Actual (BTU/KWH) |
|------------------|------------------------|------------------------------|--------------------------|---------------------|----------------------------|
| Jan-18 | 0.00 | 2.12 | 95.76 | 81.81 | 9,692 |
| Feb-18 | 0.00 | 2.21 | 96.53 | 67.96 | 9,231 |
| Mar-18 | 0.00 | 0.39 | 5.71 | 4.52 | 10,153 |
| Apr-18 | 0.00 | 0.00 | 0.00 | 0.00 | 0 |
| May-18 | 30.55 | 41.58 | 52.92 | 43.55 | 10,303 |
| Jun-18 | 0.00 | 19.58 | 70.69 | 54.31 | 11,788 |
| Jul-18 | 0.00 | 8.95 | 88.71 | 72.60 | 11,171 |
| Aug-18 | 0.00 | 12.37 | 85.72 | 73.88 | 11,788 |
| Sep-18 | 0.00 | 12.39 | 41.30 | 33.71 | 11,262 |
| Oct-18 | 16.64 | 17.37 | 60.83 | 37.12 | 11,370 |
| Nov-18 | 66.16 | 66.16 | 62.42 | 1.74 | 13,654 |
| Dec-18 | 0.00 | 0.93 | 76.46 | 37.13 | 6,013 |
| YTD Total | 6.10 | 13.84 | 61.33 | 42.37 | 10,410 |

Mitchell Generating Plant
Unplanned Outages
2018

KPSC Case No. 2012-00578
March 1, 2019
Attachment 2
Page 1 of 2

Kentucky Power Co.
01/01/2018 To 12/31/2018
Mitchell Unit 1

| Month | From | To | Duration (Hrs) | Event Type | Reason for Outage |
|-----------|------------------|-----------------|----------------|------------|---|
| January | 1/10/18 2:03 AM | 1/16/18 1:09 AM | 143.1 | MO | Remove Clinker on Lower Slope & Boiler i/r |
| January | 1/16/18 6:00 PM | 1/16/18 8:13 PM | 2.21667 | SF | startup failure |
| January | 1/25/18 1:56 AM | 2/2/18 6:15 AM | 196.317 | MO | #11 Bearing Vibration running at 13.8 mils |
| February | 2/2/18 6:15 AM | 2/3/18 6:24 PM | 36.15 | SF | ARV 542 failure |
| February | 2/15/18 12:00 AM | 2/15/18 9:20 AM | 9.33333 | MO | Boiler Inspect and Repair |
| April | 4/28/18 10:39 AM | 4/28/18 8:32 PM | 9.88333 | U1 | 12 ID Fan blades stuck @ 25% open |
| May | 5/24/18 4:09 PM | 5/26/18 5:53 PM | 49.7333 | U1 | steam leak on 1st reheat exhaust drain line |
| June | 6/2/18 8:30 AM | 6/17/18 4:27 PM | 367.95 | U3 | Stator Water Leak |
| June | 6/19/18 1:29 AM | 6/28/18 8:58 PM | 235.483 | U1 | Tube Leak & Stator Cooling Water Leak |
| July | 7/17/18 3:01 PM | 7/24/18 9:43 AM | 162.7 | U1 | Economizer tube leak |
| August | 8/18/18 1:35 AM | 8/18/18 3:19 PM | 13.7333 | U3 | due to Stator Water Leak |
| August | 8/19/18 8:23 AM | 8/21/18 9:40 AM | 49.2833 | MO | Boiler i/r, ID Fan Hubs i/r |
| September | 9/21/18 7:13 AM | 9/25/18 4:11 PM | 104.967 | U1 | Low Stator Water Pressure due to a major leak on a filter |
| September | 9/25/18 4:11 PM | 10/5/18 3:00 AM | 226.817 | MO | ID Fan Hub inspection. Boiler i/r |
| October | 10/5/18 4:53 PM | 10/7/18 7:28 PM | 50.5833 | U1 | ID Fan 11 inlet damper stuck |

Kentucky Power Co.
01/01/2018 To 12/31/2018
Mitchell Unit 2

| Month | From | To | Duration (Hrs) | Event Type | Reason for Outage |
|-----------|-------------------|------------------|----------------|------------|---|
| May | 5/3/18 9:00 AM | 5/6/18 10:57 AM | 73.95 | U1 | Above Seat Drain |
| May | 5/23/18 8:07 AM | 5/28/18 12:00 AM | 111.883 | U1 | Due to EHC leak #4 control valve |
| May | 5/28/18 2:43 AM | 5/28/18 11:16 PM | 20.55 | SF | River Water Header Issues |
| May | 5/29/18 12:39 AM | 5/29/18 3:02 AM | 2.38333 | U1 | BFP issue |
| June | 6/12/18 11:31 PM | 6/16/18 9:15 PM | 93.7333 | MO | ID Fan Motor Coupling Alignment & Lead Terminations |
| September | 9/8/18 1:33 AM | 9/23/18 10:10 PM | 380.617 | MO | Boiler I/R, Precipitator Inspection |
| October | 10/16/18 11:34 PM | 10/25/18 6:00 PM | 210.433 | MO | Tube Leak |
| October | 10/28/18 6:15 PM | 11/1/18 5:10 PM | 94.9167 | SF | Above Seat Drainline Leak |
| November | 11/1/18 5:10 PM | 11/6/18 12:00 PM | 114.833 | MO | Replace above seat drain motor operated valves UMO-102, 103, 104. |
| November | 11/6/18 12:00 PM | 11/9/18 5:55 PM | 77.9167 | MO | ID Fan hub inspections and repairs. |
| November | 11/17/18 12:00 AM | 11/17/18 3:22 PM | 15.3667 | MO | Condenser Outlet pipe flange leak i/r |

Mitchell Generating Plant
Unplanned Outages
2018

NOTES:

* Hours shown are for the portion of the outage that occurred in 2018 only.

| Event Type | NERC Description |
|------------|--|
| MO | Maintenance Outage - can be deferred beyond the end of the next weekend |
| SF | Startup Failure - results when a unit is unable to synchronize within a |
| U1 | Unplanned (Forced) Outage - requires immediate removal from service |
| U3 | Unplanned (Forced) Outage - can be postponed beyond 6 hours but requires |

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing letter and accompanying report were served by first class mail, postage prepaid upon the following parties of record, this 27th day of February 2019.

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A handwritten signature in blue ink, appearing to read 'Mark R. Overstreet', is written over a horizontal line. The signature is stylized and somewhat cursive.

Mark R. Overstreet