**ENVIRONMENTAL APPEALS BOARD**
**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**WASHINGTON, D.C.**

| | | |
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| In re:<br><br>Bloom Energy Corporation. | ) | Docket No. RCRA-HQ-2020-501 |

## FINAL ORDER

Pursuant to 40 C.F.R. § 22.18(b)-(c) of EPA's Consolidated Rules of Practice, the attached Consent Agreement resolving this matter is incorporated by reference into this Final Order and is hereby ratified.

The Respondent is ORDERED to comply with all terms of the Consent Agreement, effective immediately.

So ordered.[1]

**ENVIRONMENTAL APPEALS BOARD**

Dated: ***May 12 2020***

Mary Kay Lynch
Environmental Appeals Judge

[1] The panel ratifying this matter is composed of Environmental Appeals Judges Mary Kay Lynch and Kathie A. Stein.

**BEFORE THE**
**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

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| **In the Matter of:** | : | |
| | : | |
| **Bloom Energy Corporation** | : | **U.S. EPA Docket No. RCRA-HQ-2020-501** |
| **4353 North First Street** | : | |
| **San Jose, CA 95134** | : | **Proceeding under Section 3008(a) and (g) of the** |
| | : | **Resource Conservation and Recovery Act, as** |
| **Respondent.** | : | **amended, 42 U.S.C. § 6928(a) and (g)** |
| | : | |
| **The "Pennsylvania Customer Facility"** | : | |
| **The "Maryland Customer Facilities"** | : | |
| | : | |
| **Facilities.** | : | |
| | : | |
| | : | |

## CONSENT AGREEMENT AND FINAL ORDER

## CONSENT AGREEMENT

## PRELIMINARY STATEMENT

1. This Consent Agreement is entered into by the Director of the Waste and Chemical Enforcement Divison, Office of Civil Enforcement, Office of Enforcement and Compliance Assurance ("Complainant") and Bloom Energy Corporation ("Respondent") (collectively the "Parties"), pursuant to Section 3008(a) and (g) of the Resource Conservation and Recovery Act ("RCRA" or the "Act"), as amended, 42 U.S.C. § 6928(a) and (g), and the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation, Termination or Suspension of Permits ("Consolidated Rules of Practice"), 40 C.F.R. Part 22.

2. Section 3008(a) of RCRA authorizes the Administrator of the U.S. Environmental Protection Agency ("EPA" or the "Agency") to assess penalties and undertake other actions required by this Consent Agreement. The Administrator has delegated this authority to the Complainant.

3. Section 3008(g) of RCRA, 42 U.S.C. § 6928(g), authorizes the assessment of a civil monetary penalty against any person who violates any requirement of RCRA Subtitle C, EPA's regulations thereunder, or any regulation of a state hazardous waste program which has been authorized by EPA.

4. This Consent Agreement and the attached Final Order resolve Complainant's civil penalty claims against Respondent under RCRA for the violations alleged herein.

5. In accordance with 40 C.F.R. §§ 22.13(b) and 22.18(b)(2) and (3) of the Consolidated Rules of Practice, Complainant hereby simultaneously commences and resolves this administrative proceeding.

## JURISDICTION

6. The U.S. Environmental Protection Agency has jurisdiction over the above-captioned matter, as described in Paragraph 1, above.

7. Consolidated Rules of Practice govern this administrative adjudicatory proceeding pursuant to 40 C.F.R. § 22.1(a)(4).

8. The Commonwealth of Pennsylvania has received federal authorization to administer a Hazardous Waste Management Program (the "Pennsylvania Hazardous Waste Management Program") in lieu of the federal hazardous waste management program established under RCRA Subtitle C, 42 U.S.C. §§ 6921-6939g. Effective January 30, 1986, the Commonwealth of Pennsylvania Hazardous Waste Regulations were authorized by EPA pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), and 40 C.F.R. Part 271, Subpart A. The Commonwealth of Pennsylvania has revised, and EPA has re-authorized, the Commonwealth of Pennsylvania Hazardous Waste Regulations several times subsequent to this original authorization. The most recent authorized (revised) regulations became effective on June 29, 2009 (74 Fed. Reg. 19453). The provisions of the current authorized (revised) Commonwealth of Pennsylvania Hazardous Waste Regulations, codified at 25 Pa. Code Chapters 260a-266a, 266b, and 268a-270a ("PAHWR"), have thereby become requirements of RCRA Subtitle C and are enforceable by EPA pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a).

9. On February 11, 1985, pursuant to Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), and 40 C.F.R. Part 271, Subpart A, the State of Maryland was granted final authorization to administer its Hazardous Waste Management Regulations ("MDHWMR") set forth at the Code of Maryland Regulations ("COMAR"), Title 10, Subtitle 51 et seq., in lieu of the federal hazardous waste management program established under RCRA Subtitle C, 42 U.S.C. §§ 6921-6939e. Through this final authorization, the provisions of the MDHWMR became requirements of RCRA Subtitle C and are, accordingly, enforceable by EPA on and after that date pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a). A revised Maryland hazardous waste management program set forth at COMAR, Title 26, Subtitle 13 was authorized and effective on July 31, 2001, September 24, 2004, and most recently on October 31, 2016. Accordingly, the provisions of the revised MDHWMR are enforceable by EPA on and after those dates pursuant to § 3008(a) of RCRA, 42 U.S.C. § 6928(a).

10. This Consent Agreement addresses alleged violations by Respondent of Subtitle C of RCRA, 42 U.S.C. §§ 6921–6939g, certain federally-authorized PAHWMR and MDHWMR, as well as certain of the federal hazardous waste regulations, set forth at 40 C.F.R. Parts 260–268, for which the State of Maryland has not been granted authorization to administer in lieu of the federal hazardous waste management program under HSWA, in connection with Respondent's facilities, described below.

11. On January 8, 2018, EPA sent letters to the Commonwealth of Pennsylvania, through the Pennsylvania Department of Environmental Protection ("PADEP"), and the State of Maryland, through the Maryland Department of the Environment ("MDE"), giving prior notice of this enforcement action in accordance with Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2).

## GENERAL PROVISIONS

12. For purposes of this proceeding only, Respondent admits the jurisdictional allegations set forth in this Consent Agreement and Final Order.

13. Except as provided in Paragraph 12, above, Respondent neither admits nor denies the specific factual allegations and conclusions of law set forth in this Consent Agreement.

14. Respondent agrees not to contest the jurisdiction of EPA with respect to the execution of this Consent Agreement, the issuance of the attached Final Order, or the enforcement of this Consent Agreement and Final Order.

15. For purposes of this proceeding only, Respondent hereby expressly waives its right to contest the allegations set forth in this Consent Agreement and waives its right to appeal the accompanying Final Order.

16. Respondent consents to the assessment of the civil penalty stated herein, to the issuance of any specified compliance order herein, and to any conditions specified herein.

17. Respondent shall bear its own costs and attorney's fees in connection with this proceeding.

## FINDINGS OF FACT AND CONCLUSIONS OF LAW

18. In accordance with 40 C.F.R. §§ 22.13(b) and 22.18(b)(2) and (3) of the Consolidated Rules of Practice, Complainant alleges and adopts the Findings of Fact and Conclusions of Law set forth immediately below.

## BLOOM OPERATIONS

19. Respondent Bloom is, and at all times relevant to the allegations set forth against it in this Consent Agreement was, a Delaware corporation.

20. Respondent is, and at all times relevant to the allegations set forth against it in this Consent Agreement, was a "person," as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15), 25 Pa. Code § 260a.10 and COMAR 26.13.01.03(B)(61).

21. Respondent developed, sells and/or leases to its customers, and operates solid oxide fuel cell technology that converts natural gas into electricity without combustion. This technology is contained inside of equipment, known as "Bloom Energy Servers" or "Energy Servers".

22. Respondent has installed its Energy Servers at multiple customer facilities at locations in the United States.

23. Respondent installed Energy Servers at three customer facilities located in Pennsylvania and Maryland (respectively referred to as the "Pennsylvania Customer Facility," the "Maryland Customer 1 Facility" and the "Maryland Customer 2 Facility"). Collectively, these facilities will be referred to herein as the "Customer Facilities."

24. Respondent installed Energy Servers at the Pennsylvania Customer Facility, the Maryland Customer 1 Facility and the Maryland Customer 2 Facility, in 2012, 2014 and 2015, respectively.

25. Each Energy Server at the customer facilities utilizes natural gas. Each Energy Server contains (1) a group of fuel cell modules ("Fuel Cells"); (2) a fuel processing module; and (3) detachable canisters (referred to herein as "Desulf Canisters").

26. Inside each Fuel Cell, natural gas is converted into electricity through an electrochemical reaction.

27. The Desulf Canisters operate within an Energy Server and are located upstream of the Fuel Cells. The materials inside the Desulf Canisters remove sulfur compounds that were added as an odorant to the natural gas by the gas company, before the natural gas reaches the Fuel Cells.

28. Each Desulf Canister contains granular desulfurization material and carbon (collectively referred to as "media") which can adsorb a finite amount of sulfur compounds from the incoming natural gas.

29. At all times relevant to the allegations set forth against Respondent in this Consent Agreement, each Desulf Canister also incidentally adsorbed other compounds in the natural gas including, but not limited to, benzene. These contaminants were captured by the media within the Desulf Canisters.

30. The media in a Desulf Canister were only able to adsorb a finite amount of sulfur compounds, after which the media became exhausted and/or "spent."

31. When the adsorption capacity of the Desulf Canister degraded to a significant degree, the spent media in a Desulf Canister had to be replaced. Respondent made the determination as to when media became spent. Respondent replaced the spent Desulf Canister and its contents with a Desulf Canister containing fresh media. Respondent would then arrange for the disposal of the spent media.

32. Respondent detached the Desulf Canisters from the Energy Servers located at its customer facilities. Respondent then arranged to ship these Desulf Canisters offsite to receiving facilities so that the spent media could be removed and disposed. Respondent then replaced these Desulf Canisters containing spent media with other Desulf Canisters containing fresh media.

## SHIPPING OF SPENT DESULF CANISTERS

33. From approximately June 2013 to the present, Respondent sent Desulf Canisters which were used at the Customer Facilities and contained spent media, from the Customer Facilities to receiving facilities.

34. Respondent sent Desulf Canisters containing spent media from the Customer Facilities to these receiving facilities, during the following timeframes:

    a. VLS Recovery Services LLC ("VLS"), located in Pasadena, Texas – March 2015 – February 2017;

    b. Advanced Chemical Treatment, Inc. ("ACT"), located in Albuquerque, New Mexico – October 2016 – June 2019.

    c. Ross Incineration Services, Inc. ("Ross"), located in Grafton, Ohio – October 2019 – the present.

    (Collectively referred to as the "Receiving Facilities.")

35. At the time that VLS received Respondent's spent media, this facility was a treatment, storage or disposal facility which was not permitted under RCRA Subtitle C, 40 C.F.R. Part 270, or Pa. Code § 270a.1 (which incorporates by reference 40 C.F.R. Part 270), or COMAR 26.13.07, or 30 TAC Chapter 335, to treat, store or dispose hazardous waste.

## LEGAL CONCLUSIONS

36. At some point prior to the time that Respondent disconnected each Desulf Canister from a Fuel Cell and removed it from an Energy Server at a customer facility, and at all times thereafter relevant to the violations alleged herein, the spent media in the Desulf Canisters was a "solid waste" as this term is defined in 25 Pa. Code § 260a.1 (which

incorporates by reference 40 C.F.R. § 260.10, which further incorporates by reference 40 C.F.R. § 261.2), and COMAR 26.13.01.03(B)(73).

37. Pursuant to 25 Pa. Code § 260a.1 (which incorporates by reference 40 C.F.R. § 260.10), and COMAR 26.13.01.03(B)(31), and 25 Pa. Code § 261a.1 (which incorporates by reference 40 C.F.R. § 261.3), and COMAR 26.13.02, a solid waste is a hazardous waste if it is not excluded from regulation as a hazardous waste under 25 Pa. Code § 261a.1 (which incorporates by reference 40 C.F.R. § 261.4(b)), and COMAR 26.13.02.04 and, inter alia, it exhibits any of the characteristics of a hazardous waste set forth in 25 Pa. Code § 261a.1 (which incorporates by reference 40 C.F.R. Part 261, Subpart C), and COMAR 26.13.02.10 - .14.

38. Based upon the information above, EPA has determined that spent media generated at and shipped from the Maryland Customer 1 Facility and the Pennsylvania Customer Facility, at all times relevant to the allegations herein, was a "solid waste" as defined by 25 Pa. Code § 260a. (which incorporates by reference 40 C.F.R. § 260.10) and COMAR 26.13.01.03(B)(73).

39. Based upon the information above, EPA has determined that spent media generated at and shipped from the Maryland Customer 1 Facility and the Pennsylvania Customer Facility, at all times relevant to the allegations herein, was a "hazardous waste" as defined by 25 Pa. Code § 260a.1 (which incorporates by reference 40 C.F.R. § 260.10) and COMAR 26.13.01.03(B)(31), because it exhibits the characteristic of toxicity for benzene (EPA Waste Code D018), as described in 40 C.F.R. § 261.24.

40. EPA has determined that the spent media contained in the Desulf Canisters generated at the customer facilities was not "excluded from regulation as a hazardous waste" under 25 Pa. Code § 261a.1 (which incorporates by reference 40 C.F.R. § 261.4(b)), or COMAR 26.13.02.04.

41. 25 Pa. Code § 260a.1 (which incorporates by reference 40 C.F.R. § 260.10), defines "generator" as any person, by site, whose act or process produces hazardous waste identified or listed in 40 C.F.R. Part 261 or whose act first causes a hazardous waste to become subject to regulation.

42. COMAR 26.13.01.03(B)(29) defines "generator" as "any person, by site, whose act or process produces hazardous waste identified or listed in COMAR 26.13.02 or whose act first causes a hazardous waste to become subject to regulation."

43. Each of the customer facilities is a separate site.

44. At all times relevant to the allegations set forth in this Complaint, Respondent was a "generator" of hazardous waste generated in and "stored" within the Energy Servers at Respondent's Customer Facilities, as these terms are defined in 25 Pa. Code § 260a.1

(which incorporates by reference 40 C.F.R. § 260.10), and COMAR 26.13.01.03(B)(29) and (76).

## COUNT I
### *(Failure to Prepare a Manifest for Offsite Shipment of Hazardous Waste)*

45. The allegations of each of the preceding paragraphs are incorporated herein by reference as though fully set forth at length.

46. 25 Pa. Code § 262a.10 (which incorporates by reference 40 C.F.R. § 262.20(a)(1)), provides that "[a] generator who transports, or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, must prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A, according to the instructions included in the appendix to this part."

47. COMAR 26.13.03.04.A(1) similarly provides that "[a] generator who transports, or offers for transport a hazardous waste for off-site treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, shall prepare a manifest (OMB control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A, according to the instructions included in the appendix to 40 CFR Part 262 before the waste is transported off-site."

48. Respondent shipped Desulf Canisters storing spent media which contained benzene (EPA Hazardous Waste No. D018) from two Customer Facilities in Pennsylvania and Maryland, without first preparing a Hazardous Waste Manifest for each of these shipments, on at least the following dates:

    a. From the Pennsylvania Customer Facility: 2/11/16 (1 Desulf Canister, about 95 lbs of spent media), 11/23/16 (9 Desulf Canisters, about 855 lbs of spent media)

    b. From the Maryland Customer 1 Facility: 9/23/15 (32 Desulf Canisters, about 3,040 lbs of spent media), 10/7/16 (31 Desulf Canisters, about 2,945 lbs of spent media)

49. On at least four occasions, Respondent violated 25 Pa. Code § 262a.10 (which incorporates by reference 40 C.F.R. § 262.20(a)(1)) and COMAR 26.13.03.04.A(1), by offering for transport a hazardous waste (the spent media in the Desulf Canisters) for offsite treatment, storage, or disposal without first preparing a Manifest.

## COUNT II
### *(Failure to Adequately Respond to Information Requests)*

50. The allegations of each of the preceding paragraphs are incorporated herein by reference as though fully set forth at length.

51. Section 3007(a) of RCRA, 42 U.S.C. § 6927(a), provides, in part: "Access Entry. For purposes of developing or assisting in the development of any regulation or enforcing the provisions of this chapter, any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee or representative of a State having an authorized hazardous waste program, furnish information relating to such wastes and permit such person at all reasonable times to have access to, and to copy all records relating to such wastes. . . ."

52. On or about December 31, 2015, Respondent installed a Bloom Energy Server which became operational at a Customer Facility in Maryland, known as the "Maryland Customer 2 Facility."

53. In an information request letter ("IRL") that EPA sent to Respondent, dated January 20, 2017 ("IRL #1), Question 1, EPA asked Respondent to: "Identify all facilities where a Bloom Energy Server has been installed within the States of Pennsylvania, Maryland, Virginia, West Virginia, and the District of Columbia."

54. In an information request letter that EPA sent to Respondent, dated September 1, 2017 ("IRL #2"), Question 9, EPA asked Respondent to update its response to the original IRL with any new information generated since January 1, 2017, up to the date of Respondent's receipt of the letter, and not already included in the previous submittal.

55. Respondent failed to provide any information related to the Maryland Customer 2 Facility in either its IRL Response #1, dated March 24, 2017, or its IRL Response #2, dated October 4, 2017.

56. On March 24, 2017 and October 4, 2017, Respondent violated the requirements of Section 3007(a) of RCRA, 42 U.S.C. § 6927(a), by failing to provide information about the Maryland Customer 2 Facility in response to an EPA information request that asked Respondent to identify all facilities where a Bloom Energy Server has been installed within the State of Maryland.

## CIVIL PENALTY

57. In settlement of EPA's claims for civil penalties for the violations alleged in this Consent Agreement, Respondent consents to the assessment of a civil penalty in the amount of **TWO HUNDRED TEN THOUSAND DOLLARS ($210,000.00)**, which Respondent shall be liable to pay in accordance with the terms set forth below.

58. The civil penalty is based upon EPA's consideration of a number of factors, including the penalty criteria ("statutory factors") set forth in Section 3008(a)(3) of RCRA, 42 U.S.C. § 6928(a)(3)**,** including, the following: the seriousness of the violation and any good faith

efforts to comply with the applicable requirements. These factors were applied to the particular facts and circumstances of this case with specific reference to EPA's October, 1990 RCRA Civil Penalty Policy, as revised in June, 2003 ("RCRA Penalty Policy"), which reflect the statutory penalty criteria and factors set forth at Section 3008(a)(3) and (g) of RCRA, 42 U.S.C. §§ 6928(a)(3) and (g), the appropriate Adjustment of Civil Monetary Penalties for Inflation, pursuant to 40 C.F.R. Part 19, and the applicable EPA memoranda addressing EPA's civil penalty policies to account for inflation.

59. Payment of the civil penalty amount, and any associated interest, administrative fees, and late payment penalties owed, shall be made by either cashier's check, certified check or electronic wire transfer, in the following manner:

a. All payments by Respondent shall include reference to Respondent's name and address, and the Docket Number of this action, *i.e.*, RCRA-HQ-2020-501;

b. All checks shall be made payable to the "United States Treasury";

c. All payments made by check and sent by regular mail shall be addressed and mailed to:

U.S. Environmental Protection Agency
Cincinnati Finance Center
P.O. Box 979077
St. Louis, MO 63197-9000

d. For additional information concerning other acceptable methods of payment of the civil penalty amount see:

https://www.epa.gov/financial/makepayment

e. A copy of Respondent's check or other documentation of payment of the penalty using the method selected by Respondent for payment shall be sent simultaneously to:

Natalie Katz
Senior Assistant Regional Counsel
U.S. EPA, Region III (3RC40)
1650 Arch Street
Philadelphia, PA 19103-2029
katz.natalie@epa.gov

60. Pursuant to 31 U.S.C. § 3717 and 40 C.F.R. § 13.11, EPA is entitled to assess interest and late payment penalties on outstanding debts owed to the United States and a charge to cover the costs of processing and handling a delinquent claim, as more fully described below. Accordingly, Respondent's failure to make timely payment of the penalty as

specified herein shall result in the assessment of late payment charges including interest, penalties and/or administrative costs of handling delinquent debts.

61. Payment of the civil penalty is due and payable immediately upon receipt by Respondent of a true and correct copy of the fully executed and filed Consent Agreement and Final Order. Receipt by Respondent or Respondent's legal counsel of such copy of the fully executed Consent Agreement and Final Order, with a date stamp indicating the date on which the Consent Agreement and Final Order was filed with the Clerk of the Environmental Appeals Board, shall constitute receipt of written initial notice that a debt is owed EPA by Respondent in accordance with 40 C.F.R. § 13.9(a).

62. INTEREST: In accordance with 40 C.F.R § 13.11(a)(1), interest on the civil penalty assessed in this Consent Agreement and Final Order will begin to accrue on the date that a copy of the fully executed and filed Consent Agreement and Final Order is mailed or hand-delivered to Respondent. However, EPA will not seek to recover interest on any amount of the civil penalties that is paid within thirty (30) calendar days after the date on which such interest begins to accrue. Interest will be assessed at the rate of the United States Treasury tax and loan rate in accordance with 40 C.F.R § 13.11(a).

63. ADMINISTRATIVE COSTS: The costs of the EPA's administrative handling of overdue debts will be charged and assessed monthly throughout the period a debt is overdue. 40 C.F.R. § 13.11(b). Pursuant to Appendix 2 of EPA's *Resources Management Directives – Case Management*, Chapter 9, EPA will assess a $15.00 administrative handling charge for administrative costs on unpaid penalties for the first thirty (30) day period after the payment is due and an additional $15.00 for each subsequent thirty (30) days the penalty remains unpaid.

64. LATE PAYMENT PENALTY: A late payment penalty of six percent per year will be assessed monthly on any portion of the civil penalty that remains delinquent more than ninety (90) calendar days. 40 C.F.R. § 13.11(c). Should assessment of the penalty charge on the debt be required, it shall accrue from the first day payment is delinquent. 31 C.F.R. § 901.9(d).

65. Respondent agrees not to deduct for federal tax purposes the civil penalty assessed in this Consent Agreement and Final Order.

## SETTLEMENT CONDITION - COMPLIANCE AUDIT

66. As a condition of this settlement, Respondent agrees to conduct a Compliance Audit. Respondent shall retain an independent third party (the "Auditor") to perform the Compliance Audit, which shall consist of an audit of each of the records of Respondent's shipments of Desulf Canisters containing spent media from all of its customer facilities in the United States outside of Region III (DC, DE, MD, PA, VA, WV), for the time period beginning September 8, 2015 through December 31, 2019. (This Compliance Audit will not include records of shipments of Desulf Canisters containing spent media that

Respondent sent to the Shoremet LLC facility in Valparaiso, Indiana.) Respondent agrees to undertake the following activities, described below, with regard to the performance of the Compliance Audit.

67. Within forty-five (45) days of the effective date of this Consent Agreement and Final Order, Respondent shall provide to EPA the following: the name and address of the Auditor that Respondent has selected to perform the Compliance Audit, and documentation that such Auditor satisfies the requirements described below in Paragraph 68 of this Consent Agreement and Final Order.

68. At a minimum, the Auditor selected by Respondent for performance of the Compliance Audit shall:

    a. have no less than 3 years of experience in performing RCRA compliance audits;

    b. have a trained and experienced staff for the performance of such audits;

    c. have no past or present relationship or affiliation with the Respondent nor anticipate any prospective relationship or affiliation with the Respondent as a result of performing the Compliance Audit.

69. Upon completion of a review by EPA of the materials described in Paragraph 68, relating to the name and qualifications of the proposed Auditor, EPA will, in its sole discretion (but subject to the Dispute Resolution provisions of Paragraphs 94 through 98), either: (1) notify Respondent in writing of EPA's approval of the selection of the proposed Auditor, or (2) notify Respondent in writing of EPA's rejection of the proposed Auditor. If EPA rejects Respondent's proposed Auditor, EPA will state the reasons for the rejection in writing and will allow Respondent thirty (30) days to make a new submittal.

70. Within thirty (30) days of receipt of notice of EPA's approval of the proposed Auditor, Respondent shall provide to EPA a proposed plan (the "Compliance Audit Plan") describing the procedures which satisfy the requirements set forth in Paragraphs 72 through 77, and Appendix A of this Consent Agreement and Final Order. The Audit Plan shall reflect the scope of the records audit provided herein and in Appendix A.

71. Upon completion of a review by EPA of the proposed Compliance Audit Plan, EPA will, in its sole discretion (but subject to the Dispute Resolution provisions of Paragraphs 94 through 98), either: (1) notify Respondent in writing of EPA's approval of the proposed Compliance Audit Plan, or (2) notify Respondent in writing of EPA's rejection of the proposed Compliance Audit Plan. EPA's decision regarding approval of the Compliance Audit Plan shall be consistent with the agreed scope of the Compliance Audit as reflected in Paragraph 66 and Appendix A. If EPA rejects any or all of Respondent's proposed Compliance Audit Plan, EPA will state the reasons for the rejection and will provide to Respondent in writing a reasonable timeframe to make a new submittal. The performance of the Compliance Audit shall commence only upon Respondent's receipt of

approval by EPA of the Compliance Audit Plan. If Respondent fails to submit the name of the proposed Auditor or the Compliance Audit Plan within the deadline for submission or fails to revise and re-submit any of the items by EPA's deadline, EPA shall have the right to terminate this Consent Agreement and Final Order by providing written notice to Respondent, and EPA shall have the right to seek and collect the maximum penalty allowed by law for any and all violations of Subtitle C of RCRA at any of Respondent's customer facilities.

72. Respondent shall fully cooperate with requests made by the EPA-approved Auditor concerning performance of the Audit in accordance with the Compliance Audit Plan and preparation of the Final Audit Report.

73. Within ninety (90) days of receipt of EPA's approval of the proposed Auditor and Compliance Audit Plan, Respondent shall have the Compliance Audit completed, and submit to EPA a Final Audit Report.

74. The Final Audit Report shall contain the information set forth in Appendix A.

75. Respondent shall maintain for inspection by EPA the original records pertaining to the actual implementation and/or performance of the Compliance Audit for a period of three years from the date of approval of the Final Audit Report.

76. The Final Audit Report shall be certified by Respondent in the following manner:

> I certify that the information contained in or accompanying the Final Audit Report is true, accurate, and complete. As to [the/those] identified portions of the Final Audit Report for which I cannot personally verify [its/their] accuracy, I certify under penalty of law that the Final Audit Report and all attachments, including any and all supporting information, were prepared in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who participated in development of the Final Audit Report, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.
>
> Signature:
>
> Name:
>
> Title:

77. Upon completion of a review by EPA of the Final Audit Report, EPA shall, in its sole discretion (but subject to the Dispute Resolution provisions of Paragraphs 94 through 98),

either: (1) notify Respondent in writing of its approval of the Final Audit Report, or (2) notify Respondent in writing of its rejection of all or any part of the Final Audit Report because of a failure to include information required in accordance with Appendix A. If EPA rejects all or any part of the proposed Final Audit Report, EPA will state the reasons for rejection and will provide to Respondent in writing a reasonable time to make a new submittal. In the event that Respondent fails to revise and re-submit any or all of the items addressed in EPA's notice of rejection for the Final Audit Report within the deadline provided by EPA in the notice, EPA shall have the right to investigate any and all of Respondent's shipments from customer facilities that are within the scope of the Compliance Audit as set forth in Paragraph 66, but that were not properly addressed in the Final Audit Report. In that case, pursuant to Section 3008(g) of RCRA, 42 U.S.C. § 6928(g), EPA also has the right to seek and collect the maximum civil penalty allowed by law for any and all violations of RCRA, at any such facility related to any such shipments.

78. Upon completion of a review by EPA of the Final Audit Report, EPA shall, in its sole discretion (but subject to the Dispute Resolution provisions of Paragraphs 94 through 98), determine whether facts reported by the Compliance Audit resulted in any violations of Subtitle C of RCRA, 42 U.S.C. § 6921 et seq., federal regulations promulgated thereunder, or state hazardous waste management requirements authorized by EPA pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926. For purposes of determining whether the Audit findings resulted in any violations, the Parties stipulate that spent media generated at and/or shipped from the customer facilities listed in the Final Audit Report constituted a "hazardous waste" as defined by 40 C.F.R. § 260.10, and the applicable state hazardous waste management regulations.

79. Respondent shall immediately undertake any and all actions necessary to correct any ongoing violation of Subtitle C of RCRA, 42 U.S.C. § 6921 et seq., federal regulations promulgated thereunder, or state hazardous waste management requirements authorized by EPA pursuant to Section 3006 of RCRA, 42 U.S.C. § 6926, and remediate any harm caused or threatened by such violation discovered during the course of the performance of the Compliance Audit, and institute effective measures to ensure that any such violation does not reoccur in the future. Nothing in this Paragraph shall relieve Respondent of any obligation imposed by any applicable federal, state and/or local laws and requirements concerning compliance.

80. In the event EPA determines that there was a violation as described in Paragraph 85, below, Respondent agrees to pay penalties in accordance with the penalty schedule in Paragraphs 85 through 87 of this Consent Agreement and Final Order, for each violation. Each violation shall be resolved and settled by paying the assessed penalty in accordance with Paragraphs 59 through 65 of this Consent Agreement and Final Order. EPA reserves any rights and remedies available to it under RCRA, the regulations promulgated thereunder and any other federal law or regulation to resolve any violations identified through the Compliance Audit that are not listed in Paragraph 85.

81. In the event EPA determines that there was a violation as described in Paragraph 85, below, Respondent will certify to EPA, upon personal investigation and to the best of its knowledge and belief, that it currently is in compliance with regard to the violations identified in the Compliance Audit. Respondent will submit this certification to EPA within 30 Days of receiving the EPA's written demand letter pursuant to Paragraph 82.

## CIVIL PENALTIES FOR VIOLATIONS DISCOVERED THROUGH THE COMPLIANCE AUDIT

82. Following EPA's review of the approved Final Audit Report, EPA will furnish to Respondent a demand letter, which establishes the pre-agreed penalties to be paid for violations described in Paragraph 85, below, and identified through the Compliance Audit and Final Audit Report. Once paid, the penalty payment would resolve the claims for civil penalties EPA may have against Respondent for those violations identified through the Compliance Audit and Final Audit Report. A copy of the demand letter will also be sent to the EPA Cincinnati Finance Office.

83. No criminal violation or civil violation that results in serious actual harm or that may present an imminent and substantial endangerment to public health or the environment, shall qualify for the imposition of penalties under this Section and satisfaction under this Consent Agreement and Final Order, and EPA reserves the right to seek and obtain injunctive relief and the imposition of the maximum civil penalty or criminal sanction allowed by law for any such violation.

84. Subject to the provisions and terms of this Consent Agreement and Final Order, the period commencing May 31, 2018 and ending December 31, 2020 (the "Tolling Period"), inclusive, will not be included in computing the running of any statute of limitations applicable to any action brought by EPA or on behalf of EPA, pursuant to 3008(a) and (g) of RCRA, 42 U.S.C. § 6928(a) and (g), for civil penalties and/or other remedies provided by law in relation to any violation of the regulations identified through the Compliance Audit. Respondent shall not assert, plead or raise against EPA, or the U.S. Department of Justice on behalf of EPA, in any fashion, whether by answer, motion or otherwise, any defense or avoidance based on the running of any statute of limitations during any portion of the Tolling Period, and any statute of limitations shall be tolled during and for that period.

85. Respondent shall be liable and agrees to pay civil penalties, upon demand by EPA, for any violation discovered through the Compliance Audit and disclosed in the Final Audit Report, as set forth below:

    a. Violations of 40 C.F.R. § 262.20(a)(1), for offering for transport spent media in a Desulf Canister from a customer facility to a permitted TSD, without first preparing a manifest:

$2,000 per shipment for violations occurring between September 8, 2015 and October 3, 2016.

$4,000 per shipment for violations occurring on or after October 4, 2016

b. Violations of 40 C.F.R. § 262.20(a)(1), for offering for transport spent media in a Desulf Canister from a customer facility to a non-permitted receiving facility, without first preparing a manifest:

$3,000 per shipment for violations occurring between September 8, 2015 and October 3, 2016.

$7,500 per shipment for violations occurring on or after October 4, 2016.

c. Violations of Section 3001(d)(5) of RCRA, 42 U.S.C. § 6921(d)(5), for ultimate disposal of spent media from a Desulf Canister at a facility not permitted for treatment, storage or disposal of hazardous waste

$10,000 per shipment for violations occuring on or after September 8, 2015.

86. Penalties shall be individually assessed for each separate shipment identified through the Compliance Audit.

87. Respondent shall pay any penalty within 30 Days of receiving the EPA's written demand for payment.

88. EPA may, in the unreviewable exercise of its discretion, reduce or waive penalties otherwise due it under this Consent Agreement and Final Order.

89. Respondent shall pay penalties owing to EPA in the manner set forth and with the confirmation notices required by Paragraph 59, except that Respondent's transmittal letter shall state that the payment is for penalties for violations discovered through the Compliance Audit, and it shall state for which violation(s) the penalties are being paid.

90. If Respondent fails to pay penalties for violations discovered through the Compliance Audit, according to the terms of this Consent Agreement and Final Order, Respondent shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit EPA from seeking any remedy otherwise provided by law for Respondent's failure to pay any penalties.

91. Non-Exclusivity of Remedy. Penalties are not the EPA's exclusive remedy for violations discovered through the Compliance Audit. EPA expressly reserves the right to seek any other relief it deems appropriate for Respondent's violation of this Consent Agreement and Final Order or applicable law, including but not limited to an action against

Respondent for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation shall be reduced by an amount equal to the amount of any penalty assessed and paid pursuant to this Consent Agreement and Final Order. EPA will not seek further penalties for violations addressed pursuant to Paragraph 85.

## GENERAL SETTLEMENT CONDITIONS

92. By signing this Consent Agreement, Respondent acknowledges that this Consent Agreement and Final Order will be available to the public and represents that, to the best of Respondent's knowledge and belief, this Consent Agreement and Final Order does not contain any confidential business information or personally identifiable information from Respondent.

93. Respondent certifies that any information or representation it has supplied or made to EPA concerning this matter was, at the time of submission true, accurate, and complete and that there has been no material change regarding the truthfulness, accuracy or completeness of such information or representation. EPA shall have the right to institute further actions to recover appropriate relief if EPA obtains evidence that any information provided and/or representations made by Respondent to the EPA regarding matters relevant to this Consent Agreement and Final Order, including information about respondent's ability to pay a penalty, are false or, in any material respect, inaccurate. This right shall be in addition to all other rights and causes of action that EPA may have, civil or criminal, under law or equity in such event. Respondent and its officers, directors and agents are aware that the submission of false or misleading information to the United States government may subject a person to separate civil and/or criminal liability.

## DISPUTE RESOLUTION

94. The dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Agreement and Final Order.

95. If Respondent disagrees, in whole or in part, with any decision by EPA under this Consent Agreement and Final Order, Respondent shall notify EPA through the Branch Chief of the Air, RCRA and Toxics Branch, EPA, Region III, and the parties shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion relating to this Consent Agreement and Final Order.

96. In the event that the parties cannot resolve a dispute by informal negotiations under the preceding paragraphs, Respondent may pursue the matter by submitting its objection to the Branch Chief of the Air, RCRA and Toxics Branch, EPA, Region III, in writing. Respondent's written objections must set forth the specific points of the dispute, the basis for Respondent's position and any matters which it considers necessary for EPA's determination.

97. EPA and Respondent shall have thirty (30) days from receipt of Respondent's written objections to attempt to resolve the dispute through formal discussions.

98. If EPA and Respondent cannot resolve the dispute through formal discussions, EPA, through the Branch Chief of the Air, RCRA and Toxics Branch, EPA, Region III, will provide to Respondent in writing EPA's decision on the pending dispute, and that decision will be binding upon the Respondent.

## NOTICE

99. Except as otherwise specified herein, whenever this Consent Agreement and Final Order requires notice or submission of reports, information, or documents, such notice or submission shall be provided to the following persons via certified mail, return receipt requested, first class mail, overnight mail (Express or priority), hand-delivery or any reliable commercial delivery service. Either party may substitute another person to receive notice on its behalf or change the address to which notices are to be sent by sending written notification of the substitution or change to the other party.

a. For EPA:

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b. For Respondent:

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michael.roesch@bloomenergy.com

## CERTIFICATION OF COMPLIANCE

100. Respondent certifies to EPA, upon personal investigation and to the best of its knowledge and belief, that it currently is in compliance with regard to the violations alleged in this Consent Agreement.

## OTHER APPLICABLE LAWS

101. Nothing in this Consent Agreement and Final Order shall relieve Respondent of its obligation to comply with all applicable federal, state, and local laws and regulations, nor shall it restrict EPA's authority to seek compliance with any applicable laws or regulations, nor shall it be construed to be a ruling on the validity of any federal, state or local permit. This Consent Agreement and Final Order does not constitute a waiver, suspension or modification of the requirements of RCRA, or any regulations promulgated thereunder.

## RESERVATION OF RIGHTS

102. This Consent Agreement and Final Order resolves only EPA's claims for civil penalties for the specific violation[s] alleged against Respondent in this Consent Agreement and Final Order and for violations identified through the Compliance Audit. EPA reserves the right to commence action against any person, including Respondent, in response to any condition which EPA determines may present an imminent and substantial endangerment to the public health, public welfare, or the environment. This settlement is

subject to all limitations on the scope of resolution and to the reservation of rights set forth in Section 22.18(c) of the Consolidated Rules of Practice, 40 C.F.R. § 22.18(c). EPA reserves any rights and remedies available to it under RCRA, the regulations promulgated thereunder and any other federal law or regulation to enforce the terms of this Consent Agreement and Final Order after its effective date.

## EXECUTION /PARTIES BOUND

103. This Consent Agreement and Final Order shall apply to and be binding upon EPA, the Respondent and the officers, directors, employees, contractors, successors, agents and assigns of Respondent. By his or her signature below, the person who signs this Consent Agreement on behalf of Respondent is acknowledging that he or she is fully authorized by the Respondent to execute this Consent Agreement and to legally bind Respondent to the terms and conditions of this Consent Agreement and Final Order.

## EFFECTIVE DATE

104. The effective date of this Consent Agreement and Final Order is the date on which the Final Order, signed by the Environmental Appeals Board is filed along with the Consent Agreement with the Hearing Clerk for the Environmental Appeals Board pursuant to the Consolidated Rules of Practice.

## ENTIRE AGREEMENT

105. This Consent Agreement and Final Order constitutes the entire agreement and understanding between the Parties regarding settlement of all claims for civil penalties pertaining to the specific violations alleged herein and there are no representations, warranties, covenants, terms, or conditions agreed upon between the Parties other than those expressed in this Consent Agreement and Final Order.

For Respondent: BLOOM ENERGY CORPORATION

Date: 4/2/20

By: Shawn Soderberg, Esq.
Executive Vice President, General
Counsel and Secretary

For the Complainant: U.S. ENVIRONMENTAL PROTECTION AGENCY

Date: 5/5/2020

By: NATALIE KATZ Digitally signed by NATALIE KATZ Date: 2020.05.05 12:23:48 -04'00'

Natalie L. Katz
Sr. Assistant Regional Counsel
Office of Regional Counsel, EPA, Region III

Date: 5/5/2020

By: LESLIE OIF Digitally signed by LESLIE OIF Date: 2020.05.05 13:54:26 -04'00'

Leslie A. Oif
Attorney
Waste and Chemical Enforcement Division

After reviewing the Consent Agreement and other pertinent matters, the Environmental Compliance and Enforcement Division of the U.S. Environmental Protection Agency, recommends that the Administrator, or his/her designee issue the attached Final Order.

Date: 05/05/2020

By: DIANA SAENZ Digitally signed by DIANA SAENZ Date: 2020.05.05 14:57:12 -04'00'

Diana Saenz, Acting Director
Waste and Chemical Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

## APPENDIX A

The purpose of the Compliance Audit shall be to audit each of the records of Respondent's shipments of Desulf Units containing spent catalysts from all of its customer facilities in the United States outside of Region III (DC, DE, MD, PA, VA, WV) for the time period beginning September 8, 2015 through December 31, 2019. The Final Audit Report, required by Paragraph 73 and 74 of this Consent Agreement and Final Order, shall include the following information:

1. Identification of all facilities where a Bloom Energy Server has been installed outside of Region III states (DC, DE, MD, PA, VA, WV). For each such facility, please provide the following:

    a. Name of customer, name of facility, address of facility, and EPA ID number of facility (if applicable)
    b. Date(s) of each Energy Server installation.
    c. Number and volume of all Desulf Canisters present at the facility.

2. For each of the facilities listed in response to question 1a. above, provide the date(s) and number of instances when any Desulf Canisters were removed from any installed Energy Server during the period of September 8, 2015 through December 1, 2019. For each such instance, provide the following:

    a. Date of removal
    b. Number of Desulf Canisters removed
    c. Date of off-site transport
    d. Name, address, and EPA ID number (if applicable) of transporter(s) utilized
    e. Copies of the following types of documents showing each shipment of the Desulf Canisters, including: bills of lading, manifests, hazardous waste manifests, shipping invoices, electronic records, LDR notices and certifications.

3. For each facility or location that received a Desulf Canister shipment ("Receiving Facility"), provide the following:

    a. Name, address, and EPA ID number (if applicable) of Receiving Facility
    b. Date of receipt for each Desulf Canister shipment
    c. For any and all material removed from a Desulf Canister ("Removed Material") at this location, provide the following:
        (1) Date of removal and volume removed
        (2) Whether Removed Material was shipped from the Receiving Facility to another location and the date and method of such shipment(s). If it has not been shipped from that location, state its current location and explain why it has not been shipped from the Receiving Facility.
        (3) If the Removed Material was shipped from the Receiving Facility, provide copies of the following types of documents reflecting each shipment, including: bills of lading, manifests, hazardous waste manifests, shipping

invoices, electronic records, LDR notices and certifications that accompanied and/or refer to each off-site shipment of this material.

4. For each facility or location that received material removed from a Desulf Canister ("Final Destination"), please provide the following:

   a. Name, address, and EPA ID number (if applicable) of Final Destination
   b. Date of receipt for each shipment of Removed Material from a Desulf Canister
   c. Whether the Removed Material was ultimately disposed of. If so, provide:
      (1) date of disposal
      (2) volume disposed
      (3) disposal facility name, address and EPA ID number (if applicable)
      (4) method of disposal
      (5) copies of all documents related to the disposal.
   d. State whether the Removed Material was ultimately reclaimed or recycled. If so, provide:
      (1) whether the Removed Material was reclaimed or whether it was recycled
      (2) date of reclamation or recycling
      (3) name, address and EPA ID number (if applicable) of reclamation or recycling location
      (4) method of reclamation or recycling
      (5) copies of all documents related to the reclamation or recycling.

5. If Bloom is not in possession of documents (in any format) reflecting the information listed above, Bloom shall: i) specify which information and categories of documents it does not have; ii) formally request in writing and diligently pursue for the benefit of the auditor documents including such information from applicable transporters, receiving facilities, destination facilities, and any other entities likely to have such documents; and iii) inform EPA regarding the response of each entity to the request for documents.

6. A statement indicating any problems or difficulties, in performing the Compliance Audit, and the measures taken to address such problems or difficulties.

## CERTIFICATE OF SERVICE

I certify that copies of the foregoing "Consent Agreement" and "Final Order," in the matter of *Bloom Energy Corporation*, Docket No. RCRA-HQ-2020-501were sent to the following persons in the manner indicated:

**By E-mail:**

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Dated: ***May 12 2020***

Eurika Durr
Clerk of the Board