



STATE OF CONNECTICUT  
*CONNECTICUT SITING COUNCIL*

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

Web Site: [portal.ct.gov/csc](http://portal.ct.gov/csc)

**VIA ELECTRONIC MAIL**

June 14, 2024

Kristen Grillo  
Bloom Energy Corporation  
4353 North First Street  
San Jose, CA 95134  
[Kristen.Grillo@bloomenergy.com](mailto:Kristen.Grillo@bloomenergy.com)

RE: **PETITION NO. 1561** - Bloom Energy Corporation Declaratory Ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the construction, maintenance and operation of a customer-side 350-kilowatt fuel cell facility and associated equipment to be located at Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut. **Compliance with Condition No. 4.**

Dear Kristen Grillo:

The Connecticut Siting Council (Council) is in receipt of the notification for pipe cleaning procedure dated June 13, 2024 regarding compliance with Condition No. 4 of the Council's Declaratory Ruling of May 26, 2023 for the above-referenced facility.

The Council acknowledges that the condition has been satisfied. This acknowledgment applies only to the condition satisfied by the June 13, 2024 correspondence.

Please be advised that deviations from the standards established by the Council in the Declaratory Ruling are enforceable under the provisions of Connecticut General Statutes §16-50u.

Thank you for your attention and cooperation.

Sincerely,

Melanie A. Bachman  
Executive Director

MAB/IN/dll

# What Powers You

June 13<sup>th</sup>, 2024

Melanie Bachman, Esq.  
Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

**RE: PETITION NO. 1561** - Bloom Energy Corporation petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a customer-side 350-kilowatt fuel cell facility and associated equipment to be located at Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut.

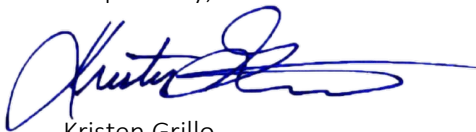
Dear Ms. Bachman:

Per condition #4 outlined in the Siting Council's declaratory ruling letter received on May 26<sup>th</sup>, 2023, we are respectfully submitting the attached report to notify the Council of the means and methods that will be used to perform fuel pipe cleaning procedures, to be completed in accordance with Public Act 11-101.

In compliance with condition #4h, copies of this correspondence and accompanying report are being sent via electronic email to the state agencies on the attached list.

If you have any questions, concerns or require additional information, please contact me at (917) 803-4511.

Respectfully,



Kristen Grillo  
Bloom Energy Corporation  
**Senior Permitting Specialist | East Coast Field Office**  
Customer Installations Group | North America  
(917) 803-4511  
[Kristen.Grillo@bloomenergy.com](mailto:Kristen.Grillo@bloomenergy.com)



Bloom Energy Corporation  
4353 North First Street, San Jose, CA 95134  
**408 543 1500**  
[www.bloomenergy.com](http://www.bloomenergy.com)



**A/Z Corporation**  
 46 Norwich Westerly Road  
 North Stonington, Connecticut 06359  
 P: (800) 400-2420  
 F: (860) 445-3599

**Project: C-P-0025 CTU006 NVCC Waterbury**  
 750 Chase Parkway  
 Waterbury, Connecticut 06708

## Submittal #220000-008.1 - Purge Plan 220000 - Plumbing

<b>Revision</b>	1	<b>Submittal Manager</b>	Bill Burgon (A/Z Corporation)
<b>Status</b>	Closed	<b>Date Created</b>	Jun 13, 2024
<b>Issue Date</b>	Jun 13, 2024	<b>Spec Section</b>	220000 - Plumbing
<b>Responsible Contractor</b>	A/Z Mechanical	<b>Received From</b>	Daniel Cruz (A/Z Mechanical)
<b>Received Date</b>		<b>Submit By</b>	
<b>Final Due Date</b>	Jun 20, 2024	<b>Lead Time</b>	
		<b>Cost Code</b>	
<b>Location</b>		<b>Type</b>	Document
<b>Sub Section</b>			
<b>Approvers</b>	Bill Burgon (A/Z Corporation)		
<b>Ball in Court</b>			
<b>Distribution</b>			
<b>Description</b>			

### Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					
Bill Burgon		Jun 20, 2024	Jun 13, 2024	For Record Only	
<b>Comment</b>	Updated to include the site plan per design comments in previous submittal,				

Our review is for the general conformance with the design concept and contract documents. Any marking or comments must not be construed as relieving the subcontractor/supplier from compliance with the project plans and specifications nor departures there from. The subcontractor / supplier remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes for the techniques of assembly, and for performing this work in a safe manner and in accordance with all applicable codes.

**Date:** 06/13/2024

**Reviewed By:** William Burgon

**CTU006**

**METHOD OF PROCEDURE**

<b>WHERE</b>	Building Name	CTU006 NVCC Waterbury/ SKEPA/ BLOOM ENERGY - FUEL CELLS		
	Work Site Address	750 Chase Parkway, Waterbury, CT 06708		

<b>WHEN</b>	Work Start Date	14-Jun	Shift Start Time	7:00:00 AM
	Work Complete Date	14-Jun	Shift Complete Time	3:30:00 PM

<b>WHAT</b>	Site ID	CTU006	Description of Work	FUEL CELL
	Project Title	NVCC Waterbury	MOP Type	Sequence of Operation for Nitrogen Purge

<b>WHO</b>	Name	Company	Title	Function/Department	Date	Approved or Approval Not Req
		Rob Kloss	A-Z Corp	Project Manager	CM	
	Bill Burgon	A-Z Corp	Project Engineer	CM		
	Daniel Cruz	A-Z Corp	Project Manager	Mechanical		
	Nicholas Baldi	A-Z Corp	Project Foreman	Mechanical		
	Sung Lee	SKE&C	Project Controls Manag	Remote Oversight		
	Brad Park	SKE&C Betek	Project Controls Manag	Remote Oversight		
	Jack Min	SKE&C Betek	Engineering Manager	Remote Oversight		
	Andrew Lathrop	SKE&C Betek	Superintendent	Remote Oversight		
	Richard Gregoire	Idea Engineering	Engineer	3rd Party Inspection Agency		
	Waterbury Fire Departme	City of Waterbury	Dispatch	Remote Oversight - In Case of Emergency		

DOC-1010418 Rev A

CTU006 NVCC Waterbury / SKE&C Betek BLOOM ENERGY - FUEL CELLS

C-P-0025

CTU006 (750 Chase Parkway, Waterbury, CT 06708)

SECT.				
1	Planning Tasks			
2	Shutdown Tasks			

Critical Step? (*)	Step No	Procedure / Task	Responsible Parties	Planned Start Date	Time	Initial Here
<b>PLANNING TASKS</b>						
	1	Review the Bloom Energy N2 Commissioning requirements and the CSC Letter Dated 5/26/23 and make provisions to complete all required work needed to safely purge and energize the new gas piping installation.	A/Z Corp/Bloom Energy/SKEPA	6/10/2024	N/A	
	2	Verify fuel plumbing has been pressure tested for leaks by the final inspections complete prior to executing this MOP	A/Z Corp	6/10/2024	N/A	
	3	Per CSC Letter Item#4a Compressed Nitrogen will be the identified cleaning media for the fuel cell new piping installation.	A/Z Corp	6/10/2024	N/A	
	4	Verify Tools are available: Gas Meter Detector RKI-GX2012, Adjustable Pipe Wrenches, Caution Tape, Fire Extinguisher (2A or better), Nitrogen Bottle with Pressure Regulator and Certified Gauges	A/Z Corp	6/14/2024	7am	
	5	Required PPE: Safety Glasses, Gloves Lvl4 cut resistant, Hard Hat, High Visibility Clothing, Steel Toe or Composite Work Boots with safety toe protection	A/Z Corp	6/14/2024	N/A	
	6	Per CSC Letter Item#4b Identify Known Hazards of Compressed Nitrogen are as follows: Contains Gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation	A/Z Corp	6/10/2024	N/A	
	7	Per CSC Letter Item#4c Description of how known hazards will be mitigated: A/Z will perform operation in outdoor area away from mechanical intakes or building openings. Compressed Nitrogen tanks will be stored out of direct sunlight, upright and secured to prevent tank from being susceptible to extreme temperatures above 52 deg C/ 125deg F.	A/Z Corp	6/10/2024	N/A	
	8	Per CSC Letter Item#4d A/Z jobsite foreman and any other affected employees conducting work shall conduct a site specific safety meeting with the Compressed Nitrogen material SDS sheet regards to safe working methods. All work to conform to the requirements set forth in the NFPA 54 1213.0 Pressure Testing, Inspection, and Purging.	A/Z Corp	6/14/2024	7am	
	9	Per CSC Letter Item#4f A/Z Corporation will be performing the Nitrogen Media Purge as the project Plumbing Contractor approved by the State of CT.	A/Z Corp/SKEPA	6/14/2024	N/A	
	10	Per CSC Letter Item#4g - Notify 3rd Party Inspection Agency to schedule witness inspection for Fuel Pipe Cleaning. Agency will be Idea Engineering, Inc. - 612 Wheelers Farms Rd. - 1st Flr. Milford, CT 06461	A/Z Corp/Bloom Energy/SKEPA	6/10/2024	N/A	
	11	Per CSC Letter Item#4h - Review MOP with SKE&C and Bloom Energy. If approved, SKE&C to submit notice to CSC of purging clean new gas piping.	A/Z Corp/Bloom Energy/SKEPA	6/10/2024	N/A	

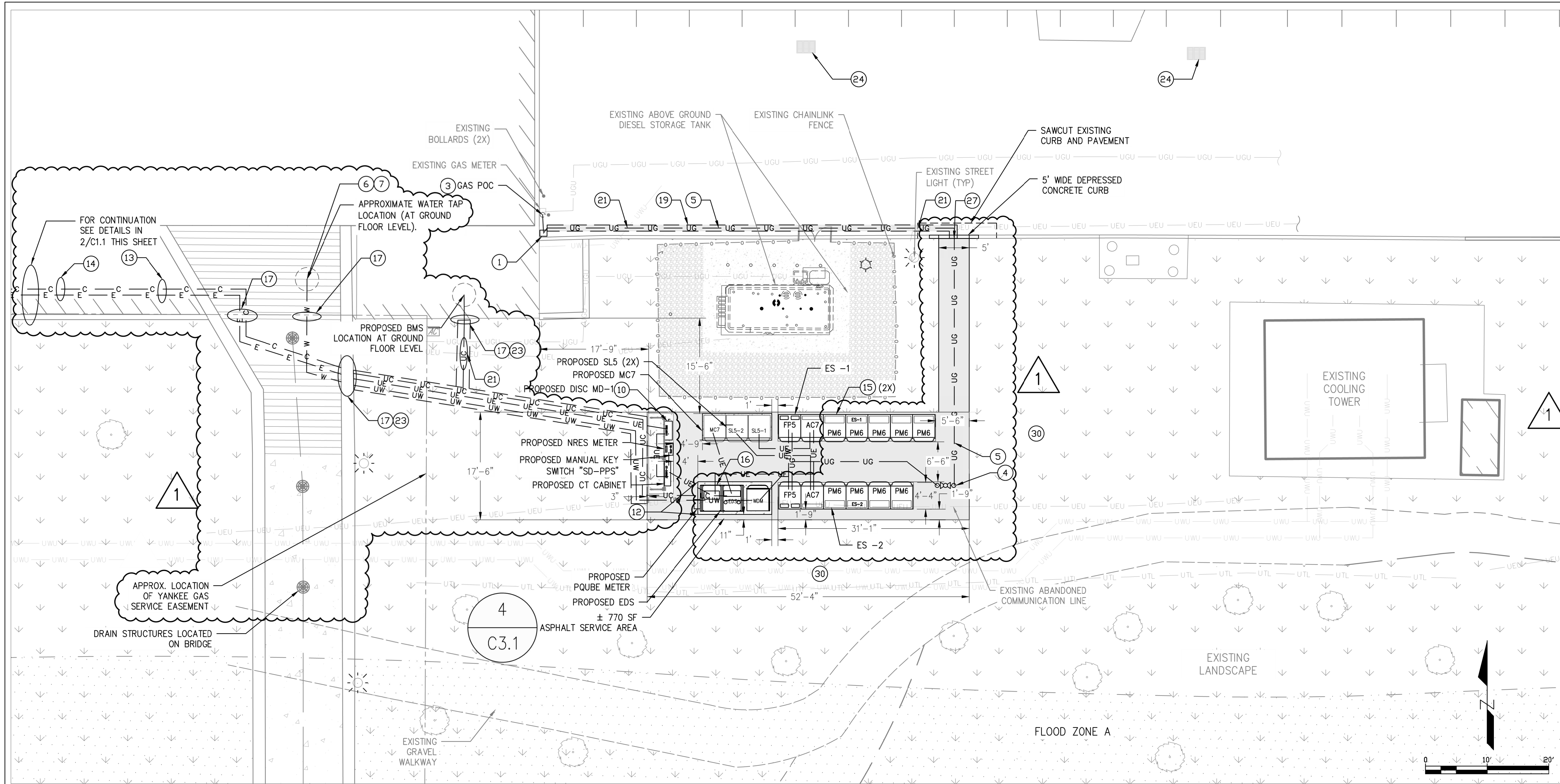
	12	Field Coordination: Setup Barricades with caution tape and or cones within a 10ft radius around the point of discharge. Ensure no open flame within 50ft of equipment. Make sure Fire Extinguisher is within reach less than 50ft from discharge area. Confirm all Valves are in the closed position at all fuel stubups and meter.	A/Z Corp	6/10/2024	7am	
	13	Notify Fire Department Dispatch	A/Z Corp	6/10/2024	7am	
<b>SHUTDOWN TASKS</b>						
	1	Per CSC Letter Item# 4e - Gather A-Z Team Together for Stand-Down to Discuss MOP and Go Over Any Questions/Concerns. Persons not involved in the purging operations shall be evacuated from all areas within 10ft of point of discharge	All Teams	6/14/2024	7am	
	2	Purge Open End of piping with Compressed Nitrogen using a pressure regulator with certified gauge rated for 60psi and controlled shutoff valve. Starting Point will be at Gas Meter POC and piping will be valved off at the ES modules. (See drawing)	A/Z Corp/Bloom Energy	6/14/2024	8:00am	
	3	The point of discharge shall be located at least 10ft away from sources of ignition, building openings, and 25ft from mechanical intake openings. (See Drawing) Compressed Nitrogen will be purged at 60psi for 60 seconds approximately 6 times at each of the 2 outlet locations noted on the plan. (See Drawing).	A/Z Corp/Bloom Energy/3rd Party Inspector	6/14/2024	8:00am	
	4	Close System Open End shutoff valves for purging and make connections to Bloom Fuel Cell Equipment.	A/Z Corp/Bloom Energy	6/14/2024	10:00am	
	5					
	6					
	7					
	8					
	9					

## PROJECT CONTACTS LIST

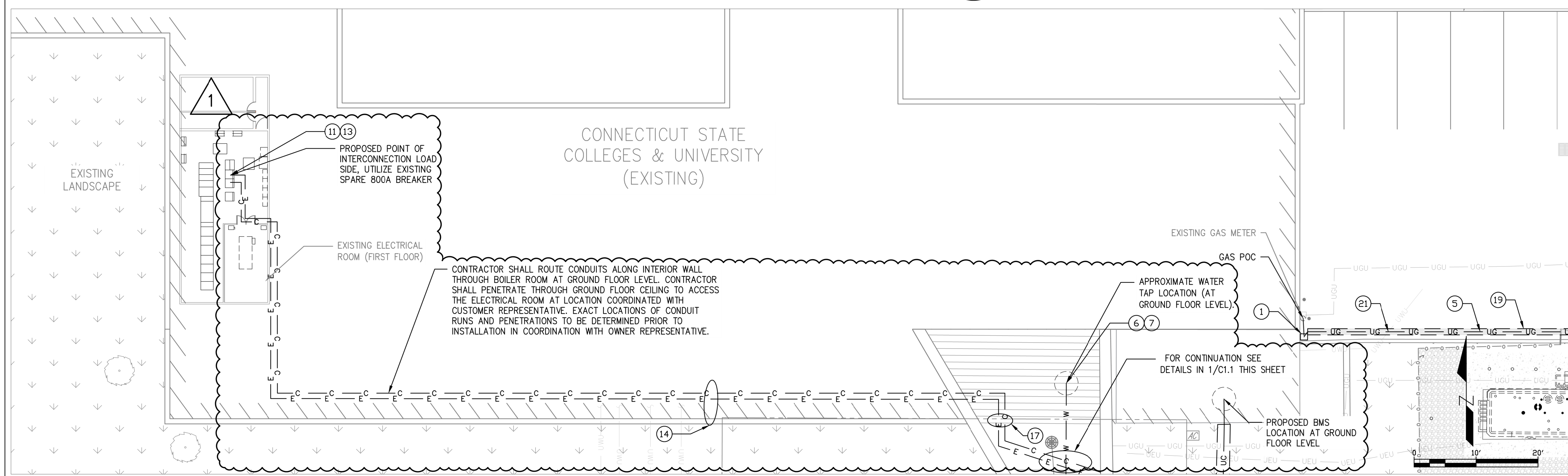
Name	Company	Title	Function/Department	Email	Phone
Robert Kloss	A-Z Corp	Project Manager	CM	<a href="mailto:rkloss@a-zcorp.com">rkloss@a-zcorp.com</a>	860-949-9734
Bill Burgon	A-Z Corp	Site Superitendant	CM	<a href="mailto:bburgon@a-zcorp.com">bburgon@a-zcorp.com</a>	860-917-5297
Daniel Cruz	A-Z Corp	Project Manager	Mechanical	<a href="mailto:dcruz@a-zcorp.com">dcruz@a-zcorp.com</a>	860-235-3945
Nicholas Baldi	A-Z Corp	Project Foreman	Mechanical	<a href="mailto:nb4433@a-zcorp.com">nb4433@a-zcorp.com</a>	860-867-0893
Sung Lee	SKEPA	Project Controls Manager	Remote Oversight	<a href="mailto:sunglee@sk.com">sunglee@sk.com</a>	213-712-6094
Brad Park	SKEPA	Project Manager	Remote Oversight	<a href="mailto:brad_park@sk.com">brad_park@sk.com</a>	408-784-9265
Jack Min	SKEPA	Engineering Manager	Remote Oversight	<a href="mailto:jackmin@sk.com">jackmin@sk.com</a>	201-716-9502
Andrew Lathrop	SKEPA	Superintendent	Remote Oversight	<a href="mailto:andrew_lathrop@sk.com">andrew_lathrop@sk.com</a>	917-239-2275
Richard Gregoire	Idea Engineering, Inc.	Engineer	3rd Party Inspection Agency	<a href="mailto:richard.gregoire@ideas4eng.com">richard.gregoire@ideas4eng.com</a>	203-500-1743
Waterbury Fire Deparment	City of Waterbury	Admin/Dispatch	Oversight		203-597-3425







DETAILED SITE PLAN A  
SCALE: 1" = 10'



DETAILED SITE PLAN B  
SCALE: 1" = 10'

GENERAL NOTES

- CLEAN AND PRIME ALL WALL MOUNTED PIPING AND CONDUIT. PIPING AND CONDUIT SHALL BE PAINTED WITH EXTERIOR GRADE PAINT TO MATCH EXISTING EXTERIOR WALL.
- CONDUITS AND PIPES MOUNTED TO BUILDING WALL SHALL BE SUPPORTED AS PER LOCAL CODE, RUN AT HEIGHT ABOVE DOORWAYS, AND STAND OFF WALL TO AVOID EXISTING CONDUITS AND PIPES.
- SEE BLOOM ENERGY PRODUCT INSTALLATION DRAWINGS FOR UTILITY CONNECTIONS TO ANCILLARY EQUIPMENT AND ENERGY SERVER.
- ALL PULL BOXES AND VAULTS REQUIRED ARE NOT SHOWN. CONTRACTOR SHALL PROVIDE PULL BOX OR VAULT FOR CONDUIT RUNS WITH MORE THAN 360-DEG BENDS OR OTHERWISE REQUIRED PER CABLE PULLING TENSION OR SIDEWALL PRESSURE LIMITATIONS. CONTRACTOR SHALL SIZE PULL BOX OR VAULT IN COMPLIANCE WITH NEC REQUIREMENTS.

REFERENCE SHEET NOTES

- UTILITY SHALL FURNISH AND INSTALL NEW WALL-MOUNTED GAS METER ASSEMBLY & REGULATOR ASSEMBLY AT LOCATION OF EXISTING METER ASSEMBLY. THE CONTRACTOR SHALL COORDINATE ALL CONNECTIONS WITH GAS UTILITY.
- ABOVEGROUND GAS SERVICE TAP BY UTILITY COMPANY. CONTRACTOR SHALL COORDINATE WITH GAS UTILITY. REFER TO GAS RISER DETAIL FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL FURNISH AND INSTALL GAS SHUT-OFF VALVE. REFER TO GAS RISER DETAIL FOR ADDITIONAL REQUIREMENTS.
- FURNISH AND INSTALL GAS PIPE. REFER TO GAS RISER DETAIL FOR ADDITIONAL REQUIREMENTS.
- TAP EXISTING WATER LINE AT NEAREST ACCESSIBLE LOCATION IN BUILDING AS SHOWN WITH A LOCAL SHUT-OFF VALVE. REFER TO DOMESTIC WATER CONNECTION DETAIL FOR ADDITIONAL REQUIREMENTS.
- FURNISH AND INSTALL WATER PIPE. REFER TO WATER RISER DETAIL FOR ADDITIONAL REQUIREMENTS.
- SK ECOPLANT AMERICAS CORPORATION SHALL FURNISH AND CONTRACTOR SHALL INSTALL DISCONNECT SWITCH MOUNT TO STRUT PER MANUFACTURER AND UTILITY SPECIFICATIONS.
- CONTRACTOR SHALL TERMINATE ELECTRIC FEEDER AS SHOWN. REFER TO ELECTRICAL SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL FURNISH AND INSTALL TWO GROUNDING RODS PLACED A MINIMUM OF 6' APART. REFER TO ELECTRICAL SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL FURNISH AND INSTALL ELECTRICAL FEEDER. REFER TO ELECTRICAL SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
- MOUNT CONDUIT/PIPE TO INTERIOR WALL. COORDINATE EXACT ROUTING WITH CUSTOMER REPRESENTATIVE IN THE FIELD. REFER TO WALL MOUNTING DETAIL FOR ADDITIONAL REQUIREMENTS.
- PROPOSED BLOOM ENERGY SERVER. REFER TO BLOOM ENERGY STANDARD INSTALLATION DRAWING SET FOR ADDITIONAL BLOOM ENERGY SERVER DETAILS.
- FACTORY WIRE BLOOM ENERGY SERVER EMERGENCY POWER-OFF SWITCH (EPO).
- CONTRACTOR SHALL CORE CONDUIT AND/OR PIPE THROUGH WALL. SCAN WALL PRIOR TO CORING TO AVOID COLLATERAL DAMAGE TO EXISTING PLUMBING AND WIRING. REFER TO WALL PENETRATION DETAIL FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL TRENCH FOR UNDERGROUND UTILITIES IN THIS LOCATION AND HAND DIG TRENCHES WHERE THEY CROSS EXISTING UTILITIES. SAW CUT TRENCH EDGES AS NEEDED. REFER TO UNDERGROUND/TRENCH CONDUIT AND PIPING DETAIL FOR ADDITIONAL REQUIREMENTS.
- PROTECT EXISTING UNDERGROUND UTILITY LINES FROM DAMAGE WHEN CROSSING WITH NEW UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR OR REPLACE OF ANY DAMAGED LINES.
- CONTRACTOR SHALL TRANSITION ALL ABOVEGROUND LINES TO UNDERGROUND TOWARD ANCILLARY EQUIPMENT. ABOVE GROUND UTILITIES SHALL BE PROTECTED AS NECESSARY, THEN ROUTED UNDERGROUND TO EQUIPMENT STUB-UP LOCATIONS PER MECHANICAL DETAIL.
- CONTRACTOR SHALL FURNISH AND INSTALL "DANDY SACK OR AN APPROVED EQUAL WITH OUTFLOW PORTS AT STORM DRAIN INLET. REFER TO STORM DRAIN PROTECTION DETAIL FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL UNDER-CUT EXISTING CURB FOR TRENCHING UTILITY LINES AND BACKFILL WITH CONCRETE SLURRY. IF CURB IS DAMAGED, REPAIR TO MATCH EXISTING.
- CONTRACTOR SHALL FURNISH AND INSTALL LANDSCAPE/TURF RESTORATION ON ALL DISTURBED AREAS. REFER TO LANDSCAPE/TURF RESTORATION DETAIL FOR ADDITIONAL REQUIREMENTS. IRRIGATION SHALL BE PROTECTED AND REMAIN OPERATIONAL DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR EXTENDING AND/OR REROUTING IRRIGATION LINES AS NECESSARY AND THE REPAIR/REPLACEMENT IF ANY DAMAGE OCCURS. COORDINATE ALL IRRIGATION REPAIRS AND CONTROLS WITH CLIENT REPRESENTATIVE.

EXISTING UTILITY NOTE:  
THE LOCATION OF EXISTING UTILITIES IS SHOWN FOR THE CONTRACTOR'S REFERENCE. EXACT LOCATION, DEPTH, AND SIZE OF ALL EXISTING UTILITIES IS NOT KNOWN. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES NOT SHOWN ON THESE DRAWINGS. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UNDERGROUND UTILITIES AND PROTECT THE EXISTING UNDERGROUND LINES FROM DAMAGE WHEN CROSSING WITH NEW UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED LINES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNER HERON INAPPROPRIATE AND MAY REQUIRE ADJUSTMENTS TO AVOID CONFLICTS.

SITE PLAN REFERENCE NOTE:  
1. PLAN ENTITLED "TOPOGRAPHY & UTILITY SURVEY 750 CHASE PARKWAY", SCALE 1"=20', PREPARED BY CONTROL POINT ASSOCIATES, INC. DATED 02/21/2023.  
2. AERIAL IMAGERY.

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t: (408) 543-1500 f: (408) 543-1501  
www.bloomenergy.com

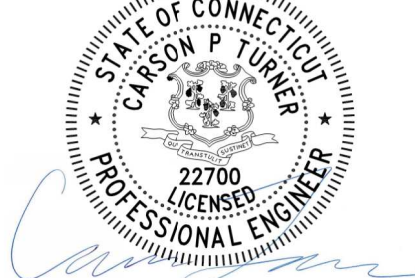
PROPRIETARY AND CONFIDENTIAL

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4353 N. FIRST STREET  
SAN JOSE, CA 95134  
t: (408) 543-1500

ENGINEER OF RECORD  
CARSON TURNER, P.E.  
LICENSE # 22700



Digitally signed  
by Carson Turner  
DN: CN=Carson Turner  
Date: 2024.05.23  
08:01:55-07'00'

CUSTOMER SITE

CONNECTICUT STATE COLLEGES & UNIVERSITIES  
750 CHASE PKWY  
WATERBURY, CT 06708



RELEASE HISTORY

REV	ISSUE PURPOSE	DATE
0A	INITIAL RELEASE	07/21/2023
1	REVISED FOR IFC	05/10/2024

DESIGNED BY SCOTT BARD  
DRAWN BY SHIVANAND ANNIGERI

REVIEWED BY KATE TAYLOR  
APPROVED BY CARSON TURNER

SHEET TITLE

DETAILED SITE PLAN

DRAWING NUMBER

C1.1

BLOOM ENERGY DOCUMENT NUMBER

DOC-1015258

THIS DRAWING IS 24" X 36" AT FULL SIZE

SHEET 04 OF 17



# Gas System Commissioning – N2

**DOC-1010208**

**Revision A**

**Estimated Evolution Time: 2 hrs**

**Number of Personnel: 2 Total**

**1 Inlet Attendant &**

**1 Discharge Attendant**

## Gas System Commissioning - Nitrogen



DOC-1010208 Rev A

### Purpose

- This procedure intends to provide a clear process for CIG field workers ensuring natural gas delivery to site within Bloom Energy Specifications. More specifically, the objective of this procedure is to:
  - Ensure Compliance with:
    - NFPA 54 National Fuel Gas Code
    - OSHA and CalOSHA construction safety standards
    - Title 49 of the Code of Federal Regulations (DOT) safety standards
    - Regional Air Quality Management Board Regulations
    - Bloom Energy's Critical to Quality Standards, especially regarding
      - Gas piping system blow-down and purging standards
    - Only valid in the state of CT

### Scope

- This procedure applies to all US BE construction sites in Connecticut.

### Audience

- 1 CDA Input attendant (general or sub-contractor)
- 1 Discharge Attendant (Bloom Qualified Gas Personnel)

### Applicable Documents

- NFPA 54
- DOC-1007152 SVC
- DOC-1009468 – Gas System Commissioning - CDA

## Gas System Commissioning - Nitrogen



DOC-1010208 Rev A

### Preliminary Requirements

#### Required Safety Trainings

- Bloom personnel on site must be documented as Bloom Energy (BE) Qualified Gas System Personnel, which includes:
  - Pipeline Safety
  - Compressed Gas Safety
  - LOTO
  - Valve Safety

#### Required Personal Protection Equipment (PPE)

- Safety glasses
- Gloves
- Hard hat
- High visibility clothing
- Work boots with safety toe protection

#### Special Precautions and Potential Hazards

- Verify fuel plumbing has been pressure tested for leaks by the utility and general contractor before executing this SOP (House Line Release).
- Oxygen monitoring is required for this operation.

#### Required Tools, Materials, and Equipment

- YFP Purge Hose (124422)
- House line installed
- Multi-Gas Monitor: minimum detection of Oxygen and Methane LEL
- Adjustable Wrench Set and/or two (2) Pipe Wrenches
- Gas Sampling Kit (BE# 131263)
- Caution tape and delineators
- Fire Extinguisher (2A or better).
  - This should already be on site.
- Filled Nitrogen Tank
  - QTY 1 approximately 75 Cu. Ft tank per 250 linear feet of 2" gas line (Praxair part NI-Q or equivalent)
  - QTY 1 approximately 140 Cu. Ft tank per 500 linear feet of 2" gas line (Praxair part NI-S or equivalent)

# Gas System Commissioning - Nitrogen

## Section A: Nitrogen Purge of Construction Plumbing

### 1. Site Setup

- 1.1. Ensure all customer protocols are met and scheduled accordingly
  - 1.1.1. Multiple RSA on the same site requires a dedicated MOP, using this procedure as a guide.
- 1.2. Put On PPE.
- 1.3. Turn on personal gas monitor(s) and attach to the person(s) at the discharge location.
- 1.4. Set up cones and caution tape to establish a discharge area around the fuel stub up farthest from the MSA with a 10 foot radius around the point of discharge. Remove all non-essential personnel.
  - 1.4.1. Ensure that there will be no open flame within 50 ft
- 1.5. Ensure a 2A or better fire extinguisher is located within 50 feet of the discharge area.
- 1.6. Verify Each Fuel stub up valve is in the closed position (at YFP, and Upstream facilities valve, where applicable and shut each fuel stub up valve. See Figure 1.

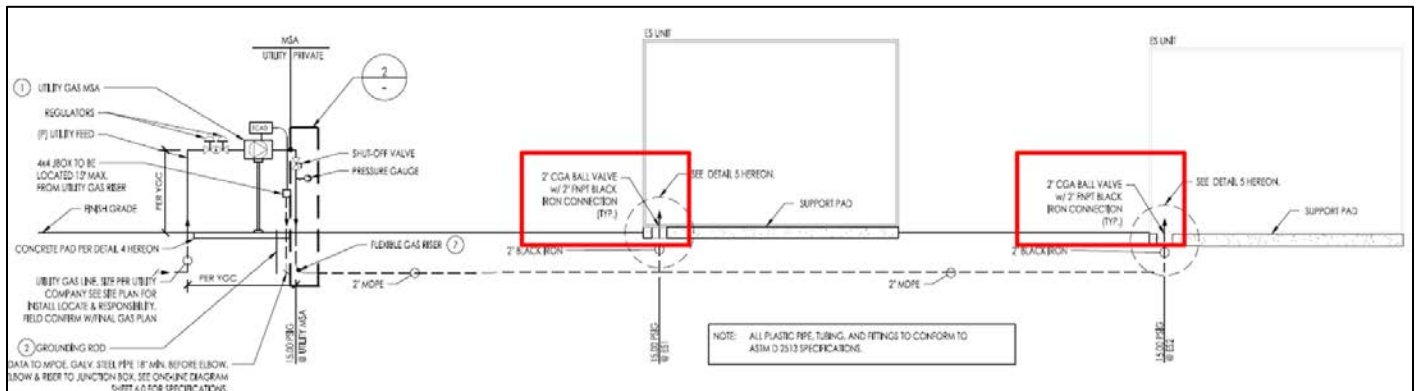


Figure 1

# Gas System Commissioning - Nitrogen

1.7. Identify Isolation valves on meter assembly.

1.8. Ensure all shut off valves are open between MSA and ESS and the stub-up valves are closed.

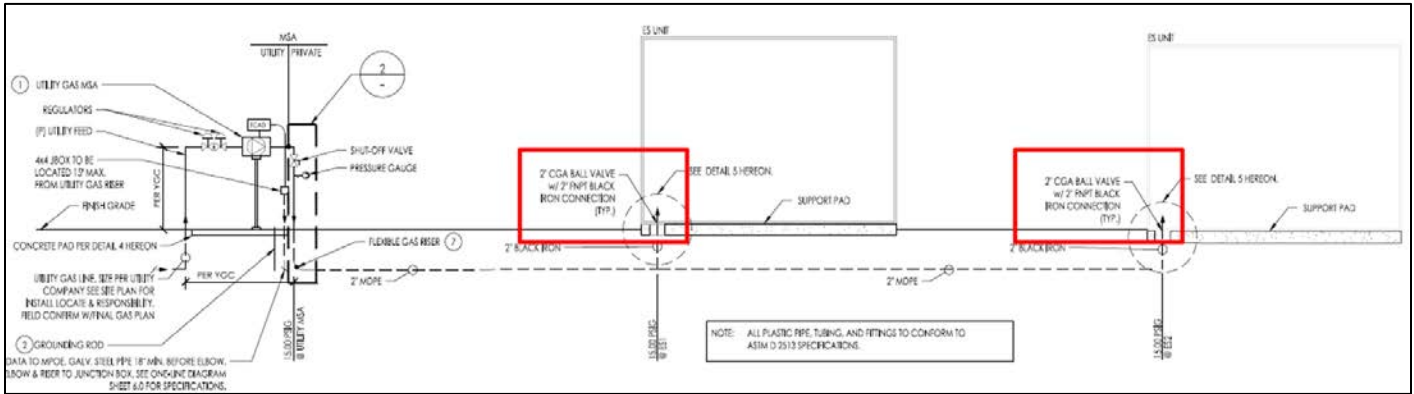


Figure 2

a. If a YBB, reach out to the Construction Program Manager. Future instructions will go here. See Figure 3.

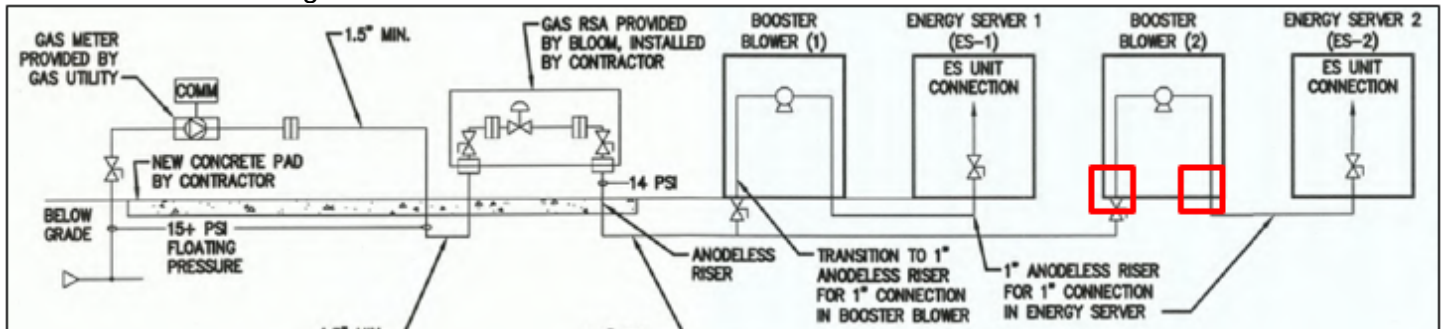


Figure 3

## Gas System Commissioning - Nitrogen

2. Follow the gas line from the MSA (or MSA gap) to the isolation valve on the stub up.
  - 2.1. Identify Isolation valve on meter assembly.
  - 2.2. Determine if gas pressure is available to the plumbing being purged, apply a LOTO to isolate gas if required.
  - 2.3. Perform a valve lineup to achieve the following:
    - 2.3.1. Meter Isolation valve is shut
    - 2.3.2. System gas stub up valve is shut
    - 2.3.3. All other valves between the meter isolation and system gas stub up are open
      - 2.3.3.1. If Parallel regulators, ensure only one set open, close isolations to the other set of regulators

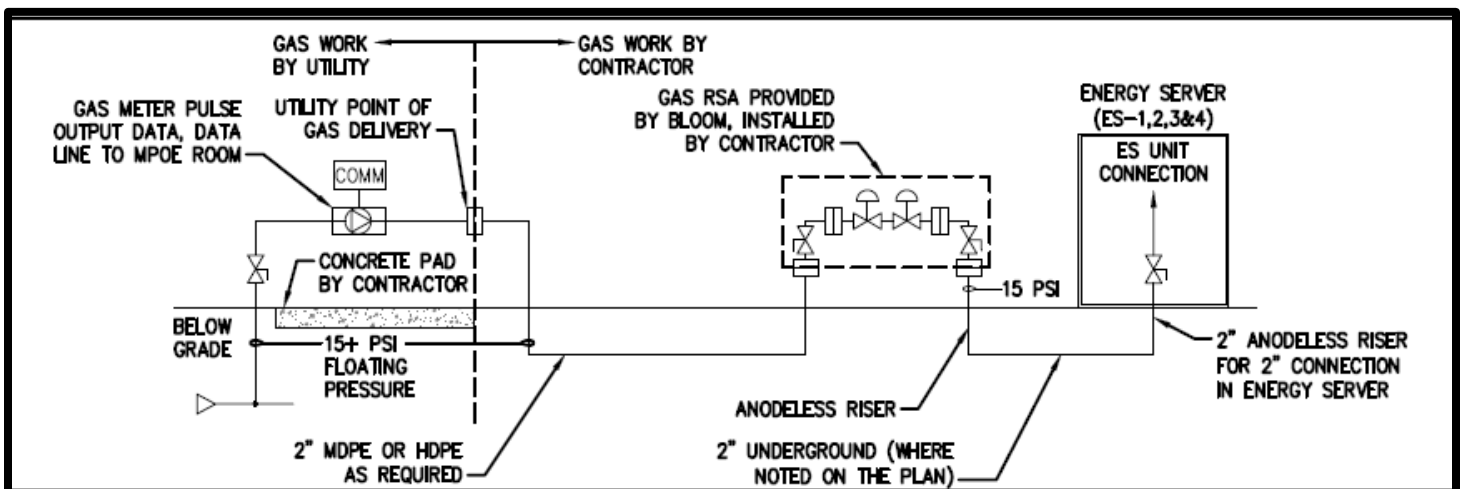


Figure 4

3. General/Subcontractor connects the supply of Nitrogen to the furthest point upstream without interfering with the Gas Utility scope of work.
4. Position Discharge Attendant with air monitor at the point of discharge.

## Gas System Commissioning - Nitrogen



DOC-1010208 Rev A

5. Connect YFP Purge Hose.
  - 5.1. Disconnect YFP from the fuel stub up, if connected
  - 5.2. Attach YFP purge hose to fuel stub up
  - 5.3. Attach YFP purge hose to overhead QDC
6. Inlet attendant supplies intended operational system pressure (min of 60 PSI) to plumbing and corrects any leaks.
7. Once pressure holds, the Discharge Attendant slowly opens all valves between the Nitrogen supply and the discharge assembly
8. Discharge attendant then opens the discharge assembly full open
  - 8.1. Continuously monitor the discharge area for the following and create an incident report if any are found:
    - 8.1.1. Debris
    - 8.1.2. Liquid water
    - 8.1.3. Gas other than compressed air
    - 8.1.4. Discharge attendant shall continuously monitor the discharge area and be prepared to secure the flow.
9. Let Nitrogen flow through the purge assembly for 60 seconds, then secure for 60 seconds.
  - 9.1. Perform at least 6 on/off cycles (6 cycles per 200 ft. of underground pipe)
10. Close the stub up isolation valve
11. If part of the assembly, remove the purge hose Y strainer
  - 11.1. If debris found, take pictures, clean and log an incident.
12. Reinstall "y" strainer.
13. If the Gas stick is provided by Bloom, perform Section B, if it is provided by the utility (fixed pressure) Move to Section C



## Section B: Setting the Bloom Gas Regulators

### 1. Possible Bloom Gas Stick Setups:

#### 1.1. Dual Regulator (two regulators on a single run of pipe)

1.1.1. Perform Section B as written

#### 1.2. Dual Parallel (four regulators on two runs of pipe)

1.2.1. Perform Section B once for each set

1.2.2. Ensure that the set not being used is isolated

#### 1.3. Single Regulator (one regulator on a single run of pipe)

1.3.1. Follow instructions for the upstream regulator only

2. Di Discharge Attendant throttles open the discharge valve as little as possible while still discharging air.

3. Contract Plumber will throttle the compressed gas regulator to achieve delivery pressure (min of 60PSI) on pressure gauge upstream of the regulator set.

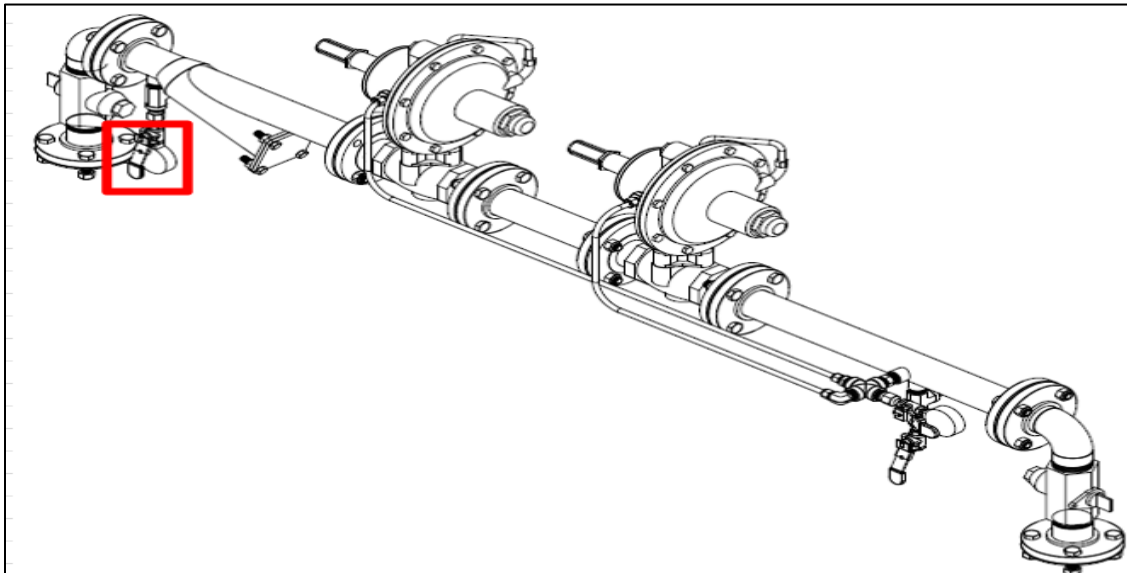


Figure 10

## Gas System Commissioning - Nitrogen

4. Discharge Attendant closes the valve on the vent assembly.
5. Remove the gray plastic covers from the Main Body Pilot adjustment screw from both regulators. Leave the cover on the small independent series 67 pilot assembly alone. See Figure 11.

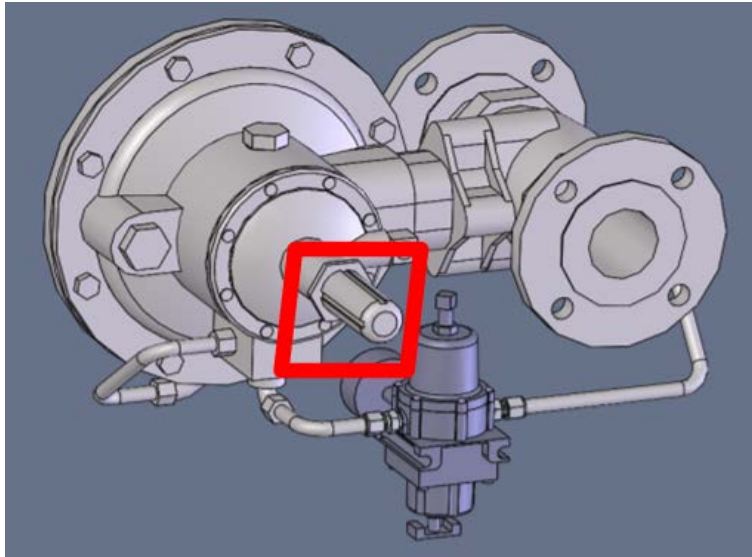


Figure 11

6. Turn the **Main Body Pilot** on the **upstream** regulator fully counter clockwise to stop any flow of gas.
  7. Turn the **Main Body Pilot** on the **downstream** regulator clockwise so the regulator is fully open.
- 7.1. If single regulator, ignore all **downstream** regulator instructions

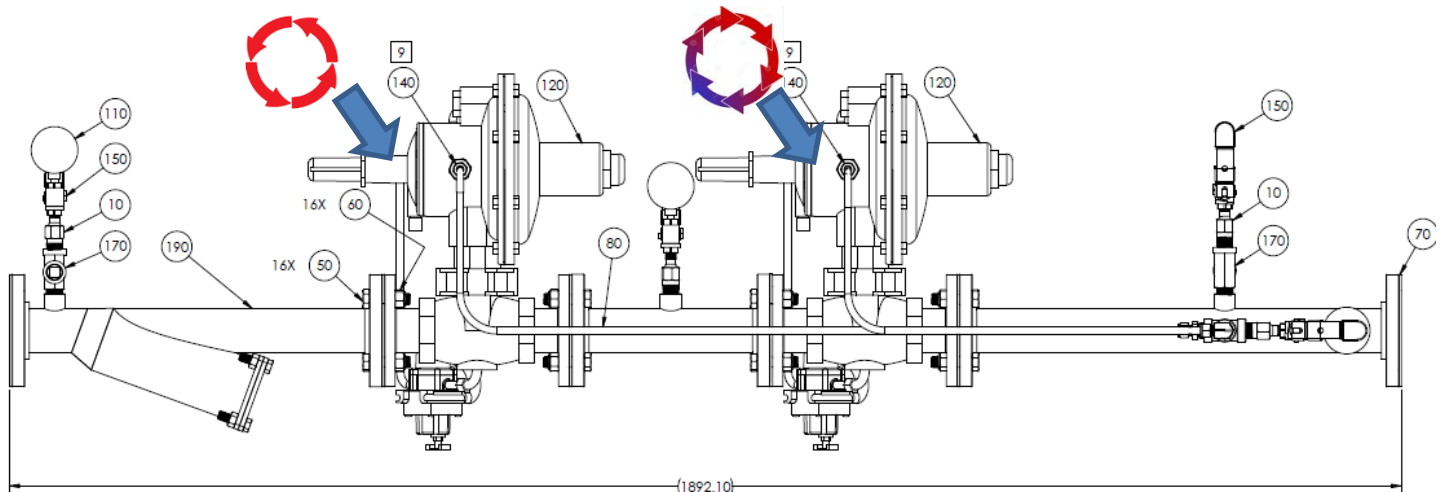


Figure 12

## Gas System Commissioning - Nitrogen

8. Crack open the discharge valve just enough so that the flow of air can be heard or felt.



Figure 13

9. Adjust the **Upstream** regulator first.
10. On the **Main Body Pilot** assembly, turn the adjusting screw clockwise to increase outlet pressure to achieve **18** psi as read on a gauge as far downstream as possible.
- 10.1. Be sure to adjust slowly to allow system pressure to stabilize after adjustment.

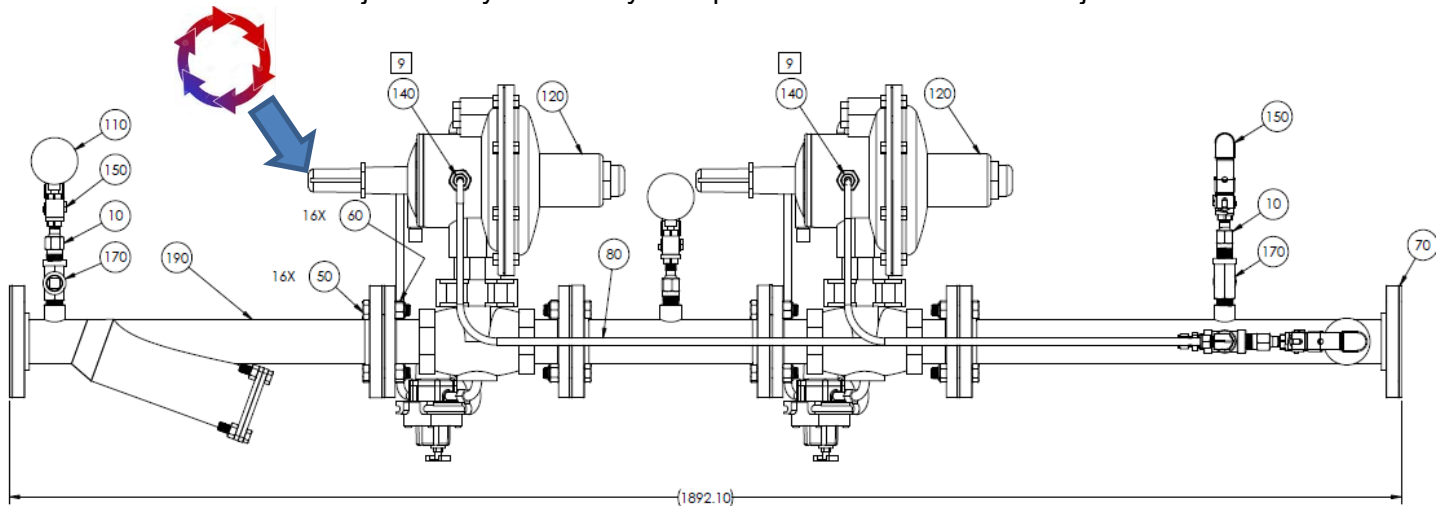


Figure 14

## Gas System Commissioning - Nitrogen

### 11. Adjust the **downstream** regulator second

11.1. On the **Main Body Pilot** assembly, turn the adjusting screw clockwise to increase outlet pressure or counterclockwise to decrease outlet pressure to achieve **15 psi** as read as far downstream as possible.

11.2. Be sure to wait for system pressure to change.

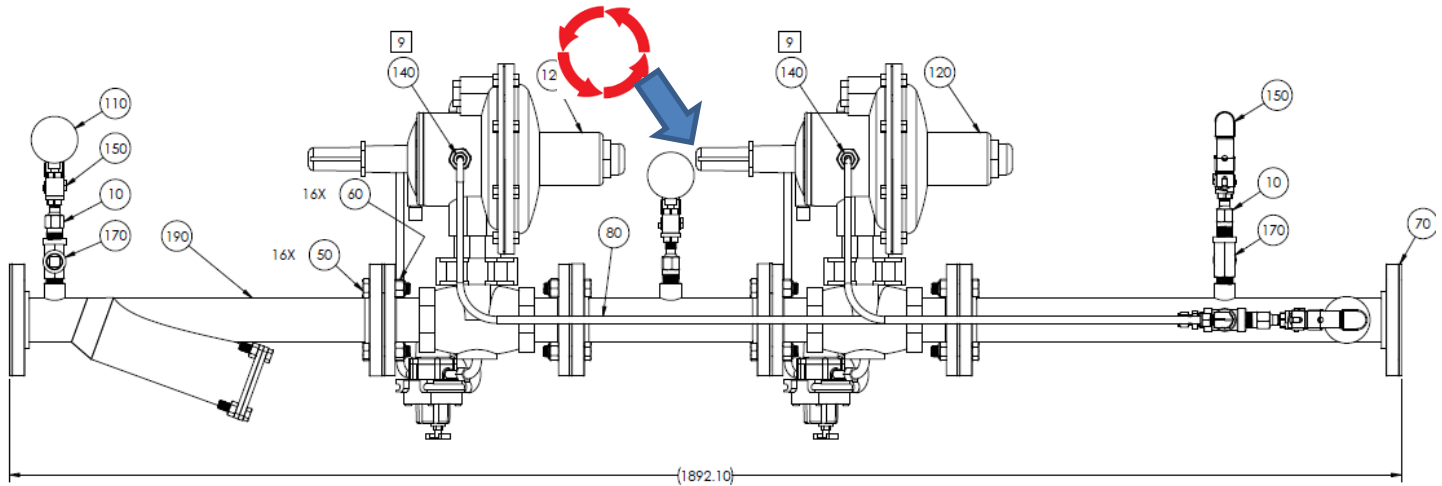


Figure 15

12. If the pressure on the upstream RSA riser gauge drops below expected delivery pressure at any time during the procedure, **STOP**, and re-pressurize the line and consider throttling down on the discharge valve.

13. Close the vent assembly valve.

## Gas System Commissioning - Nitrogen

14. If the gas stick is a dual parallel set and this is the first set dialed in, do the following (skip to next step if not):
- 14.1. Isolate the dialed in set with the valves provided on the turndown
  - 14.2. Open the isolation valves for the pair that has not yet been set
  - 14.3. Repeat Section B for the second set of regulators

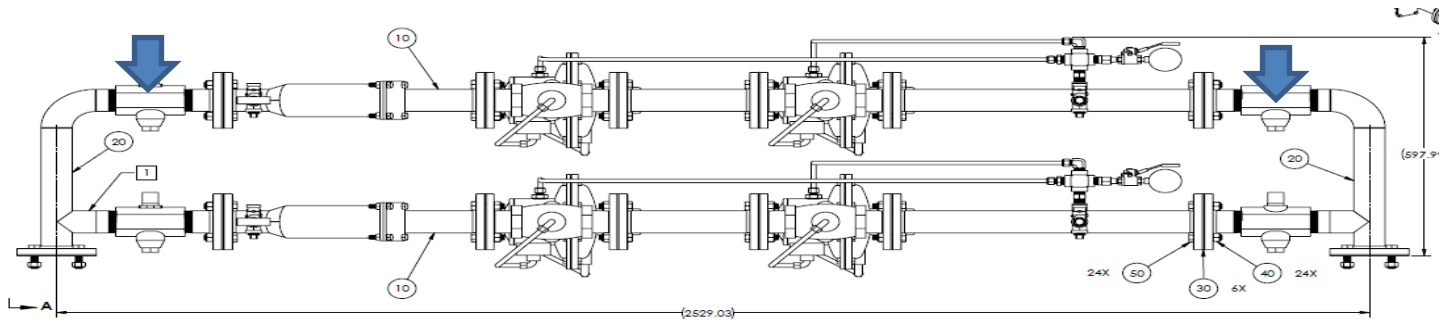


Figure 16

### Section C: Process closeout

#### 1. Restore system Conditions

- 1.1. Turn off the air compressor
- 1.2. Isolate the test equipment from the system
- 1.3. Remove all test equipment
  - 1.3.1. Air Compressor
  - 1.3.2. Purge Hose
- 1.4. Close all fuel stub up valves and reconnect YFP to fuel stub up
- 1.5. Leave meter isolation valves open
  - 1.5.1. If dual parallel, leave only one set open, isolate the second set

## Gas System Commissioning - Nitrogen



DOC-1010208 Rev A

## Version History

Revision	Date	Process Owner	Change Description	Training Required
A		Andy Blakeslee	Initial Release	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
A	4/27/17	Shane Peters	Reformatted into Standard Template, suggested edits	<input type="checkbox"/> Yes <input type="checkbox"/> No
A	6/8/17	Shane Peters	Thomas Sipe updates, with Shane's reformatting.	<input type="checkbox"/> Yes <input type="checkbox"/> No
A	2/20/18	Thomas Sipe	Split CDA, N2 and Moisture Sample	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Yes <input type="checkbox"/> No

Electronic Signature approvals are on file in Agile.



STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051  
Phone: (860) 827-2935 Fax: (860) 827-2950  
E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)  
Web Site: [portal.ct.gov/csc](http://portal.ct.gov/csc)

**VIA ELECTRONIC & CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

May 26, 2023

Kristen Grillo  
Bloom Energy Corporation  
4353 North First Street  
San Jose, CA 95134  
[Kristen.Grillo@bloomenergy.com](mailto:Kristen.Grillo@bloomenergy.com)

RE: **PETITION NO. 1561** - Bloom Energy Corporation petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a customer-side 350-kilowatt fuel cell facility and associated equipment to be located at Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut.

Dear Kristen Grillo:

At a public meeting held on May 25, 2023, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal meets air and water quality standards of the Department of Energy and Environmental Protection and would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

1. Approval of any Project changes be delegated to Council staff;
2. Provide a copy of the Fuel Cell Emergency Response Plan to local emergency responders prior to facility operation and provide emergency response training that includes an itemized list of necessary fire suppression equipment;
2. The use of natural gas as a fuel system cleaning medium during fuel cell construction, installation or modification shall be prohibited;
3. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities;
4. Submit the following information to the Council 15 days prior to any fuel pipe cleaning operations related to fuel cell construction, installation, or modification:
  - a. Identification of the cleaning media to be used;
  - b. Identification of any known hazards through use of the selected cleaning media;
  - c. Description of how known hazards will be mitigated, including identification of any applicable state or federal regulations concerning hazard mitigation measures for such media;
  - d. Identification and description of accepted industry practices or relevant regulations concerning the proper use of such media;
  - e. Provide detailed specifications (narratives/drawings) indicating the location and procedures to be used during the pipe cleaning process, including any necessary worker safety exclusion zones;



- f. Identification of the contractor or personnel performing the work, including a description of past project experience and the level of training and qualifications necessary for performance of the work;
  - g. Contact information for a special inspector hired by the project developer who is a Connecticut Registered Engineer with specific knowledge and experience regarding electric generating facilities or a National Board of Boiler and Pressure Vessel Inspector and written approval of such special inspector by the local fire marshal and building inspector; and
  - h. Certification of notice regarding pipe cleaning operations to all state agencies listed in General Statutes § 16-50j(h) and to the Department of Consumer Protection, Department of Labor, Department of Public Safety, Department of Public Works, and the Department of Emergency Management and Homeland Security;
5. Compliance with the following codes and standards during fuel cell construction, installation or modification, as applicable:
    - a. NFPA 54
    - b. NFPA 853; and
    - c. ASME B31;
  6. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;
  7. Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the City of Waterbury;
  8. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed **along with a representative photograph of the facility**;
  9. The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v; and
  10. This Declaratory Ruling may be transferred or partially transferred, provided both the facility owner/operator/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. The Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer. Both the facility owner/operator/transferor and the transferee shall provide the Council with a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility, including contact information for the individual acting on behalf of the transferee.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition, dated March 17, 2023, and additional information dated April 27, 2023, in compliance with Public Act 11-101, An Act Adopting Certain Safety Recommendations of the Thomas Commission.

Enclosed for your information is a copy of the staff report on this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Melanie A. Bachman". The signature is fluid and cursive, with the first name being the most prominent.

Melanie A. Bachman  
Executive Director

MAB/IN/laf

Enclosure: Staff Report dated May 25, 2023

c: The Honorable Neil M. O'Leary, Mayor, City of Waterbury (noleary@waterburyct.org)  
Tom Fitzgerald, Fire Marshall, City of Waterbury (tfitzgerald@waterburyct.org)  
The Honorable Edward B. St. John, First Selectperson, Town of Middlebury  
(firstselectman@middlebury-ct.org)

# NITROGEN, COMPRESSED

## Safety Data Sheet



### 1. IDENTIFICATION

**Product identifier**

**Product Name** NITROGEN, COMPRESSED

**Other means of identification**

**Safety data sheet number** LIND-P086

**UN/ID no.** UN1066

**Trade name** Lasline N2 4.8; Lasline N2 5.0; Gourmet N; Grade 6.0, VOC Free, Emission Grade, Zero 0.2

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Industrial and professional use. Food and Beverage. Calibration/test gas.

**Uses advised against** Consumer use

**Details of the supplier of the safety data sheet**

Messer Canada Inc.

5860 Chedworth Way

Mississauga, Ontario L5R 0A2

Phone: 905-501-2500

Email: [service@messer-ca.com](mailto:service@messer-ca.com)

Website: [www.messer-ca.com](http://www.messer-ca.com)

Customer Service: 888-256-7359

**Emergency telephone number**

Company Phone Number +1 905-501-0802

FOR TRANSPORTATION EMERGENCIES ONLY: CANUTEC +1 613-996-6666 OR +1-888-226-8832

### 2. HAZARDS IDENTIFICATION

Gases under pressure	Compressed gas
Simple asphyxiants	Yes / Category 1

**Label elements**


**Signal word**

**Warning**

**Hazard Statements**

Contains gas under pressure; may explode if heated

May displace oxygen and cause rapid suffocation

**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood  
 Use and store only outdoors or in a well ventilated place  
 Use a backflow preventive device in piping  
 Use only with equipment rated for cylinder pressure  
 Close valve after each use and when empty

**Precautionary Statements - Response**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention/advice.

**Precautionary Statements - Storage**

Protect from sunlight when ambient temperature exceeds 52°C/125°F

**Hazards not otherwise classified (HNOC)**

Not applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure Gas

Chemical Name	Common names/synonyms	CAS No.	Volume %	Chemical Formula
NITROGEN	Not available	7727-37-9	>99	N <sub>2</sub>

### 4. FIRST AID MEASURES

**Description of first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
<b>Skin contact</b>	None under normal use. Get medical attention if symptoms occur.
<b>Eye contact</b>	None under normal use. Get medical attention if symptoms occur.
<b>Ingestion</b>	Not an expected route of exposure.
<b>Self-protection of the first aider</b>	RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Simple asphyxiant. May cause suffocation by displacing the oxygen in the air. Exposure to oxygen-deficient atmosphere (<19.5%) may cause dizziness, drowsiness, nausea, vomiting, excess salivation, diminished mental alertness, loss of consciousness and death. Exposure to atmospheres containing 8-10% or less oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help or protect themselves. Lack of sufficient oxygen may cause serious injury or death.
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**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
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## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media None.

### Specific extinguishing methods

Continue to cool fire exposed cylinders until flames are extinguished. Damaged cylinders should be handled only by specialists.

### Specific hazards arising from the chemical

Non-flammable gas. Cylinders may rupture under extreme heat.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Monitor oxygen level. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

### Environmental precautions

#### **Environmental precautions**

Prevent spreading of vapors through sewers, ventilation systems and confined areas.

### Methods and material for containment and cleaning up

#### **Methods for containment**

Stop the flow of gas or remove cylinder to outdoor location if this can be done without risk. If leak is in container or container valve, contact the appropriate emergency telephone number in Section 1 or call your closest Messer location.

#### **Methods for cleaning up**

Return cylinder to Messer or an authorized distributor.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on safe handling**

Protect cylinders from physical damage; do not drag, roll, slide or drop. When moving cylinders, even for short distance, use a cart designed to transport cylinders. Never attempt to lift a cylinder by its valve protection cap. Never insert an object (e.g. wrench, screwdriver, pry bar, etc.) into valve cap openings. Doing so may damage valve, causing leak to occur. Use an adjustable strap wrench to remove over-tight or rusted caps. Use only with adequate ventilation. Use a backflow preventive device in piping. Close valve after each use and when empty. If user experiences any difficulty operating cylinder valve discontinue use and contact supplier. Ensure the complete gas system has been checked for leaks before use.

Never put cylinders into trunks of cars or unventilated areas of passenger vehicles. Never attempt to refill a compressed gas cylinder without the owner's written consent. Never strike an arc on a compressed gas cylinder or make a cylinder a part of an electrical circuit.

Only experienced and properly instructed persons should handle gases under pressure. Always store and handle compressed gas cylinders in accordance with Compressed Gas Association publication CGA-P1, Safe Handling of Compressed Gases in Containers. Use only with equipment rated for cylinder pressure.

For additional recommendations consult CGA P-76 Hazards of Oxygen-Deficient Atmospheres.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store in cool, dry, well-ventilated area of non-combustible construction away from heavily trafficked areas and emergency exits. Keep at temperatures below 52°C / 125°F. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling. Full and empty cylinders should be segregated. Use a "first in-first out" inventory system to prevent full cylinders from being stored for excessive periods of time. Stored containers should be periodically checked for general condition and leakage.

**Incompatible materials** None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
NITROGEN 7727-37-9	: See Appendix F: Minimal Oxygen Content	None	None

*ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health*

### Appropriate engineering controls

**Engineering Controls** Provide general ventilation, local exhaust ventilation, process enclosure or other engineering controls to maintain airborne levels below recommended exposure limits and to maintain oxygen levels above 19.5%. Oxygen detectors should be used when asphyxiating gases may be released. Systems under pressure should be regularly checked for leakages.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Work gloves and safety shoes are recommended when handling cylinders.

**Respiratory protection** Use positive pressure airline respirator with escape cylinder or self contained breathing apparatus for oxygen-deficient atmospheres (<19.5%).

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state	Gas
Appearance	Colorless
Odor	Odorless
Odor threshold	Not applicable
pH	Not applicable
Melting/freezing point	Not applicable
Boiling point / boiling range	-196 °C / -321 °F
Evaporation rate	Not applicable
Flammability (solid, gas)	Non-flammable gas
Lower flammability limit:	Not applicable
Upper flammability limit:	Not applicable
Flash point	Not applicable
Autoignition temperature	Not available

Decomposition temperature	Not available
Water solubility	Slightly soluble
Partition coefficient	Not available
Kinematic viscosity	Not applicable

**Component Level Information:**

Chemical Name	Molecular weight	Boiling point/range	Vapor Pressure	Vapor density (air =1)	Gas Density kg/m <sup>3</sup> @20°C	Critical Temperature
NITROGEN	28.01	-196 °C	Above critical temperature	0.97	1.153	-146.9 °C

## 10. STABILITY AND REACTIVITY

**Reactivity**

Not reactive under normal conditions

**Chemical stability**

Stable under normal conditions.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

None under recommended storage and handling conditions (see Section 7).

**Incompatible materials**

None known.

**Hazardous Decomposition Products**

None known.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Inhalation</b>	Product is a simple asphyxiant.
<b>Skin contact</b>	Not available
<b>Eye contact</b>	Not available
<b>Ingestion</b>	Not an expected route of exposure.

**Information on toxicological effects****Symptoms**

Simple asphyxiant. May cause suffocation by displacing the oxygen in the air. Exposure to oxygen-deficient atmosphere (<=19.5%) may cause dizziness, drowsiness, nausea, vomiting, excess salivation, diminished mental alertness, loss of consciousness and death. Exposure to atmospheres containing 8-10% or less oxygen will bring about unconsciousness without warning and so quickly that the individuals cannot help or protect themselves. Lack of sufficient oxygen may cause serious injury or death.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Not classified.
<b>Serious eye damage/eye irritation</b>	Not classified.
<b>Irritation</b>	Not classified.
<b>Sensitization</b>	Not classified.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens listed by OSHA, IARC or NTP.
<b>Reproductive toxicity</b>	Not classified.
<b>Developmental Toxicity</b>	Not classified.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Chronic toxicity</b>	None known.
<b>Aspiration hazard</b>	Not applicable.

**Numerical measures of toxicity**

<b>Product Information</b>	
<b>Oral LD50</b>	Not available
<b>Dermal LD50</b>	Not available
<b>Inhalation LC50</b>	Not available

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

No known effect.

**Persistence and degradability**

Not applicable.

**Bioaccumulation**

No known effect.

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

**Disposal of wastes** Do not attempt to dispose of residual waste or unused quantities. Return in the shipping container PROPERLY LABELED WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE to Messer for proper disposal.

**14. TRANSPORT INFORMATION****TDG**

<b>UN/ID no.</b>	UN1066
<b>Proper shipping name</b>	Nitrogen, compressed
<b>Hazard Class</b>	2.2
<b>Description</b>	UN1066, Nitrogen, compressed, 2.2

**IATA**

<b>UN/ID no.</b>	UN1066
<b>Proper shipping name</b>	Nitrogen, compressed
<b>Hazard Class</b>	2.2
<b>ERG Code</b>	2L
<b>Special Provisions</b>	A69



**IMDG**

UN/ID no.	UN1066
Proper shipping name	Nitrogen, compressed
Hazard Class	2.2
EmS-No.	F-C, S-V

**15. REGULATORY INFORMATION****INTERNATIONAL INVENTORIES**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health hazards</b> 0	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Properties</b> Simple asphyxiant
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**Note:** Ratings were assigned in accordance with Compressed Gas Association (CGA) guidelines as published in CGA Pamphlet P-19-2019, CGA Recommended Hazard Ratings for Compressed Gases, 4th Edition.

Issue Date	07-Apr-2017
Revision Date	27-Sep-2021
Revision Note:	SDS sections updated; 3

LIND-P086

**General Disclaimer**

For terms and conditions, including limitation of liability, please refer to the purchase agreement in effect between Messer LLC, Messer Merchant Production LLC, Messer North America, Inc., Messer Gas Puerto Rico, Inc. or Messer Canada Inc. (or any of their affiliates and subsidiaries) and the purchaser.

**DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

**End of Safety Data Sheet**

## Kristen Grillo

---

**From:** Kristen Grillo  
**Sent:** Thursday, June 13, 2024 1:15 PM  
**To:** attorney.general@ct.gov; Katie.dykes@ct.gov; marissa.gillett@ct.gov; dph.commissioner@ct.gov; paul.aresta@ct.gov; Bryan.Hurlburt@ct.gov; j.beckham@ct.gov; garrett.eucalitto@ct.gov; daniel.okeefe@ct.gov; brenda.bergeron@ct.gov; bryan.cafferelli@ct.gov; cindy.rusczyk@ct.gov; dante.bartolomeo@ct.gov  
**Subject:** CT Siting Council Petition No. 1561 - Notification of Fuel Cell Pipe Cleaning Procedures - Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut

RE: **PETITION NO. 1561** - Bloom Energy Corporation petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a customer-side 350-kilowatt fuel cell facility and associated equipment to be located at Naugatuck Valley Community College, 750 Chase Parkway, Waterbury, Connecticut.

Dear Ladies and Gentlemen:

At a public meeting held on May 25<sup>th</sup>, 2023, the Connecticut Siting Council (Council) considered and ruled that the above-referenced petition would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k would not require a Certificate of Environmental Compatibility and Public Need with certain conditions. As requested in the conditions of the declaratory ruling, Bloom Energy is required to provide notice to all state agencies listed in General Statutes § 16-50j(h) and to the Department of Consumer Protection, Department of Labor, Department of Public Safety, Department of Public Works, and the Department of Emergency Management and Homeland Security regarding any fuel pipe cleaning operations related to our fuel cell installation. Employees of Bloom Energy will oversee and perform the procedures detailed in their "Gas System Commissioning" procedure. Bloom Energy has safely commissioned over hundreds of fuel cell installation projects in California, New York, New Jersey, Delaware and Connecticut. During fuel pipe cleaning operations, Richard Gregoire, a licensed 3<sup>rd</sup> party special inspection agent, will be present to witness the work.

Additional information regarding the pipe cleaning procedures will be posted under PE1561 on the Council website. If you should have any questions or concerns, please do not hesitate to contact me. Thank you for your time.

Respectfully,



**Kristen Grillo**

Senior Permitting Specialist | East Coast Field Office  
Customer Installations Group | North America  
(917) 803-4511  
[Kristen.Grillo@bloomenergy.com](mailto:Kristen.Grillo@bloomenergy.com)

Bloom Energy Corporation HQ  
4353 North First Street, San Jose, CA 95134  
(408) 543-1500  
[www.bloomenergy.com](http://www.bloomenergy.com)

OFFICIALS

Name	Title	Mailing Address	Town	State	Zip
William Tong	Attorney General	165 Capitol Ave. (email: attorney.general@ct.gov)	Hartford	CT	06106
Katie Dykes katie.dykes@ct.gov	Commissioner, Dept. of Energy and Environmental Protection	79 Elm St.	Hartford	CT	06106-5127
Marissa Gillett marissa.gillett@ct.gov	Chairman, Public Utilities Regulatory Authority	10 Franklin Square	New Britain	CT	06051
Manisha Juthani, M.D.	Commissioner, Dept. of Public Health	410 Capitol Ave. (email: dph.commissioner@ct.gov)	Hartford	CT	06134
Paul Aresta	Director, Council on Environmental Quality	79 Elm St. (email: paul.aresta@ct.gov)	Hartford	CT	06106
Bryan P. Hurlburt	Commissioner, Dept. of Agriculture (e: bryan.hurlburt@ct.gov)	450 Columbus Blvd., Suite 701	Hartford	CT	06103
Jeffrey R. Beckham	Secretary, Office of Policy and Management	450 Capitol Ave. (email: j.beckham@ct.gov)	Hartford	CT	06106
Garrett Eucalitto	Commissioner, Dept. of Transportation	2800 Berlin Tpke. (garrett.eucalitto@ct.gov)	Newington	CT	06111
Daniel. O'Keefe Daniel.OKeefe@ct.gov	Commissioner, Dept. of Economic and Community Development	450 Columbus Blvd.	Hartford	CT	06103
Brenda Bergeron brenda.bergeron@ct.gov	Deputy Commissioner, Div. of Emergency Management and Homeland Security	1111 Country Club Rd.	Middletown	CT	06457
Bryan T. Cafferelli bryan.cafferelli@ct.gov	Commissioner, Dept. of Consumer Protection	450 Columbus Blvd., Suite 901	Hartford	CT	06103
Michelle Gilman cindy.ruszyk@ct.gov	Commissioner, Dept. of Administrative Services	450 Columbus Blvd.	Hartford	CT	06103
Danté Bartolomeo	Commissioner, Dept. of Labor	200 Folly Brook Blvd. (email: dante.bartolomeo@ct.gov)	Wethersfield	CT	06109