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IDAHO PUBLIC
UTILITIES COMMISSION

DONOVAN E. WALKER (ISB No. 5921)
Idaho Power Company
1221 West Idaho Street (83702)
P.O. Box 70
Boise, Idaho 83707
Telephone: (208) 388-5317
Facsimile: (208) 388-6936
dwalker@idahopower.com

Attorney for Idaho Power Company

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

BLACK MESA, LLC Complainant, v. IDAHO POWER COMPANY, Respondent.	)	CASE NO. IPC-E-20-17 IDAHO POWER COMPANY'S ANSWER AND MOTION TO DISMISS

COMES NOW, Idaho Power Company ("Idaho Power" or "Company") and pursuant to Rule 56 and 57 hereby answers the Complaint of Black Mesa, LLC ("Black Mesa") as follows:

I. INTRODUCTION, BACKGROUND, and FACTS

Black Mesa initially submitted a Schedule 73 application requesting a PURPA Energy Sales Agreement ("ESA") for a single, 20 MW proposed battery storage facility on February 13, 2017. *See*, Attachment 5 to Idaho Power's Petition, Case No. IPC-E-17-01. In its request, Black Mesa demanded a 20-year contract at published avoided cost rates. *Id*. Idaho Power responded to this initial request, within the 10-day response time required by Schedule 73, by informing the project that the Company did

not agree that it was entitled to a 20-year contract or published avoided cost rates. Attachment 1 to Idaho Power's Answer and Motion to Dismiss, February 27, 2017, letter from Idaho Power.[1] On February 27, 2017, Idaho Power initiated a proceeding at the Commission, asking the Commission to issue a Declaratory Order regarding the proper contract terms, conditions, and avoided cost pricing for five battery storage facilities requesting contracts under PURPA, including Black Mesa's proposed project as well as four additional proposed battery storage projects from Franklin Battery Storage.[2] Case No. IPC-E-17-01.

On July 13, 2017, the Commission issued Order No. 33785 granting Idaho Power's Petition for declaratory relief stating, "We find that, as storage facilities with design capacities that will exceed 100 kW each and with solar as their primary energy source, the projects are eligible for two-year, negotiated (IRP methodology) contracts." Order No. 33785, p 12-13. Subsequently, the Franklin Energy Storage projects ("Franklin") petitioned the IPUC for reconsideration alleging that the Commission had improperly considered Franklin's QF status in its determination.[3] On August 29, 2017, the Commission denied Franklin's Petition for Reconsideration. Order No. 33858.

[1] Idaho Power's February 27, 2017, letter was also provided in Attachment 6 to Idaho Power's Petition in Case No. IPC-E-17-01.

[2] On January 26, 2017, Idaho Power received four separate Schedule 73 applications from proposed battery storage projects requesting published avoided cost rate indicative pricing and 20-year contracts from: Franklin Energy Storage One, LLC (32 MW); Franklin Energy Storage Two, LLC (32 MW); Franklin Energy Storage Three, LLC (32 MW); and Franklin Energy Storage Four, LLC (32 MW). *See* Attachments 1-4 to the Petition for Declaratory Order, Case No IPC-E-17-01. All proposed Franklin Energy Storage projects were submitted by the same developer. On February 13, 2017, Idaho Power received another Schedule 73 application from a separate proposed battery storage project from another developer: Black Mesa Energy, LLC (20 MW). *See* Attachment 5 to the Petition for Declaratory Order, Case No IPC-E-17-01.

[3] Franklin Energy Storage Projects' Petition for Reconsideration, Aug. 3, 2017, Case No. IPC-E-17-01.

Franklin then filed a Petition for Declaratory Order and Petition for Enforcement action against the IPUC at the Federal Energy Regulatory Commission ("FERC") to which FERC declined to act. FERC Docket EL-18-50-000. On May 30, 2018, Franklin filed a Complaint for Violation of the Federal Power Act, PURPA, and FERC Regulations with the United States District Court for the District of Idaho.[4] The Federal Court heard argument on the IPUC's and Idaho Power's Motions to Dismiss, as well as cross-motions for summary judgment on February 7, 2019. On January 17, 2020, the Federal Court issued its Memorandum Decision and Order, denying the IPUC's and Idaho Power's motions to dismiss and for summary judgment, and granting in part Franklin's motion for summary judgment[5] stating as follows:

> 3. Plaintiffs' [Franklin's] Motion for Summary Judgment (Dkt. 24) is GRANTED IN PART:
>
> a. The Court finds that the Defendant IPUC Commissioners violated the Public Utility Regulatory Policies Act of 1978, 16 U.S.C. §§ 2601 et seq., when they issued final order numbers 33785 on July 13, 2017 and 33858 on August 29, 2017. Such orders established an implementation plan that impermissibly classified the QF status of Plaintiffs' energy storage facilities that are certified under such Act as energy storage facilities. Classifying such facilities as "solar QFs" is outside the Commissioners' authority as state regulators and therefore in violation of federal law.
>
> b. Defendants are permanently enjoined from enforcing or applying either of such IPUC final orders to Plaintiffs' facilities as if such facilities are classified as something other than energy storage QFs, to include but not be limited to classifying Plaintiffs' facilities as if they are "solar QFs" under the IPUC's prior implementation plan. Defendants are further permanently enjoined from considering the energy source input into Plaintiffs' energy storage QFs for the purpose of classifying the QFs in any way other than as energy storage QFs.

[4] Case No. 1:18-cv-00236-REB.
[5] Case No. 1:18-cv-00236-REB, Document 62.

Memorandum Decision and Order, p 36-37, Case No. 1:18-cv-00236-REB, Document 62, Jan. 17, 2020.

However, the Federal Court also stated that it will not Order the IPUC to place any specific terms upon any power supply contract Idaho Power must enter with energy storage QFs[6] stating:

> 4. Plaintiffs' Motion for Summary Judgment (Dkt. 24) is otherwise DENIED. The Court specifically declines to order Defendants [IPUC] to require utilities under their jurisdiction to afford energy storage QFs all rights and privileges afforded to "other QFs" under the IPUC's PURPA implementation plan.

Id., at p 37.

Following the District Court's January 17, 2020, Order, on January 21, 2020, Idaho Power received two Schedule 73 applications that were e-mailed over the Holiday weekend for two, 20 MW each, battery storage QFs from Black Mesa Energy 1 and Black Mesa Energy 2. Attachment 2 to Idaho Power's Answer and Motion to Dismiss. These applications state, "Black Mesa Energy LLC, reiterates its previous request for an Energy Sales Agreement pursuant to Schedule 73 as requested on 2/10/2017 … The project is an energy storage QF and qualifies for the "Other projects" avoided costs as found in 1:18-cv-00236-REB (Franklin Energy Storage v. Idaho PUC & Idaho Power)." *Id*. Idaho Power responded to Black Mesa on February 3, 2020, within the required 10 business days of Schedule 73, informing Black Mesa that Idaho Power dis not agree that Black Mesa's projects were entitled to published rates and 20-year contracts as well as informing Black Mesa of Idaho Power's January 27, 2020, Petition requesting that the IPUC initiate a proceeding to determine the proper avoided cost rates as well as

[6] Case No. 1:18-cv-00236-REB, Document 62, at p 35.

contract terms and conditions applicable to, and to be included in the PURPA contracts requested by energy storage QFs. Attachment 1 to Idaho Power's Answer and Motion to Dismiss, February 3, 2020, letter from Idaho Power.

Immediately following the Federal District Court's Friday, January 17, 2020, Order, Idaho Power filed a Petition with the Commission on the next business day, Tuesday, January 21, 2020. Case No. IPC-E-20-02. In light of the Federal Court's Order as well as Black Mesa's ensuing request for PURPA contracts, Idaho Power requested that the IPUC initiate a proceeding to determine the proper avoided cost rates as well as contract terms and conditions applicable to, and to be included in the PURPA contracts requested by energy storage QFs. Idaho Power's Petition, Case No. IPC-E-20-02.

The Commission subsequently issued Order No. 34552 providing Notice of Idaho Power's Petition and establishing a February 28, 2020, deadline for interested persons to intervene as parties to the proceeding. There were no Petitions to Intervene filed, and this matter is currently pending at the Commission.

Black Mesa's Complaint alleges entitlement to published avoided cost rates and 20-year contracts as "other" QFs. The Commission has previously ruled that Black Mesa was not entitled to published rates and 20-year contracts as an "other" QF, because it was entitled to the same avoided cost and contract terms as its solar generation source. Order Nos. 33785, 33858. Because Black Mesa's proposed project exceeded the 100 kW published rate eligibility cap, it was eligible for two-year contracts with rates determined pursuant to the Incremental Cost Integrated Resource Plan methodology. *Id*. While the Federal District Court found this determination by the

Commission to impermissibly classify the proposed battery storage projects as solar QFs, the Court also stated, "The Court ***specifically declines*** to order Defendants [the IPUC] to require utilities under their jurisdiction to afford energy storage QFs all rights and privileges afforded to "other QFs" under the IPUC's PURPA implementation plan." Memorandum Decision and Order, p 37, Case No. 1:18-cv-00236-REB, Document 62, Jan. 17, 2020, U.S. Dist. Idaho. (emphasis added). The setting of avoided cost rates and the contractual terms and conditions of purchase are the exclusive jurisdiction and responsibility of the IPUC. *Id*., at p 35-36. Black Mesa is *not* entitled to the relief requested in its Complaint. The Commission has an open proceeding to determine the proper avoided cost rate and contract term eligibility for proposed energy storage facilities. Black Mesa's Complaint should therefore be dismissed.

II. ANSWER

Idaho Power hereby answers Black Mesa's Complaint as follows: Idaho Power denies any allegation not specifically admitted and reserves the right to supplement and/or amend this Answer if Black Mesa amends its Complaint, or if additional defenses are ascertained during the course of discovery or otherwise.

1. To the extent that Paragraph 1 summarizes Black Mesa's Complaint, the Complaint speaks for itself and does not require a specific response by Idaho Power. Idaho Power denies that Black Mesa has formed or established a legally enforceable obligation as identified in Paragraph 1 and the Complaint.

2. Paragraph 2 identifies contact information for legal counsel for Black Mesa and requires no specific response by Idaho Power.

3. Idaho Power has insufficient information or knowledge regarding the truth of the allegations in paragraph 3 of the Complaint, which relate to the identity of Black Mesa and its proposed projects.

4. Idaho Power admits that it is an Idaho corporation with its principal place of business at 1221 West Idaho Street, Boise, Idaho 83702. Idaho Power also admits that it is a public utility subject to the jurisdiction of this Commission, the Public Utility Commission of Oregon, and the Federal Energy Regulatory Commission ("FERC").

5. The allegations in paragraph 5 are legal conclusions and require no response.

6. The allegations in paragraph 6 are legal conclusions and require no response.

7. The allegations in paragraph 7 are legal conclusions and require no response.

8. The allegations in paragraph 5 are legal conclusions and require no response. To the extent the allegations in paragraph 5 purport to quote a FERC order, such FERC order speaks for itself, and the Commission can determine the proper weight, authority, and application of precedent to its own decisions.

9. Idaho Power has insufficient information or knowledge regarding the truth of the allegations in paragraph 9 of the Complaint, which relate to the configuration of Black Mesa's proposed projects, other than what Black Mesa has submitted to the Company.

10. Idaho Power has insufficient information or knowledge regarding the truth of the allegations in paragraph 10 of the Complaint, which relate to the QF certifications

of Black Mesa's proposed projects. Idaho Power admits that Black Mesa has provided as Exhibits to its Complaint FERC Form 556 self-certifications that speak for themselves.

11. Idaho Power admits that it received a Schedule 73 request for a contract from Black Mesa on or about February 13, 2017. This request was previously provided to the Commission as Attachment 5 to Idaho Power's Petition in Case No. IPC-E-17-01, and said request speaks for itself. Idaho Power denies the remaining claims and characterizations contained in paragraph 11.

12. Idaho Power admits that it received a Schedule 73 request for a contract from Black Mesa on or about February 13, 2017. This request was previously provided to the Commission as Attachment 5 to Idaho Power's Petition in Case No. IPC-E-17-01, and said application speaks for itself. Idaho Power denies Black Mesa's allegations that it is entitled to non-levelized, non-fueled, published avoided cost rates for "Other" facilities. Idaho Power denies the remaining claims and characterizations contained in paragraph 12.

13. Idaho Power denies the allegations in paragraph 13 of the Complaint. The graph contained in paragraph 13 is not the graph of the proposed projects' generation profiles that were submitted to Idaho Power with Black Mesa's requests. *See* Black Mesa's Schedule 73 requests, Attachment 2 to Idaho Power's Answer and Motion to Dismiss.

14. Idaho Power denies the allegations in paragraph 14 of the Complaint. Schedule 73 speaks for itself. Idaho Power responded to Black Mesa's 2017 and 2020 requests within the required time and pursuant to Schedule 73.

15. Idaho Power admits that it received the e-mail identified in Exhibit 2 of the Complaint, and that it sent the e-mail identified in Exhibit 3 of the Complaint. The communications provided in Exhibit 2 and 3 to the Complaint speak for themselves. Idaho Power denies the remaining allegations and characterizations in paragraph 15.

16. Idaho Power admits that it responded to Black Mesa, within the required time and pursuant to Schedule 73, that it had filed a case with the Commission to determine the proper avoided cost rate and contract terms for Black Mesa's proposed projects. The communications provided in Exhibit 4 to the Complaint speak for themselves. Idaho Power denies the remaining allegations and characterizations in paragraph 16.

17. The allegations of paragraph 17 appear to summarize and quote Commission Order Nos. 33785 and 33858. The Commission's Order Nos. 33785 and 33858 speak for themselves. Idaho Power admits that the Commission previously determined that Black Mesa's proposed energy storage project was not entitled to published rates and a 20-year contract. Idaho Power denies the remaining allegations and characterizations in paragraph 17.

18. Idaho Power admits that Franklin Energy Storage brought an action against the Commission in Federal District Court, Case No. 1:18-cv-00236-REB, and on January 17, 2020, the Federal Court issued its Memorandum Decision and Order, denying the IPUC's and Idaho Power's motions to dismiss and for summary judgment, and granting in part Franklin's motion for summary judgment. Memorandum Decision and Order, Case No. 1:18-cv-00236-REB, Document 62, Jan. 17, 2020. In denying in part Franklin's motion for summary judgment, the Court stated, "The Court specifically

declines to order Defendants [Commission] to require utilities under their jurisdiction to afford energy storage QFs all rights and privileges afforded to "other QFs" under the IPUC's PURPA implementation plan." *Id.,* at 37. The Court's Decision and Order speaks for itself. Idaho Power denies the remaining allegations and characterizations in paragraph 18.

19. Idaho Power has insufficient information or knowledge to admit or deny the truth as to the allegations of Black Mesa's continued development, or not, as referenced in paragraph 19. A Feasibility Study is merely the first step in a three-step study process required to identify any required facilities or upgrades required in the requested interconnection of a generator to the Company's system which could ultimately lead to a generator interconnection agreement that would provide for the interconnection and operation of the generation on Idaho Power's system.

20. Idaho Power admits that it received Schedule 73 requests for contracts from Black Mesa on or about January 21, 2020. Idaho Power has provided herewith as Attachment 2 to Idaho Power's Answer and Motion to Dismiss a copy of what Idaho Power received from Black Mesa. Idaho Power denies the allegations that Black Mesa is entitled to published avoided cost rates and 20-year contracts as "Other" facilities. The documents speak for themselves. Idaho Power denies the remaining allegations and characterizations in paragraph 20.

21. Idaho Power admits that it responded to Black Mesa's January 21, 2020, requests within the required time and pursuant to Schedule 73. Idaho Power admits that it informed Black Mesa that it did not agree Black Mesa was entitled to published rates and 20-year contracts, and that Idaho Power had filed a case with the

Commission to determine the proper avoided cost rates and contract terms for energy storage projects, and further served Black Mesa with said Commission filing on January 21, 2020. Idaho Power's February 3, 2020, response to Black Mesa is provided herewith in Attachment 1 to Idaho Power's Answer and Motion to Dismiss. Idaho Power denies the remaining allegations and characterizations in paragraph 21.

22. Idaho Power admits that Black Mesa unilaterally drafted its own contractual documents and sent copies that it had signed itself to Idaho Power on or about January 24, 2020, for four proposed energy storage projects. Idaho Power has provided herewith in Attachment 3 to Idaho Power's Answer and Motion to Dismiss copies of said purported contractual documents for Black Mesa Energy 1, Black Mesa Energy 2, Frederick Energy 1, and Frederick Energy 2.[7] Idaho Power denies any claim or allegation that such unilateral actions create a legally enforceable obligation as claimed by Black Mesa. Idaho Power denies the remaining allegations and characterizations in paragraph 22.

23. Idaho Power denies the claim that Black Mesa is entitled to published avoided cost rates and 20-year contracts. Idaho Power denies the allegations in paragraph 23 of the Complaint.

24. Idaho Power admits that it sent to Black Mesa a letter dated February 3, 2020, responding to Black Mesa's Schedule 73 applications and claims of legally enforceable obligations. Idaho has provided in Attachment 1 to its Answer and Motion to Dismiss a copy of said February 3, 2020, letter. The letter speaks for itself. Idaho Power denies the remaining allegations and characterizations in paragraph 24.

[7] Because of the large volume, Idaho Power has only attached in Attachment 3 the first purported contractual document submitted for Black Mesa 1, but received essentially the same purported contractual document for all 4 proposed projects.

25. Idaho Power denies that Black Mesa has created a legally enforceable obligation for any of its proposed projects. Idaho Power has insufficient information or knowledge as to the capability of Black Mesa to develop, construct, interconnect, and do any other required activities to bring a proposed project online as it alleges in paragraph 25, and therefore denies the allegations.

26. In response to paragraph 26 which re-alleges all preceding paragraphs, please see Idaho Power's answers and responses to all preceding paragraphs.

27. Idaho Power has insufficient knowledge or information to admit or deny whether Black Mesa "has attempted in good faith to engage in negotiations …" Idaho Power acknowledges that Black Mesa has requested a PURPA contract from Idaho Power. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

28. Idaho Power denies the allegations in paragraph 28. Idaho Power is not refusing to purchase from Black Mesa at the avoided cost rate and contract term and conditions required and approved by the Commission, and has asked the Commission to set and approve the same. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

29. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects and thus denies the allegations in paragraph 29.

30. Idaho Power denies the allegations in paragraph 30. Black Mesa has purported to commit itself only to the rates, terms, and conditions that Black Mesa

believes it is entitled to. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

31. Idaho Power denies the allegations in paragraph 31. Idaho Power is not refusing to purchase from Black Mesa at the avoided cost rate and contract term and conditions required and approved by the Commission, and has asked the Commission to set and approve the same. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

32. Idaho Power denies the allegations in paragraph 32.

33. Idaho Power denies that it refused to respond to Black Mesa's requests. The remaining allegations in paragraph 33 are legal conclusions and require no response.

34. Idaho Power denies the allegation in paragraph 34. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

35. In response to paragraph 35 which re-alleges all preceding paragraphs, please see Idaho Power's answers and responses to all preceding paragraphs.

36. Idaho Power has insufficient knowledge or information to admit or deny whether Black Mesa "has attempted in good faith to engage in negotiations …" Idaho Power acknowledges that Black Mesa has requested a PURPA contract from Idaho Power. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

37. Idaho Power denies the allegations in paragraph 37. Idaho Power is not refusing to purchase from Black Mesa at the avoided cost rate and contract term and

conditions required and approved by the Commission, and has asked the Commission to set and approve the same. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

38. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects and thus denies the allegations in paragraph 38.

39. Idaho Power denies the allegations in paragraph 39. Black Mesa has purported to commit itself only to the rates, terms, and conditions that Black Mesa believes it is entitled to. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

40. Idaho Power denies the allegations in paragraph 40. Idaho Power is not refusing to purchase from Black Mesa at the avoided cost rate and contract term and conditions required and approved by the Commission, and has asked the Commission to set and approve the same. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

41. Idaho Power denies the allegations in paragraph 41.

42. Idaho Power denies that it refused to respond to Black Mesa's requests. The remaining allegations in paragraph 42 are legal conclusions and require no response.

43. Idaho Power denies the allegation in paragraph 43. Idaho Power denies that Black Mesa is entitled to published avoided cost rates or 20-year contracts for its proposed projects.

III. AFFIRMATIVE DEFENSES

44. Black Mesa's Complaint, and all allegations and requests for relief therein, fails to state a claim upon which relief can be granted.

45. Idaho Power acted at all times and in all respects, with regard to Black Mesa and its requests, in conformance and compliance with state and federal law and the required and applicable rules, regulations, tariffs, and schedules for the state of Idaho's implementation of PURPA.

46. Idaho Power hereby reserves the right to assert any and all additional defenses, ascertained during the course of discovery or otherwise, by amendment to this answer as the Commission's rules, procedures, and/or Orders may allow and/or withdraw or amend the above affirmative defenses.

WHEREFORE, having fully answered, Idaho Power respectfully requests:

1. That the Commission issue its Order denying the relief sought by Black Mesa in its Prayer for Relief;

2. That Black Mesa's Complaint be dismissed with prejudice and that it go hence without cost or delay; and

3. For such other relief as the Commission deems just and reasonable.

Respectfully submitted this 23rd day of April 2020.

Donovan E. Walker

DONOVAN E. WALKER
Attorney for Idaho Power Company

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 23rd day of April 2020, I served a true and correct copy of IDAHO POWER COMPANY'S ANSWER AND MOTION TO DISMISS upon the following named parties by the method indicated below, and addressed to the following:

Black Mesa Energy, LLC
Peter J. Richardson
Gregory M. Adams
RICHARDSON ADAMS, PLLC
515 n. 27th Street
Boise, Idaho 83702

____Hand Delivered
____ U.S. Mail
____Overnight Mail
____FAX
__X__ Email peter@richardsonadams.com

Idaho Public Utilities Commission Staff
Edward Jewell
Deputy Attorney General

__X__ Email Edward.jewell@puc.idaho.gov

Christy Davenport, Legal Secretary

BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION
CASE NO. IPC-E-20-17

ATTACHMENT 1

TO IDAHO POWER COMPANY'S
ANSWER AND MOTION TO DISMISS

Idaho Power Letters Dated:

February 27, 2017; December 23, 2019;

February 3, 2020; and February 18, 2020

IDAHO POWER®
An IDACORP Company

February 27, 2017

Black Mesa Energy, LLC
Brian Lynch
P.O. Box 2731
Palos Verdes, CA 90274

SENT VIA: Email Only – brian@mezzdev.com

SUBJECT: Black Mesa Energy, LLC Schedule 73 Energy Sales Agreement Application

Mr. Lynch,

Idaho Power received your Schedule 73 Qualifying Facility Energy Sales Agreement Application ("Application") effective February 13, 2017, in which you have requested an indicative pricing proposal for the proposed 20 MW Black Mesa Energy battery storage project. In your Application, you request a proposed contracting term of 20 years and published avoided cost Rate Option 4, Non-Levelized Non-Fueled Rates.

Idaho Power does not agree that your proposed project is eligible for published avoided cost Rate Option 4, Non-Levelized Non-Fueled Rates, with a 20-year contract term. On February 27, 2017, Idaho Power filed an application to the Idaho Public Utilities Commission requesting a declaratory order that determines the contract term and avoided cost pricing methodology for which your proposed project may be eligible. See IPUC Case No. IPC-E-17-01.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Michael Darrington

Michael Darrington
Energy Contracts
Phone: (208)388-5946
Email: mdarrington@idahopower.com

Cc: Donovan Walker

1221 W. Idaho St. (83702)
P.O. Box 70
Boise, ID 83707

IDAHO POWER®
An IDACORP Company

December 23, 2019

Redwood Energy
Attention: Brian Lynch

SENT VIA: Email – blynch@redwoodenergy.com

RE: Proposed Project – Black Mesa Solar and Storage

Dear Mr. Lynch,

Thank you for your proposal regarding the Black Mesa Solar and Storage project. As you are aware, Idaho Power ("Company") is a regulated utility and prepares an Integrated Resource Plan ("IRP") every two years in accordance with regulatory requirements and guidelines established by the Idaho Public Utilities Commission ("IPUC") and the Public Utility Commission of Oregon ("OPUC"). The IRP is used to guide Idaho Power's acquisition of generation resources needed to meet the electric load requirements of its customers in both Idaho and Oregon. The process of developing the IRP includes input from customer stakeholders and the public, with a final publication filed with the IPUC and OPUC for acknowledgement.

The 2017 IRP and the 2019 IRP, as amended for filing in 2020, identify that Idaho Power is resource sufficient based on the current amount of Company owned resources, and those under PURPA and non-PURPA power purchase agreements ("PPAs"). Idaho Power does not have an immediate need to obtain additional generation resources and, therefore, is not currently interested in pursuing your proposed project. The Company's needs for future generation resource acquisitions will be identified through the IRP process and will likely be developed through a request for proposal that will be made available to interested parties.

Clean energy resources will serve as an essential part of Idaho Power's future portfolio, and the Company is committed to achieving its goal of providing customers with 100% clean energy by 2045. However, Idaho Power must evaluate the benefits and costs to its customers of new resource acquisitions and account for its ability to integrate any additional generation with its electrical system. These analyses are performed through the IRP process and future variable energy resource studies. The Company must also carefully consider the impacts that entering into PPAs has on its financial health as the imputed debt the Company incurs from PPAs is viewed negatively by credit agencies and many investors.

Thank you again for your proposal. If you have any questions, feel free to contact Idaho Power's Energy Contracts group at (208)388-5946.

Sincerely,

Tessia Park

Tessia Park
Vice President
Power Supply
Idaho Power Company

Cc:
Tom Harvey (Idaho Power)
Donovan Walker (Idaho Power)

IDAHO POWER®
An IDACORP Company

February 3, 2020

Black Mesa Energy, LLC
MB MezzDev, LLC
Brian Lynch
P.O. Box 2731
Palos Verdes, CA 90274

SENT VIA: Email Only – blynch@redwoodenergy.com

SUBJECT: Schedule 73 Qualifying Facility Energy Sales Agreement Applications – Black Mesa Energy 1, Black Mesa Energy 2, Frederick Energy 1, LLC and Frederick Energy 2, LLC:
Response to Claims of Legally Enforceable Obligation
Response to Schedule 73 Applications

Mr. Lynch,

Idaho Power received the Schedule 73 Qualifying Facility ("QF") Energy Sales Agreement Applications ("Applications") on January 21, 2020, in which you have requested an indicative pricing proposal for the proposed 20 MW Black Mesa Energy 1, Black Mesa Energy 2, Frederick Energy 1, LLC and Frederick Energy 2, LLC battery storage projects. In your Applications, you request a proposed contracting term of 20 years and published avoided cost Rate Option 4, Non-Levelized Non-Fueled Rates.

Idaho Power has also received your letter e-mailed on January 27, 2020, along with four contracts that you inserted your own rates, terms, and conditions into and signed and sent to Idaho Power purporting to create a Legally Enforceable Obligation ("LEO").

As you are aware in order to sell the output of your proposed facilities to Idaho Power under PURPA, you must follow the procedures required by the Idaho Public Utilities Commission ("IPUC") and set forth in Schedule 73. As referenced in Schedule 73 Section 1b. the Company must notify you within 10 days if your Schedule 73 Application is not sufficient. If the Application is sufficient and complete the Company must, within 20 days of your Application, provide you with indicative pricing and contract terms and conditions.

With this letter Idaho Power hereby responds within 10 days of your Applications as to: (1) your Applications are deficient; (2) Idaho Power has filed a proceeding with the Idaho Public Utilities Commission ("Commission") asking the Commission to set avoided cost rates as well as contract terms and conditions for energy storage QFs consistent with the federal court order that you reference, Case No. 1:18-cv-00236-REB; and (3) your attempt to unilaterally sign contracts containing rates, terms, and conditions, none of which Idaho Power has seen before, and send it in purporting to create a LEO is improper and does not comply with IPUC procedures and tariffs nor with Idaho law.

1221 W. Idaho St. (83702)
P.O. Box 70
Boise, ID 83707

Applications' Deficiency: In accordance with Schedule 73 Section 1.b., the Applications are deficient regarding Section 1.a.iv., which requires the Schedule of estimated Qualifying Facility ("QF") electric output, in an 8,760-hour electronic spreadsheet format. The schedule of estimated deliveries provided with your Applications appear to have the same output shape as that of a solar project.

The form 556 documents provided with your Applications state, "The project consists of an energy storage system Qualifying Facility providing scheduled and dispatchable electricity in forward-looking time blocks…The proposed electric energy storage Qualifying Facility will consist of an electro-chemical battery and will have a maximum power output capacity of 20 MWac for a sustained time period of 5 - 60 minutes." However, based on the generation profile submitted with your Applications, the battery storage project will be capable of producing on average 91-95% of its nameplate capacity each hour over a continuous 7-hour period in July. In addition, there are several days identified in July that the battery storage project will be capable of providing its full output (20 MWac) over continuous 9-hour periods. Please provide an hourly generation profile consistent with the capability of your proposed battery storage facility that represents the generation output you intend to deliver.

Eligibility for Published Avoided Cost Rates: Regardless of the deficiency in your Applications, Idaho Power does not agree that your proposed projects are eligible for published avoided cost Rate Option 4, Non-Levelized Non-Fueled Rates, with a 20-year contract term. Your Schedule 73 Applications, as well as your purported LEO letter, makes reference to each of your proposed projects as "energy storage QFs" that "qualify for the "'Other projects' avoided costs as published by the Idaho Public Utilities Commission (Avoided Cost Rates for Other Projects) and referenced in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power)." However, if you read to the end of that order from the federal court, it clearly states, "The Court specifically declines to order Defendants [IPUC] to require utilities under their jurisdiction to afford energy storage QFs all rights and privileges afforded to "other QFs" under the IPUC's PURPA implementation plan." Memorandum Decision and Order, Franklin Energy Storage One, *et all* v. Kjellander *et all* and Idaho Power Company, page 37.

On January 21, 2020, Idaho Power filed a petition with the Idaho Public Utilities Commission to establish avoided cost rates applicable to PURPA energy storage QFs. The outcome of the filed petition will determine the contract term and avoided cost pricing methodology for which your proposed project may be eligible. See IPUC Case No. IPC-E-20-02. You were personally served this petition on the day it was filed by both e-mail and U.S. Mail.

Legally Enforceable Obligation: The Idaho Supreme Court has affirmed that the "IPUC has authority under state and federal law, to require that before a developer can lock in a certain rate, there must be either a signed contract to sell at that rate or a meritorious complaint alleging that the project is mature and that the developer has attempted and failed to negotiate a contract with the utility; that is, there would be a contract but for the conduct of the utility." *Idaho Power Co., v. Idaho Public Utilities Comm'n.*, 155 Idaho 780, 316 P.3d 1278, 1285 (2013)("*Grouse Creek*"). None of these elements are present in your case.

Additionally, Schedule 73 Section 1.d. discusses and sets forth the same principles affirmed by the Idaho Supreme Court regarding when the indicative pricing and other terms and conditions of the

contract become final and binding. Idaho Power has seen numerous similar, and unsuccessful, claims and attempts at unilaterally signing contracts and inserting rates that the utility has never seen, essentially as the first contract from a proposed QF, purporting to establish some entitlement rates, terms, and/or conditions at a particular time. Such a procedure, and such a concept, as a legally enforceable obligation exists under PURPA to prevent a situation where the utility unreasonably refuses to purchase from a QF. *Grouse Creek*, 316 P.3d at 1280, 1285. It does not exist so that the QF can pick and choose what contractual terms, conditions, and rates it unilaterally wishes to impose upon the utility and its customers. Those items, most particularly the rates, are determined by the IPUC, not by the QF. PURPA requires that the utility purchase. The IPUC determines the terms and conditions of the purchase and the appropriate price.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Michael Darrington
Energy Contracts
Phone: (208)388-5946
Email: mdarrington@idahopower.com

Cc: Donovan Walker
Mike Polito

Walker, Donovan

From: Darrington, Michael
Sent: Tuesday, February 18, 2020 11:34 AM
To: Brian Lynch
Cc: Walker, Donovan
Subject: RE: [EXTERNAL]Black Mesa

Brian,

Idaho Power is in receipt of your letter sent on February 5, 2020. Idaho Power understands its obligations and requirements under its tariff Schedule 73. On February 3, 2020, Idaho Power responded to your Schedule 73 Qualifying Facility Energy Sales Agreement Applications submitted on behalf of your proposed battery storage projects. Although your applications contained inaccurate generation profiles, as stated in Idaho Power's letter, "Regardless of the deficiency in your Applications, Idaho Power does not agree that your proposed projects are eligible for published avoided cost Rate Option 4, Non-Levelized Non-Fueled Rates, with a 20-year contract term." A case is now pending before the Idaho Public Utilities Commission, IPUC Case No. IPC-E-20-02, regarding the avoided cost rates that battery storage QFs may be eligible to receive. As you are aware, you are included on the service list for that case.

--

Michael Darrington
ENERGY CONTRACTS
Idaho Power|Power Supply

Work 208-388-5946
Email mdarrington@idahopower.com

From: Walker, Donovan <DWalker@Idahopower.com>
Sent: Friday, February 14, 2020 8:59 PM
To: Darrington, Michael <MDarrington@idahopower.com>
Subject: FW: [EXTERNAL]Black Mesa

From: Brian Lynch <blynch@redwoodenergy.com>
Date: Friday, Feb 14, 2020, 4:40 PM
To: Walker, Donovan <DWalker@Idahopower.com>
Subject: [EXTERNAL]Black Mesa

Donovan-

I have not heard back from you in response to my letter of February 4 requesting PPA pricing and contract terms for our Black Mesa and Frederick energy storage QFs. In order to assure my team that your response is not due to the lack of receipt of the same, would you please confirm your receipt of that letter and also indicate whether or not a substantive response is pending?

Thank you,

Brian

Brian Lynch
Managing Principal

blynch@redwoodenergy.com
310.750.7796

BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION
CASE NO. IPC-E-20-17

ATTACHMENT 2

TO IDAHO POWER COMPANY'S
ANSWER AND MOTION TO DISMISS

Schedule 73 Applications Received from Black Mesa:

Black Mesa Energy, LLC - February 10, 2017;

Black Mesa Energy 1 - January 18, 2020;

Black Mesa Energy 1 - corrected - January 18, 2020;

Black Mesa Energy 2 - January 18, 2020;

Black Mesa Energy 2 - corrected - January 18, 2020;

Frederick Energy 1 - January 20, 2020;

Frederick Energy 2 - January 20, 2020.

Walker, Donovan

From: Brian Lynch <brian@mezzdev.com>
Sent: Friday, February 10, 2017 5:36 PM
To: Allphin, Randy; Darrington, Michael
Subject: [EXTERNAL] Black Mesa Energy pricing request
Attachments: 12x24 - Black Mesa[1].xlsx; form-556 Black Mesa[2].pdf; Idaho Power Company PPA Application Black Mesa[2].pdf; Map - Black Mesa[2].pdf

Please find below the requested information from Schedule 73 and completed Qualifying Facility Energy Sales Agreement Application to receive an indicative pricing proposal for the Black Mesa Energy Storage QF Project. Please let me know if there are any questions. Each of the items from Section 1 of the Contracting Procedures of Schedule 73 is responded to below:

- **Project Name**: Black Mesa Energy, LLC
- **Location**: Black Mesa Substation, King Hill, Idaho
- **Organization chart**: Black Mesa Energy, LLC is wholly owned by MB MezzDev, LLC
- **Generation technology**: Black Mesa Energy is an energy storage system Qualifying Facility that provides scheduled and dispatchable electricity. The storage system will receive 100% of input energy from renewable energy sources.
- **Maximum Capacity & Net Power**: See attached FERC QFSelf-Certification Form 556, which quantifies these amounts.
- **Hourly production**: Attached is an 8760 of power production
- **Dispatch orders**: The project will provide scheduled, dispatchable power output in forward looking time intervals ranging from 5-30 minutes pending final system design. Within these intervals Idaho Power may have the ability to downward adjust the output, subject to full compensation of potential output available.
- **Map of QF Location**: See attached.
- **Anticipated COD**: 12/1/2019
- **Permitting status**: Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the Q4 2019 COD due to permitting.
- **QF Status**: A FERC Form 556 QF Self-Certification has been submitted, see attached.
- **Fuel type**: The energy provided to Idaho Power will be 100% from the battery storage system. The system will be charged from a renewable energy source such as wind, solar, biomass, etc. Initial designs consist of a PV solar facility to charge the system.
- **Fuel source**: Not applicable as the battery storage will be charged from a renewable source.
- **Interconnection**: The project has prepared an SGIA interconnection application with supporting material and to be submitted in February 2017.
- **Contract term and rate option**: 20-year term with "Non-Levelized Non-Fueled Rates"

Within the next ten business days and pursuant to Section 1(b) please provide your written notice of any deficiencies in this request or, if there are no deficiencies, pursuant to Section 1(c) please provide Idaho Power's indicative pricing proposal.

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION

Idaho Power Qualifying Facility (QF) contact information:

Mailing Address: Attn: Energy Contracts, P O Box 70 Boise, ID 83702
Physical Address: 1221 W. Idaho Street, Boise, ID 83703
Telephone number: 208-388-6070
E-Mail Address: rallphin@idahopower.com

Preamble and Instructions

All generation facilities that qualify pursuant to Idaho Power Company Schedule 73 for a QF Energy Sales Agreement and wish to sell energy from their facility to Idaho Power must complete the following information and submit this Application by hand delivery, mail or E-mail to Idaho Power.

Upon receipt of a complete Application, Idaho Power shall process this request for a QF Energy Sales Agreement pursuant to Idaho Power Company Schedule 73.

Qualifying Facility Information

Proposed Project

Name of Facility: **Black Mesa Energy**

Resource Type: *(i.e. wind, solar, hydro, etc)*: **Battery Storage**

Facility Location: GPS Coordinates: **W 115.18 N 42.91**

Nearest City or landmark: **Glenns Ferry, Idaho**

Name of Facility: **Black Mesa Energy**

County and State: **Elmore County, Idaho**

Map of Facility, including proposed interconnection point. **(See Attached.)**

Anticipated commencement date of energy deliveries to Idaho Power: **October 1, 2019**

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION
(Continued)

Facility Nameplate Capacity Rating (kW): **20,000**

Facility Maximum Output Capacity (kW): **20,000**

Station Service Requirements (kW): **7,000**

Facility Net Delivery to Idaho Power (kW): **20,000**

Facility interconnection status: **Pending**

Proposed Contracting Term (cannot exceed 20 years): **20 years**

Requested Rate Option (details provided in Schedule 73): **Rate Option No. 4, "Non-Levelized Non-Fueled Rates"**

Does the Facility have the ability to respond to dispatch orders from Idaho Power Company (Yes or No): **Yes**

Please include the following attachments:

✓ Hourly estimated energy deliveries (kW) to Idaho Power for every hour of a one year period.
Attached.

✓ List of acquired and outstanding Qualifying Facility permits, including a description of the status and timeline for acquisition of any outstanding permits.
Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the Q4 2019 COD due to permitting.

• At the minimum a FERC issued QF certificate/self-certification is required and/or evidence that Facility will be able to obtain a Qualifying Facility certificate.
FERC Form 556 is attached.

✓ If the Facility will require fuel be transported to the Facility (i.e. natural gas pipelines, railroad

transportation, etc), evidence of ability to obtain sufficient transportation rights to operate the Facility at the stated Maximum Output Amount.

N/A

✓ If the Facility will not be interconnecting directly to the Idaho Power electrical system, evidence that the Facility will be able to interconnect to another utility's electrical system and evidence that the Facility will be able to obtain firm transmission rights over all required transmission providers to deliver the Facility's energy to Idaho Power.

N/A

Owner Information

Owner / Company Name: **Black Mesa Energy, LLC**
Contact Person: **Brian Lynch, Manager**
Address: **P.O. Box 2731**
City: State: Zip: **Palos Verdes, CA 90274**
Telephone: **310-750-7796**
E-mail: **brian@mezzdev.com**

Applicant Signature

I hereby certify that, to the best of my knowledge, all information provided in this Qualifying Facility Energy Sales Agreement application is true and correct.

/s/
Signature

Brian Lynch
Print Name

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. *See* 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button ( ) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do *not* use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
(2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

☐ **Non-Public**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
☐ **Public (redacted)**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility)
Black Mesa Energy, LLC

1b Applicant street address
P.O. Box 2731

1c City
Palos Verdes

1d State/province
CA

1e Postal code
90274

1f Country (if not United States)

1g Telephone number
310-750-7796

1h Has the instant facility ever previously been certified as a QF? Yes ☐ No ☒

1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF ___ - ____ - ___

1j Under which certification process is the applicant making this filing?

☒ Notice of self-certification (see note below)

☐ Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)

Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.

1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)

☒ Qualifying small power production facility status ☐ Qualifying cogeneration facility status

1l What is the purpose and expected effective date(s) of this filing?

☒ Original certification; facility expected to be installed by 10/1/19 and to begin operation on 12/1/19

☐ Change(s) to a previously certified facility to be effective on _____
(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)

- ☐ Name change and/or other administrative change(s)
- ☐ Change in ownership
- ☐ Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output

☐ Supplement or correction to a previous filing submitted on _____
(describe the supplement or correction in the Miscellaneous section starting on page 19)

1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.

☐ The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)

☐ The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted

☐ The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)

Contact Information

2a Name of contact person
Brian Lynch

2b Telephone number
310-750-7796

2c Which of the following describes the contact person's relationship to the applicant? (check one)

☒ Applicant (self) ☐ Employee, owner or partner of applicant authorized to represent the applicant

☐ Employee of a company affiliated with the applicant authorized to represent the applicant on this matter

☐ Lawyer, consultant, or other representative authorized to represent the applicant on this matter

2d Company or organization name (if applicant is an individual, check here and skip to line 2e) ☐
Black Mesa Energy, LLC

2e Street address (if same as Applicant, check here and skip to line 3a) ☒

2f City

2g State/province

2h Postal code

2i Country (if not United States)

Facility Identification and Location

3a Facility name
Black Mesa Energy

3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) ☒

3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.

Longitude ☐ East (+) ☒ West (-) 115.183 degrees

Latitude ☒ North (+) ☐ South (-) 42.909 degrees

3d City (if unincorporated, check here and enter nearest city) ☒
Glenns Ferry

3e State/province
Idaho

3f County (or check here for independent city) ☐
Elmore

3g Country (if not United States)

Transacting Utilities

Identify the electric utilities that are contemplated to transact with the facility.

4a Identify utility interconnecting with the facility
Idaho Power Company

4b Identify utilities providing wheeling service or check here if none ☒

4c Identify utilities purchasing the useful electric power output or check here if none ☐
Idaho Power Company

4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none ☒

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	MB MezzDev, LLC	Yes ☐ No ☐	100 %
2)		Yes ☐ No ☐	%
3)		Yes ☐ No ☐	%
4)		Yes ☐ No ☐	%
5)		Yes ☐ No ☐	%
6)		Yes ☐ No ☐	%
7)		Yes ☐ No ☐	%
8)		Yes ☐ No ☐	%
9)		Yes ☐ No ☐	%
10)		Yes ☐ No ☐	%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist. ☒

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)		%
2)		%
3)		%
4)		%
5)		%
6)		%
7)		%
8)		%
9)		%
10)		%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Black Mesa Energy, LLC

Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- ☐ Biomass (specify)
  - ☐ Landfill gas
  - ☐ Manure digester gas
  - ☐ Municipal solid waste
  - ☐ Sewage digester gas
  - ☐ Wood
  - ☐ Other biomass (describe on page 19)
- ☐ Waste (specify type below in line 6b)
- ☒ Renewable resources (specify)
  - ☐ Hydro power - river
  - ☐ Hydro power - tidal
  - ☐ Hydro power - wave
  - ☐ Solar - photovoltaic
  - ☐ Solar - thermal
  - ☐ Wind
  - ☒ Other renewable resource (describe on page 19)
- ☐ Geothermal
- ☐ Fossil fuel (specify)
  - ☐ Coal (not waste)
  - ☐ Fuel oil/diesel
  - ☐ Natural gas (not waste)
  - ☐ Other fossil fuel (describe on page 19)
- ☐ Other (describe on page 19)

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

☐ Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- ☐ Anthracite culm produced prior to July 23, 1985
- ☐ Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- ☐ Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- ☐ Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- ☐ Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non- Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- ☐ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- ☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- ☐ Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- ☐ Materials that a government agency has certified for disposal by combustion (describe on page 19)
- ☐ Heat from exothermic reactions (describe on page 19) ☐ Residual heat (describe on page 19)
- ☐ Used rubber tires ☐ Plastic materials ☐ Refinery off-gas ☐ Petroleum coke

☐ Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	27,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host) , do not include any power consumed by the non-power production activities in your reported parasitic station power.	10 kW
7c Electrical losses in interconnection transformers	434 kW
7d Electrical losses in AC/DC conversion equipment, if any	920 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	5,636 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	7,000.0 kW
7g Maximum net power production capacity = 7a - 7f	20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The project consists of an energy storage system Qualifying Facility providing scheduled and dispatchable electricity in forward-looking time blocks. The energy storage system that comprises the energy storage Qualifying Facility is designed to, and will, receive 100% of its energy input from a combination of renewable energy sources such as wind, solar, biogas, biomass, etc. The current initial design utilizes solar photovoltaic (PV) modules mounted to single-axis trackers to provide the electric energy input to the Qualifying Facility's battery storage system. The PV modules are planned to be connected in series/ parallel combinations to solar inverters, rated approximately 2.5 MWac each, (subject to change). The proposed electric energy storage Qualifying Facility will consist of an electro-chemical battery and will have a maximum power output capacity of 20 MWac for a sustained time period of 5 - 60 minutes. The Facility will consist of an alternating current (AC) to direct current (DC) control system. The Qualifying Facility will be utilized to provide the purchasing utility with pre-scheduled and dispatchable AC energy within pre-determined time blocks. The sole source of electric power and energy provided to the purchasing utility will be the electro-chemical reaction giving rise to the discharge of electric power and energy by the battery. In turn, the sole direct source of energy input provided to the battery Facility will be, as described above, renewable sources.

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) *as amended by* Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).

8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.

Check here if no such facilities exist. ☒

	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity
1)		QF ___ - ___		kW
2)		QF ___ - ___		kW
3)		QF ___ - ___		kW

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?

☐ Yes (continue at line 8c below) ☒ No (skip lines 8c through 8e)

8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes ☐ No ☐

8d Did construction of the facility commence on or before December 31, 1999? Yes ☐ No ☐

8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes ☐ No ☐ If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.

Certification of Compliance with Fuel Use Requirements

Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:

☒ Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above.

9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:

☒ Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.

10a What type(s) of cogeneration technology does the facility represent? (check all that apply)

☐ Topping-cycle cogeneration ☐ Bottoming-cycle cogeneration

10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.

Check to certify compliance with indicated requirement	Requirement
☐	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
☐	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
☐	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
☐	Diagram must specify average gross electric output in kW or MW for each generator.
☐	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
☐	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is *liquid only* (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
☐	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
☐	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
☐	Diagram must specify working fluid flow conditions at make-up water inputs.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes ☐ No ☐

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes ☐ No ☐

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

☐ Yes (continue at line 11d below)

☐ No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

☐ Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

☐ No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

☐ Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

☐ No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

☐ Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

☐ No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).*

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

☐ Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

☐ No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. *See* Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use *in separate rows.*

	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b Indicate the annual average rate of net electrical energy output	kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	0 %
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f	0 %

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?

☐ Yes (complies with operating standard) ☐ No (does not comply with operating standard)

13j Did installation of the facility in its current form commence on or after March 13, 1980?

☐ Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.

☐ No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)) , the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.

14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process *in separate rows.*

	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
1)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
2)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
3)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

☐ Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.

☐ No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

☒ He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

☒ He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

☒ He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

- ☐ The person on whose behalf the filing is made
- ☐ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
- ☐ An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
- ☒ A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

☒ He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

☒ He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
	P.O. Box 2731 Palos Verdes, CA 90274	

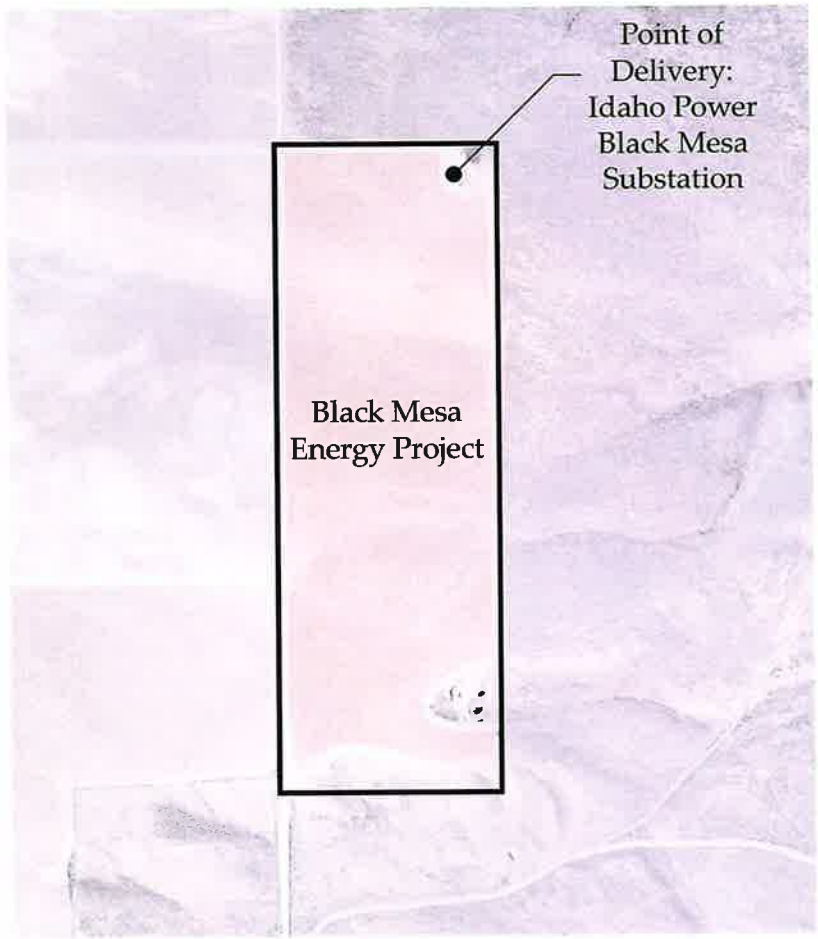
Audit Notes
Commission Staff Use Only: ☐

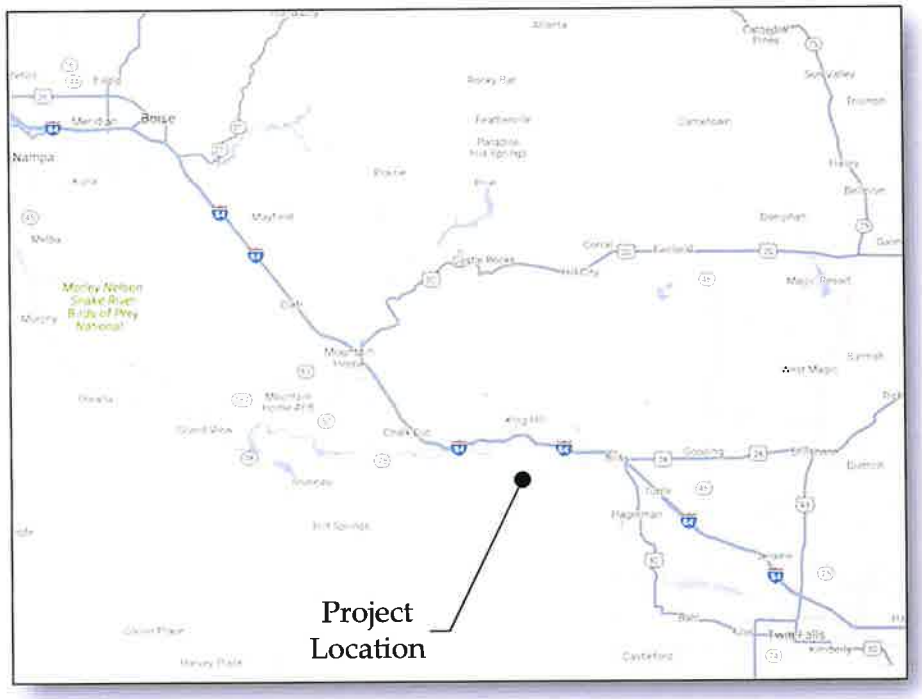
Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 6a: The energy storage (battery) system will take its input from 100% renewable energy sources such as wind, solar, biogas, biomass, etc. The system is designed with flexibility to most efficiently utilize the resources available at the site, at the present time as well as in the future.





Black Mesa Energy Project

20 MW
Energy Storage
+
Renewable Energy

Lat/Long: 42.904, -115.183
Location: Elmore County, Idaho

Project	Black Mesa
Capacity (AC)	20 MW
Location	Glenns Ferry, Idaho
Interconnection	Idaho Power

8760 Hourly Profile

Date/Time	Energy (MW-h)
1/1/1990 0:00	0
1/1/1990 1:00	0
1/1/1990 2:00	0
1/1/1990 3:00	0
1/1/1990 4:00	0
1/1/1990 5:00	0
1/1/1990 6:00	0
1/1/1990 7:00	0
1/1/1990 8:00	1.28253321
1/1/1990 9:00	9.898361203
1/1/1990 10:00	10.6703195
1/1/1990 11:00	8.245497604
1/1/1990 12:00	8.261679182
1/1/1990 13:00	9.419337308
1/1/1990 14:00	11.9125693
1/1/1990 15:00	13.38263493
1/1/1990 16:00	4.803534816

12x24

	Hour																								Avg MW-h	Total MW-h
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0	228.7	265.9	253.5	240.3	252.1	253.5	248.3	174.6	9.1	0.0	0.0	0.0	0.0	0.0	0.0	82.6	1,983.3
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	133.3	321.8	[illegible]	348.1	372.5	315.8	313.3	405.5	280.5	83.9	0.2	0.0	0.0	0.0	0.0	0.0	115.2	2,764.8
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.7	81.1	346.8	[illegible]	[illegible]	422.2	[illegible]	[illegible]	481.4	[illegible]	[illegible]	285.1	40.0	0.0	0.0	0.0	0.0	0.0	185.4	[illegible]
Apr	0.0	0.0	0.0	0.0	0.0	0.0	54.5	219.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	147.1	2.5	0.0	0.0	0.0	0.0	219.5	[illegible]
May	0.0	0.0	0.0	0.0	0.0	8.6	180.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	287.4	41.7	0.0	0.0	0.0	0.0	257.8	[illegible]
Jun	0.0	0.0	0.0	0.0	0.0	24.9	244.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	97.0	0.0	0.0	0.0	0.0	266.2	[illegible]
Jul	0.0	0.0	0.0	0.0	0.0	5.5	191.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	85.8	0.0	0.0	0.0	0.0	281.1	[illegible]
Aug	0.0	0.0	0.0	0.0	0.0	0.0	91.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	222.0	28.8	0.0	0.0	0.0	0.0	257.2	[illegible]
Sep	0.0	0.0	0.0	0.0	0.0	0.0	54.0	226.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	266.8	53.2	0.0	0.0	0.0	0.0	0.0	214.3	[illegible]
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.3	156.8	426.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	128.0	73.5	0.0	0.0	0.0	0.0	0.0	0.0	158.0	[illegible]
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	114.1	295.0	296.5	274.2	282.7	297.7	320.8	286.4	109.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	94.6	2,269.5
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.1	178.6	213.8	214.0	224.3	241.9	251.8	234.2	45.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.0	1,655.0
Avg MW-h	0.0	0.0	0.0	0.0	0.0	3.3	64.7	208.8	335.9	420.7	441.3	439.1	435.2	438.5	436.5	425.2	359.7	244.6	117.9	20.8	0.0	0.0	0.0	0.0	183.0	
Total MW-h	0.0	0.0	0.0	0.0	0.0	39.4	776.9	2,505.0	4,030.5	5,048.8	5,295.7	5,269.6	5,221.9	5,262.1	5,237.8	5,102.5	4,316.6	2,934.9	1,414.6	249.6	0.0	0.0	0.0	0.0		52,706.0

Walker, Donovan

From: Brian Lynch <blynch@redwoodenergy.com>
Sent: Saturday, January 18, 2020 1:26 PM
To: Energy Contracts
Cc: Walker, Donovan; Darrington, Michael; Matt Garlinghouse; Brian Lynch
Subject: [EXTERNAL]Black Mesa Energy Pricing Request
Attachments: Schedule 73 - Black mesa 1[2].pdf; Map - Black Mesa 1[2].pdf; 12x24 - Black Mesa 1[2].xlsx; form-556 Black Mesa 1.pdf

Idaho Power -

Black Mesa Energy LLC, reiterates its previous request for an Energy Sales Agreement pursuant to Schedule 73 as requested on 2/10/2017. The project is a Qualifying Facility that will interconnect to Idaho Power's electrical system at an interconnection point within the state of Idaho. The project is an energy storage QF and qualifies for the "Other projects" avoided costs as found in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power).

Please find below the requested information from Schedule 73 and completed Qualifying Facility Energy Sales Agreement Application. Each of the items from Section 1 of the Contracting Procedures of Schedule 73 is responded to below. Please let me know if there are any questions.

Black Mesa Energy 1

- **Project Name**: Black Mesa Energy 1
- **Location**: Black Mesa Substation, King Hill, Idaho
- **Organization chart**: Black Mesa Energy, LLC is wholly owned by MB MezzDev, LLC
- **Generation technology**: Black Mesa Energy 1 is an energy storage system Qualifying Facility that provides scheduled and dispatchable electricity. The storage system will receive 100% of input energy from renewable energy sources.
- **Maximum Capacity & Net Power**: 20MW-AC. See attached FERC QFSelf-Certification Form 556, which quantifies these amounts.
- **Hourly production**: Attached is an 8760 of power production
- **Dispatch orders**: The project will provide scheduled, dispatchable power output in forward looking time intervals ranging from 5-240 minutes pending final system design. Within these intervals Idaho Power may have the ability to downward adjust the output, subject to full compensation of potential output available.
- **Map of QF Location**: See attached.
- **Anticipated COD**: 6/1/2023
- **Permitting status**: Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the 6/1/2023 COD due to permitting.
- **QF Status**: A FERC Form 556 QF Self-Certification was submitted on Feb 23, 2017 at docket QF17-705-000, see attached as amended on Jan 17, 2020.
- **Fuel type**: The energy provided to Idaho Power will be 100% from the battery storage system. The system will be charged from a renewable energy source such as wind, solar, biomass, etc. Initial designs consist of a PV solar facility to charge the system.
- **Fuel source**: Not applicable as the battery storage will be charged from a renewable source.

- **Interconnection**: The project has applied for interconnection and completed Feasibility Study at Queue #557.
- **Contract term and rate option**: 20-year term with "Non-Levelized Non-Fueled Rates"

Within the next ten business days and pursuant to Section 1(b) please provide your written notice of any deficiencies in this request or, if there are no deficiencies, pursuant to Section 1(c) please provide Idaho Power's indicative pricing proposal using the Published Rates.

Brian Lynch
Managing Principal

blynch@redwoodenergy.com
310.750.7796

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION

Idaho Power Qualifying Facility (QF) contact information:

Mailing Address: Attn: Energy Contracts, P O Box 70 Boise, ID 83702
Physical Address: 1221 W. Idaho Street, Boise, ID 83703
Telephone number: 208-388-6070
E-Mail Address: energycontracts@idahopower.com

Preamble and Instructions

All generation facilities that qualify pursuant to Idaho Power Company Schedule 73 for a QF Energy Sales Agreement and wish to sell energy from their facility to Idaho Power must complete the following information and submit this Application by hand delivery, mail or E-mail to Idaho Power.

Upon receipt of a complete Application, Idaho Power shall process this request for a QF Energy Sales Agreement pursuant to Idaho Power Company Schedule 73.

Qualifying Facility Information

Proposed Project

Name of Facility: Black Mesa Energy 1

Resource Type: *(i.e. wind, solar, hydro, etc)*: Battery Storage

Facility Location: GPS Coordinates: 42.91, -115.18

Nearest City or landmark: Glenns Ferry, Idaho

County and State: Elmore County, Idaho

Map of Facility, including proposed interconnection point. (See Attached)

Anticipated commencement date of energy deliveries to Idaho Power: 6/1/2023

Facility Nameplate Capacity Rating (kW): 20,000

Facility Maximum Output Capacity (kW): 20,000

Station Service Requirements (kW): 200

Facility Net Delivery to Idaho Power (kW): 20,000

Facility interconnection status: Queue#557, In-progress

Proposed Contracting Term (cannot exceed 20 years): 20 years

Requested Rate Option (details provided in Schedule 73): Rate Option No. 4 "Non-Levelized Non-Fueld Rates"

Does the Facility have the ability to respond to dispatch orders from Idaho Power Company (Yes or No): Yes

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION
(Continued)

Please include the following attachments:

- ✓ Hourly estimated energy deliveries (kW) to Idaho Power for every hour of a one year period.
- ✓ List of acquired and outstanding Qualifying Facility permits, including a description of the status and timeline for acquisition of any outstanding permits.
  - At the minimum a FERC issued QF certificate/self-certification is required and/or evidence that Facility will be able to obtain a Qualifying Facility certificate.
- ✓ If the Facility will require fuel be transported to the Facility (i.e. natural gas pipelines, railroad transportation, etc), evidence of ability to obtain sufficient transportation rights to operate the Facility at the stated Maximum Output Amount.
- ✓ If the Facility will not be interconnecting directly to the Idaho Power electrical system, evidence that the Facility will be able to interconnect to another utility's electrical system and evidence that the Facility will be able to obtain firm transmission rights over all required transmission providers to deliver the Facility's energy to Idaho Power.

Owner Information

Owner / Company Name: **Black Mesa Energy, LLC**

Contact Person: **Brian Lynch, Manager**

Address: **P.O. Box 2731**

City: **Palos Verdes** State: **CA** Zip: **90274**

Telephone: **310-750-7796**

E-mail: **blynch@redwoodenergy.com**

Applicant Signature

I hereby certify that, to the best of my knowledge, all information provided in this Qualifying Facility Energy Sales Agreement application is true and correct.

Brian Lynch
Signature

Brian Lynch
Print Name

1/17/2020
Date

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. *See* 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button ( ) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do *not* use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
(2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

☐ **Non-Public**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
☐ **Public (redacted)**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility)
Black Mesa Energy, LLC

1b Applicant street address
P.O. Box 2731

1c City
Palos Verdes

1d State/province
CA

1e Postal code
90274

1f Country (if not United States)

1g Telephone number
310-750-7796

1h Has the instant facility ever previously been certified as a QF? Yes ☒ No ☐

1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF 17 - 705 - 000

1j Under which certification process is the applicant making this filing?

☒ Notice of self-certification (see note below)

☐ Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)

Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.

1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)

☒ Qualifying small power production facility status ☐ Qualifying cogeneration facility status

1l What is the purpose and expected effective date(s) of this filing?

☒ Original certification; facility expected to be installed by 10/1/22 and to begin operation on 12/1/22

☐ Change(s) to a previously certified facility to be effective on _____

(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)

- ☐ Name change and/or other administrative change(s)
- ☐ Change in ownership
- ☐ Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output

☐ Supplement or correction to a previous filing submitted on _____

(describe the supplement or correction in the Miscellaneous section starting on page 19)

1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.

☐ The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)

☐ The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted

☐ The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)

Contact Information

2a Name of contact person
Brian Lynch

2b Telephone number
310-750-7796

2c Which of the following describes the contact person's relationship to the applicant? (check one)

☒ Applicant (self) ☐ Employee, owner or partner of applicant authorized to represent the applicant

☐ Employee of a company affiliated with the applicant authorized to represent the applicant on this matter

☐ Lawyer, consultant, or other representative authorized to represent the applicant on this matter

2d Company or organization name (if applicant is an individual, check here and skip to line 2e) ☐
Black Mesa Energy, LLC

2e Street address (if same as Applicant, check here and skip to line 3a) ☒

2f City

2g State/province

2h Postal code

2i Country (if not United States)

Facility Identification and Location

3a Facility name
Black Mesa Energy 1

3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) ☒

3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.

Longitude ☐ East (+) ☒ West (-) 115.183 degrees

Latitude ☒ North (+) ☐ South (-) 42.909 degrees

3d City (if unincorporated, check here and enter nearest city) ☒
Glenns Ferry

3e State/province
Idaho

3f County (or check here for independent city) ☐
Elmore

3g Country (if not United States)

Transacting Utilities

Identify the electric utilities that are contemplated to transact with the facility.

4a Identify utility interconnecting with the facility
Idaho Power Company

4b Identify utilities providing wheeling service or check here if none ☒

4c Identify utilities purchasing the useful electric power output or check here if none ☐
Idaho Power Company

4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none ☒

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	MB MezzDev, LLC	Yes ☐ No ☒	100 %
2)		Yes ☐ No ☐	%
3)		Yes ☐ No ☐	%
4)		Yes ☐ No ☐	%
5)		Yes ☐ No ☐	%
6)		Yes ☐ No ☐	%
7)		Yes ☐ No ☐	%
8)		Yes ☐ No ☐	%
9)		Yes ☐ No ☐	%
10)		Yes ☐ No ☐	%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist. ☒

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)		%
2)		%
3)		%
4)		%
5)		%
6)		%
7)		%
8)		%
9)		%
10)		%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Black Mesa Energy, LLC

Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- ☐ Biomass (specify)
  - ☐ Landfill gas
  - ☐ Manure digester gas
  - ☐ Municipal solid waste
  - ☐ Sewage digester gas
  - ☐ Wood
  - ☐ Other biomass (describe on page 19)
- ☐ Waste (specify type below in line 6b)
- ☒ Renewable resources (specify)
  - ☐ Hydro power - river
  - ☐ Hydro power - tidal
  - ☐ Hydro power - wave
  - ☐ Solar - photovoltaic
  - ☐ Solar - thermal
  - ☐ Wind
  - ☒ Other renewable resource (describe on page 19)
- ☐ Geothermal
- ☐ Fossil fuel (specify)
  - ☐ Coal (not waste)
  - ☐ Fuel oil/diesel
  - ☐ Natural gas (not waste)
  - ☐ Other fossil fuel (describe on page 19)
- ☐ Other (describe on page 19)

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

☐ Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- ☐ Anthracite culm produced prior to July 23, 1985
- ☐ Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- ☐ Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- ☐ Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- ☐ Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non- Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- ☐ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- ☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- ☐ Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- ☐ Materials that a government agency has certified for disposal by combustion (describe on page 19)
- ☐ Heat from exothermic reactions (describe on page 19) ☐ Residual heat (describe on page 19)
- ☐ Used rubber tires ☐ Plastic materials ☐ Refinery off-gas ☐ Petroleum coke

☐ Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	27,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host) , do not include any power consumed by the non-power production activities in your reported parasitic station power.	10 kW
7c Electrical losses in interconnection transformers	434 kW
7d Electrical losses in AC/DC conversion equipment, if any	920 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	5,636 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	7,000.0 kW
7g Maximum net power production capacity = 7a - 7f	20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The project consists of an energy storage system Qualifying Facility providing scheduled and dispatchable electricity in forward-looking time blocks. The energy storage system that comprises the energy storage Qualifying Facility is designed to, and will, receive 100% of its energy input from a combination of renewable energy sources such as wind, solar, biogas, biomass, etc. The current initial design utilizes solar photovoltaic (PV) modules mounted to single-axis trackers to provide the electric energy input to the Qualifying Facility's battery storage system. The PV modules are planned to be connected in series/ parallel combinations to solar inverters, rated approximately 2.5 MWac each, (subject to change). The proposed electric energy storage Qualifying Facility will consist of an electro-chemical battery and will have a maximum power output capacity of 20 MWac for a sustained time period of 5 - 240 minutes. The Facility will consist of an alternating current (AC) to direct current (DC) control system. The Qualifying Facility will be utilized to provide the purchasing utility with pre-scheduled and dispatchable AC energy within pre-determined time blocks. The sole source of electric power and energy provided to the purchasing utility will be the electro-chemical reaction giving rise to the discharge of electric power and energy by the battery. In turn, the sole direct source of energy input provided to the battery Facility will be, as described above, renewable sources.

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) *as amended by* Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).

8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.

Check here if no such facilities exist. ☒

	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity
1)		QF -		kW
2)		QF -		kW
3)		QF -		kW

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?

☐ Yes (continue at line 8c below) ☒ No (skip lines 8c through 8e)

8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes ☐ No ☐

8d Did construction of the facility commence on or before December 31, 1999? Yes ☐ No ☐

8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes ☐ No ☐ If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.

Certification of Compliance with Fuel Use Requirements

Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:

☒ Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above.

9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:

☒ Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.

10a What type(s) of cogeneration technology does the facility represent? (check all that apply)

☐ Topping-cycle cogeneration ☐ Bottoming-cycle cogeneration

10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.

Check to certify compliance with indicated requirement	Requirement
☐	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
☐	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
☐	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
☐	Diagram must specify average gross electric output in kW or MW for each generator.
☐	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
☐	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is *liquid only* (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
☐	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
☐	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
☐	Diagram must specify working fluid flow conditions at make-up water inputs.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes ☐ No ☐

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes ☐ No ☐

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

☐ Yes (continue at line 11d below)

☐ No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

☐ Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

☐ No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

☐ Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

☐ No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

☐ Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

☐ No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).*

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

☐ Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

☐ No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. *See* Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use *in separate rows*.

	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b Indicate the annual average rate of net electrical energy output	kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	0 %
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f	0 %

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?

☐ Yes (complies with operating standard) ☐ No (does not comply with operating standard)

13j Did installation of the facility in its current form commence on or after March 13, 1980?

☐ Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.

☐ No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)) , the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.

14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process *in separate rows*.

	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
1)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
2)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
3)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

- ☐ Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.
- ☐ No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

☒ He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

☒ He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

☒ He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

- ☐ The person on whose behalf the filing is made
- ☒ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
- ☐ An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
- ☐ A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

☒ He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

☒ He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Brian Lynch	P.O. Box 2731 Palos Verdes, CA 90274	1/18/2020

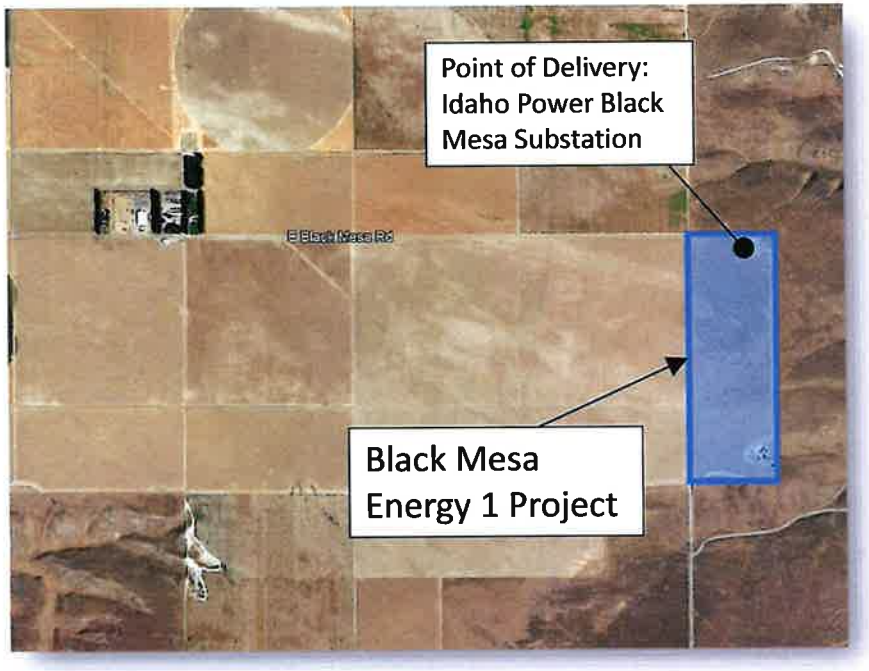
Audit Notes
Commission Staff Use Only: ☐

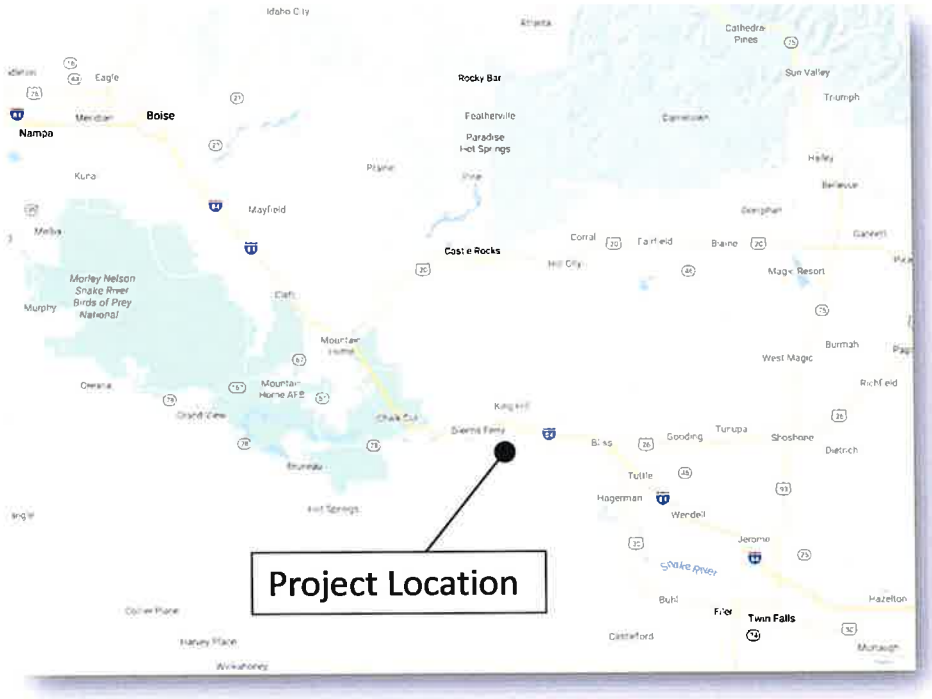
Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 6a: The energy storage (battery) system will take its input from 100% renewable energy sources such as wind, solar, biogas, biomass, etc. The system is designed with flexibility to most efficiently utilize the resources available at the site, at the present time as well as in the future.





Black Mesa Energy 1	20 MW Energy Storage & Renewable Energy	Lat/Long: 42.908, -115.185 Location: Elmore County, ID

Project	Black Mesa Energy 1
Capacity (AC)	20 MW
Location	Glenns Ferry, Idaho
Interconnection	Idaho Power

8760 Hourly Profile

Date/Time	Energy (MW-h)
1/1/1990 0:00	0
1/1/1990 1:00	0
1/1/1990 2:00	0
1/1/1990 3:00	0
1/1/1990 4:00	0
1/1/1990 5:00	0
1/1/1990 6:00	0
1/1/1990 7:00	0
1/1/1990 8:00	1.371529194
1/1/1990 9:00	6.830484636
1/1/1990 10:00	6.672865608
1/1/1990 11:00	5.720487744
1/1/1990 12:00	5.676286163
1/1/1990 13:00	6.128837199
1/1/1990 14:00	7.906550456
1/1/1990 15:00	9.233978022
1/1/1990 16:00	4.191869776
1/1/1990 17:00	0
1/1/1990 18:00	0
1/1/1990 19:00	0
1/1/1990 20:00	0
1/1/1990 21:00	0
1/1/1990 22:00	0

12x24 - Avg MW

	Hour																						
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.6	6.4	5.9	5.5	5.7	6.0	6.4	4.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.7	9.8	9.9	9.7	9.5	8.4	8.7	8.9	8.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.0	13.3	13.1	12.7	12.6	12.9	13.0	13.7	13.1	7.6	1.3	0.0	0.0	0.0	0.0	0.0
Apr	0.0	0.0	0.0	0.0	0.0	0.0	1.7	8.9	15.6	16.1	16.4	16.1	15.6	15.8	15.7	16.1	14.1	11.2	3.8	0.1	0.0	0.0	0.0	0.0
May	0.0	0.0	0.0	0.0	0.0	0.3	4.3	13.4	17.3	17.8	17.6	18.6	19.9	17.2	17.0	15.6	14.5	12.3	7.1	1.4	0.0	0.0	0.0	0.0
Jun	0.0	0.0	0.0	0.0	0.0	0.9	6.4	13.8	16.9	18.1	18.4	18.8	18.7	17.8	17.3	15.8	14.1	11.8	9.1	2.9	0.0	0.0	0.0	0.0
Jul	0.0	0.0	0.0	0.0	0.0	0.2	4.7	13.1	17.1	18.5	18.4	18.7	18.7	18.0	16.4	14.8	13.6	11.1	8.9	2.4	0.0	0.0	0.0	0.0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	2.6	12.3	17.2	18.7	18.5	19.0	19.2	18.2	16.3	15.2	14.4	12.3	5.8	0.8	0.0	0.0	0.0	0.0
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.7	13.0	14.8	15.7	15.9	15.1	14.2	13.5	13.9	13.6	9.5	1.7	0.0	0.0	0.0	0.0	0.0
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	9.5	11.2	11.8	11.7	10.5	10.7	11.7	11.9	8.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.1	6.8	7.5	8.5	8.6	7.0	8.1	7.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.9	5.2	5.0	5.0	5.4	5.8	5.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Walker, Donovan

From: Brian Lynch <blynch@redwoodenergy.com>
Sent: Saturday, January 18, 2020 1:41 PM
To: Energy Contracts
Cc: Walker, Donovan; Darrington, Michael; Matt Garlinghouse
Subject: [EXTERNAL]Re: Black Mesa Energy Pricing Request
Attachments: Schedule 73 - Black mesa 1[7].pdf

Corrected Schedule 73 attached for Black Mesa 1.

From: Brian Lynch <blynch@redwoodenergy.com>
Date: Saturday, January 18, 2020 at 3:26 PM
To: <energycontracts@idahopower.com>
Cc: <DWalker@idahopower.com>, <MDarrington@idahopower.com>, Matt Garlinghouse <mgarlinghouse@redwoodenergy.com>, Brian Lynch <blynch@redwoodenergy.com>
Subject: Black Mesa Energy Pricing Request

Idaho Power -

Black Mesa Energy LLC, reiterates its previous request for an Energy Sales Agreement pursuant to Schedule 73 as requested on 2/10/2017. The project is a Qualifying Facility that will interconnect to Idaho Power's electrical system at an interconnection point within the state of Idaho. The project is an energy storage QF and qualifies for the "Other projects" avoided costs as found in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power).

Please find below the requested information from Schedule 73 and completed Qualifying Facility Energy Sales Agreement Application. Each of the items from Section 1 of the Contracting Procedures of Schedule 73 is responded to below. Please let me know if there are any questions.

Black Mesa Energy 1

- **Project Name**: Black Mesa Energy 1
- **Location**: Black Mesa Substation, King Hill, Idaho
- **Organization chart**: Black Mesa Energy, LLC is wholly owned by MB MezzDev, LLC
- **Generation technology**: Black Mesa Energy 1 is an energy storage system Qualifying Facility that provides scheduled and dispatchable electricity. The storage system will receive 100% of input energy from renewable energy sources.
- **Maximum Capacity & Net Power**: 20MW-AC. See attached FERC QFSelf-Certification Form 556, which quantifies these amounts.
- **Hourly production**: Attached is an 8760 of power production
- **Dispatch orders**: The project will provide scheduled, dispatchable power output in forward looking time intervals ranging from 5-240 minutes pending final system design. Within these intervals Idaho Power may have the ability to downward adjust the output, subject to full compensation of potential output available.
- **Map of QF Location**: See attached.
- **Anticipated COD**: 6/1/2023

- **Permitting status**: Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the 6/1/2023 COD due to permitting.
- **QF Status**: A FERC Form 556 QF Self-Certification was submitted on Feb 23, 2017 at docket QF17-705-000, see attached as amended on Jan 17, 2020.
- **Fuel type**: The energy provided to Idaho Power will be 100% from the battery storage system. The system will be charged from a renewable energy source such as wind, solar, biomass, etc. Initial designs consist of a PV solar facility to charge the system.
- **Fuel source**: Not applicable as the battery storage will be charged from a renewable source.
- **Interconnection**: The project has applied for interconnection and completed Feasibility Study at Queue #557.
- **Contract term and rate option**: 20-year term with "Non-Levelized Non-Fueled Rates"

Within the next ten business days and pursuant to Section 1(b) please provide your written notice of any deficiencies in this request or, if there are no deficiencies, pursuant to Section 1(c) please provide Idaho Power's indicative pricing proposal using the Published Rates.

Brian Lynch
Managing Principal

Redwood Energy
LOS ANGELES | SAN FRANCISCO

blynch@redwoodenergy.com
310.750.7796

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION

Idaho Power Qualifying Facility (QF) contact information:

Mailing Address: Attn: Energy Contracts, P O Box 70 Boise, ID 83702
Physical Address: 1221 W. Idaho Street, Boise, ID 83703
Telephone number: 208-388-6070
E-Mail Address: energycontracts@idahopower.com

Preamble and Instructions

All generation facilities that qualify pursuant to Idaho Power Company Schedule 73 for a QF Energy Sales Agreement and wish to sell energy from their facility to Idaho Power must complete the following information and submit this Application by hand delivery, mail or E-mail to Idaho Power.

Upon receipt of a complete Application, Idaho Power shall process this request for a QF Energy Sales Agreement pursuant to Idaho Power Company Schedule 73.

Qualifying Facility Information

Proposed Project

Name of Facility: Black Mesa Energy 1

Resource Type: *(i.e. wind, solar, hydro, etc)*: Battery Storage

Facility Location: GPS Coordinates: 42.91, -115.18

Nearest City or landmark: Glenns Ferry, Idaho

County and State: Elmore County, Idaho

Map of Facility, including proposed interconnection point. (See Attached)

Anticipated commencement date of energy deliveries to Idaho Power: 6/1/2023

Facility Nameplate Capacity Rating (kW): 20,000

Facility Maximum Output Capacity (kW): 20,000

Station Service Requirements (kW): 200

Facility Net Delivery to Idaho Power (kW): 20,000

Facility interconnection status: Queue#557, In-progress

Proposed Contracting Term (cannot exceed 20 years): 20 years

Requested Rate Option (details provided in Schedule 73): Rate Option No. 4 "Non-Levelized Non-Fueld Rates"

Does the Facility have the ability to respond to dispatch orders from Idaho Power Company (Yes or No): Yes

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION
(Continued)

Please include the following attachments:

- ✓ Hourly estimated energy deliveries (kW) to Idaho Power for every hour of a one year period.
- ✓ List of acquired and outstanding Qualifying Facility permits, including a description of the status and timeline for acquisition of any outstanding permits.
  - At the minimum a FERC issued QF certificate/self-certification is required and/or evidence that Facility will be able to obtain a Qualifying Facility certificate.
- ✓ If the Facility will require fuel be transported to the Facility (i.e. natural gas pipelines, railroad transportation, etc), evidence of ability to obtain sufficient transportation rights to operate the Facility at the stated Maximum Output Amount.
- ✓ If the Facility will not be interconnecting directly to the Idaho Power electrical system, evidence that the Facility will be able to interconnect to another utility's electrical system and evidence that the Facility will be able to obtain firm transmission rights over all required transmission providers to deliver the Facility's energy to Idaho Power.

Owner Information

Owner / Company Name: **Black Mesa Energy, LLC**

Contact Person: **Brian Lynch, Manager**

Address: **P.O. Box 2731**

City: **Palos Verdes** State: **CA** Zip: **90274**

Telephone: **310-750-7796**

E-mail: **blynch@redwoodenergy.com**

Applicant Signature

I hereby certify that, to the best of my knowledge, all information provided in this Qualifying Facility Energy Sales Agreement application is true and correct.

Brian Lynch
Signature

Brian Lynch
Print Name

1/17/2020
Date

Walker, Donovan

From: Brian Lynch <blynch@redwoodenergy.com>
Sent: Saturday, January 18, 2020 1:41 PM
To: Energy Contracts
Cc: Walker, Donovan; Darrington, Michael; Matt Garlinghouse
Subject: [EXTERNAL]Black Mesa 2 corrected request
Attachments: Schedule 73 - Black mesa 2[2].pdf; Map - Black Mesa 2[2][1].pdf; 12x24 - Black Mesa 2[1][1].xlsx; form-556 Black Mesa 2[2].pdf

Idaho Power -

Black Mesa Energy LLC, submits this request for an Energy Sales Agreement pursuant to Schedule 73. The project is a Qualifying Facility that will interconnect to Idaho Power's electrical system at an interconnection point within the state of Idaho. The project is an energy storage QF and qualifies for the "Other projects" avoided costs as found in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power).

Please find below the requested information from Schedule 73 and completed Qualifying Facility Energy Sales Agreement Application. Each of the items from Section 1 of the Contracting Procedures of Schedule 73 is responded to below. Please let me know if there are any questions.

Black Mesa Energy 2

- **Project Name**: Black Mesa Energy 2
- **Location**: Black Mesa Substation, King Hill, Idaho
- **Organization chart**: Black Mesa Energy, LLC is wholly owned by MB MezzDev, LLC
- **Generation technology**: Black Mesa Energy 2 is an energy storage Qualifying Facility that provides scheduled and dispatchable electricity. The storage system will receive 100% of input energy from renewable energy sources.
- **Maximum Capacity & Net Power**: 20MW-AC. See attached FERC QF Self-Certification Form 556, which quantifies these amounts.
- **Hourly production**: Attached is an 8760 of power production
- **Dispatch orders**: The project will provide scheduled, dispatchable power output in forward looking time intervals ranging from 5-240 minutes pending final system design. Within these intervals Idaho Power may have the ability to downward adjust the output, subject to full compensation of potential output available.
- **Map of QF Location**: See attached.
- **Anticipated COD**: 6/1/2023
- **Permitting status**: Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the 6/1/2023 COD due to permitting.
- **QF Status**: A FERC Form 556 QF Self-Certification is attached.
- **Fuel type**: The energy provided to Idaho Power will be 100% from the battery storage system. The system will be charged from a renewable energy source such as wind, solar, biomass, etc. Initial designs consist of a PV solar facility to charge the system.
- **Fuel source**: Not applicable as the battery storage will be charged from a renewable source.
- **Interconnection**: The project has applied for interconnection and completed Feasibility Study at Queue #557.
- **Contract term and rate option**: 20-year term with "Non-Levelized Non-Fueled Rates"

Within the next ten business days and pursuant to Section 1(b) please provide your written notice of any deficiencies in this request or, if there are no deficiencies, pursuant to Section 1(c) please provide Idaho Power's indicative pricing proposal using the Published Rates.

Brian Lynch
Managing Principal

blynch@redwoodenergy.com
310.750.7796

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION

Idaho Power Qualifying Facility (QF) contact information:

Mailing Address: Attn: Energy Contracts, P O Box 70 Boise, ID 83702
Physical Address: 1221 W. Idaho Street, Boise, ID 83703
Telephone number: 208-388-6070
E-Mail Address: energycontracts@idahopower.com

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Upon receipt of a complete Application, Idaho Power shall process this request for a QF Energy Sales Agreement pursuant to Idaho Power Company Schedule 73.

Qualifying Facility Information

Proposed Project

Name of Facility: Black Mesa Energy 2

Resource Type: *(i.e. wind, solar, hydro, etc)*: Battery Storage

Facility Location: GPS Coordinates: 42.907, -115.207

Nearest City or landmark: Glenns Ferry, Idaho

County and State: Elmore County, Idaho

Map of Facility, including proposed interconnection point. (See Attached)

Anticipated commencement date of energy deliveries to Idaho Power: 6/1/2023

Facility Nameplate Capacity Rating (kW): 20,000

Facility Maximum Output Capacity (kW): 20,000

Station Service Requirements (kW): 200

Facility Net Delivery to Idaho Power (kW): 20,000

Facility interconnection status: Queue#557, In-progress

Proposed Contracting Term (cannot exceed 20 years): 20 years

Requested Rate Option (details provided in Schedule 73): Rate Option No. 4 "Non-Levelized Non-Fueld Rates"

Does the Facility have the ability to respond to dispatch orders from Idaho Power Company (Yes or No): Yes

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION
(Continued)

Please include the following attachments:

- ✓ Hourly estimated energy deliveries (kW) to Idaho Power for every hour of a one year period.
- ✓ List of acquired and outstanding Qualifying Facility permits, including a description of the status and timeline for acquisition of any outstanding permits.
  - At the minimum a FERC issued QF certificate/self-certification is required and/or evidence that Facility will be able to obtain a Qualifying Facility certificate.
- ✓ If the Facility will require fuel be transported to the Facility (i.e. natural gas pipelines, railroad transportation, etc), evidence of ability to obtain sufficient transportation rights to operate the Facility at the stated Maximum Output Amount.
- ✓ If the Facility will not be interconnecting directly to the Idaho Power electrical system, evidence that the Facility will be able to interconnect to another utility's electrical system and evidence that the Facility will be able to obtain firm transmission rights over all required transmission providers to deliver the Facility's energy to Idaho Power.

Owner Information

Owner / Company Name: **Black Mesa Energy, LLC**

Contact Person: **Brian Lynch, Manager**

Address: **P.O. Box 2731**

City: **Palos Verdes** State: **CA** Zip: **90274**

Telephone: **310-750-7796**

E-mail: **blynch@redwoodenergy.com**

Applicant Signature

I hereby certify that, to the best of my knowledge, all information provided in this Qualifying Facility Energy Sales Agreement application is true and correct.

Brian Lynch
Signature

Brian Lynch
Print Name

1/17/2020
Date

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. *See* 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button ( ) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do *not* use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
(2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

☐ **Non-Public**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
☐ **Public (redacted)**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility)
Black Mesa Energy, LLC

1b Applicant street address
P.O. Box 2731

1c City
Palos Verdes

1d State/province
CA

1e Postal code
90274

1f Country (if not United States)

1g Telephone number
310-750-7796

1h Has the instant facility ever previously been certified as a QF? Yes ☐ No ☒

1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF ___ - ___ - ___

1j Under which certification process is the applicant making this filing?

☒ Notice of self-certification (see note below)

☐ Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)

Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.

1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)

☒ Qualifying small power production facility status ☐ Qualifying cogeneration facility status

1l What is the purpose and expected effective date(s) of this filing?

☒ Original certification; facility expected to be installed by 10/1/22 and to begin operation on 12/1/22

☐ Change(s) to a previously certified facility to be effective on ___
(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)

- ☐ Name change and/or other administrative change(s)
- ☐ Change in ownership
- ☐ Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output

☐ Supplement or correction to a previous filing submitted on ___
(describe the supplement or correction in the Miscellaneous section starting on page 19)

1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.

☐ The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated ___ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)

☐ The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted

☐ The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)

Contact Information

2a Name of contact person
Brian Lynch

2b Telephone number
310-750-7796

2c Which of the following describes the contact person's relationship to the applicant? (check one)

☒ Applicant (self) ☐ Employee, owner or partner of applicant authorized to represent the applicant

☐ Employee of a company affiliated with the applicant authorized to represent the applicant on this matter

☐ Lawyer, consultant, or other representative authorized to represent the applicant on this matter

2d Company or organization name (if applicant is an individual, check here and skip to line 2e) ☐
Black Mesa Energy, LLC

2e Street address (if same as Applicant, check here and skip to line 3a) ☒

2f City

2g State/province

2h Postal code

2i Country (if not United States)

Facility Identification and Location

3a Facility name
Black Mesa Energy 2

3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) ☒

3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.

Longitude ☐ East (+) ☒ West (-) 115.183 degrees

Latitude ☒ North (+) ☐ South (-) 42.909 degrees

3d City (if unincorporated, check here and enter nearest city) ☒
Glenns Ferry

3e State/province
Idaho

3f County (or check here for independent city) ☐
Elmore

3g Country (if not United States)

Transacting Utilities

Identify the electric utilities that are contemplated to transact with the facility.

4a Identify utility interconnecting with the facility
Idaho Power Company

4b Identify utilities providing wheeling service or check here if none ☒

4c Identify utilities purchasing the useful electric power output or check here if none ☐
Idaho Power Company

4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none ☒

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	MB MezzDev, LLC	Yes ☐ No ☒	100 %
2)		Yes ☐ No ☐	%
3)		Yes ☐ No ☐	%
4)		Yes ☐ No ☐	%
5)		Yes ☐ No ☐	%
6)		Yes ☐ No ☐	%
7)		Yes ☐ No ☐	%
8)		Yes ☐ No ☐	%
9)		Yes ☐ No ☐	%
10)		Yes ☐ No ☐	%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist. ☒

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)		%
2)		%
3)		%
4)		%
5)		%
6)		%
7)		%
8)		%
9)		%
10)		%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Black Mesa Energy, LLC

Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- ☐ Biomass (specify)
  - ☐ Landfill gas
  - ☐ Manure digester gas
  - ☐ Municipal solid waste
  - ☐ Sewage digester gas
  - ☐ Wood
  - ☐ Other biomass (describe on page 19)
- ☐ Waste (specify type below in line 6b)
- ☒ Renewable resources (specify)
  - ☐ Hydro power - river
  - ☐ Hydro power - tidal
  - ☐ Hydro power - wave
  - ☐ Solar - photovoltaic
  - ☐ Solar - thermal
  - ☐ Wind
  - ☒ Other renewable resource (describe on page 19)
- ☐ Geothermal
- ☐ Fossil fuel (specify)
  - ☐ Coal (not waste)
  - ☐ Fuel oil/diesel
  - ☐ Natural gas (not waste)
  - ☐ Other fossil fuel (describe on page 19)
- ☐ Other (describe on page 19)

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

☐ Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- ☐ Anthracite culm produced prior to July 23, 1985
- ☐ Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- ☐ Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- ☐ Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- ☐ Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non- Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- ☐ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- ☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- ☐ Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- ☐ Materials that a government agency has certified for disposal by combustion (describe on page 19)
- ☐ Heat from exothermic reactions (describe on page 19) ☐ Residual heat (describe on page 19)
- ☐ Used rubber tires ☐ Plastic materials ☐ Refinery off-gas ☐ Petroleum coke

☐ Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	27,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host) , do not include any power consumed by the non-power production activities in your reported parasitic station power.	10 kW
7c Electrical losses in interconnection transformers	434 kW
7d Electrical losses in AC/DC conversion equipment, if any	920 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	5,636 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	7,000.0 kW
7g Maximum net power production capacity = 7a - 7f	20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The project consists of an energy storage system Qualifying Facility providing scheduled and dispatchable electricity in forward-looking time blocks. The energy storage system that comprises the energy storage Qualifying Facility is designed to, and will, receive 100% of its energy input from a combination of renewable energy sources such as wind, solar, biogas, biomass, etc. The current initial design utilizes solar photovoltaic (PV) modules mounted to single-axis trackers to provide the electric energy input to the Qualifying Facility's battery storage system. The PV modules are planned to be connected in series/ parallel combinations to solar inverters, rated approximately 2.5 MWac each, (subject to change). The proposed electric energy storage Qualifying Facility will consist of an electro-chemical battery and will have a maximum power output capacity of 20 MWac for a sustained time period of 5 - 60 minutes. The Facility will consist of an alternating current (AC) to direct current (DC) control system. The Qualifying Facility will be utilized to provide the purchasing utility with pre-scheduled and dispatchable AC energy within pre-determined time blocks. The sole source of electric power and energy provided to the purchasing utility will be the electro-chemical reaction giving rise to the discharge of electric power and energy by the battery. In turn, the sole direct source of energy input provided to the battery Facility will be, as described above, renewable sources.

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) *as amended by* Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).

8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.

Check here if no such facilities exist. ☒

	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity
1)		QF -		kW
2)		QF -		kW
3)		QF -		kW

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?

☐ Yes (continue at line 8c below) ☒ No (skip lines 8c through 8e)

8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes ☐ No ☐

8d Did construction of the facility commence on or before December 31, 1999? Yes ☐ No ☐

8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes ☐ No ☐ If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.

Certification of Compliance with Fuel Use Requirements

Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:

☒ Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above.

9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:

☒ Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.

10a What type(s) of cogeneration technology does the facility represent? (check all that apply)

☐ Topping-cycle cogeneration ☐ Bottoming-cycle cogeneration

10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.

Check to certify compliance with indicated requirement	Requirement
☐	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
☐	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
☐	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
☐	Diagram must specify average gross electric output in kW or MW for each generator.
☐	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
☐	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is *liquid only* (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
☐	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
☐	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
☐	Diagram must specify working fluid flow conditions at make-up water inputs.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes ☐ No ☐

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes ☐ No ☐

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

☐ Yes (continue at line 11d below)

☐ No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

☐ Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

☐ No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

☐ Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

☐ No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

☐ Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

☐ No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).*

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

☐ Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

☐ No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. *See* Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use *in separate rows.*

	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b Indicate the annual average rate of net electrical energy output	kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	0 %
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f	0 %

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?

☐ Yes (complies with operating standard) ☐ No (does not comply with operating standard)

13j Did installation of the facility in its current form commence on or after March 13, 1980?

☐ Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.

☐ No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)) , the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.

14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process *in separate rows*.

	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
1)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
2)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
3)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

- ☐ Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.
- ☐ No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

☒ He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

☒ He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

☒ He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

- ☐ The person on whose behalf the filing is made
- ☒ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
- ☐ An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
- ☐ A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

☒ He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

☒ He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Brian Lynch	P.O. Box 2731 Palos Verdes, CA 90274	1/18/2020

Audit Notes
Commission Staff Use Only:

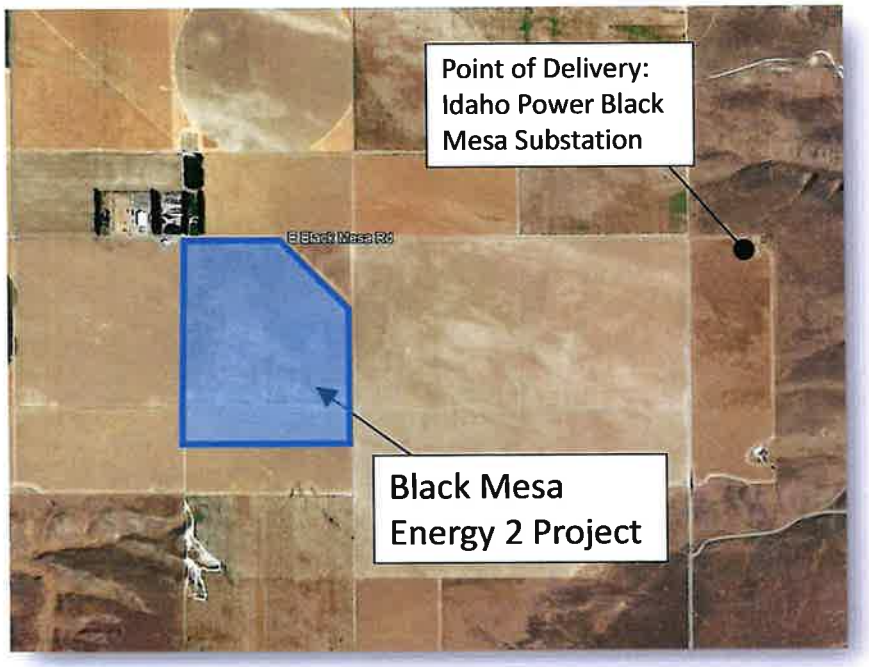
☐

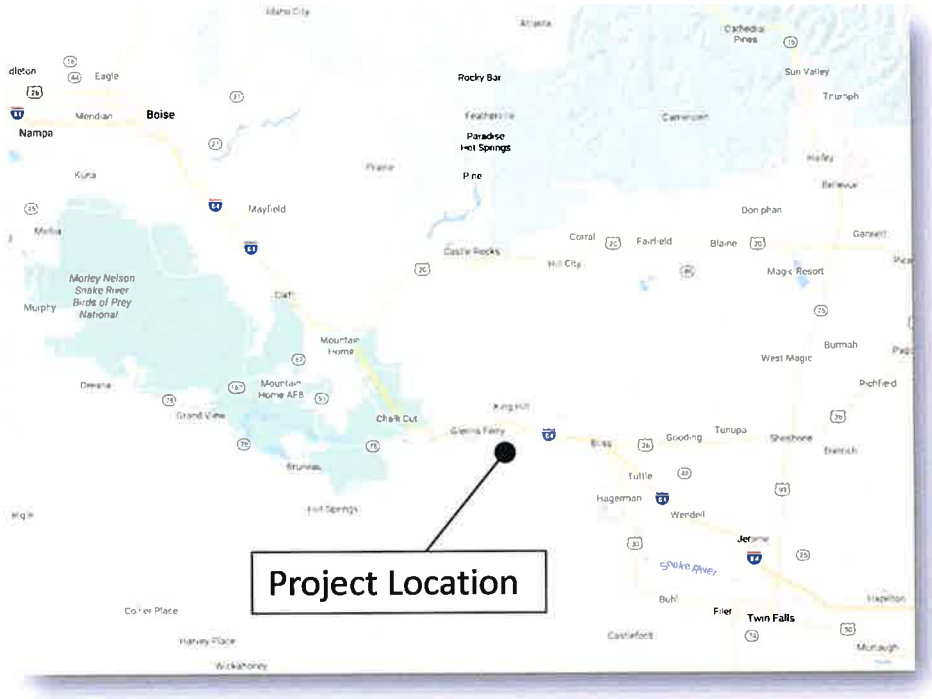
Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 6a: The energy storage (battery) system will take its input from 100% renewable energy sources such as wind, solar, biogas, biomass, etc. The system is designed with flexibility to most efficiently utilize the resources available at the site, at the present time as well as in the future.





Black Mesa Energy 2	20 MW Energy Storage & Renewable Energy	Lat/Long: 42.908, -115.208 Location: Elmore County, ID

Project	Black Mesa Energy 2
Capacity (AC)	20 MW
Location	Glenns Ferry, Idaho
Interconnection	Idaho Power

8760 Hourly Profile

Date/Time	Energy (MW-h)
1/1/1990 0:00	0
1/1/1990 1:00	0
1/1/1990 2:00	0
1/1/1990 3:00	0
1/1/1990 4:00	0
1/1/1990 5:00	0
1/1/1990 6:00	0
1/1/1990 7:00	0
1/1/1990 8:00	1.371529194
1/1/1990 9:00	6.830484636
1/1/1990 10:00	6.672865608
1/1/1990 11:00	5.720487744
1/1/1990 12:00	5.676286163
1/1/1990 13:00	6.128837199
1/1/1990 14:00	7.906550456
1/1/1990 15:00	9.233978022

12x24 - Avg MW

	Hour																						
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.6	6.4	5.9	5.5	5.7	6.0	5.4	4.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.7	9.5	9.9	9.7	8.5	8.4	8.3	8.9	8.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.0	13.1	13.1	12.7	12.5	12.9	13.0	13.7	13.1	7.6	1.3	0.0	0.0	0.0	0.0	0.0
Apr	0.0	0.0	0.0	0.0	0.0	0.0	1.7	8.9	15.4	16.2	16.4	16.1	15.8	15.6	15.7	16.3	15.1	11.2	3.8	0.1	0.0	0.0	0.0	0.0
May	0.0	0.0	0.0	0.0	0.0	0.3	4.3	13.1	18.2	17.8	17.6	17.6	17.9	17.3	17.2	17.4	16.5	12.1	7.1	1.4	0.0	0.0	0.0	0.0
Jun	0.0	0.0	0.0	0.0	0.0	0.9	6.4	13.9	18.8	18.1	18.1	18.3	18.7	18.8	17.9	17.0	14.1	11.8	8.2	2.9	0.0	0.0	0.0	0.0
Jul	0.0	0.0	0.0	0.0	0.0	0.2	4.7	13.1	17.1	18.5	18.4	18.2	18.3	18.0	16.7	16.6	16.6	13.1	8.0	2.4	0.0	0.0	0.0	0.0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	2.6	11.3	17.2	19.1	19.5	19.6	17.9	16.5	16.1	15.2	14.6	12.2	5.8	0.8	0.0	0.0	0.0	0.0
Sep	0.0	0.0	0.0	0.0	0.0	0.5	5.7	13.0	14.8	13.7	15.3	15.1	15.2	15.5	15.4	15.0	9.5	2.7	0.0	0.0	0.0	0.0	0.0	0.0
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	9.5	11.7	11.6	10.7	10.3	10.7	11.7	11.9	8.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.1	4.8	7.5	8.5	9.6	7.0	8.3	7.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.3	5.2	5.0	5.0	5.4	5.8	5.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Walker, Donovan

From: Brian Lynch <blynch@redwoodenergy.com>
Sent: Saturday, January 18, 2020 1:28 PM
To: Energy Contracts
Cc: Walker, Donovan; Darrington, Michael; Matt Garlinghouse
Subject: [EXTERNAL]Black Mesa Energy Pricing Request
Attachments: Map - Black Mesa 2[2].pdf; Schedule 73 - Black mesa 2[1].pdf; 12x24 - Black Mesa 2[1].xlsx; form-556 Black Mesa 2.pdf

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Idaho Power -

Black Mesa Energy LLC, reiterates its previous request for an Energy Sales Agreement pursuant to Schedule 73 as requested on 2/10/2017. The project is a Qualifying Facility that will interconnect to Idaho Power's electrical system at an interconnection point within the state of Idaho. The project is an energy storage QF and qualifies for the "Other projects" avoided costs as found in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power).

Please find below the requested information from Schedule 73 and completed Qualifying Facility Energy Sales Agreement Application. Each of the items from Section 1 of the Contracting Procedures of Schedule 73 is responded to below. Please let me know if there are any questions.

Black Mesa Energy 2

- **Project Name**: Black Mesa Energy 2
- **Location**: Black Mesa Substation, King Hill, Idaho
- **Organization chart**: Black Mesa Energy, LLC is wholly owned by MB MezzDev, LLC
- **Generation technology**: Black Mesa Energy 1 is an energy storage system Qualifying Facility that provides scheduled and dispatchable electricity. The storage system will receive 100% of input energy from renewable energy sources.
- **Maximum Capacity & Net Power**: 20MW-AC. See attached FERC QFSelf-Certification Form 556, which quantifies these amounts.
- **Hourly production**: Attached is an 8760 of power production
- **Dispatch orders**: The project will provide scheduled, dispatchable power output in forward looking time intervals ranging from 5-240 minutes pending final system design. Within these intervals Idaho Power may have the ability to downward adjust the output, subject to full compensation of potential output available.
- **Map of QF Location**: See attached.
- **Anticipated COD**: 6/1/2023
- **Permitting status**: Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the 6/1/2023 COD due to permitting.
- **QF Status**: A FERC Form 556 QF Self-Certification was submitted on Feb 23, 2017 at docket QF17-705-000, see attached as amended on Jan 17, 2020.
- **Fuel type**: The energy provided to Idaho Power will be 100% from the battery storage system. The system will be charged from a renewable energy source such as wind, solar, biomass, etc. Initial designs consist of a PV solar facility to charge the system.
- **Fuel source**: Not applicable as the battery storage will be charged from a renewable source.

- **Interconnection**: The project has applied for interconnection and completed Feasibility Study at Queue #557.
- **Contract term and rate option**: 20-year term with "Non-Levelized Non-Fueled Rates"

Within the next ten business days and pursuant to Section 1(b) please provide your written notice of any deficiencies in this request or, if there are no deficiencies, pursuant to Section 1(c) please provide Idaho Power's indicative pricing proposal using the Published Rates.

Brian Lynch
Managing Principal

blynch@redwoodenergy.com
310.750.7796

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION

Idaho Power Qualifying Facility (QF) contact information:

Mailing Address: Attn: Energy Contracts, P O Box 70 Boise, ID 83702
Physical Address: 1221 W. Idaho Street, Boise, ID 83703
Telephone number: 208-388-6070
E-Mail Address: energycontracts@idahopower.com

Preamble and Instructions

All generation facilities that qualify pursuant to Idaho Power Company Schedule 73 for a QF Energy Sales Agreement and wish to sell energy from their facility to Idaho Power must complete the following information and submit this Application by hand delivery, mail or E-mail to Idaho Power.

Upon receipt of a complete Application, Idaho Power shall process this request for a QF Energy Sales Agreement pursuant to Idaho Power Company Schedule 73.

Qualifying Facility Information

Proposed Project

Name of Facility: Black Mesa Energy 2

Resource Type: *(i.e. wind, solar, hydro, etc)*: Battery Storage

Facility Location: GPS Coordinates: 42.907, -115.207

Nearest City or landmark: Glenns Ferry, Idaho

County and State: Elmore County, Idaho

Map of Facility, including proposed interconnection point. (See Attached)

Anticipated commencement date of energy deliveries to Idaho Power: 3/1/2023

Facility Nameplate Capacity Rating (kW): 20,000

Facility Maximum Output Capacity (kW): 20,000

Station Service Requirements (kW): 200

Facility Net Delivery to Idaho Power (kW): 20,000

Facility interconnection status: Queue#557, In-progress

Proposed Contracting Term (cannot exceed 20 years): 20 years

Requested Rate Option (details provided in Schedule 73): Rate Option No. 4 "Non-Levelized Non-Fueld Rates"

Does the Facility have the ability to respond to dispatch orders from Idaho Power Company (Yes or No): Yes

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION
(Continued)

Please include the following attachments:

- ✓ Hourly estimated energy deliveries (kW) to Idaho Power for every hour of a one year period.
- ✓ List of acquired and outstanding Qualifying Facility permits, including a description of the status and timeline for acquisition of any outstanding permits.
  - At the minimum a FERC issued QF certificate/self-certification is required and/or evidence that Facility will be able to obtain a Qualifying Facility certificate.
- ✓ If the Facility will require fuel be transported to the Facility (i.e. natural gas pipelines, railroad transportation, etc), evidence of ability to obtain sufficient transportation rights to operate the Facility at the stated Maximum Output Amount.
- ✓ If the Facility will not be interconnecting directly to the Idaho Power electrical system, evidence that the Facility will be able to interconnect to another utility's electrical system and evidence that the Facility will be able to obtain firm transmission rights over all required transmission providers to deliver the Facility's energy to Idaho Power.

Owner Information

Owner / Company Name: **Black Mesa Energy, LLC**

Contact Person: **Brian Lynch, Manager**

Address: **P.O. Box 2731**

City: **Palos Verdes** State: **CA** Zip: **90274**

Telephone: **310-750-7796**

E-mail: **blynch@redwoodenergy.com**

Applicant Signature

I hereby certify that, to the best of my knowledge, all information provided in this Qualifying Facility Energy Sales Agreement application is true and correct.

Brian Lynch
Signature

Brian Lynch
Print Name

1/17/2020
Date

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. *See* 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button ( ) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do *not* use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
(2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

☐ **Non-Public**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
☐ **Public (redacted)**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility)
Black Mesa Energy, LLC

1b Applicant street address
P.O. Box 2731

1c City
Palos Verdes

1d State/province
CA

1e Postal code
90274

1f Country (if not United States)

1g Telephone number
310-750-7796

1h Has the instant facility ever previously been certified as a QF? Yes ☐ No ☒

1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF ___ - ___ - ___

1j Under which certification process is the applicant making this filing?

☒ Notice of self-certification (see note below)

☐ Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)

Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.

1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)

☒ Qualifying small power production facility status ☐ Qualifying cogeneration facility status

1l What is the purpose and expected effective date(s) of this filing?

☒ Original certification; facility expected to be installed by 10/1/22 and to begin operation on 12/1/22

☐ Change(s) to a previously certified facility to be effective on ___
(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)

- ☐ Name change and/or other administrative change(s)
- ☐ Change in ownership
- ☐ Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output

☐ Supplement or correction to a previous filing submitted on ___
(describe the supplement or correction in the Miscellaneous section starting on page 19)

1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.

☐ The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated ___ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)

☐ The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted

☐ The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)

Contact Information

2a Name of contact person
Brian Lynch

2b Telephone number
310-750-7796

2c Which of the following describes the contact person's relationship to the applicant? (check one)

☒ Applicant (self) ☐ Employee, owner or partner of applicant authorized to represent the applicant

☐ Employee of a company affiliated with the applicant authorized to represent the applicant on this matter

☐ Lawyer, consultant, or other representative authorized to represent the applicant on this matter

2d Company or organization name (if applicant is an individual, check here and skip to line 2e) ☐
Black Mesa Energy, LLC

2e Street address (if same as Applicant, check here and skip to line 3a) ☒

2f City

2g State/province

2h Postal code

2i Country (if not United States)

Facility Identification and Location

3a Facility name
Black Mesa Energy 2

3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) ☒

3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.

Longitude ☐ East (+) ☒ West (-) 115.183 degrees

Latitude ☒ North (+) ☐ South (-) 42.909 degrees

3d City (if unincorporated, check here and enter nearest city) ☒
Glenns Ferry

3e State/province
Idaho

3f County (or check here for independent city) ☐
Elmore

3g Country (if not United States)

Transacting Utilities

Identify the electric utilities that are contemplated to transact with the facility.

4a Identify utility interconnecting with the facility
Idaho Power Company

4b Identify utilities providing wheeling service or check here if none ☒

4c Identify utilities purchasing the useful electric power output or check here if none ☐
Idaho Power Company

4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none ☒

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	MB MezzDev, LLC	Yes ☐ No ☒	100 %
2)		Yes ☐ No ☐	%
3)		Yes ☐ No ☐	%
4)		Yes ☐ No ☐	%
5)		Yes ☐ No ☐	%
6)		Yes ☐ No ☐	%
7)		Yes ☐ No ☐	%
8)		Yes ☐ No ☐	%
9)		Yes ☐ No ☐	%
10)		Yes ☐ No ☐	%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist. ☒

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)		%
2)		%
3)		%
4)		%
5)		%
6)		%
7)		%
8)		%
9)		%
10)		%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Black Mesa Energy, LLC

Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- ☐ Biomass (specify)
  - ☐ Landfill gas
  - ☐ Manure digester gas
  - ☐ Municipal solid waste
  - ☐ Sewage digester gas
  - ☐ Wood
  - ☐ Other biomass (describe on page 19)
- ☐ Waste (specify type below in line 6b)
- ☒ Renewable resources (specify)
  - ☐ Hydro power - river
  - ☐ Hydro power - tidal
  - ☐ Hydro power - wave
  - ☐ Solar - photovoltaic
  - ☐ Solar - thermal
  - ☐ Wind
  - ☒ Other renewable resource (describe on page 19)
- ☐ Geothermal
- ☐ Fossil fuel (specify)
  - ☐ Coal (not waste)
  - ☐ Fuel oil/diesel
  - ☐ Natural gas (not waste)
  - ☐ Other fossil fuel (describe on page 19)
- ☐ Other (describe on page 19)

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

☐ Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- ☐ Anthracite culm produced prior to July 23, 1985
- ☐ Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- ☐ Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- ☐ Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- ☐ Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non- Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- ☐ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- ☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- ☐ Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- ☐ Materials that a government agency has certified for disposal by combustion (describe on page 19)
- ☐ Heat from exothermic reactions (describe on page 19) ☐ Residual heat (describe on page 19)
- ☐ Used rubber tires ☐ Plastic materials ☐ Refinery off-gas ☐ Petroleum coke

☐ Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	27,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host) , do not include any power consumed by the non-power production activities in your reported parasitic station power.	10 kW
7c Electrical losses in interconnection transformers	434 kW
7d Electrical losses in AC/DC conversion equipment, if any	920 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	5,636 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	7,000.0 kW
7g Maximum net power production capacity = 7a - 7f	20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The project consists of an energy storage system Qualifying Facility providing scheduled and dispatchable electricity in forward-looking time blocks. The energy storage system that comprises the energy storage Qualifying Facility is designed to, and will, receive 100% of its energy input from a combination of renewable energy sources such as wind, solar, biogas, biomass, etc. The current initial design utilizes solar photovoltaic (PV) modules mounted to single-axis trackers to provide the electric energy input to the Qualifying Facility's battery storage system. The PV modules are planned to be connected in series/ parallel combinations to solar inverters, rated approximately 2.5 MWac each, (subject to change). The proposed electric energy storage Qualifying Facility will consist of an electro-chemical battery and will have a maximum power output capacity of 20 MWac for a sustained time period of 5 - 60 minutes. The Facility will consist of an alternating current (AC) to direct current (DC) control system. The Qualifying Facility will be utilized to provide the purchasing utility with pre-scheduled and dispatchable AC energy within pre-determined time blocks. The sole source of electric power and energy provided to the purchasing utility will be the electro-chemical reaction giving rise to the discharge of electric power and energy by the battery. In turn, the sole direct source of energy input provided to the battery Facility will be, as described above, renewable sources.

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) *as amended by* Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).

8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.

Check here if no such facilities exist. ☒

	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity
1)		QF -		kW
2)		QF -		kW
3)		QF -		kW

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?

☐ Yes (continue at line 8c below) ☒ No (skip lines 8c through 8e)

8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes ☐ No ☐

8d Did construction of the facility commence on or before December 31, 1999? Yes ☐ No ☐

8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes ☐ No ☐ If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.

Certification of Compliance with Fuel Use Requirements

Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:

☒ Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above.

9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:

☒ Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.

10a What type(s) of cogeneration technology does the facility represent? (check all that apply)

☐ Topping-cycle cogeneration ☐ Bottoming-cycle cogeneration

10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.

Check to certify compliance with indicated requirement	Requirement
☐	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
☐	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
☐	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
☐	Diagram must specify average gross electric output in kW or MW for each generator.
☐	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
☐	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is *liquid only* (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
☐	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
☐	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
☐	Diagram must specify working fluid flow conditions at make-up water inputs.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes ☐ No ☐

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes ☐ No ☐

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

☐ Yes (continue at line 11d below)

☐ No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

☐ Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

☐ No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

☐ Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

☐ No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

☐ Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

☐ No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).*

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

☐ Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

☐ No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. *See* Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use *in separate rows.*

	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b Indicate the annual average rate of net electrical energy output	kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	0 %
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f	0 %

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?

☐ Yes (complies with operating standard) ☐ No (does not comply with operating standard)

13j Did installation of the facility in its current form commence on or after March 13, 1980?

☐ Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.

☐ No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)) , the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.

14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process *in separate rows*.

	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
1)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
2)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
3)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

- ☐ Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.
- ☐ No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

☒ He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

☒ He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

☒ He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

- ☐ The person on whose behalf the filing is made
- ☒ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
- ☐ An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
- ☐ A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

☒ He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

☒ He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Brian Lynch	P.O. Box 2731 Palos Verdes, CA 90274	1/18/2020

Audit Notes
Commission Staff Use Only:

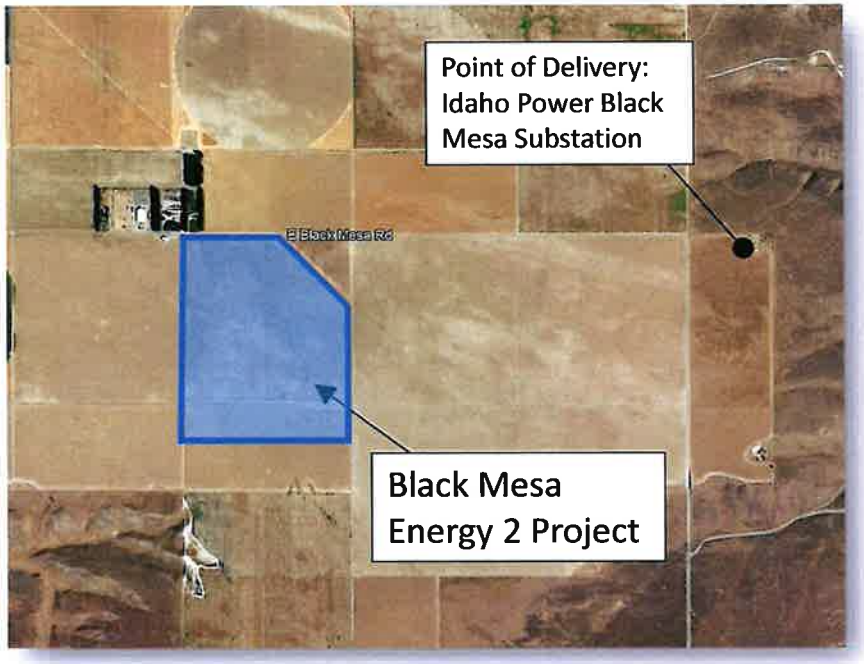
☐

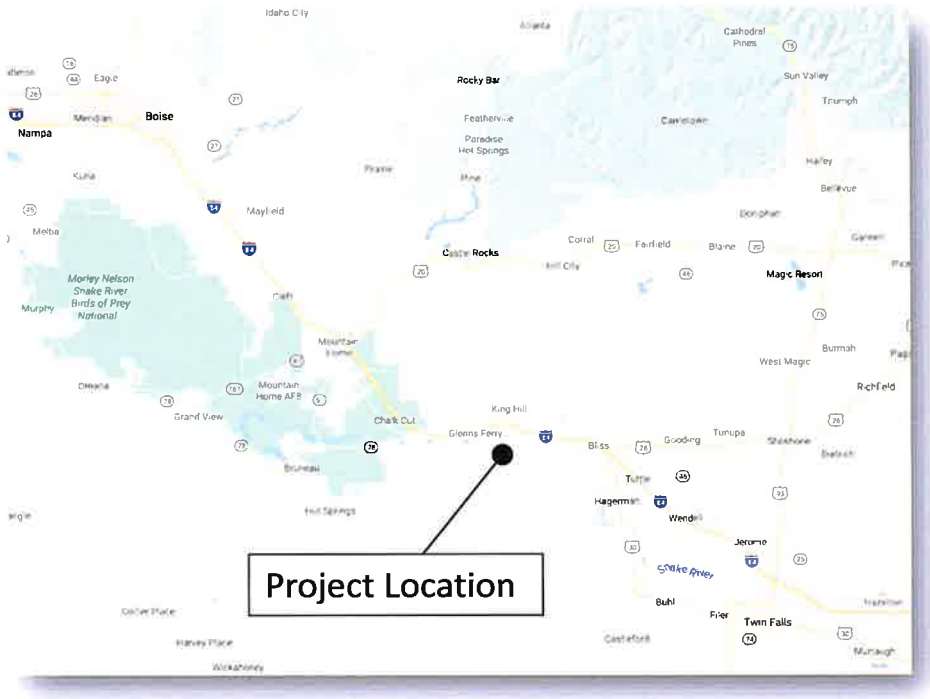
Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 6a: The energy storage (battery) system will take its input from 100% renewable energy sources such as wind, solar, biogas, biomass, etc. The system is designed with flexibility to most efficiently utilize the resources available at the site, at the present time as well as in the future.





Black Mesa Energy 2	20 MW Energy Storage & Renewable Energy	Lat/Long: 42.908, -115.208 Location: Elmore County, ID

Project	Black Mesa Energy 2
Capacity (AC)	20 MW
Location	Glenns Ferry, Idaho
Interconnection	Idaho Power

8760 Hourly Profile

Date/Time	Energy (MW-h)
1/1/1990 0:00	0
1/1/1990 1:00	0
1/1/1990 2:00	0
1/1/1990 3:00	0
1/1/1990 4:00	0
1/1/1990 5:00	0
1/1/1990 6:00	0
1/1/1990 7:00	0
1/1/1990 8:00	1.371529194
1/1/1990 9:00	6.830484636
1/1/1990 10:00	6.672865608
1/1/1990 11:00	5.720487744
1/1/1990 12:00	5.676286163
1/1/1990 13:00	6.128837199
1/1/1990 14:00	7.906559456
1/1/1990 15:00	9.233978022
1/1/1990 16:00	4.191869776
1/1/1990 17:00	0
1/1/1990 18:00	0
1/1/1990 19:00	0
1/1/1990 20:00	0

12x24 - Avg MW

	Hour																							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.6	6.4	5.8	5.5	5.7	6.0	6.4	4.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.7	9.6	9.9	9.7	8.5	8.4	8.7	8.9	8.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.0	13.1	14.1	13.7	12.8	12.8	13.0	13.7	13.2	7.6	1.3	0.0	0.0	0.0	0.0	0.0
Apr	0.0	0.0	0.0	0.0	0.0	0.0	1.7	8.9	17.4	20.1	20.8	20.4	19.8	19.5	19.7	19.1	17.1	12.2	3.8	0.1	0.0	0.0	0.0	0.0
May	0.0	0.0	0.0	0.0	0.0	0.1	4.3	12.6	21.2	23.6	23.6	23.5	23.0	22.3	22.0	21.8	18.5	12.3	7.1	1.4	0.0	0.0	0.0	0.0
Jun	0.0	0.0	0.0	0.0	0.0	0.5	6.4	13.9	22.6	24.1	24.0	23.6	23.7	23.3	23.0	22.6	19.1	12.8	8.1	2.9	0.0	0.0	0.0	0.0
Jul	0.0	0.0	0.0	0.0	0.0	0.2	4.7	13.1	22.5	24.2	24.1	24.1	24.0	23.7	23.5	23.0	20.0	13.1	8.5	2.4	0.0	0.0	0.0	0.0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	2.6	11.3	22.2	24.3	24.5	24.6	24.7	24.5	24.5	24.2	21.0	12.2	5.8	0.8	0.0	0.0	0.0	0.0
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.7	19.0	23.8	25.1	25.8	25.9	25.3	25.5	25.0	22.9	9.5	1.7	0.0	0.0	0.0	0.0	0.0
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	9.5	13.2	13.3	10.7	10.3	10.7	11.7	11.9	8.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.1	6.8	7.5	8.5	6.6	7.0	8.1	7.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.3	5.2	5.0	5.0	5.4	5.8	5.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Walker, Donovan

From: Brian Lynch <blynch@redwoodenergy.com>
Sent: Monday, January 20, 2020 11:00 PM
To: Energy Contracts
Cc: Walker, Donovan; Darrington, Michael; Matt Garlinghouse
Subject: [EXTERNAL]Frederick Energy 1 price request
Attachments: 12x24 - Frederick 1.xlsx; Map - Frederick 1.pdf; form-556 Frederick 1.pdf; Schedule 73 - Frederick 1.pdf

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Idaho Power -

MB MezzDev, LLC submits this request for an Energy Sales Agreement pursuant to Schedule 73. The project is a Qualifying Facility that will interconnect to Idaho Power's electrical system at an interconnection point within the state of Idaho. The project is an energy storage QF and qualifies for the "Other projects" avoided costs as found in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power).

Please find below the requested information from Schedule 73 and completed Qualifying Facility Energy Sales Agreement Application. Each of the items from Section 1 of the Contracting Procedures of Schedule 73 is responded to below. Please let me know if there are any questions.

Frederick Energy 1

- **Project Name**: Frederick Energy 1, LLC
- **Location**: Grand View Substation, Grand View, Idaho
- **Organization chart**: Frederick Energy 1, LLC is wholly owned by MB MezzDev, LLC
- **Generation technology**: Frederick Energy 1 is an energy storage Qualifying Facility that provides scheduled and dispatchable electricity. The storage system will receive 100% of input energy from renewable energy sources.
- **Maximum Capacity & Net Power**: 20MW-AC. See attached FERC QF Self-Certification Form 556, which quantifies these amounts.
- **Hourly production**: Attached is an 8760 of power production
- **Dispatch orders**: The project will provide scheduled, dispatchable power output in forward looking time intervals ranging from 5-240 minutes pending final system design. Within these intervals Idaho Power may have the ability to downward adjust the output, subject to full compensation of potential output available.
- **Map of QF Location**: See attached.
- **Anticipated COD**: 12/1/2023
- **Permitting status**: Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the 12/1/2023 COD due to permitting.
- **QF Status**: A FERC Form 556 QF Self-Certification is attached.
- **Fuel type**: The energy provided to Idaho Power will be 100% from the battery storage system. The system will be charged from a renewable energy source such as wind, solar, biomass, etc. Initial designs consist of a PV solar facility to charge the system.
- **Fuel source**: Not applicable as the battery storage will be charged from a renewable source.
- **Interconnection**: The project has prepared an SGIA interconnection application with supporting material and to be submitted in February 2020

- **Contract term and rate option**: 20-year term with "Non-Levelized Non-Fueled Rates"

Within the next ten business days and pursuant to Section 1(b) please provide your written notice of any deficiencies in this request or, if there are no deficiencies, pursuant to Section 1(c) please provide Idaho Power's indicative pricing proposal using the Published Rates.

Brian Lynch
Managing Principal

blynch@redwoodenergy.com
310.750.7796

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION

Idaho Power Qualifying Facility (QF) contact information:

Mailing Address: Attn: Energy Contracts, P O Box 70 Boise, ID 83702
Physical Address: 1221 W. Idaho Street, Boise, ID 83703
Telephone number: 208-388-6070
E-Mail Address: energycontracts@idahopower.com

Preamble and Instructions

All generation facilities that qualify pursuant to Idaho Power Company Schedule 73 for a QF Energy Sales Agreement and wish to sell energy from their facility to Idaho Power must complete the following information and submit this Application by hand delivery, mail or E-mail to Idaho Power.

Upon receipt of a complete Application, Idaho Power shall process this request for a QF Energy Sales Agreement pursuant to Idaho Power Company Schedule 73.

Qualifying Facility Information

Proposed Project

Name of Facility: Frederick Energy 1

Resource Type: *(i.e. wind, solar, hydro, etc)*: Battery Storage

Facility Location: GPS Coordinates: 43.009, -116.018

Nearest City or landmark: Grand View, Idaho

County and State: Elmore County, Idaho

Map of Facility, including proposed interconnection point. (See Attached)

Anticipated commencement date of energy deliveries to Idaho Power: 12/1/2023

Facility Nameplate Capacity Rating (kW): 20,000

Facility Maximum Output Capacity (kW): 20,000

Station Service Requirements (kW): 200

Facility Net Delivery to Idaho Power (kW): 20,000

Facility interconnection status: Application prepared to submit

Proposed Contracting Term (cannot exceed 20 years): 20 years

Requested Rate Option (details provided in Schedule 73): Rate Option No. 4 "Non-Levelized Non-Fueld Rates"

Does the Facility have the ability to respond to dispatch orders from Idaho Power Company (Yes or No): Yes

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION
(Continued)

Please include the following attachments:

- ✓ Hourly estimated energy deliveries (kW) to Idaho Power for every hour of a one year period.
- ✓ List of acquired and outstanding Qualifying Facility permits, including a description of the status and timeline for acquisition of any outstanding permits.
  - At the minimum a FERC issued QF certificate/self-certification is required and/or evidence that Facility will be able to obtain a Qualifying Facility certificate.
- ✓ If the Facility will require fuel be transported to the Facility (i.e. natural gas pipelines, railroad transportation, etc), evidence of ability to obtain sufficient transportation rights to operate the Facility at the stated Maximum Output Amount.
- ✓ If the Facility will not be interconnecting directly to the Idaho Power electrical system, evidence that the Facility will be able to interconnect to another utility's electrical system and evidence that the Facility will be able to obtain firm transmission rights over all required transmission providers to deliver the Facility's energy to Idaho Power.

Owner Information

Owner / Company Name: **Black Mesa Energy, LLC**

Contact Person: **Brian Lynch, Manager**

Address: **P.O. Box 2731**

City: **Palos Verdes** State: **CA** Zip: **90274**

Telephone: **310-750-7796**

E-mail: **blynch@redwoodenergy.com**

Applicant Signature

I hereby certify that, to the best of my knowledge, all information provided in this Qualifying Facility Energy Sales Agreement application is true and correct.

Brian Lynch
Signature

Brian Lynch
Print Name

1/17/2020
Date

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. *See* 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button ( ) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do *not* use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
(2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

☐ **Non-Public**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
☐ **Public (redacted)**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

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OMB Control # 1902-0075
Expiration 06/30/2019

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility)
Black Mesa Energy, LLC

1b Applicant street address
P.O. Box 2731

1c City
Palos Verdes

1d State/province
CA

1e Postal code
90274

1f Country (if not United States)

1g Telephone number
310-750-7796

1h Has the instant facility ever previously been certified as a QF? Yes ☐ No ☒

1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF ___ - ____ - ___

1j Under which certification process is the applicant making this filing?

☒ Notice of self-certification (see note below)

☐ Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)

Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.

1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)

☒ Qualifying small power production facility status ☐ Qualifying cogeneration facility status

1l What is the purpose and expected effective date(s) of this filing?

☒ Original certification; facility expected to be installed by 10/1/22 and to begin operation on 12/1/23

☐ Change(s) to a previously certified facility to be effective on _____
(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)

- ☐ Name change and/or other administrative change(s)
- ☐ Change in ownership
- ☐ Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output

☐ Supplement or correction to a previous filing submitted on _____
(describe the supplement or correction in the Miscellaneous section starting on page 19)

1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.

☐ The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)

☐ The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted

☐ The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)

Contact Information

2a Name of contact person
Brian Lynch

2b Telephone number
310-750-7796

2c Which of the following describes the contact person's relationship to the applicant? (check one)

☒ Applicant (self) ☐ Employee, owner or partner of applicant authorized to represent the applicant

☐ Employee of a company affiliated with the applicant authorized to represent the applicant on this matter

☐ Lawyer, consultant, or other representative authorized to represent the applicant on this matter

2d Company or organization name (if applicant is an individual, check here and skip to line 2e) ☐
Black Mesa Energy, LLC

2e Street address (if same as Applicant, check here and skip to line 3a) ☒

2f City

2g State/province

2h Postal code

2i Country (if not United States)

Facility Identification and Location

3a Facility name
Frederick Energy 1

3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) ☒

3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.

Longitude ☐ East (+) ☒ West (-) 116.018 degrees

Latitude ☒ North (+) ☐ South (-) 43.009 degrees

3d City (if unincorporated, check here and enter nearest city) ☒
Grand View

3e State/province
Idaho

3f County (or check here for independent city) ☐
Elmore

3g Country (if not United States)

Transacting Utilities

Identify the electric utilities that are contemplated to transact with the facility.

4a Identify utility interconnecting with the facility
Idaho Power Company

4b Identify utilities providing wheeling service or check here if none ☒

4c Identify utilities purchasing the useful electric power output or check here if none ☐
Idaho Power Company

4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none ☒

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	MB MezzDev, LLC	Yes ☐ No ☒	100 %
2)		Yes ☐ No ☐	%
3)		Yes ☐ No ☐	%
4)		Yes ☐ No ☐	%
5)		Yes ☐ No ☐	%
6)		Yes ☐ No ☐	%
7)		Yes ☐ No ☐	%
8)		Yes ☐ No ☐	%
9)		Yes ☐ No ☐	%
10)		Yes ☐ No ☐	%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist. ☒

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)		%
2)		%
3)		%
4)		%
5)		%
6)		%
7)		%
8)		%
9)		%
10)		%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Black Mesa Energy, LLC

Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- ☐ Biomass (specify)
  - ☐ Landfill gas
  - ☐ Manure digester gas
  - ☐ Municipal solid waste
  - ☐ Sewage digester gas
  - ☐ Wood
  - ☐ Other biomass (describe on page 19)
- ☐ Waste (specify type below in line 6b)
- ☒ Renewable resources (specify)
  - ☐ Hydro power - river
  - ☐ Hydro power - tidal
  - ☐ Hydro power - wave
  - ☐ Solar - photovoltaic
  - ☐ Solar - thermal
  - ☐ Wind
  - ☒ Other renewable resource (describe on page 19)
- ☐ Geothermal
- ☐ Fossil fuel (specify)
  - ☐ Coal (not waste)
  - ☐ Fuel oil/diesel
  - ☐ Natural gas (not waste)
  - ☐ Other fossil fuel (describe on page 19)
- ☐ Other (describe on page 19)

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

☐ Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- ☐ Anthracite culm produced prior to July 23, 1985
- ☐ Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- ☐ Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- ☐ Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- ☐ Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non- Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- ☐ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- ☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- ☐ Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- ☐ Materials that a government agency has certified for disposal by combustion (describe on page 19)
- ☐ Heat from exothermic reactions (describe on page 19) ☐ Residual heat (describe on page 19)
- ☐ Used rubber tires ☐ Plastic materials ☐ Refinery off-gas ☐ Petroleum coke

☐ Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	27,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host) , do not include any power consumed by the non-power production activities in your reported parasitic station power.	10 kW
7c Electrical losses in interconnection transformers	434 kW
7d Electrical losses in AC/DC conversion equipment, if any	920 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	5,636 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	7,000.0 kW
7g Maximum net power production capacity = 7a - 7f	20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The project consists of an energy storage system Qualifying Facility providing scheduled and dispatchable electricity in forward-looking time blocks. The energy storage system that comprises the energy storage Qualifying Facility is designed to, and will, receive 100% of its energy input from a combination of renewable energy sources such as wind, solar, biogas, biomass, etc. The current initial design utilizes solar photovoltaic (PV) modules mounted to single-axis trackers to provide the electric energy input to the Qualifying Facility's battery storage system. The PV modules are planned to be connected in series/ parallel combinations to solar inverters, rated approximately 2.5 MWac each, (subject to change). The proposed electric energy storage Qualifying Facility will consist of an electro-chemical battery and will have a maximum power output capacity of 20 MWac for a sustained time period of 5 - 240 minutes. The Facility will consist of an alternating current (AC) to direct current (DC) control system. The Qualifying Facility will be utilized to provide the purchasing utility with pre-scheduled and dispatchable AC energy within pre-determined time blocks. The sole source of electric power and energy provided to the purchasing utility will be the electro-chemical reaction giving rise to the discharge of electric power and energy by the battery. In turn, the sole direct source of energy input provided to the battery Facility will be, as described above, renewable sources.

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) *as amended by* Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).

8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.

Check here if no such facilities exist. ☒

	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity
1)		QF -		kW
2)		QF -		kW
3)		QF -		kW

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?

☐ Yes (continue at line 8c below) ☒ No (skip lines 8c through 8e)

8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes ☐ No ☐

8d Did construction of the facility commence on or before December 31, 1999? Yes ☐ No ☐

8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes ☐ No ☐ If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.

Certification of Compliance with Fuel Use Requirements

Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:

☒ Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above.

9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:

☒ Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.

10a What type(s) of cogeneration technology does the facility represent? (check all that apply)

☐ Topping-cycle cogeneration ☐ Bottoming-cycle cogeneration

10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.

Check to certify compliance with indicated requirement	Requirement
☐	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
☐	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
☐	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
☐	Diagram must specify average gross electric output in kW or MW for each generator.
☐	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
☐	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is *liquid only* (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
☐	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
☐	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
☐	Diagram must specify working fluid flow conditions at make-up water inputs.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes ☐ No ☐

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes ☐ No ☐

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

☐ Yes (continue at line 11d below)

☐ No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

☐ Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

☐ No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

☐ Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

☐ No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

☐ Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

☐ No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).*

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

☐ Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

☐ No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. *See* Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use *in separate rows*.

	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b Indicate the annual average rate of net electrical energy output	kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	0 %
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f	0 %

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?

☐ Yes (complies with operating standard) ☐ No (does not comply with operating standard)

13j Did installation of the facility in its current form commence on or after March 13, 1980?

☐ Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.

☐ No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)) , the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.

14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process *in separate rows*.

	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
1)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
2)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
3)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

- ☐ Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.
- ☐ No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

☒ He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

☒ He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

☒ He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

- ☐ The person on whose behalf the filing is made
- ☒ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
- ☐ An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
- ☐ A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

☒ He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

☒ He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Brian Lynch	P.O. Box 2731 Palos Verdes, CA 90274	1/20/2020

Audit Notes
Commission Staff Use Only:

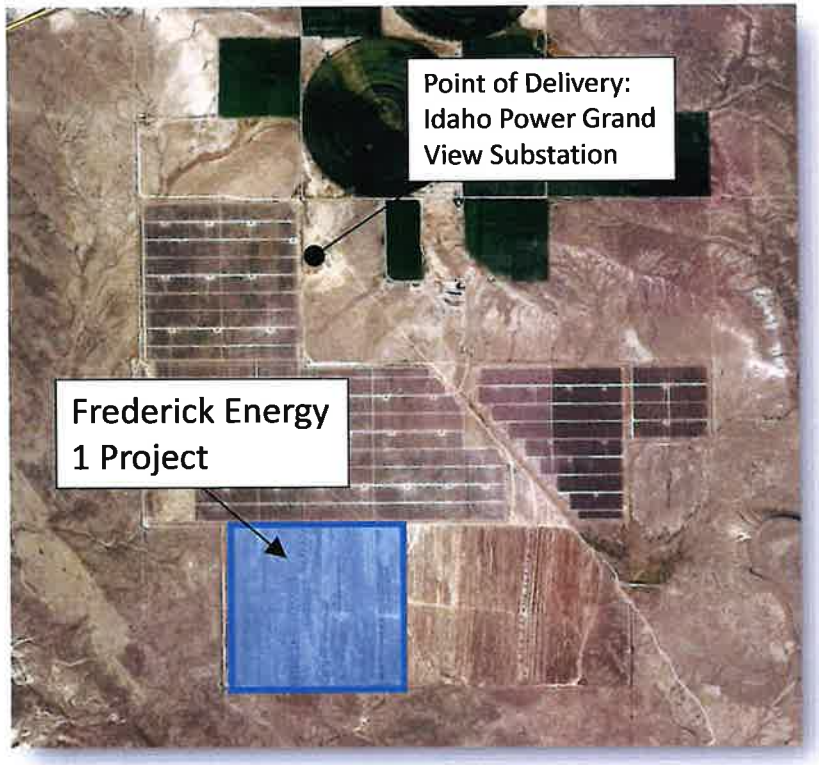
☐

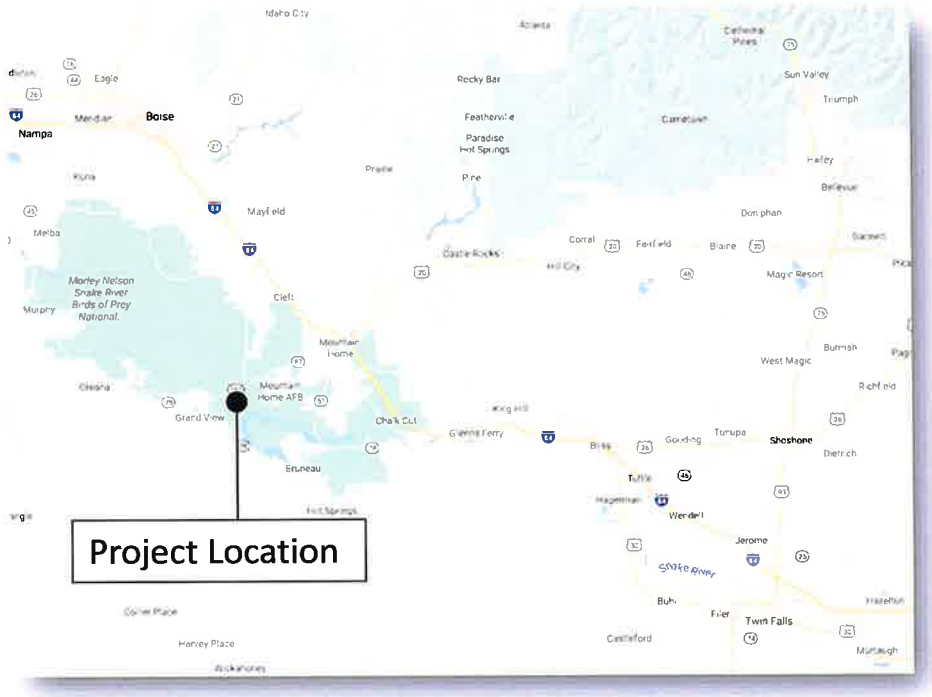
Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 6a: The energy storage (battery) system will take its input from 100% renewable energy sources such as wind, solar, biogas, biomass, etc. The system is designed with flexibility to most efficiently utilize the resources available at the site, at the present time as well as in the future.





Frederick Energy 1	20 MW Energy Storage & Renewable Energy	Lat/Long: 43.009, -116.018 Location: Elmore County, ID

Project	Frederick 1
Capacity (AC)	20 MW
Location	Grand View, Idaho
Interconnection	Idaho Power

8760 Hourly Profile

Date/Time	Energy (MW-h)
1/1/1990 0:00	0
1/1/1990 1:00	0
1/1/1990 2:00	0
1/1/1990 3:00	0
1/1/1990 4:00	0
1/1/1990 5:00	0
1/1/1990 6:00	0
1/1/1990 7:00	0
1/1/1990 8:00	1.371529194
1/1/1990 9:00	6.830484636
1/1/1990 10:00	6.672865608
1/1/1990 11:00	5.720487744
1/1/1990 12:00	5.676286163
1/1/1990 13:00	6.128837199
1/1/1990 14:00	7.906550456
1/1/1990 15:00	9.233978022
1/1/1990 16:00	4.191869776
1/1/1990 17:00	0
1/1/1990 18:00	0
1/1/1990 19:00	0
1/1/1990 20:00	0

12x24 - Avg MW

	Hour																							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	3.6	4.4	5.9	5.5	5.7	8.0	8.4	8.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.7	9.5	9.9	9.7	8.5	8.4	8.7	8.9	8.3	7.6	0.0	0.0	0.0	0.0	0.0	0.0
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.0	13.3	13.1	12.7	12.6	12.9	13.0	13.7	13.1	7.6	1.3	0.0	0.0	0.0	0.0	0.0
Apr	0.0	0.0	0.0	0.0	0.0	0.0	1.7	9.5	16.4	18.2	18.8	18.2	15.6	15.6	15.7	14.1	13.1	13.2	4.8	0.1	0.0	0.0	0.0	0.0
May	0.0	0.0	0.0	0.0	0.0	0.3	4.3	12.5	18.2	19.8	17.8	15.8	15.9	17.1	17.0	15.8	14.5	12.3	7.1	1.4	0.0	0.0	0.0	0.0
Jun	0.0	0.0	0.0	0.0	0.0	0.5	6.8	13.9	16.9	18.3	17.2	15.5	16.7	17.6	17.3	15.9	14.1	12.4	9.1	2.9	0.0	0.0	0.0	0.0
Jul	0.0	0.0	0.0	0.0	0.0	0.2	4.7	12.1	17.3	18.7	18.4	16.7	18.0	18.0	18.7	16.6	15.5	13.1	8.9	2.4	0.0	0.0	0.0	0.0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	2.6	11.3	17.8	18.3	18.6	16.8	17.7	18.5	19.4	18.2	17.6	12.2	5.8	0.8	0.0	0.0	0.0	0.0
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.7	13.0	14.9	15.7	15.3	15.3	15.9	16.5	15.0	13.9	9.5	1.7	0.0	0.0	0.0	0.0	0.0
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	9.5	12.7	13.6	14.2	15.1	15.7	15.7	13.9	8.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.1	6.8	7.5	6.5	6.6	7.0	8.1	7.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.2	5.2	5.0	5.0	5.4	5.8	5.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Walker, Donovan

From: Brian Lynch <blynch@redwoodenergy.com>
Sent: Monday, January 20, 2020 11:01 PM
To: Energy Contracts
Cc: Walker, Donovan; Darrington, Michael; Matt Garlinghouse
Subject: [EXTERNAL]Frederick Energy 2 price request
Attachments: 12x24 - Frederick 2.xlsx; Map - Frederick 2.pdf; form-556 Frederick 2[1].pdf; Schedule 73 - Frederick 2.pdf

Idaho Power -

MB MezzDev, LLC submits this request for an Energy Sales Agreement pursuant to Schedule 73. The project is a Qualifying Facility that will interconnect to Idaho Power's electrical system at an interconnection point within the state of Idaho. The project is an energy storage QF and qualifies for the "Other projects" avoided costs as found in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power).

Please find below the requested information from Schedule 73 and completed Qualifying Facility Energy Sales Agreement Application. Each of the items from Section 1 of the Contracting Procedures of Schedule 73 is responded to below. Please let me know if there are any questions.

Frederick Energy 2

- **Project Name**: Frederick Energy 2, LLC
- **Location**: Grand View Substation, Grand View, Idaho
- **Organization chart**: Frederick Energy 2, LLC is wholly owned by MB MezzDev, LLC
- **Generation technology**: Frederick Energy 2 is an energy storage Qualifying Facility that provides scheduled and dispatchable electricity. The storage system will receive 100% of input energy from renewable energy sources.
- **Maximum Capacity & Net Power**: 20MW-AC. See attached FERC QF Self-Certification Form 556, which quantifies these amounts.
- **Hourly production**: Attached is an 8760 of power production
- **Dispatch orders**: The project will provide scheduled, dispatchable power output in forward looking time intervals ranging from 5-240 minutes pending final system design. Within these intervals Idaho Power may have the ability to downward adjust the output, subject to full compensation of potential output available.
- **Map of QF Location**: See attached.
- **Anticipated COD**: 12/1/2023
- **Permitting status**: Conditional Use Permit Application to Elmore County has been prepared and is being submitted. No major obstacles are anticipated. All of the necessary local agencies will be engaged to provide comment and feedback on the proposed project. Building permits will be obtained prior to construction. There are currently no anticipated schedule impacts to the 12/1/2023 COD due to permitting.
- **QF Status**: A FERC Form 556 QF Self-Certification is attached.
- **Fuel type**: The energy provided to Idaho Power will be 100% from the battery storage system. The system will be charged from a renewable energy source such as wind, solar, biomass, etc. Initial designs consist of a PV solar facility to charge the system.
- **Fuel source**: Not applicable as the battery storage will be charged from a renewable source.
- **Interconnection**: The project has prepared an SGIA interconnection application with supporting material and to be submitted in February 2020

- **Contract term and rate option**: 20-year term with "Non-Levelized Non-Fueled Rates"

Within the next ten business days and pursuant to Section 1(b) please provide your written notice of any deficiencies in this request or, if there are no deficiencies, pursuant to Section 1(c) please provide Idaho Power's indicative pricing proposal using the Published Rates.

Brian Lynch
Managing Principal

blynch@redwoodenergy.com
310.750.7796

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION

Idaho Power Qualifying Facility (QF) contact information:

Mailing Address: Attn: Energy Contracts, P O Box 70 Boise, ID 83702
Physical Address: 1221 W. Idaho Street, Boise, ID 83703
Telephone number: 208-388-6070
E-Mail Address: energycontracts@idahopower.com

Preamble and Instructions

All generation facilities that qualify pursuant to Idaho Power Company Schedule 73 for a QF Energy Sales Agreement and wish to sell energy from their facility to Idaho Power must complete the following information and submit this Application by hand delivery, mail or E-mail to Idaho Power.

Upon receipt of a complete Application, Idaho Power shall process this request for a QF Energy Sales Agreement pursuant to Idaho Power Company Schedule 73.

Qualifying Facility Information

Proposed Project

Name of Facility: Frederick Energy 2

Resource Type: *(i.e. wind, solar, hydro, etc)*: Battery Storage

Facility Location: GPS Coordinates: 43.009, -116.004

Nearest City or landmark: Grand View, Idaho

County and State: Elmore County, Idaho

Map of Facility, including proposed interconnection point. (See Attached)

Anticipated commencement date of energy deliveries to Idaho Power: 12/1/2023

Facility Nameplate Capacity Rating (kW): 20,000

Facility Maximum Output Capacity (kW): 20,000

Station Service Requirements (kW): 200

Facility Net Delivery to Idaho Power (kW): 20,000

Facility interconnection status: Application prepared to submit

Proposed Contracting Term (cannot exceed 20 years): 20 years

Requested Rate Option (details provided in Schedule 73): Rate Option No. 4 "Non-Levelized Non-Fueld Rates"

Does the Facility have the ability to respond to dispatch orders from Idaho Power Company (Yes or No): Yes

SCHEDULE 73
COGENERATION AND SMALL POWER PRODUCTION SCHEDULE – IDAHO
(Continued)

QUALIFYING FACILITY ENERGY SALES AGREEMENT APPLICATION
(Continued)

Please include the following attachments:

- ✓ Hourly estimated energy deliveries (kW) to Idaho Power for every hour of a one year period.
- ✓ List of acquired and outstanding Qualifying Facility permits, including a description of the status and timeline for acquisition of any outstanding permits.
  - At the minimum a FERC issued QF certificate/self-certification is required and/or evidence that Facility will be able to obtain a Qualifying Facility certificate.
- ✓ If the Facility will require fuel be transported to the Facility (i.e. natural gas pipelines, railroad transportation, etc), evidence of ability to obtain sufficient transportation rights to operate the Facility at the stated Maximum Output Amount.
- ✓ If the Facility will not be interconnecting directly to the Idaho Power electrical system, evidence that the Facility will be able to interconnect to another utility's electrical system and evidence that the Facility will be able to obtain firm transmission rights over all required transmission providers to deliver the Facility's energy to Idaho Power.

Owner Information

Owner / Company Name: **Black Mesa Energy, LLC**

Contact Person: **Brian Lynch, Manager**

Address: **P.O. Box 2731**

City: **Palos Verdes** State: **CA** Zip: **90274**

Telephone: **310-750-7796**

E-mail: **blynch@redwoodenergy.com**

Applicant Signature

I hereby certify that, to the best of my knowledge, all information provided in this Qualifying Facility Energy Sales Agreement application is true and correct.

Brian Lynch
Signature

Brian Lynch
Print Name

1/17/2020
Date

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. *See* 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button ( ) for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (oira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. Do *not* use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

(1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
(2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at http://earth.google.com), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

☐ **Non-Public**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.
☐ **Public (redacted)**: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines indicated below. This public version of the applicants's Form 556 contains all data except for data from the lines indicated below, which has been redacted.
Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment
Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 06/30/2019

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility)
Black Mesa Energy, LLC

1b Applicant street address
P.O. Box 2731

1c City
Palos Verdes

1d State/province
CA

1e Postal code
90274

1f Country (if not United States)

1g Telephone number
310-750-7796

1h Has the instant facility ever previously been certified as a QF? Yes ☐ No ☒

1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF ___ - ___ - ___

1j Under which certification process is the applicant making this filing?

☒ Notice of self-certification (see note below)

☐ Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3)

Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.

1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply)

☒ Qualifying small power production facility status ☐ Qualifying cogeneration facility status

1l What is the purpose and expected effective date(s) of this filing?

☒ Original certification; facility expected to be installed by 10/1/22 and to begin operation on 12/1/23

☐ Change(s) to a previously certified facility to be effective on ___
(identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19)

- ☐ Name change and/or other administrative change(s)
- ☐ Change in ownership
- ☐ Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output

☐ Supplement or correction to a previous filing submitted on ___
(describe the supplement or correction in the Miscellaneous section starting on page 19)

1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19.

☐ The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated ___ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19)

☐ The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted

☐ The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)

Contact Information

2a Name of contact person
Brian Lynch

2b Telephone number
310-750-7796

2c Which of the following describes the contact person's relationship to the applicant? (check one)

☒ Applicant (self) ☐ Employee, owner or partner of applicant authorized to represent the applicant

☐ Employee of a company affiliated with the applicant authorized to represent the applicant on this matter

☐ Lawyer, consultant, or other representative authorized to represent the applicant on this matter

2d Company or organization name (if applicant is an individual, check here and skip to line 2e) ☐
Black Mesa Energy, LLC

2e Street address (if same as Applicant, check here and skip to line 3a) ☒

2f City

2g State/province

2h Postal code

2i Country (if not United States)

Facility Identification and Location

3a Facility name
Frederick Energy 2

3b Street address (if a street address does not exist for the facility, check here and skip to line 3c) ☒

3c Geographic coordinates: If you indicated that no street address exists for your facility by checking the box in line 3b, then you must specify the latitude and longitude coordinates of the facility in degrees (to three decimal places). Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 4 for help. If you provided a street address for your facility in line 3b, then specifying the geographic coordinates below is optional.

Longitude ☐ East (+) ☒ West (-) 116.005 degrees

Latitude ☒ North (+) ☐ South (-) 43.009 degrees

3d City (if unincorporated, check here and enter nearest city) ☒
Grand View

3e State/province
Idaho

3f County (or check here for independent city) ☐
Elmore

3g Country (if not United States)

Transacting Utilities

Identify the electric utilities that are contemplated to transact with the facility.

4a Identify utility interconnecting with the facility
Idaho Power Company

4b Identify utilities providing wheeling service or check here if none ☒

4c Identify utilities purchasing the useful electric power output or check here if none ☐
Idaho Power Company

4d Identify utilities providing supplementary power, backup power, maintenance power, and/or interruptible power service or check here if none ☒

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	MB MezzDev, LLC	Yes ☐ No ☒	100 %
2)		Yes ☐ No ☐	%
3)		Yes ☐ No ☐	%
4)		Yes ☐ No ☐	%
5)		Yes ☐ No ☐	%
6)		Yes ☐ No ☐	%
7)		Yes ☐ No ☐	%
8)		Yes ☐ No ☐	%
9)		Yes ☐ No ☐	%
10)		Yes ☐ No ☐	%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist. ☒

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)		%
2)		%
3)		%
4)		%
5)		%
6)		%
7)		%
8)		%
9)		%
10)		%

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Black Mesa Energy, LLC

Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

- ☐ Biomass (specify)
  - ☐ Landfill gas
  - ☐ Manure digester gas
  - ☐ Municipal solid waste
  - ☐ Sewage digester gas
  - ☐ Wood
  - ☐ Other biomass (describe on page 19)
- ☐ Waste (specify type below in line 6b)
- ☒ Renewable resources (specify)
  - ☐ Hydro power - river
  - ☐ Hydro power - tidal
  - ☐ Hydro power - wave
  - ☐ Solar - photovoltaic
  - ☐ Solar - thermal
  - ☐ Wind
  - ☒ Other renewable resource (describe on page 19)
- ☐ Geothermal
- ☐ Fossil fuel (specify)
  - ☐ Coal (not waste)
  - ☐ Fuel oil/diesel
  - ☐ Natural gas (not waste)
  - ☐ Other fossil fuel (describe on page 19)
- ☐ Other (describe on page 19)

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

☐ Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- ☐ Anthracite culm produced prior to July 23, 1985
- ☐ Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- ☐ Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- ☐ Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- ☐ Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non- Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- ☐ Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- ☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- ☐ Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- ☐ Materials that a government agency has certified for disposal by combustion (describe on page 19)
- ☐ Heat from exothermic reactions (describe on page 19) ☐ Residual heat (describe on page 19)
- ☐ Used rubber tires ☐ Plastic materials ☐ Refinery off-gas ☐ Petroleum coke

☐ Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	27,000 kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host) , do not include any power consumed by the non-power production activities in your reported parasitic station power.	10 kW
7c Electrical losses in interconnection transformers	434 kW
7d Electrical losses in AC/DC conversion equipment, if any	920 kW
7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	5,636 kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	7,000.0 kW
7g Maximum net power production capacity = 7a - 7f	20,000.0 kW

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The project consists of an energy storage system Qualifying Facility providing scheduled and dispatchable electricity in forward-looking time blocks. The energy storage system that comprises the energy storage Qualifying Facility is designed to, and will, receive 100% of its energy input from a combination of renewable energy sources such as wind, solar, biogas, biomass, etc. The current initial design utilizes solar photovoltaic (PV) modules mounted to single-axis trackers to provide the electric energy input to the Qualifying Facility's battery storage system. The PV modules are planned to be connected in series/ parallel combinations to solar inverters, rated approximately 2.5 MWac each, (subject to change). The proposed electric energy storage Qualifying Facility will consist of an electro-chemical battery and will have a maximum power output capacity of 20 MWac for a sustained time period of 5 - 240 minutes. The Facility will consist of an alternating current (AC) to direct current (DC) control system. The Qualifying Facility will be utilized to provide the purchasing utility with pre-scheduled and dispatchable AC energy within pre-determined time blocks. The sole source of electric power and energy provided to the purchasing utility will be the electro-chemical reaction giving rise to the discharge of electric power and energy by the battery. In turn, the sole direct source of energy input provided to the battery Facility will be, as described above, renewable sources.

Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) *as amended by* Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).

8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.

Check here if no such facilities exist. ☒

	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity
1)		QF -		kW
2)		QF -		kW
3)		QF -		kW

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?

☐ Yes (continue at line 8c below) ☒ No (skip lines 8c through 8e)

8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes ☐ No ☐

8d Did construction of the facility commence on or before December 31, 1999? Yes ☐ No ☐

8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes ☐ No ☐ If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.

Certification of Compliance with Fuel Use Requirements

Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:

☒ Applicant certifies that the facility will use fossil fuels *exclusively* for the purposes listed above.

9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:

☒ Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.

Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.

10a What type(s) of cogeneration technology does the facility represent? (check all that apply)

☐ Topping-cycle cogeneration ☐ Bottoming-cycle cogeneration

10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.

Check to certify compliance with indicated requirement	Requirement
☐	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
☐	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
☐	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
☐	Diagram must specify average gross electric output in kW or MW for each generator.
☐	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
☐	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is *liquid only* (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
☐	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
☐	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
☐	Diagram must specify working fluid flow conditions at make-up water inputs.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes ☐ No ☐

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes ☐ No ☐

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

☐ Yes (continue at line 11d below)

☐ No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

☐ Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

☐ No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

☐ Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

☐ No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

☐ Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

☐ No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).*

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	0 %

11j Is the response in line 11i greater than or equal to 50 percent?

☐ Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

☐ No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. *See* Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use *in separate rows.*

	Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)
1)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
2)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
3)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
4)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
5)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h
6)		Select thermal host's relationship to facility Select thermal host's use of thermal output	Btu/h

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b Indicate the annual average rate of net electrical energy output	kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	0 %
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f	0 %

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?

☐ Yes (complies with operating standard) ☐ No (does not comply with operating standard)

13j Did installation of the facility in its current form commence on or after March 13, 1980?

☐ Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.

☐ No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)) , the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.

14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process *in separate rows*.

	Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type	Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
1)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
2)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐
3)		Select thermal host's relationship to facility Select thermal host's process type	Yes ☐ No ☐

☐ Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

- ☐ Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.
- ☐ No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.

15b Indicate the annual average rate of net electrical energy output	kW
15c Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
15e Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
15f Indicate the annual average rate of supplementary energy input from natural gas or oil	Btu/h
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0 %

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

☐ Yes (complies with efficiency standard) ☐ No (does not comply with efficiency standard)

Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

Signer identified below certifies the following: (check all items and applicable subitems)

☒ He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.

☒ He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.

☒ He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)

- ☐ The person on whose behalf the filing is made
- ☒ An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
- ☐ An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
- ☐ A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign

☒ He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.

☒ He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Brian Lynch	P.O. Box 2731 Palos Verdes, CA 90274	1/20/2020

Audit Notes
Commission Staff Use Only:

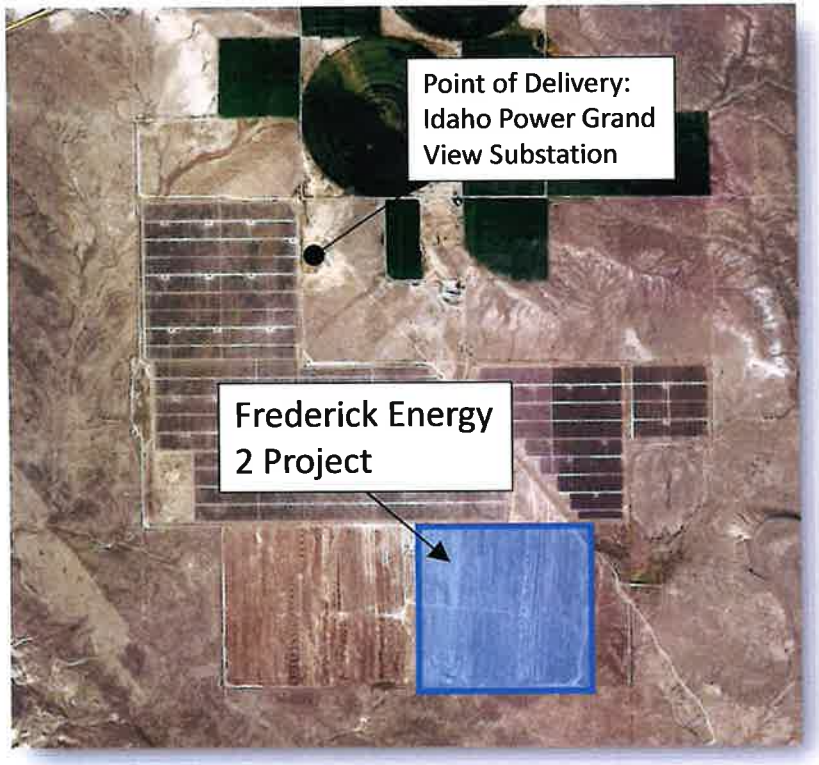
☐

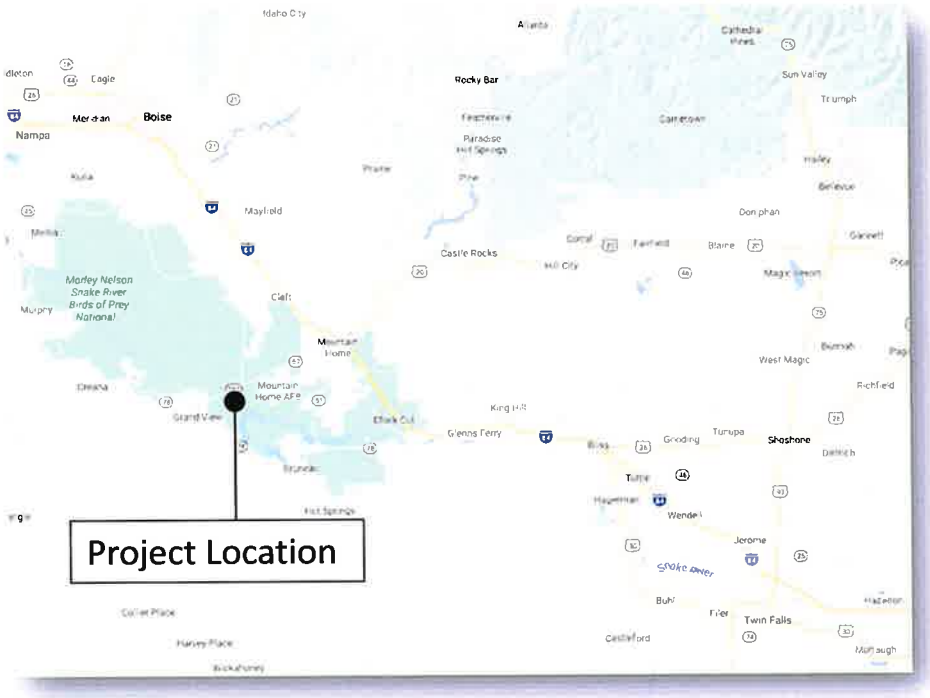
Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to.* You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

Line 6a: The energy storage (battery) system will take its input from 100% renewable energy sources such as wind, solar, biogas, biomass, etc. The system is designed with flexibility to most efficiently utilize the resources available at the site, at the present time as well as in the future.





Frederick Energy 2	20 MW Energy Storage & Renewable Energy	Lat/Long: 43.009, -116.004 Location: Elmore County, ID

Project	Frederick 2
Capacity (AC)	20 MW
Location	Grand View, Idaho
Interconnection	Idaho Power

8760 Hourly Profile

Date/Time	Energy (MW-h)
1/1/1990 0:00	0
1/1/1990 1:00	0
1/1/1990 2:00	0
1/1/1990 3:00	0
1/1/1990 4:00	0
1/1/1990 5:00	0
1/1/1990 6:00	0
1/1/1990 7:00	0
1/1/1990 8:00	1.371529194
1/1/1990 9:00	6.830484636
1/1/1990 10:00	6.672865608
1/1/1990 11:00	5.720487744
1/1/1990 12:00	5.676286163
1/1/1990 13:00	6.128837199
1/1/1990 14:00	7.906550456
1/1/1990 15:00	9.233978022
1/1/1990 16:00	4.191869776
1/1/1990 17:00	0
1/1/1990 18:00	0
1/1/1990 19:00	0
1/1/1990 20:00	0
1/1/1990 21:00	0
1/1/1990 22:00	0

12x24 - Avg MW

	Hour																							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Jan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.8	8.4	5.8	5.5	5.3	6.0	6.4	4.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.7	9.6	9.9	9.7	8.5	8.4	8.7	8.9	8.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0
Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	10.0	13.1	13.1	12.3	12.6	12.8	13.0	12.7	10.1	7.6	1.3	0.0	0.0	0.0	0.0	0.0
Apr	0.0	0.0	0.0	0.0	0.0	0.0	1.7	8.9	13.4	16.2	16.8	16.3	15.8	15.6	15.7	14.1	13.3	11.2	3.8	0.1	0.0	0.0	0.0	0.0
May	0.0	0.0	0.0	0.0	0.0	0.3	4.3	12.6	18.7	19.6	17.0	16.3	16.8	17.1	17.1	15.8	14.5	12.8	7.1	1.4	0.0	0.0	0.0	0.0
Jun	0.0	0.0	0.0	0.0	0.0	0.9	6.4	13.9	16.5	16.5	14.3	14.9	16.7	17.9	17.3	15.6	14.1	12.9	9.1	2.9	0.0	0.0	0.0	0.0
Jul	0.0	0.0	0.0	0.0	0.0	0.2	4.7	13.1	17.5	18.1	18.4	18.1	18.0	18.0	18.3	18.0	16.6	13.1	8.6	2.4	0.0	0.0	0.0	0.0
Aug	0.0	0.0	0.0	0.0	0.0	0.0	2.6	11.3	17.5	18.3	18.2	18.0	17.7	18.0	18.2	15.2	14.6	12.7	5.8	0.3	0.0	0.0	0.0	0.0
Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.7	12.0	13.8	15.7	15.3	15.2	15.4	15.3	13.9	12.6	9.5	1.7	0.0	0.0	0.0	0.0	0.0
Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	9.5	11.2	12.1	10.7	10.4	10.7	11.7	11.9	8.7	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Nov	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.1	6.8	7.5	6.5	6.6	7.0	8.1	7.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.9	5.2	5.0	5.0	5.4	5.8	5.3	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0

BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION
CASE NO. IPC-E-20-17

ATTACHMENT 3

TO IDAHO POWER COMPANY'S
ANSWER AND MOTION TO DISMISS

Black Mesa letter, January 24, 2020;

Black Mesa Purported Contract for Black Mesa 1

January 24, 2020

Michael Darrington
SR Energy Contracts Coordinator
Idaho Power/Power Supply
1221 West Idaho Street
Boise, Idaho 83702

Re: Energy Storage QF's

Dear Mr. Darrington:

Black Mesa Energy, LLC ("Black Mesa") is developing four greenfield energy storage and renewable power plants: Black Mesa Energy 1, Black Mesa Energy 2, Frederick Energy 1, and Frederick Energy 2 (collectively, the "Projects"). Black Mesa has provided applications and supporting documentation per the requirements of Schedule 73 "Cogeneration and Small Power Production Schedule" to Idaho Power on January 18, 2020 (Black Mesa Energy 1 and Black Mesa Energy 2) and on January 20, 2020 (Frederick Energy 1 and Frederick Energy 2). The projects are each an energy storage QF and qualify for the "Other projects" avoided costs as published by the Idaho Public Utilities Commission (Avoided Cost Rates for Other Projects) and referenced in 1:18-cv-00236-REB (Franklin Energy Storage v Idaho PUC & Idaho Power).

Black Mesa herby enters into a legally enforceable obligation to provide such capacity and energy to Idaho Power and is submitting executed Energy Sales Agreements for each Project for your countersignature.

These energy storage facilities have the capability to provide additional value to Idaho Power's system via limited dispatchability. While our commitment, evidenced by the enclosed executed contracts, is binding and enforceable, we are willing to discuss possible amendments to these obligations to accommodate Idaho Power's load following and ancillary service needs.

We are looking forward a long and mutually beneficial relationship with Idaho Power.

Sincerely

Brian Lynch
Manager
Black Mesa Energy, LLC

ENERGY SALES AGREEMENT

BETWEEN

IDAHO POWER COMPANY

AND

BLACK MESA ENERGY, LLC

TABLE OF CONTENTS

FIRM GENERATION SALES AGREEMENT
(Other Facility 10 average Monthly MW or Less)

Project Name: Black Mesa Energy 1

Project Number: _____

THIS FIRM GENERATION SALES AGREEMENT ("Agreement"), entered into on this 24 day of January 2020 ("**Effective Date**") between BLACK MESA ENERGY, LLC an Idaho limited liability company (Seller), and IDAHO POWER COMPANY, an Idaho corporation (Idaho Power), hereinafter sometimes referred to collectively as "Parties" or individually as "Party."

WITNESSETH:

WHEREAS, Seller will design, construct, own, maintain and operate an energy storage system and electric generation facility that will be a PURPA Qualifying Facility; and

WHEREAS, Seller wishes to sell, and Idaho Power is required to purchase, electric generation produced and delivered by the PURPA Qualifying Facility.

THEREFORE, In consideration of the mutual covenants and agreements hereinafter set forth, the Parties agree as follows:

ARTICLE I: DEFINITIONS

As used in this Agreement and the appendices attached hereto, the following terms shall have the following meanings:

1.1 "Adjusted Estimated Net Energy Amount" – the Estimated Net Energy Amount specified in paragraph 6.2 including any adjustments that have been made in accordance with paragraphs 6.2.2 or 6.2.3.

1.2 "Authorized Agent" – a person or persons specified within paragraph 25.2 of this Agreement as being authorized and empowered, for and on behalf of the Seller, to execute instruments, agreements, certificates, and other documents (collectively "Documents") and to take actions on

behalf of the Seller, and that Idaho Power Company and its directors, officers, employees, and agents are entitled to consider and deal with such persons as agents of the Seller for all purposes, until such time as an authorized officer of the Seller shall have delivered to Idaho Power Company a notice in writing stating that such person is and shall no longer be an agent on behalf of the Seller. Any Documents executed by such persons shall be deemed duly authorized by the Seller for all purposes.

1.3 "Commission" – The Idaho Public Utilities Commission.

1.4 "Contract Year" – The period commencing each calendar year on the same calendar date as the Operation Date and ending three hundred sixty-four (364) days thereafter.

1.5 "Delay Cure Period" – One hundred twenty (120) days immediately following the Scheduled Operation Date.

1.6 "Delay Damages" – Current month's Estimated Net Energy Amount for the first Contract Year as specified in paragraph 6.2.1 as of the Effective Date divided by the number of days in the current month multiplied by the number of days in the Delay Period in the current month multiplied by the current month's Delay Price.

1.7 "Delay Period" – All days past the Scheduled Operation Date until the Seller's Facility achieves the Operation Date or the Agreement is terminated by Idaho Power.

1.8 "Delay Price" – The current month's Mid-Columbia Market Energy Cost minus the current month's Base Energy Purchase Price as specified in Appendix D of this Agreement. If this calculation results in a value less than zero (0), the result of this calculation will be zero (0).

1.9 "Designated Network Resource (DNR)" – A resource that is designated for Idaho Power network load and does not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet Idaho Power's network load.

1.10 "Designated Dispatch Facility" – Idaho Power's Load Serving Operations, or any subsequent group designated by Idaho Power.

1.11 "Effective Date" – The date stated in the opening paragraph of this Energy Sales Agreement representing the date upon which this Energy Sales Agreement was fully executed by both Parties.

1.12 "Environmental Attributes" – means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Facility, and its avoided emission of pollutants. Environmental Attributes include but are not limited to: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO_2), methane (CH_4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;[1] (3) the reporting rights to these avoided emissions, such as REC Reporting Rights. REC Reporting Rights are the right of a REC purchaser to report the ownership of accumulated RECs in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the REC purchaser's discretion, and include without limitation those REC Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. RECs are accumulated on a MWh basis and one REC represents the Environmental Attributes associated with one (1) MWh of energy. Environmental Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Facility, (ii) production tax credits or investment tax credits associated with the construction or operation of the Facility and other financial incentives in the form of credits, reductions, or allowances associated with the Facility that are applicable to a state or federal income taxation obligation, (iii) the cash grant in

[1] Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Environmental Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

lieu of the investment tax credit pursuant to Section 1603 of the American Recovery and Reinvestment Act of 2009, or (iv) emission reduction credits encumbered or used by the Facility for compliance with local, state, or federal operating and/or air quality permits.

1.13 "Estimated Net Energy Amount" – the monthly estimated Net Energy (kWh) information provided by the Seller in accordance with paragraph 6.2 and which may be adjusted periodically throughout the term of this Agreement in accordance with paragraph 6.2.

1.14 "Facility" – That electric generation facility described in Appendix B of this Agreement

1.15 "Facility Nameplate Capacity" – The sum of the individual Generation Unit Nameplate Capacity's that are installed at this Facility. This value is established for the term of this Agreement in Appendix B, item B-1 of this Agreement and validated in paragraph 4.1.4 of this Agreement.

1.16 "First Energy Date" – The day commencing at 00:01 hours, Mountain Time, following the day that Seller has satisfied the requirements of Article IV and after the Seller requested First Energy Date.

1.17 "Forced Outage" – a partial or total reduction of a) the Facility's capacity to produce and/or deliver Net Energy to the Point of Delivery, or b) Idaho Power's ability to accept Net Energy at the Point of Delivery for non-economic reasons, as a result of Idaho Power or Facility: 1) equipment failure which was **not** the result of negligence or lack of preventative maintenance, or 2) responding to a transmission provider curtailment order, or 3) unplanned preventative maintenance to repair equipment that left unrepaired, would result in failure of equipment prior to the planned maintenance period, or 4) planned maintenance or construction of the Facility or electrical lines required to serve this Facility, or 5) icing events within the immediate water source used as the Facility's primary motive force that causes the Facility to reduce generation production.

1.18 "Generation Interconnection Agreement (GIA)" – The interconnection agreement that specifies terms, conditions and requirements of interconnecting to the Idaho Power electrical system, which will include but not be limited to all requirements as specified by Schedule 72.

1.19 "Generation Unit" – a complete electrical generation system within the Facility that is able to generate and deliver electricity to the Point of Delivery independent of other Generation Units within the same Facility.

1.20 "Inadvertent Energy" – Electric energy Seller does not intend to generate. Inadvertent energy is more particularly described in paragraph 7.2 of this Agreement.

1.21 "Interconnection Facilities" – All equipment specified in the GIA.

1.22 "Initial Capacity Determination" – The process by which Idaho Power confirms that under normal or average design conditions the Facility will generate at no more than 10 average megawatts (MW) per month, as more particulary described in pargraph 4.1.4.

1.23 "Losses" – The loss of electrical energy expressed in kilowatt hours (kWh) occurring as a result of the transformation and transmission of energy between the point where the Facility's energy is metered and the Facility's Point of Delivery. The loss calculation formula will be as specified in Appendix B of this Agreement.

1.24 "Market Energy Reference Price" – Eighty-five percent (85%) of the Mid-Columbia Market Energy Cost.

1.25 "Material Breach" – A Default (paragraph 19.2.1) subject to paragraph 19.2.2.

1.26 "Maximum Capacity Amount" – The maximum capacity (MW) of the Facility will be as specified in Appendix B of this Agreement.

1.27 "Mid-Columbia Market Energy Cost" – is Eighty-two and four tenths percent (82.4%) of the monthly arithmetic average of each day's Intercontinental Exchange ("ICE") daily firm Mid-C Peak Avg and Mid-C Off-Peak Avg index prices. Each day's index prices will reflect the relative proportions of peak hours and off peak hours in the month as follows:

The Mid-Columbia Market Energy Cost actual calculation being:

$$.824 * \left(\sum_{X=1}^{n} \{(\text{ICE Mid-C Peak Avg}_x * \text{HL hours for day}) + (\text{ICE Mid-C Off-Peak Avg}_x * \text{LL hours for day})\} / (n*24) \right)$$

where n = number of days in the month

If the ICE Mid-C Index prices are not reported for a particular day or days, prices derived from the respective averages of HL and LL prices for the immediately preceding and following reporting periods or days shall be substituted into the formula stated in this definition and shall therefore be multiplied by the appropriate respective numbers of HL and LL Hours for such particular day or days with the result that each hour in such month shall have a related price in such formula. If the day for which prices are not reported has in it only LL Hours (for example a Sunday), the respective averages shall use only prices reported for LL hours in the immediately preceding and following reporting periods or days. If the day for which prices are not reported is a Saturday or Monday or is adjacent on the calendar to a holiday, the prices used for HL Hours shall be those for HL hours in the nearest (forward or backward) reporting periods or days for which HL prices are reported.
If the ICE Mid-C Index reporting is discontinued by the reporting agency, both Parties will mutually agree upon a replacement index, which is similar to the ICE Mid-C Index. The selected replacement index will be consistent with other similar agreements and a commonly used index by the electrical industry.

1.28 "Monthly Nameplate Energy" – Facility Nameplate Capacity (kW) multiplied by the hours in the applicable month.

1.29 "Nameplate Capacity" –The full-load electrical quantities assigned by the designer to a Generation Unit and its prime mover or other piece of electrical equipment, such as transformers and circuit breakers, under standardized conditions, expressed in amperes, kilovolt-amperes,

kilowatts, volts or other appropriate units. Usually indicated on a nameplate attached to the individual machine or device.

1.30 "Net Energy" – All of the electric energy produced by the Facility, less Station Use and Losses, expressed in kilowatt hours (kWh) delivered by the Facility to Idaho Power at the Point of Delivery. Subject to the terms of this Agreement, Seller commits to deliver all Net Energy to Idaho Power at the Point of Delivery for the full term of the Agreement. Net Energy does not include Inadvertent Energy.

1.31 "Operation Date" – The day commencing at 0001 hours, Mountain Time, following the day that all requirements of paragraph 5.2 have been completed and after the Seller requested Operation Date.

1.32 "Other Facility" – In accordance with IPUC Order 32697 and Order 32802, a generation facility that is not a Solar, Wind, Seasonal Hydro or Non-seasonal Hydro generation facility.

1.33 "Point of Delivery" – The location specified in the GIA and referenced in Appendix B, where Idaho Power's and the Seller's electrical facilities are interconnected and the energy from this Facility is delivered to the Idaho Power electrical system.

1.34 "Prudent Electrical Practices" – Those practices, methods and equipment that are commonly and ordinarily used in electrical engineering and operations to operate electric equipment lawfully, safely, dependably, efficiently and economically.

1.35 "Renewable Energy Certificate" or "REC" means a certificate, credit, allowance, green tag, or other transferable indicia, howsoever entitled, indicating generation of renewable energy by the Facility, and includes all Environmental Attributes arising as a result of the generation of electricity associated with the REC. One REC represents the Environmental Attributes associated with the generation of one thousand (1,000) kWh of Net Energy.

1.36 "Scheduled Operation Date" – The date specified in Appendix B when Seller anticipates achieving the Operation Date. It is expected that the Scheduled Operation Date provided by the Seller shall

be a reasonable estimate of the date that the Seller anticipates that the Seller's Facility shall achieve the Operation Date.

1.37 "Schedule 72" – Idaho Power's Tariff No 101, Schedule 72 or its successor schedules as approved by the Commission.

1.38 "Station Use" – Electric energy that is used to operate equipment that is auxiliary or otherwise related to the production of electricity by the Facility.

1.39 "Termination Damages" – Financial damages the non-defaulting party has incurred as a result of termination of this Agreement.

1.40 "WECC Scheduling Calendar" – The Scheduling Calendar for the current year published by the Western Electricity Coordinating Council.

ARTICLE II: NO RELIANCE ON IDAHO POWER

2.1 Seller Independent Investigation - Seller warrants and represents to Idaho Power that in entering into this Agreement and the undertaking by Seller of the obligations set forth herein, Seller has investigated and determined that it is capable of performing hereunder and has not relied upon the advice, experience or expertise of Idaho Power in connection with the transactions contemplated by this Agreement.

2.2 Seller Independent Experts - All professionals or experts including, but not limited to, engineers, attorneys or accountants, that Seller may have consulted or relied on in undertaking the transactions contemplated by this Agreement have been solely those of Seller.

ARTICLE III: WARRANTIES

3.1 No Warranty by Idaho Power - Any review, acceptance or failure to review Seller's design, specifications, equipment or facilities shall not be an endorsement or a confirmation by Idaho Power and Idaho Power makes no warranties, expressed or implied, regarding any aspect of Seller's design, specifications, equipment or facilities, including, but not limited to, safety, durability, reliability, strength, capacity, adequacy or economic feasibility.

3.2 Qualifying Facility Status - Seller warrants that the Facility is a "Qualifying Facility," as that term is used and defined in 18 CFR 292.201 et seq. After initial qualification, Seller will take such steps as may be required to maintain the Facility's Qualifying Facility status during the term of this Agreement and Seller's failure to maintain Qualifying Facility status will be a Material Breach of this Agreement. Idaho Power reserves the right to review the Facility's Qualifying Facility status and associated support and compliance documents at any time during the term of this Agreement.

3.3 Other Facility Qualification - Seller warrants that the Facility is an Other Facility as that term is defined in paragraph 1.32 of this Agreement. Seller will take such steps as may be required to maintain the Other Facility status during the full term of this Agreement, Idaho Power reserves the right to review the Other Facility status of this Facility and associated support and compliance documents at any time during the term of this Agreement.

ARTICLE IV: CONDITIONS TO ACCEPTANCE OF ENERGY

4.1 First Energy Date - Prior to the First Energy Date and as a condition of Idaho Power's acceptance of deliveries of energy from the Seller under this Agreement, Seller shall:

4.1.1 Submit proof to Idaho Power that all licenses, permits, determinations and approvals necessary for Seller's operations have been obtained from applicable federal, state or local authorities, including, but not limited to, evidence of compliance with Subpart B, 18 C.F.R. §292.201 et seq. as a certified Qualifying Facility.

4.1.2 Opinion of Counsel - Submit to Idaho Power an opinion letter signed by an attorney admitted to practice and in good standing in the State of Idaho providing an opinion that Seller's licenses, permits, determinations and approvals as set forth in paragraph 4.1.1. above are legally and validly issued, are held in the name of the Seller and, based on a reasonable independent review, counsel is of the opinion that Seller is in substantial compliance with said permits as of the date of the Opinion Letter. The opinion letter will

be in a form acceptable to Idaho Power and will acknowledge that the attorney rendering the opinion understands that Idaho Power is relying on said opinion. Idaho Power's acceptance of the form will not be unreasonably withheld. The opinion letter will be governed by and shall be interpreted in accordance with the legal opinion accord of the American Bar Association Section of Business Law (1991).

4.1.3 Commission Approval - Confirm with Idaho Power that Commission approval of this Agreement in a form acceptable to Idaho Power has been received.

4.1.4 Initial Capacity Determination - Submit to Idaho Power such data as Idaho Power may reasonably require to perform the Initial Capacity Determination. Such data will include but not be limited to, Generation Unit Nameplate Capacity, equipment specifications, prime mover data, resource characteristics, normal and/or average operating design conditions and Station Use data. Upon receipt of this information, Idaho Power will review the provided data and if necessary, request additional data to complete the Initial Capacity Determination within a reasonable time.

4.1.4.1 If the Maximum Capacity Amount specified in Appendix B of this Agreement and the cumulative manufacturer's Nameplate Capacity rating of the individual Generation Units at this Facility does not exceed ten (10) MW, the Seller shall submit detailed, manufacturer, verifiable data of the Nameplate Capacity ratings of the individual Generation Units to be installed at this Facility. Idaho Power will verify that the data provided establishes the combined Nameplate Capacity rating of the Generation Units to be installed at this Facility does not exceed ten (10) MW and determine if the Seller has satisfied the Initial Capacity Determination.

4.1.4.2 If the Maximum Capacity or the cumulative manufacture's Nameplate Capacity Rating of the individual Generation Units at this Facility exceeds ten (10) MW, Idaho Power will review all data submitted by Seller to determine if it is a

reasonable estimate that the Facility will not exceed ten (10) average monthly MW in any month.

4.1.5 Nameplate Capacity – Submit to Idaho Power manufacturer's and engineering documentation that establishes the Nameplate Capacity of each individual Generation Unit that is included within this entire Facility. The sum of the individual Generation Unit Capacity ratings shall be equal to Facility Nameplate Capacity. Upon receipt of this data, Idaho Power shall review the provided data and determine if the Nameplate Capacity specified is reasonable based upon the manufacturer's specified generation ratings for the specific Generation Units.

4.1.6 Completion certificate - Submit a certificate executed by an authorized agent of the Seller attesting that all mechanical and electrical equipment of the Facility has been completed to enable the Facility to begin testing and delivery of Test Energy in a safe manner.

4.1.7 Insurance - Submit written proof to Idaho Power of all insurance required in Article XIII.

4.1.8 Interconnection – Provide written confirmation from Idaho Power's business unit that administers the GIA that Seller has satisfied all interconnection and testing requirements that will enable the Facility to be safely connected to the Idaho Power electrical system.

4.1.9 Designated Network Resource (DNR) – Confirm that the Seller's Facility has completed all of the requirements to be an Idaho Power DNR capable of delivering energy up to the amount of the Maximum Capacity at the Point of Delivery.

4.1.9.1 As specified in Appendix B item 7 of this Agreement, the Seller's Facility must have achieved the status of being an Idaho Power DNR prior to Idaho Power accepting any energy from this Facility. Appendix B item 7 provides information on the initial application process required to enable Idaho Power to determine if network transmission capacity is available for this Facility's Maximum Capacity Amount and/or if Idaho Power transmission network upgrades will be required. The results of this study process and any associated

costs will be included in the GIA for this Facility.

4.1.9.2 After the Facility has completed all requirements of the GIA that enable the Facility to come online and at least thirty (30) days prior to the Scheduled First Energy Date, Idaho Power will complete the process for approving the Seller's Facility as an Idaho Power DNR. If the Seller estimates that the actual First Energy is expected to be different then the Scheduled First Energy Date specified in Appendix B of this Agreement, the Seller must notify Idaho Power of this revised date no later than 30 days prior to Scheduled First Energy Date. The Facility cannot deliver any energy to Idaho Power until it is approved as a DNR after completing all the requirements of the GIA and complying with the requirements of this Agreement.

4.1.10 Written Acceptance – Request and obtain written confirmation from Idaho Power that all conditions to acceptance of energy have been fulfilled. Such written confirmation shall be provided within a commercially reasonable time following the Seller's request and will not be unreasonably withheld by Idaho Power.

ARTICLE V: TERM AND OPERATION DATE

5.1 Term - Subject to the provisions of paragraph 5.2 below, this Agreement shall become effective on the Effective Date and shall continue in full force and effect for a period of twenty (20) Contract Years from the Operation Date.

5.2 Operation Date – A single Operation Date will be granted for the entire Facility and may occur only after the Facility has achieved all of the following:

a) At a minimum, 75% of the Facility Nameplate Capacity as identified in Appendix B, item, B-1 has achieved a First Energy Date.

b) Seller has demonstrated to Idaho Power's satisfaction that all mechanical and electrical testing has been completed satisfactorily and the Facility is able to provide energy in a

consistent, reliable and safe manner.

c) Engineer's Certifications - Submit an executed Engineer's Certification of Design & Construction Adequacy and an Engineer's Certification of Operations and Maintenance (O&M) Policy as described in Commission Order No. 21690. These certificates will be in the form specified in Appendix C but may be modified to the extent necessary to recognize the different engineering disciplines providing the certificates.

d) Seller has requested an Operation Date from Idaho Power in a written format.

e) Seller has received written confirmation from Idaho Power of the Operation Date. This confirmation will not be unreasonably withheld by Idaho Power.

5.3 Operation Date Delay - Seller shall cause the Facility to achieve the Operation Date on or before the Scheduled Operation Date. Delays in the interconnection and transmission network upgrade study, design and construction process (This includes any delay in making the required deposit payments set forth in the Facility's GIA) that **are not** caused by Idaho Power or Force Majeure events accepted by both Parties, **shall not** prevent Delay Damages or Termination Damages from being due and owing as calculated in accordance with this Agreement.

5.4 Termination - If Seller fails to achieve the Operation Date prior to the Scheduled Operation Date, such failure will be a Material Breach and shall subject the Seller to Delay Damages during the Delay Cure Period. If Seller fails to achieve an Operation Date by the end of the Delay Cure Period, Idaho Power may immediately terminate this Agreement with no further notice required.

5.5 Delay Damages billing and payment – Idaho Power shall calculate and submit to the Seller any Delay Damages due Idaho Power within fifteen (15) days after the end of each month or within 30 days of the date this Agreement is terminated by Idaho Power.

5.6 Termination Damages billing and payment - Idaho Power shall calculate and submit to the Seller any Termination Damages due Idaho Power within thirty (30) days after this Agreement has been terminated.

5.7 Seller Payment - Seller shall pay Idaho Power any undisputed Delay Damages or Termination

Damages within seven (7) days of when Idaho Power presents these billings to the Seller. Seller's failure to pay these damages within the specified time will be a Material Breach of this Agreement.

ARTICLE VI: PURCHASE AND SALE OF NET ENERGY

6.1 Net Energy Purchase and Delivery - Except when either Party's performance is excused as provided herein, Idaho Power will purchase and Seller will sell all of the Net Energy to Idaho Power at the Point of Delivery. All Inadvertent Energy produced by the Facility will also be delivered by the Seller to Idaho Power at the Point of Delivery.

6.2 Estimated Net Energy Amounts –Neither the monthly Estimated Net Energy Amounts provided as of the Effective Date nor the monthly Adjusted Estimated Net Energy Amount provided during the term of this Agreement shall exceed ten (10) average monthly MW nor be greater than the Maximum Capacity Amount (measured in kW) multiplied by the hours in the applicable month.

6.2.1 Monthly Estimated Net Energy Amounts provided as of the Effective Date of this Agreement: The monthly Estimated Net Energy Amount shall be determined as the product of (i) kWh for the applicable month specified in the table below, multiplied by: (ii) the Annual Factor for the applicable Contract Year specified below.

	Month	**kWh**	**Average kW**
Season 1	March	3,877,667	5.2
	April	4,624,518	6.4
	May	5,335,442	7.2
Season 2	July	5,909,079	7.9
	August	5,385,122	7.2
	November	1,948,797	2.7
	December	1,435,385	1.9
Season 3	June	5,611,145	7.8
	September	4,459,257	6.2

	October	3,278,001	4.4
	January	1,728,734	2.3
	February	2,384,643	3.5

Year	Annual Factor
1	99.50%
2	99.00%
3	98.50%
4	98.00%
5	97.50%
6	97.00%
7	96.50%
8	96.00%
9	95.50%
10	95.00%
11	94.50%
12	94.00%
13	93.50%
14	93.00%
15	92.50%
16	92.00%
17	91.50%
18	91.00%
19	90.50%
20	90.00%

6.2.2 Seller's Adjustment of Estimated Net Energy Amounts – Prior to the Operation Date, the Seller may revise all of the previously provided Estimated Net Energy Amounts by providing written notice to Idaho Power in accordance with paragraph 25.1.

6.2.3 Seller's Adjustment of Estimated Net Energy Amounts After the Operation Date – After the Operation Date, the Seller may revise any future monthly Estimated Net Energy Amounts by providing written notice no later than 5 PM Mountain Standard time on the 25th day of the month that is prior to the month to be revised. If the 25th day of the month falls on a weekend or holiday, then written notice must be received on the last business day prior to the 25th of the month. For example, if Seller would like to revise the Estimated Net

Energy Amount for October, they would need to submit a revised schedule no later than September 25th or the last business day prior to September 25th.

a) This written notice must be provided to Idaho Power in accordance with paragraph 25.1 or by electronic notice as agreed to by both parties.

b) Failure to provide timely written notice of changes to the Estimated Net Energy Amounts will be deemed to be an election of no change from the most recently provided Estimated Net Energy Amounts.

6.3 Failure to Deliver Minimum Amounts of Net Energy - Unless excused by an event of Force Majeure or Idaho Power's inability to accept Net Energy, Seller's failure to deliver Net Energy in any Contract Year in an amount equal to at least ten percent (10%) of the sum of the monthly estimated Net Energy amounts in effect as of the Operation Date shall constitute an event of default.

ARTICLE VII: PURCHASE PRICE AND METHOD OF PAYMENT

7.1 Surplus Energy – (1) Net Energy produced by the Seller's Facility and delivered to the Idaho Power electrical system during the month which exceeds one hundred ten percent (110%) of the monthly Adjusted Estimated Net Energy Amount for the corresponding month specified in paragraph 6.2, or (2) if the Net Energy produced by the Seller's Facility and delivered to the Idaho Power electrical system during the month is less than ninety percent (90%) of the monthly Adjusted Estimated Net Energy Amount for the corresponding month specified in paragraph 6.2, then all Net Energy delivered by the Facility to the Idaho Power electrical system for that given month, or (3) all Net Energy produced by the Seller's Facility and delivered by the Facility to the Idaho Power electrical system prior to the Operation Date, or (4) all monthly Net Energy that exceeds the Monthly Nameplate Energy.

7.2 Surplus Energy Price – For all Surplus Energy, Idaho Power shall pay to the Seller the current

month's Market Energy Reference Price or the applicable Base Energy Purchase Price, whichever is lower.

7.3 Base Energy – The Net Energy produced by the Seller's Facility and delivered to the Idaho Power electrical system after the Facility has achieved an Operation Date which is greater or equal to ninety percent (90%) and less than or equal to one hundred ten percent (110%) of the monthly Adjusted Estimated Net Energy Amount for the corresponding month specified in paragraph 6.2.

7.4 Base Energy Purchase Price – For all Base Energy received during a calendar month, Idaho Power will pay Seller the Base Energy Purchase Price as set forth in Appendix D.

7.5 Inadvertent Energy –

7.5.1 Inadvertent Energy is electric energy produced by the Facility, expressed in kWh, which the Seller delivers to Idaho Power at the Point of Delivery that exceeds ten thousand (10,000) kW multiplied by the hours in the specific month in which the energy was delivered. (For example, January contains 744 hours. 744 hours' times 10,000 kW = 7,440,000 kWh. Energy delivered in January in excess of 7,440,000 kWh in this example would be Inadvertent Energy.)

7.5.2 Although Seller intends to design and operate the Facility to generate and deliver no more than ten (10) average MW monthly and therefore does not intend to generate and deliver Inadvertent Energy, Idaho Power will accept Inadvertent Energy that does not exceed the Maximum Capacity Amount but will not purchase or pay for Inadvertent Energy.

7.5.3 Delivering Inadvertent Energy to Idaho Power for 2 consecutive months and/or in any 3 months during a Contract Year will be a Material Breach of this Agreement and Idaho Power may terminate this Agreement within sixty (60) days after the Material Breach has occurred.

7.6 Payments – Undisputed Base Energy and Surplus Energy payments, less any payments due to Idaho Power will be disbursed to the Seller within thirty (30) days of the date which Idaho Power

receives and accepts the documentation of the monthly Base Energy and Surplus Energy actually delivered to Idaho Power as specified in Appendix A.

7.7 Continuing Jurisdiction of the Commission - This Agreement is a special contract and, as such, the rates, terms and conditions contained in this Agreement will be construed in accordance with Idaho Power Company v. Idaho Public Utilities Commission and Afton Energy, Inc., 107 Idaho 781, 693 P.2d 427 (1984), Idaho Power Company v. Idaho Public Utilities Commission, 107 Idaho 1122, 695 P.2d 1 261 (1985), Afton Energy, Inc, v. Idaho Power Company, 111 Idaho 925, 729 P.2d 400 (1986), Section 210 of the Public Utility Regulatory Policies Act of 1978 and 18 CFR §292.303-308

ARTICLE VIII: ENVIRONMENTAL ATTRIBUTES

8.1 Pursuant to Commission Order 32697 and 32802 the Environmental Attributes and Renewable Energy Certificates as defined within this Agreement and directly associated with the production of energy from the Seller's Facility are owned by the Seller.

ARTICLE IX: FACILITY AND INTERCONNECTION

9.1 Design of Facility - Seller will design, construct, install, own, operate and maintain the Facility and any Seller-owned Interconnection Facilities so as to allow safe and reliable generation, storage, and delivery of Net Energy and Inadvertent Energy to the Idaho Power Point of Delivery for the full term of the Agreement in accordance with the GIA.

ARTICLE X:

METERING, METERING COMMUNICATIONS AND SCADA TELEMETRY

10.1 Metering – Idaho Power shall, provide, install, and maintain metering equipment needed for metering the electrical energy delivered from the Facility. The metering equipment will be capable of measuring, recording, retrieving and reporting the Facility's hourly gross electrical energy

delivery, Station Use, maximum energy deliveries (kW) and any other energy measurements at the Point of Delivery that Idaho Power needs to administer this Agreement and integrate this Facility's electricity delivered to the Idaho Power electrical system. Specific equipment, installation details and requirements for this metering equipment will be established in the GIA process and documented in the GIA. Seller shall be responsible for all initial and ongoing costs of this equipment as specified in Schedule 72 and the GIA.

10.2 Metering Communications – Seller shall, at the Seller's sole initial and ongoing expense, arrange for, provide, install, and maintain dedicated metering communications equipment capable of transmitting the metering data specified in paragraph 10.1 to Idaho Power in a frequency, manner and form acceptable to Idaho Power. Seller shall grant Idaho Power sole control and use of this dedicated metering communications equipment. Specific details and requirements for this metering communications equipment will be established in the GIA process and documented in the GIA.

10.3 Supervisory Control and Data Acquisition (SCADA) Telemetry – In addition to the requirements of paragraph 10.1 and 10.2, Idaho Power may require telemetry equipment and telecommunications which will be capable of providing Idaho Power with continuous instantaneous SCADA telemetry of the Seller's Net Energy and Inadvertent Energy production in a form acceptable to Idaho Power. Seller shall grant Idaho Power sole control and use of this dedicated SCADA and telecommunications equipment. Specific details and requirements for this SCADA Telemetry and telecommunications equipment will be established in the GIA process and documented in the GIA. Seller shall be responsible for all initial and ongoing costs of this equipment as specified in Schedule 72 and the GIA.

ARTICLE XI - RECORDS

11.1 Maintenance of Records - Seller shall maintain monthly records at the Facility or such other location mutually acceptable to the Parties. These records shall include total generation, Net Energy, Station Use, Surplus Energy, Inadvertent Energy and maximum hourly generation (kW)

and be recorded in a form and content acceptable to Idaho Power. Monthly records shall be retained for a period of not less than five years.

11.2 Inspection - Either Party, after reasonable notice to the other Party, shall have the right, during normal business hours, to inspect and audit any or all records pertaining to the Seller's Facility generation, Net Energy, Station Use, Surplus Energy, Inadvertent Energy and maximum generation (kW) records pertaining to the Seller's Facility.

ARTICLE XII: OPERATIONS

12.1 Communications - Idaho Power and the Seller shall maintain appropriate operating communications through Idaho Power's Designated Dispatch Facility in accordance with the GIA.

12.2 Acceptance of Energy –

12.2.1 Idaho Power shall be excused from accepting and paying for Net Energy or accepting Inadvertent Energy which would have otherwise been produced by the Facility and delivered by the Seller to the Point of Delivery:

a.) If energy deliveries are interrupted due an event of Force Majeure or Forced Outage.

b.) If interruption of generation deliveries is allowed by Section 210 of the Public Utility Regulatory Policies Act of 1978 and 18 CFR §292.304

c.) If temporary disconnection and/or interruption of generation deliveries is in accordance with Schedule 72 or other provisions as specified within the GIA.

d.) If Idaho Power determines that curtailment, interruption or reduction of Net Energy or Inadvertent Energy deliveries is necessary because of line construction, electrical system maintenance requirements, emergencies, electrical system operating conditions, electrical system reliability

emergencies on its system, or as otherwise required by Prudent Electrical Practices.

12.2.2 If, in the reasonable opinion of Idaho Power, Seller's operation of the Facility or Interconnection Facilities is unsafe or may otherwise adversely affect Idaho Power's equipment, personnel or service to its customers, Idaho Power may temporarily disconnect the Facility from Idaho Power's transmission/distribution system as specified within the GIA or Schedule 72 or take such other reasonable steps as Idaho Power deems appropriate.

12.2.3 Under no circumstances will the Seller deliver generation from the Facility to the Point of Delivery in an amount that exceeds the Maximum Capacity Amount at any moment in time. Seller's failure to limit deliveries to the Maximum Capacity Amount will be a Material Breach of this Agreement.

12.2.4 If Idaho Power is unable to accept the generation from this Facility and is not excused from accepting the Facility's generation, Idaho Power's damages shall be limited to only the value of the estimated generation that Idaho Power was unable to accept valued at the applicable generation prices specified in this Agreement. Idaho Power will have no responsibility to pay for any other costs, lost revenue or consequential damages the Facility may incur.

12.3 Scheduled Maintenance – On or before January 31st of each calendar year, Seller shall submit a written proposed maintenance schedule of significant Facility maintenance for that calendar year and Idaho Power and Seller shall mutually agree as to the acceptability of the proposed schedule. If the Seller intends to perform planned maintenance at approximately the same time every year, the Seller may submit a maintenance schedule for the first calendar year and include a statement that this maintenance schedule shall be consistent for all future years, until such time as the Seller notifies Idaho Power of a change to this schedule. The Parties determination as to the acceptability of the Seller's timetable for scheduled maintenance will take into consideration Prudent Electrical

Practices, Idaho Power system requirements and the Seller's preferred schedule. Neither Party shall unreasonably withhold acceptance of the proposed maintenance schedule.

12.4 Idaho Power Maintenance Information – Upon receiving a written request from the Seller, Idaho Power shall provide publicly available information in regards to Idaho Power planned maintenance information that may impact the Facility.

12.5 Contact Prior to Curtailment - Idaho Power will make a reasonable attempt to contact the Seller prior to interrupting the interconnection or curtailing deliveries from the Seller's Facility. Seller understands that in the case of emergency circumstances, real time operations of the electrical system, and/or unplanned events, Idaho Power may not be able to provide notice to the Seller prior to interruption, curtailment, or reduction of electrical energy deliveries to Idaho Power.

ARTICLE XIII: INDEMNIFICATION AND INSURANCE

13.1 Indemnification - Each Party shall agree to hold harmless and to indemnify the other Party, its officers, agents, affiliates, subsidiaries, parent company and employees against all loss, damage, expense and liability to third persons for injury to or death of person or injury to property, proximately caused by the indemnifying Party's, (a) construction, ownership, operation or maintenance of, or by failure of, any of such Party's works or facilities used in connection with this Agreement, or (b) negligent or intentional acts, errors or omissions. The indemnifying Party shall, on the other Party's request, defend any suit asserting a claim covered by this indemnity. The indemnifying Party shall pay all documented costs, including reasonable attorney fees that may be incurred by the other Party in enforcing this indemnity.

13.2 Insurance - During the term of this Agreement, Seller shall secure and continuously carry insurance as specified in Appendix E.

ARTICLE XIV: FORCE MAJEURE

14.1 As used in this Agreement, "Force Majeure" or "an event of Force Majeure" means any cause

beyond the control of the Seller or of Idaho Power which, despite the exercise of due diligence, such Party is unable to prevent or overcome. Force Majeure includes, but is not limited to, acts of God, fire, flood, storms, wars, hostilities, civil strife, strikes and other labor disturbances, earthquakes, fires, lightning, epidemics, sabotage, or changes in law or regulation occurring after the effective date, which, by the exercise of reasonable foresight such party could not reasonably have been expected to avoid and by the exercise of due diligence, it shall be unable to overcome. Fluctuations and/or changes of the motive force and/or the fuel supply **are not** events of Force Majeure. If either Party is rendered wholly or in part unable to perform its obligations under this Agreement because of an event of Force Majeure, both Parties shall be excused from whatever performance is affected by the event of Force Majeure, provided that:

(1) The non-performing Party shall, as soon as is reasonably possible after the occurrence of the Force Majeure, give the other Party written notice describing the particulars of the occurrence.

(2) The suspension of performance shall be of no greater scope and of no longer duration than is required by the event of Force Majeure.

(3) No obligations of either Party which arose before the occurrence of the Force Majeure event and which could and should have been fully performed before such occurrence shall be excused as a result of such occurrence.

ARTICLE XV: LIABILITY; DEDICATION

15.1 Limitation of Liability. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party to this Agreement. Neither party shall be liable to the other for any indirect, special, consequential, nor punitive damages, except as expressly authorized by this Agreement.

15.2 Dedication. No undertaking by one Party to the other under any provision of this Agreement shall constitute the dedication of that Party's system or any portion thereof to the Party or the public or affect the status of Idaho Power as an independent public utility corporation or Seller as an independent individual or entity.

ARTICLE XVI: SEVERAL OBLIGATIONS

16.1 Except where specifically stated in this Agreement to be otherwise, the duties, obligations and liabilities of the Parties are intended to be several and not joint or collective. Nothing contained in this Agreement shall ever be construed to create an association, trust, partnership or joint venture or impose a trust or partnership duty, obligation or liability on or with regard to either Party. Each Party shall be individually and severally liable for its own obligations under this Agreement.

ARTICLE XVII: WAIVER

17.1 Any waiver at any time by either Party of its rights with respect to a default under this Agreement or with respect to any other matters arising in connection with this Agreement shall not be deemed a waiver with respect to any subsequent default or other matter.

ARTICLE XVIII: CHOICE OF LAWS AND VENUE

18.1 This Agreement shall be construed and interpreted in accordance with the laws of the State of Idaho without reference to its choice of law provisions.

18.2 Venue for any litigation arising out of or related to this Agreement will lie in the District Court of the Fourth Judicial District of Idaho in and for the County of Ada.

ARTICLE XIX: DISPUTES AND DEFAULT

19.1 Disputes - All disputes related to or arising under this Agreement, including, but not limited to, the interpretation of the terms and conditions of this Agreement, will be submitted to the appropriate

authority for resolution.

19.2 Notice of Default

19.2.1 Defaults. If either Party fails to perform any of the terms or conditions of this Agreement (an "event of default"), the non-defaulting Party shall cause notice in writing to be given to the defaulting Party, specifying the manner in which such default occurred. If the defaulting Party shall fail to cure such default within the sixty (60) days after service of such notice, or if the defaulting Party reasonably demonstrates to the other Party that the default can be cured within a commercially reasonable time but not within such sixty (60) day period and then fails to diligently pursue such cure, then the non-defaulting Party may, at its option, terminate this Agreement and/or pursue its legal or equitable remedies.

19.2.2 Material Breaches – The notice and cure provisions in paragraph 19.2.1 do not apply to defaults identified in this Agreement as Material Breaches. Material Breaches must be cured as expeditiously as possible following occurrence of the breach or if a specific cure and/or inability to cure is identified by this Agreement for the specific Material Breach then that cure shall apply.

19.3 Prior to the Operation Date and thereafter for the full term of this Agreement, Seller will provide Idaho Power with the following:

19.3.1 Insurance - Evidence of compliance with the provisions of Appendix E. If Seller fails to comply, such failure will be a Material Breach.

19.3.2 Engineer's Certifications - Every three (3) years after the Operation Date, Seller will supply Idaho Power with a completed Certification of Ongoing Operations and Maintenance form as specified in Appendix C. The certification will be from a Registered Professional Engineer licensed in the State of Idaho. Seller's failure to supply the required certificate will be an event of default. Such a default may only be cured by Seller providing the required certificate; and

19.3.3 Licenses / Permits / Determinations - During the full term of this Agreement, Seller shall maintain compliance with all permits, licenses and determinations described in paragraph 4.1.1 of this Agreement. In addition, Seller will supply Idaho Power with copies of any new or additional permits, licenses or determinations. At least every fifth Contract Year, Seller will update the documentation described in Paragraph 4.1.1. If at any time Seller fails to maintain compliance with the permits, licenses and determinations described in paragraph 4.1.1 or to provide the documentation required by this paragraph, such failure will be an event of default and may only be cured by Seller submitting to Idaho Power evidence of compliance from the permitting agency.

ARTICLE XX: GOVERNMENTAL AUTHORIZATION

20.1 This Agreement is subject to the jurisdiction of those governmental agencies having control over either Party of this Agreement.

ARTICLE XXI: COMMISSION ORDER

21.1 Idaho Power shall file this Agreement for its acceptance or rejection by the Commission. This Agreement shall only become finally effective upon the Commission's approval of all terms and provisions hereof without change or condition and declaration that all payments to be made to Seller hereunder shall be allowed as prudently incurred expenses for ratemaking purposes.

ARTICLE XXII: SUCCESSORS AND ASSIGNS

22.1 This Agreement and shall be binding upon and inure to the benefit of the respective successors and assigns of the Parties hereto. Neither this Agreement nor any rights or obligations of either Party hereunder may be assigned, in whole or in part, by operation of law or otherwise, without the prior written consent of both Parties, which consent shall not be unreasonably withheld. Any party with which Idaho Power may consolidate, merge, convey or transfer substantially all of its electric utility assets, shall automatically, without further act, and without need of consent or approval by the

Seller, succeed to all of Idaho Power's rights, obligations and interests under this Agreement. Any purported assignment in derogation of the foregoing shall be void. This article shall not prevent a financing entity with recorded or secured rights from exercising all rights and remedies available to it under law or contract. Idaho Power shall have the right to be notified by the financing entity that it is exercising such rights or remedies.

ARTICLE XXIII: MODIFICATION

23.1 No modification to this Agreement shall be valid unless it is in writing and signed by both Parties and subsequently approved by the Commission.

ARTICLE XXIV: TAXES

24.1 Each Party shall pay before delinquency all taxes and other governmental charges which, if failed to be paid when due, could result in a lien upon the Facility or the Interconnection Facilities.

ARTICLE XXV: NOTICES AND AUTHORIZED AGENTS

25.1 Notices - All written notices under this Agreement shall be directed as follows and shall be considered delivered when faxed, e-mailed and confirmed with deposit in the U.S. Mail, first-class, postage prepaid, as follows:

To Seller:

Original document to:

Black Mesa Energy, LLC
Brian Lynch
PO Box 2731
Palos Verdes, CA 90274
Telephone: 310-750-7796
E-mail: blynch@redwoodenergy.com

To Idaho Power:

Original document to:

Vice President, Power Supply
Idaho Power Company
PO Box 70
Boise, Idaho 83707
Email: energycontracts@idahopower.com

Copy of document to:

Cogeneration and Small Power Production
Idaho Power Company
PO Box 70
Boise, Idaho 83707
E-mail: energycontracts@idahopower.com

Either Party may change the contact person and/or address information listed above, by providing written notice from an authorized person representing the Party.

25.2 Authorized Agent(s)

Name	Title
Brian Lynch	(i) MManager

The Seller may modify the Authorized Agents by requesting and completing an Authorized Agent form provided by Idaho Power. This document will include the requested changes and require signature(s) from an authorized party of the Seller.

ARTICLE XXVI: ADDITIONAL TERMS AND CONDITIONS

26.1 Equal Employment. During performance, pursuant to this Agreement, Seller agrees to comply with all applicable equal employment opportunity, small business, and affirmative action laws and regulations. All Equal Employment Opportunity and affirmative action laws and regulations are hereby incorporated by this reference, including provisions of 38 U.S.C. § 4212, Executive Order 11246, as amended, and any subsequent executive orders or other laws or regulations

relating to equal opportunity for employment on government contracts. To the extent this Agreement is covered by Executive Order 11246, the Equal Opportunity Clauses contained in 41 C.F.R. 60-1.4, 41 C.F.R. 60-250.5, and 41 CFR 60-741.5 are incorporated herein by reference.

26.2 Prior to the Seller executing this Agreement, the Seller shall have:

a) Submitted an interconnection application for this Facility and is in compliance with all payments and requirements of the interconnection process.

b) Acknowledged responsibility for all interconnection costs and any costs associated with acquiring adequate firm transmission capacity to enable the project to be classified as an Idaho Power DNR. If final interconnection or transmission studies are not complete at the time the Seller executes this Agreement, the Seller understands that the Seller's obligations to pay Delay Damages and Termination Damages associated with the project's failure to achieve the Operation Date by the Scheduled Operation Date as specified in this Agreement is not relieved by final interconnection or transmission costs, processes or schedules.

c) Provide acceptable and verifiable evidence to Idaho Power that demonstrates the Facility is eligible for the published avoided costs requested by the Seller and contained within this Agreement. Commission Order 34062 effective June 1, 2018, provides the current published avoided costs for Non-Seasonal Hydro Facilities, Seasonal Hydro Facilities, Other Facilities, Solar Facilities, and Wind Facilities. Commission Order 32697 provides for full capacity payments for existing projects that have requested replacement contracts after their existing contract expires.

26.3 This Agreement includes the following appendices, which are attached hereto and included by reference:

Appendix A	-	Generation Scheduling and Reporting
Appendix B	-	Facility and Point of Delivery
Appendix C	-	Engineer's Certifications
Appendix D	-	Energy Prices
Appendix E	-	Insurance Requirements

ARTICLE XXVII: SEVERABILITY

27.1 The invalidity or unenforceability of any term or provision of this Agreement shall not affect the validity or enforceability of any other terms or provisions and this Agreement shall be construed in all other respects as if the invalid or unenforceable term or provision were omitted.

ARTICLE XXVIII: COUNTERPARTS

28.1 This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

ARTICLE XXIX: ENTIRE AGREEMENT

29.1 This Agreement constitutes the entire Agreement of the Parties concerning the subject matter hereof and supersedes all prior or contemporaneous oral or written agreements between the Parties concerning the subject matter hereof.

IN WITNESS WHEREOF, The Parties hereto have caused this Agreement to be executed in their respective names on the dates set forth below:

Idaho Power Company	Black Mesa Energy, LLC
By _____	By _____
_____	Brian Lynch Manager
Dated _____	Dated 1/26/20
"Idaho Power"	"Seller"

APPENDIX A

A –1 MONTHLY POWER PRODUCTION AND SWITCHING REPORT

At the end of each month the following required documentation will be submitted to:

Idaho Power Company
Attn: Cogeneration and Small Power Production
PO Box 70
Boise, Idaho 83707

The meter readings required on this report will be the readings on the Idaho Power meter equipment measuring the Facility's total energy deliveries and Station Usage delivered to Idaho Power and the maximum delivered energy (kW) as recorded on the metering equipment and/or any other required energy measurements to adequately administer this Agreement. This document shall be the document to enable Idaho Power to begin the energy payment calculation and payment process. The meter readings on this report may not be used to calculate the actual payment, but instead will be a check of the automated meter reading information that will be gathered as described in item A-2 below:

Idaho Power Company

Cogeneration and Small Power Production

MONTHLY POWER PRODUCTION AND SWITCHING REPORT

Month _____ **Year** _____

Project Name _____ **Project** _____

Address _____ **Phone Number:** _____

City _____ **State** _____ **Zip** _____

	Facility Output	Station Usage	Metered Maximum
Meter Number:			
End of Month kWh Meter Reading:			kW
Beginning of Month kWh Meter:			
Difference:			
Times Meter Constant:			Net Generation
kWh for the Month:		-	=
Metered Demand:			

Breaker Opening Record

Date	Time	Meter	*	Reason

Breaker Closing Record

Date	Time	Meter

* **Breaker Opening Reason Codes**

1 Lack of Adequate Prime Mover
2 Forced Outage of Facility
3 Disturbance of IPCo System
4 Scheduled Maintenance
5 Testing of Protection Systems
6 Cause Unknown
7 Other (Explain)

I hereby certify that the above meter readings are true and correct as of Midnight on the last day of the above month and that the switching record is accurate and complete as required by the Energy Sales Agreement to which I am a Party.

_____ _____

Signature **Date**

A-2 AUTOMATED METER READING COLLECTION PROCESS

Monthly, Idaho Power will use the provided metering and telemetry equipment and processes to collect the meter reading information from the Idaho Power provided metering equipment that measures the Net Energy and energy delivered to supply Station Use for the Facility recorded at 12:00 AM (Midnight) of the last day of the month.

The meter information collected will include energy deliveries, Station Use, the maximum delivered power (kW) and any other required energy measurements to adequately administer this Agreement.

A-3 SELLER CONTACT INFORMATION

Seller's Contact Information

Project Management

Name:	Brian Lynch
Telephone Number:	310-750-7796
Cell Phone:	310-750-7796
E-Mail:	blynch@redwoodenergy.com

24-Hour Project Operational Contact

Name:	Brian Lynch
Telephone Number:	310-750-7796
Cell Phone:	310-750-7796
E-Mail:	blynch@redwoodenergy.com

Project On-site Contact information

Name:	Brian Lynch
Telephone Number:	310-750-7796
Cell Phone:	310-750-7796
E-Mail:	blynch@redwoodenergy.com

APPENDIX B

FACILITY AND POINT OF DELIVERY

Project Name: Black Mesa Energy 1

Project Number: _____

B-1 DESCRIPTION OF FACILITY

The expected design of the system will consist of an energy storage system that is charged by renewable energy and discharged to Idaho Power at the point of delivery. The system will have a nameplate capacity of 20 MW-AC as measured at the point of interconnection with 0.95 leading/lagging power factor. The energy storage system will consist of chemical (e.g. lithium-ion) or mechanical (e.g. flywheel) energy storage devices that will be connected in series and parallel combination to either the AC bus of the Facility via Power Conversion Systems (PCS) that convert bidirectional between DC and AC electricity or to the DC bus of the Facility within the generation system via DC/DC converters. Renewable energy will be supplied by approximately 28 MW-DC of solar PV modules mounted on single-axis tracking connected in series and parallel combination to solar inverters that convert DC electricity to AC. The energy storage system and renewable energy generation will be controlled and automated by a plant-controller and SCADA system that actively monitors energy production, battery state-of-charge, and other variables of the system to determine charge and discharge functionality.

Facility Nameplate Capacity: 20 MW-AC

B-2 LOCATION OF FACILITY

Near: Glenn's Ferry, Idaho

Actual or nearest physical street address: 5498 E. Black Mesa Rd., King Hill, ID 83633

GPS Coordinates: Latitude Decimal Degrees 42.906403

Longitude Decimal Degrees -115.182598

State: Idaho County: Elmore

Description of Interconnection Location: Idaho Power Black Mesa Substation

B-3 SCHEDULED FIRST ENERGY AND OPERATION DATE

First Energy Date: May 1, 2023

Operation Date: June 1, 2023

B-4 MAXIMUM CAPACITY AMOUNT:

The maximum capacity amount is 20 MW-AC which is consistent with the value provided by the Seller to Idaho Power in accordance with the GIA. This value is the maximum energy (kW) that potentially could be delivered by the Seller's Facility to the Idaho Power electrical system at any moment in time.

B-5 POINT OF DELIVERY

"Point of Delivery" means, unless otherwise agreed by both Parties, the point of where the Seller's Facility energy is delivered to the Idaho Power electrical system. The GIA will determine the specific Point of Delivery for this Facility. The Point of Delivery identified by the GIA will become an integral part of this Agreement.

B-6 LOSSES

If the Idaho Power Metering equipment is capable of measuring the exact energy deliveries by the Seller to the Idaho Power electrical system at the Point of Delivery, no Losses will be calculated for this Facility. If the Idaho Power Metering Equipment is unable to measure the exact energy deliveries by the Seller to the Idaho Power electrical system at the Point of Delivery, a Losses calculation will be established to measure the energy losses (kWh) between the Seller's Facility and the Idaho Power Point of Delivery. This loss calculation will be initially set at 2% of the kWh energy production recorded on the Facility generation metering equipment. At such time as Seller provides Idaho Power with the electrical equipment specifications (transformer loss specifications, conductor sizes, etc.) of all of the electrical equipment between the Facility and the Idaho Power electrical system, Idaho Power will configure a revised loss calculation formula to be agreed to by both parties and used to calculate the kWh Losses for the remaining term of the Agreement. If at any time during the term of this Agreement, Idaho Power determines that the loss calculation does not correctly reflect the actual kWh losses attributed to the electrical equipment between the Facility and the Idaho Power electrical system, Idaho Power may adjust the calculation and retroactively adjust the previous month's kWh loss calculations.

B-7 DESIGNATED NETWORK RESOURCE (DNR)

This Facility is an Idaho Power DNR pursuant to an existing energy sales agreement. The DNR status will continue if this Agreement is 1) executed and approved by the Commission 2) a GIA has been executed by both parties and 3) the Seller is in compliance with all requirements of that GIA.

Idaho Power cannot accept or pay for generation from this Facility if the Facility has not achieved the status of being an Idaho Power DNR. Federal Energy Regulatory Commission ("FERC") rules require Idaho Power to prepare and submit the application to achieve DNR status for this Facility. Because much of the information Idaho Power needs to prepare the DNR application is specific to the Seller's Facility, Idaho Power's ability to file the DNR application in a timely manner is contingent upon timely receipt of the required information from the Seller. Prior to Idaho Power beginning the process to enable Idaho Power to submit a request for DNR status for this Facility, the Seller shall have 1) filed a Generation Interconnection application, 2) submitted all information required by Idaho Power to complete the application, and 3) either executed this Agreement or, at a minimum, provided Idaho Power with confirmation of the Seller's intent to complete this Agreement in a timely manner. **Seller's failure to provide complete and accurate information in a timely manner can significantly impact Idaho Power's ability and cost to attain the DNR designation for the Seller's Facility and the Seller shall bear the costs of any of these delays that are a result of any action or inaction by the Seller.**

APPENDIX C

ENGINEER'S CERTIFICATION

OF

OPERATIONS & MAINTENANCE POLICY

The undersigned _____, on behalf of himself/herself and _____, hereinafter collectively referred to as "Engineer," hereby states and certifies to the Seller as follows:

1. That Engineer is a Licensed Professional Engineer in good standing in the State of Idaho.

2. That Engineer has reviewed the Energy Sales Agreement, hereinafter referred to as the "Agreement," between Idaho Power as Buyer, and _____as Seller, dated _____.

3. That the cogeneration or small power production project which is the subject of the Agreement and this Statement is identified as Idaho Power Company Facility No. _____ and is hereinafter referred to as the "Project."

4. That the Project, which is commonly known as the _____Project, is located in Section _____ Township _____ Range _____, Boise Meridian, _____ County, Idaho.

5. That Engineer recognizes that the Agreement provides for the Project to furnish electrical energy to Idaho Power for a _____ year period.

6. That Engineer has substantial experience in the design, construction and operation of electric power plants of the same type as this Project.

7. That Engineer has no economic relationship to the Design Engineer of this Project.

8. That Engineer has reviewed and/or supervised the review of the Policy for Operation and Maintenance ("O&M") for this Project and it is his professional opinion that, said Project has been designed and built to appropriate standards, and adherence to said O&M Policy will result in the Project's

producing at or near the design electrical output, efficiency and plant factor for the full Contact Term of _____ years.

9. That Engineer recognizes that Idaho Power, in accordance with paragraph 5.2 of the Agreement, is relying on Engineer's representations and opinions contained in this Statement.

10. That Engineer certifies that the above statements are complete, true and accurate to the best of his/her knowledge and therefore sets his/her hand and seal below.

By _____

(P.E. Stamp)

Date _____

APPENDIX C

ENGINEER'S CERTIFICATION

OF

ONGOING OPERATIONS AND MAINTENANCE

The undersigned _____, on behalf of himself/herself and _____ hereinafter collectively referred to as "Engineer," hereby states and certifies to the Seller as follows:

1. That Engineer is a Licensed Professional Engineer in good standing in the State of Idaho.

2. That Engineer has reviewed the Energy Sales Agreement, hereinafter referred to as the "Agreement," between Idaho Power as Buyer, and _____ as Seller, dated _____.

3. That the cogeneration or small power production project which is the subject of the Agreement and this Statement is identified as Idaho Power Company Facility No. _____ and hereinafter referred to as the "Project".

4. That the Project, which is commonly known as the _____Project, is located in Section _____ Township _____ Range _____, Boise Meridian, _____ County, Idaho.

5. That Engineer recognizes that the Agreement provides for the Project to furnish electrical energy to Idaho Power for a _____ year period.

6. That Engineer has substantial experience in the design, construction and operation of electric power plants of the same type as this Project.

7. That Engineer has no economic relationship to the Design Engineer of this Project.

8. That Engineer has made a physical inspection of said Project, its operations and maintenance records since the last previous certified inspection. The Engineer certifies, based on the Project's appearance and the information provided by the Project, that the Project's ongoing O&M has been completed in accordance with said O&M Policy; that it is in reasonably good operating condition; and it is in the Engineer's professional opinion that if adherence to said O&M Policy continues, the Project will continue producing at or near its design electrical output, efficiency and plant factor for the remaining _____ years of the Agreement.

9. That Engineer recognizes that Idaho Power, in accordance with paragraph 5.2 of the Agreement, is relying on Engineer's representations and opinions contained in this Statement.

10. That Engineer certifies that the above statements are complete, true and accurate to the best of his/her knowledge and therefore sets his/her hand and seal below.

By _____

(P.E. Stamp)

Date _____

APPENDIX C

ENGINEER'S CERTIFICATION

OF

DESIGN & CONSTRUCTION ADEQUACY

The undersigned _____, on behalf of himself/herself and _____ hereinafter collectively referred to as "Engineer", hereby states and certifies to Idaho Power as follows:

1. That Engineer is a Licensed Professional Engineer in good standing in the State of Idaho.

2. That Engineer has reviewed the Energy Sales Agreement, hereinafter referred to as the "Agreement", between Idaho Power as Buyer, and _____ as Seller, dated _____, _____.

3. That the cogeneration or small power production project, which is the subject of the Agreement and this Statement, is identified as Idaho Power Company Facility No _____ and is hereinafter referred to as the "Project".

4. That the Project, which is commonly known as the _____ Project, is located in Section _____ Township _____ Range _____, Boise Meridian, _____ County, Idaho.

5. That Engineer recognizes that the Agreement provides for the Project to furnish electrical energy to Idaho Power for a _____ year period.

6. That Engineer has substantial experience in the design, construction and operation of electric power plants of the same type as this Project.

7. That Engineer has no economic relationship to the Design Engineer of this Project and has made the analysis of the plans and specifications independently.

8. That Engineer has reviewed the engineering design and construction of the Project, including the civil work, electrical work, generating equipment, prime mover conveyance system, Seller furnished Interconnection Facilities and other Project facilities and equipment.

9. That the Project has been constructed in accordance with said plans and specifications, all applicable codes and consistent with Prudent Electrical Practices as that term is described in the Agreement.

10. That the design and construction of the Project is such that with reasonable and prudent operation and maintenance practices by Seller, the Project is capable of performing in accordance with the terms of the Agreement and with Prudent Electrical Practices for a _____ year period.

11. That Engineer recognizes that Idaho Power, in accordance with paragraph 5.2 of the Agreement, in interconnecting the Project with its system, is relying on Engineer's representations and opinions contained in this Statement.

12. That Engineer certifies that the above statements are complete, true and accurate to the best of his/her knowledge and therefore sets his/her hand and seal below.

By _____

(P.E. Stamp)

Date _____

APPENDIX D

ENERGY PRICES

(Prices based upon the Non-Levelized, Non-Fueled Avoided Cost Rates for Other Projects as posted by the Idaho Public Utilities Commission dated June 1, 2019)

D-1 Base Energy Purchase Price – For all Base Energy received during a calendar month, Idaho Power shall pay Seller the product of (i) the Calendar Energy Price specified below for the applicable delivery year, multiplied by (ii) the Seasonal Factor specified below for the applicable delivery month (such product the "**Base Energy Purchase Price**").

Year	Calendar Energy Price ($/MWh)
2023	32.84
2024	35.76
2025	38.62
2026	62.7
2027	63.97
2028	66.23
2029	67.44
2030	69.15
2031	70.54
2032	73.36
2033	75.51
2034	77.62
2035	79.66
2036	81.97
2037	83.75
2038	85.64
2039	87.67
2040	90.47
2041	92.17
2042	94.1

Month	Seasonal Factor
Jan	1.00
Feb	1.00
Mar	0.74
Apr	0.74
May	0.74
Jun	1.00
Jul	1.20
Aug	1.20
Sep	1.00
Oct	1.00
Nov	1.20
Dec	1.20

APPENDIX E

INSURANCE REQUIREMENTS

The Seller shall secure and continuously carry insurance as specified within this Appendix for the term of the Agreement.

Insurance Requirements:

1. All insurance required by this Agreement shall be placed with an insurance company with an A.M. Best Company rating of A- or better.

2. If the insurance coverage required in this Appendix is cancelled, materially changed or lapses for any reason, the Seller will immediately notify Idaho Power in writing. This notice will advise Idaho Power of the specific reason for cancellation, material change or lapse and the steps being taken to comply with these Insurance Requirements. Failure to provide this notice and to comply with these Insurance Requirements within 5 days of the cancellation, material change or lapse will constitute a Material Breach and Idaho Power may terminate this Agreement.

3. Prior to the First Energy date and subsequently within 10 days of the annual anniversary of the Operation Date, the Seller shall provide a Certificate of Insurance in the name of Idaho Power Company and list Idaho Power Company as an Additional Insured Endorsement and Waiver of Subrogation Endorsement.

4. The Certificate of Insurance shall evidence the appropriate insurance coverage of Comprehensive General Liability Insurance for both bodily injury and property damage with limits equal to $1,000,000, each occurrence, combined single limit. The deductible for such insurance shall be consistent with current Insurance Industry Utility practices for similar property.