

FIRST AMENDMENT TO POWER PURCHASE AGREEMENT

This FIRST AMENDMENT TO POWER PURCHASE AGREEMENT (“First Amendment”), dated as of March 22, 2017, is made by and between PACIFIC GAS AND ELECTRIC COMPANY, a California corporation (“PG&E” or “Buyer”), and NORTH SKY RIVER ENERGY LLC, a Delaware limited liability company (“Seller”). Seller and Buyer are referred to individually as a “Party” and collectively as the “Parties”.

RECITALS

A. Buyer and Seller are Parties to that certain Power Purchase Agreement dated as of July 15, 2011, as amended (collectively “Agreement”).

B. The Parties wish to modify the Agreement in certain respects in order to respond to changing CAISO market conditions.

NOW, THEREFORE, for good and valuable consideration, the Parties agree to amend the Agreement as follows:

1. Definitions and Interpretation. All capitalized terms not otherwise defined in this Amendment shall have the meanings defined in the Agreement. The rules of interpretation set forth in the Agreement shall also apply to the interpretation of this Amendment.

2. Amendments to Article One: General Definitions.

a. Section 1.16 is hereby amended and restated in its entirety as follows:

“Buyer Bid Curtailment” means Buyer as the SC communicates a curtailment instruction to Seller, requiring Seller to produce less Energy from the Project than the CAISO final market forecast amount to be produced from the Project for a period of time, and Buyer as the SC either (a) submitted a CAISO final market Energy Supply Bid and such curtailment is solely a result of the CAISO implementing the Energy Supply Bid; or (b) submitted a CAISO final market Self-Schedule for less than the amount of the final-market Energy forecasted to be produced from the Project.

However, if the Project is subject to a Planned Outage, Forced Outage, Force Majeure and/or a Curtailment Period during the same time period as referenced above in the first sentence of this Section, then Buyer Bid Curtailment shall not include any Energy that would have been produced but for any such Planned Outage, Forced Outage, Force Majeure or Curtailment Period.

b. Section 1.17 is hereby amended and restated in its entirety as follows:

“Buyer Curtailment Notice” means a Buyer Curtailment Order or Buyer Bid Curtailment provided in compliance with Section 3.1(o)(i) and provided via CAISO Automated Dispatch System (ADS), verbal notification, or another mutually agreeable form of communication.

- c. Section 1.18 is hereby amended and restated in its entirety as follows:

“Buyer Curtailment Order” means the instruction from Buyer to Seller to reduce generation from the Project by the amount, and for the period of time set forth in such order, for reasons unrelated to a Planned Outage, Forced Outage, Force Majeure and/or Curtailment Order.

- d. Section 1.19 is hereby amended and restated in its entirety as follows:

“Buyer Curtailment Period” means the period of time, as measured using current Settlement Intervals, during which Seller reduces generation from the Project pursuant to (a) Buyer Bid Curtailment or (b) a Buyer Curtailment Order. The Buyer Curtailment Period shall include the time required for the Project to ramp down and ramp up; provided that such time periods to ramp down and ramp up shall be consistent with the Ramp Rate designated in Appendix XVII.

- e. The following is added to the end of Section 1.47:

For the avoidance of doubt, if Buyer as the SC submitted a Self-Schedule or an Energy Supply Bid in its final CAISO market participation in a given time period (e.g. Integrated Forward Market, Real-Time Market, etc.) that clears, in full, such CAISO market for the amount of Energy forecasted to be produced from the Project as reflected in the then most current forecast available to Buyer as the SC at the time of the Self-Schedule or Energy Supply Bid was submitted, then any subsequent notice from the CAISO having the effect of requiring a reduction during such given time period is a Curtailment Order, rather than a Buyer Bid Curtailment.

- f. Section 1.48 is hereby amended and restated in its entirety as follows:

“Curtailment Period” means the period of time during which Seller reduces generation from the Project, pursuant to a Curtailment Order. The Curtailment Period shall include the time required for the Project to ramp down and ramp up; provided that such time periods to ramp down and ramp up shall be consistent with the Ramp Rate designated in Appendix XVII.

- g. Section 1.53 is hereby amended and restated in its entirety as follows:

“Deemed Delivered Energy” means the amount of Energy expressed in MWh that the Project would have produced and delivered to the Delivery Point, but that is not produced by the Project and delivered to the Delivery Point during a Buyer Curtailment Period, which amount shall be equal to (a) the final VER Forecast, expressed in MWh, applicable to the Buyer Curtailment Period, multiplied by the ratio of monthly metered generation to the sum of all final VER Forecasts for that month, with such ratio computed using Delivered Energy exclusive of Buyer Curtailment Periods and Curtailment Periods, or, (b) if there is no VER Forecast available, the result of the equation provided pursuant to Section 3.1(l)(i)(G) and using relevant Project availability, weather and other pertinent data for the period of time during the Buyer Curtailment Period less the amount of Delivered Energy delivered to the Delivery Point during the Buyer Curtailment Period; provided that, if the applicable difference calculated pursuant to (a) or (b) above is negative as compared to the amount of metered Energy at the CAISO revenue meter for the Project, the Deemed Delivered Energy shall be zero (0).

For the avoidance of doubt, (a) above will be calculated using this equation:

Deemed Delivered Energy = $[A * [B / C]] - D$, where,

$A = \sum$ Final 5 min VER Forecast (MWh) in the applicable Buyer Curtailment Period

$B = \sum$ Delivered Energy (MWh) exclusive of Buyer Curtailment Period and Curtailment Period

$C = \sum$ Final 5 min VER Forecast exclusive of Buyer Curtailment Period and Curtailment Period

$D = \sum$ Delivered Energy during the Buyer Curtailment Period and Curtailment Period

- h. Section 1.73 is hereby amended and restated in its entirety as follows:

“Energy Deviation(s)” means the absolute value of the difference, in MWh, in any Settlement Interval between (a) the final accepted Bid submitted for the Project; and (b) Delivered Energy.

- i. Section 1.191 is hereby amended and restated in its entirety as follows:

“Real-Time Price” means the Resource-Specific Settlement Interval LMP as defined in the CAISO Tariff. If there is more than one applicable Real-

Time Price for the same period of time, Real-Time Price shall mean the price associated with the smallest time interval.

j. Section 1.208 is hereby amended and restated in its entirety to read as follows:

“Seller Excuse Hours” means those hours during which Seller is unable to deliver Delivered Energy to Buyer as a result of (a) a Force Majeure event, (b) Buyer’s failure to perform, (c) a Curtailment Period, or (d) an Intervention.

k. Section 1.211 is hereby amended and restated in its entirety as follows:

“Settlement Interval” has the meaning set forth in the CAISO Tariff.

l. The following definitions are hereby added to Article One:

“Bid” has the meaning set forth in the CAISO Tariff.

“Dispatch Instruction” has the meaning set forth in the CAISO Tariff.

“Integrated Forward Market” has the meaning set forth in the CAISO Tariff.

“Master File” has the meaning set forth in the CAISO Tariff.

“Minimum Down Time” has the meaning set forth in the CAISO Tariff.

“Minimum Load” has the meaning set forth in the CAISO Tariff.

“PMax” has the meaning set forth in the CAISO Tariff.

“Ramp Rate” has the meaning set forth in the CAISO Tariff.

“Real-Time Market” means any existing or future intra-day market conducted by the CAISO occurring after the Day-Ahead Market.

“Start-up” means the action of bringing a Unit from non-operation to operation at or above the Unit’s Minimum Load, or with positive generation output if Minimum Load is zero.

“Variable Energy Resource Forecast” or “VER Forecast” means the final forecast of the Energy to be produced by the Project prepared by the CAISO in accordance with the Eligible Intermittent Resources Protocol and communicated to Buyer or Third-Party SC.

3. The following definitions are hereby deleted from Article One:

“Hour-Ahead Scheduling Process” has the meaning set forth in the CAISO Tariff.

4. Amendments to Article Three: Obligations and Deliveries.

- a. In Section 3.1(e)(ii)(A), the definition of Guaranteed Energy Production is amended as follows:

"Guaranteed Energy Production" means an amount of Delivered Energy plus Deemed Delivered Energy, if any, as measured in MWh, equal to the product of (x) and (y), where (x) is one hundred sixty percent (160%) of the Contract Quantity, and (y) is the difference between (I) and (II), with the resulting difference divided by (I), where (I) is the number of hours in the applicable Performance Measurement Period and (II) is the aggregate number of Seller Excuse Hours in the applicable Performance Measurement Period.

- b. Section 3.1(i)(ii) is hereby amended and restated in its entirety as follows:

Buyer Excuses. Buyer shall be excused from (A) receiving and paying for the Product only (I) during periods of Force Majeure, (II) by Seller's failure to perform, (III) during Curtailment Periods and (B) receiving Product during Buyer Curtailment Periods.

- c. Section 3.1(o)(i) is hereby amended and restated in its entirety as follows:

Order. Buyer shall have the right to order Seller to reduce generation from the Project pursuant to a Buyer Curtailment Order or cause Seller to be required to reduce generation from the Project pursuant to a Buyer Bid Curtailment, provided that (A) the Buyer Curtailment Period shall be for unlimited hours cumulatively per Contract Year (which may or may not be consecutive); (B) a Buyer Curtailment Order or Buyer Bid Curtailment shall be consistent with the operational characteristics set forth in Appendix XVII; and (C) Buyer shall pay Seller the Deemed Delivered Energy Price for Deemed Delivered Energy pursuant to Article Four. Seller agrees to reduce the Project's generation by the amount and for the period set forth in the Buyer Curtailment Order or Buyer Bid Curtailment.

Buyer's instruction to Seller to reduce generation pursuant to a Curtailment Order shall follow PG&E's Curtailment Order operating procedure.

- d. Section 3.1(o)(ii) is hereby amended and restated in its entirety as follows:

Failure to Comply. If Seller fails to comply with a Buyer Curtailment Notice then, for each MWh of Delivered Energy that the Project generated in contradiction to the Buyer Curtailment Order or Buyer Bid Curtailment, Seller shall pay Buyer for each such MWh at an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for delivery of such MWh (for example, the Contract Price adjusted by TOD Factors) and, (B) is the absolute value of the Real-Time Price for the applicable PNode, if such price is negative, for the Buyer Curtailment Period and, (C) is any penalties or other charges resulting from Seller's failure to comply with the Buyer Curtailment Order or Buyer Bid Curtailment.

If Seller fails to comply with a Buyer Curtailment Notice, and the sole reason Seller failed to comply is due to a failure to receive a CAISO ADS instruction and Seller has used Good Utility Practice to maintain their communication systems, then for the Settlement Intervals for which the ADS instruction was not received, Seller shall not be subject to this Failure to Comply provision.

e. Section 3.1(p) is hereby added as follows:

(p) Seller Equipment Required for Curtailment Instruction Communications.

(i) Seller shall acquire, install, and maintain such facilities, communications links and other equipment, and implement such protocols and practices, as necessary to respond and follow instructions, including an electronic signal conveying real time and intra-day instructions, to operate the Units as directed by the Buyer and/or a Governmental Authority, including to implement a Buyer Curtailment Order, Buyer Bid Curtailment or Curtailment Order in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. If at any time during the Delivery Term Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take the steps necessary to become compliant as soon as commercially reasonably possible. Seller shall be liable pursuant to Section 3.1(o)(ii) for Failure to Comply with a Buyer Curtailment Order or Buyer Bid Curtailment, during the time that Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies. For the avoidance of doubt, a Buyer Curtailment Order or Buyer Bid Curtailment communication via such systems and facilities shall have the same force and effect on Seller as any other form of communication. Seller's obligation to become compliant with then-current methodologies pursuant to this Section 3.1(p) is expressly conditioned on receipt by Seller of all information, access, authorizations, certifications

and protocols from third parties (e.g., CAISO certifications) that are necessary for implementation of such methodologies. Initial actions needed to become compliant under this First Amendment will be completed by Seller within 90 days of the later of (A) CPUC Approval or (B) receipt by Seller of all information, access, authorizations, certifications and protocols from third parties (e.g., CAISO certifications) that are necessary for implementation.

(ii) Notwithstanding any other provision contained herein, Seller shall not be required to comply with the obligations of Section 3.1(p)(i) if compliance would result in (A) a capital cost, over and above administrative costs to remain compliant, that over the expected life of such improvement exceeds ten thousand dollars (\$10,000.00) per Contract Year; or (B) an operating expense, over and above administrative expenses incurred to remain compliant, that exceeds an average of ten thousand dollars (\$10,000.00) per Contract Year; provided that Seller shall promptly inform Buyer by written notice of any change or improvement necessary to comply with the obligation that would cause the total amount of costs to exceed such limits and Buyer shall, within ninety (90) Business Days of its receipt of Seller's notice, provide Seller with its decision as to whether (I) Seller should proceed to implement such change or improvement and agrees to reimburse Seller for any capital cost or operating expense that exceeds the limits specified in this paragraph or (II) Seller shall not be obligated to proceed to implement such change or improvement.

f. Section 3.1(q) is hereby added as follows:

(q) Additional Curtailment Hours. In accordance with Section 3.1(o)(i), Buyer has a right under the terms of the Agreement to an unlimited number of hours of Buyer Curtailment Periods per year. However, any hours more than two hundred fifty (250) cumulative hours of Buyer Curtailment Periods in any Contract Year of the Agreement are hereby defined as additional curtailment hours ("Additional Curtailment Hours"). The Parties are not certain of the effects on Seller's generating equipment that may result from the Additional Curtailment Hours and want to provide a process for addressing any unusual or unexpected equipment degradation that might result directly therefrom. Therefore, the Parties agree as follows:

- (i) if more than two hundred fifty (250) cumulative hours of Buyer Curtailment Periods occur in any Contract Year, and
- (ii) if Seller determines in its reasonable professional judgment that there was excess and explainable wear and tear to Seller's facilities caused by such Additional Curtailment Hours during such Contract Year, then

(iii) Seller may request that Buyer make operational changes or Master File adjustments necessary to address the excess wear and tear on Seller's equipment, and Buyer shall not unreasonably withhold consent to make such changes or adjustments.

Seller shall consult with Buyer in the event of any excess wear and tear and shall use good faith efforts to minimize changes and frequency of changes to Appendix XVII to address any excess wear and tear on Seller's facilities.

g. In Sections 3.4(c)(ii) and 3.4(c)(iii) all references to the Hour-Ahead Scheduling Process shall be replaced with the Real-Time Market.

h. The following is hereby added to Section 3.4(c)(iii) as Section 3.4(c)(iii)(E):

To the extent that Seller obtains, in the normal course of business, other forecasts of energy production at the Project not otherwise specified in this Section 3.4, then Seller shall grant Buyer read-only access to such forecasts.

5. Amendments to Article Four: Compensation; Monthly Payments.

a. Section 4.5(c)(i) is hereby amended to remove the word "six" from reference to Settlement Intervals.

6. Amendments to Appendices.

a. Appendix XVII shall be amended and restated in its entirety as follows:

APPENDIX XVII

Buyer Bid Curtailment and Buyer Curtailment Orders

Seller shall provide the operational characteristics listed below for the Project for Buyer Bid Curtailment and Buyer Curtailment Orders, which in each case must be equal to or greater than the resource flexibility reflected in the resource Master File, as such term is defined in the CAISO Tariff. Buyer, as the Scheduling Coordinator, may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project and to ensure that the information provided by Seller is true and accurate. Seller agrees to coordinate with Buyer or Third-Party SC, as applicable, to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are actually based on physical characteristics of the resource.

Pmax of the Project: 162 MW

Minimum Load: 7.5 MW

The Project will be capable of receiving and responding to all Dispatch Instruction in accordance with Section 3.1(p).

Advance notification required for a Buyer Bid Curtailment or Buyer Curtailment Order delivered via CAISO’s Automated Dispatch System (ADS) or other mutually agreeable form of communication: Not greater than that required to participate in the smallest time intervals of the Real-Time Market.

Maximum number of Start-ups per calendar day (if any such operational limitations exist): N/A

Minimum hold time between successive Buyer Bid Curtailment or Buyer Curtailment Orders: N/A [If applicable, but not greater than any value that would otherwise restrict participation in the smallest time intervals of the Real-Time Market]

Minimum Down Time: 10 minutes

Ramp Rate: 16.2 MW/min

- b. In Appendix VII the definition of “B” shall be amended as follows:

B = Sum of Delivered Energy plus Deemed Delivered Energy, if any, over the Performance Measurement Period, in MWh.

7. Effect and Effectiveness of Amendment. This Amendment shall not become effective until all of the following have occurred:

- a. This Agreement has been duly executed by the authorized representatives of each of Buyer and Seller, and;
- b. CPUC Approval of this Amendment has been obtained.

8. Miscellaneous.

a. Except as otherwise expressly modified hereby, the Agreement remains in full force and effect. Subject to Section 7 of this Amendment, from and after the execution of this Amendment by both Parties, all references in the Agreement (including all Appendices and Schedules thereto) to the “Agreement” shall be understood to mean the Agreement as amended by this Amendment.

b. This Amendment may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall be deemed one and the same

instrument. Delivery of an executed counterpart of this Amendment by email will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Amendment by email will also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Amendment will not affect the validity or effectiveness of this Amendment.

c. This Amendment and the rights and duties of the Parties hereunder shall be governed by Section 10.12 of the Agreement. The Parties agree to comply with Article 12 of the Agreement with respect to any dispute relating to this Amendment.

d. This Amendment may only be amended or otherwise modified in writing signed by each of the Parties.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed by their authorized representatives as of the dates provided below:

NORTH SKY RIVER ENERGY, LLC

PACIFIC GAS AND ELECTRIC COMPANY

Signature: 

Signature: 

Name: Rebecca J. Kujawa
Vice President

Name: Donald Howerton

Title: _____

Title: Director, Renewable Transactions

Date: 3/22/17

Date: 3/22/17