

AMENDMENT
executed by the
BONNEVILLE POWER ADMINISTRATION
and
ALCOA INC.

This AMENDMENT to the Power Sales Agreement Contract No. 13PM-10978 (Agreement) is executed by the UNITED STATES OF AMERICA, Department of Energy, acting by and through the BONNEVILLE POWER ADMINISTRATION (BPA) and Alcoa Inc. (Alcoa), a corporation organized under the laws of the State of Pennsylvania. BPA and Alcoa are sometimes referred to individually as "Party" and collectively as "Parties."

RECITALS

WHEREAS, on November 16, 2015 Alcoa provided BPA with notice to curtail its load on BPA from 75 MW to 10 MW (Curtailment Amount) in accordance with curtailment rights specified in Section 5.1 of the Agreement.

WHEREAS, Alcoa's notice of curtailment and other actions have served as a rejection of a purchase of 75 MW of Firm Power at the IP rate due to the economic impossibility of profitably operating at current and forecasted aluminum prices during the 24 month curtailment period (February 15, 2016, through February 14, 2018).

WHEREAS, in light of such circumstances, on February 10, 2016, BPA executed Amendment No. 2 to the Agreement with Alcoa and Surplus Power Sale Confirmation Agreement No. 16PM-13213 with Alcoa Power Marketing LLC.

WHEREAS, BPA and Alcoa have also agreed to enter into discussions regarding whether they could negotiate a mutually favorable contract arrangement following the termination of Amendment No. 2 (June 30, 2016) to allow Alcoa to maintain a 2.5 potline operation at the Alcoa Intalco Plant while providing benefits to BPA in excess of what BPA would otherwise be able to obtain under the Agreement.

WHEREAS, Alcoa and BPA intend to continue discussions on how the existing agreement can provide mutual benefit, consistent with sound business principles.

BPA and Alcoa agree to amend the terms of the Agreement as follows:

1. TERM

This Amendment takes effect on July 1, 2016, and will terminate at 2400 hours on February 14, 2018.

2. AMENDMENT OF AGREEMENT

- (a) Section 4.5 (Additional Firm Power During Curtailment) shall be added to the Agreement as follows:

“4.5 When a Trigger Event occurs, Alcoa shall increase the Firm Power purchase amount using the quantities and conditions described in section 4.5.2.

4.5.1 Definitions

- i. “Trigger Event” means the point in time when aluminum cash settlement prices defined by the London Metal Exchange (LME) increases to \$1850 per metric tonne, or above, on average for 25 consecutive calendar days.
- ii. “Firm Power Adjustment Date” means the date Alcoa’s schedule is increased consistent with the table in section 4.5.2. The adjustment will be prescheduled on the WECC defined preschedule day following the Trigger Event.
- iii. “Additional Firm Power” means the increased amount of Firm Power above the Curtailment Amount that Alcoa shall purchase from BPA upon the Firm Power Adjustment Date.

4.5.2 Firm Power Increase During Curtailment

If a Trigger Event occurs during the term of this Amendment Alcoa agrees that it shall purchase Additional Firm Power in the quantities referenced in the table below:

LME Price/Metric tonne	Firm Power
\$1850.00 - \$2500.00	15 MW
Over \$2500.00	65 MW

- i. If the LME price decreases to a 25 day average of \$1849, or less, the Firm Power amount shall decrease to 10 MW. The adjustment will be prescheduled on the WECC defined preschedule day following this event.
 - ii. If Section 4.5.2 is triggered and Alcoa is purchasing 75 MW of Firm Power then that month will not count towards Alcoa’s 24 month right to curtail per Section 5.2 of the Agreement.”
- (b) Section 4.4 (Surplus Power Sale) shall be deleted from the Agreement and replaced by the following:

“4.4 Surplus Power Sale

BPA shall make available surplus power to Alcoa Power Marketing LLC (APM) and APM shall purchase such surplus power on a take-or-pay basis under Confirmation Agreement No. 16PM-13475.

The Confirm will specify 1) a sale of 25 MW flat for the periods July 1, 2016, through March 31, 2017, and July 1, 2017 through February 14, 2018, 2) a sale of 250 MW flat for the period April 1, 2017 through June 30, 2017, 3) for all surplus sales specified in this section, the price shall be a “Market Index Price¹” with a per MW hour adder of \$0.75, and all deliveries will be provided at the FCRPS busbar.

Any dollar value above the monthly historical ICE Index Price, that Alcoa pays BPA under the Confirmation Agreement 16PM-13475, shall also be considered in the Net Revenue Amount.”

- (c) Section 5.5 (No Purchases from Third Parties During Curtailment) shall be deleted and replaced by the following:

“5.5 Alcoa shall have the unilateral right to purchase market power from third-party suppliers through the duration of this Amendment. Upon expiration of this Amendment, Alcoa will be required to purchase 75 MW of Firm Power at the IP rate, except to the extent that Alcoa is able to avoid using individual months of curtailment during the term of the Amendment, pursuant to Section 4.5.2 (ii). In such instance, Alcoa retains its right, after expiration of this Amendment, to provide notice of curtailment, but limited to the number of months corresponding to the number of months that curtailment was avoided during the term of the Amendment in accordance with Section 4.5.2(ii).

Parties agree that the curtailment notice submitted by Alcoa on November 16, 2015 to curtail its Firm Power amount to 10 MW shall be extended through February 14, 2018.”

- (d) Section 6.3 (Additional Contingency Reserves) shall be added to the Agreement as follows:

“6.3 Additional Contingency Reserves

Alcoa shall make available to BPA 30 MW of Contingency Reserves from its Intalco Plant load through the period specified below. The Contingency Reserves specified in this section will be accounted for separately from Alcoa’s current obligation to provide Minimum DSI Operating Reserve – Supplemental in the Agreement.

6.3.1 Alcoa shall provide the additional Contingency Reserves specified in this section starting July 1, 2016, through March 31, 2017, and July 1, 2017, through February 14, 2018.

6.3.2 Alcoa shall provide these Contingency Reserves at no cost to BPA, as partial consideration for BPA amending the purchase restriction in section 5.5 of the Agreement. BPA shall not compensate Alcoa for the energy delivered. BPA shall deliver the Restricted Energy to Alcoa as specified in Exhibit E, Power Reserves of the Agreement

¹ “Market Index Price” means the Intercontinental Exchange (ICE) Mid C Peak Day Ahead and ICE Mid C Off-Peak Day Ahead index for Heavy Load Hours and Light Load Hours. The Market Index Price shall have a floor of zero.

6.3.3 For the Contingency Reserves specified in this section, Alcoa is required to comply with the same requirements as those identified in Exhibit E, Power Reserves of the Agreement for Minimum DSI Operating Reserve – Supplemental. All Contingency Reserves made available by Alcoa shall be associated with deliveries from the FCRPS.

6.3.4 If Alcoa is unable to provide the Contingency Reserves for any hour, the parties agree that BPA shall be reimbursed for the value of this service, which shall be calculated and assessed by rounding to the nearest whole hour and billed at a rate of \$1.48 per MW hour.”

(e) Section 10.6 (Payment in Partial Consideration of Amending Section 5.5) shall be added to the Agreement as follows:

“10.6 Payment in Partial Consideration of Amending Section 5.5

Alcoa agrees to pay BPA \$1,500,000 in partial consideration for BPA agreeing to amend Section 5.5 of the Agreement. The monetary amount shall appear as an individual charge on Alcoa’s July 2016 power bill invoiced in August 2016. This obligation shall not be included in the Net Revenue Amount calculation.”

(f) Section 19.1.2.1 (Alcoa Termination During the Period of Amendment No. 3) shall be added to the Agreement as follows:

“19.1.2.1 If the current curtailment ends due to a Termination Notice as specified under section 19.1.2, all provisions of that section shall be applicable, except that Alcoa will, in any event, remain obligated to make the \$1,500,000 payment specified in Section 10.6 should Termination Notice be provided prior to the date such payment is made in full.

3. SIGNATURES

The Parties have executed this Amendment as of the last date indicated below.

ALCOA INC.

UNITED STATES OF AMERICA
Department of Energy
Bonneville Power Administration

By Simon Baker

By Mark E. Miller

Name Simon Baker
(Print/Type)

Name Mark E. Miller
(Print/Type)

Title President Energy

Title Account Executive

Date April 29, 2016

Date April 28, 2016