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June 22, 2011

Regulatory Commission of Alaska
701 West Eighth Avenue, Suite 300
Anchorage, Alaska 99501

Subject: Tariff Advice Letter No. TL52-307

Dear Commissioners:

On behalf of Kuparuk Transportation Company ("KTC"), the tariff filing described below is transmitted to you for filing in compliance with the Pipeline Act (AS 42.06) and 3 AAC 48.200 — 3 AAC 48.430.

Tariff Sheet Number		Cancels Sheet Number		Schedule or Rule Number
Original	Revised	Original	Revised	
1.1	Original			Tariff Location
4	15th	4	14th	Schedule 2

This filing and the enclosed tariff sheet revisions are submitted to address issues that were raised by Commission Staff during the Commission's review of TL51-307. As required by 3 AAC 48.360(f), Sheet No. 4 of KTC's tariff incorporates by reference, for application to intrastate transportation of petroleum, KTC's Federal Energy Regulatory Commission ("FERC") quality bank methodology tariff. Currently, Sheet No. 4 incorporates KTC's FERC Quality Bank Methodology Tariff No. 20.0.0. The incorporation of FERC Tariff No. 20.0.0 into KTC's intrastate tariff was approved effective May 25, 2011, in TL51-307 through Letter Order No. L1100175.

During the Commission's review of TL51-307, Commission Staff observed that KTC's FERC quality bank tariff contains outdated references to the "APUC" and a FERC tariff number reference for BP Pipelines (Alaska) Inc.'s quality bank tariff that had been superceded. See Commission Staff Memorandum (May 24, 2011), attached to Letter Order No. L1100175 ("Staff Memorandum") at 4. Commission Staff also raised questions regarding differences between KTC's quality bank tariff and those of the Trans Alaska Pipeline System ("TAPS") carriers. See *id.* at 5. In a supplemental filing submitted on May 23, 2011, KTC proposed to address those issues in a subsequent revision to its FERC quality bank tariff and an associated revision to KTC's intrastate tariff. In Letter Order No. L1100175, the Commission accepted KTC's proposal. The instant filing addresses those issues.

- **Revised FERC Quality Bank Methodology Tariff.**

On June 22, 2011, KTC submitted to FERC an updated version of its quality bank methodology tariff—FERC Tariff No. 20.1.0, canceling FERC Tariff No. 20.0.0. Changes in FERC Tariff No. 20.1.0 and explanations in this letter address the items raised by Commission Staff regarding TL51-307. By this instant filing, KTC requests approval of revisions to Tariff Sheet No. 4 to change the quality bank methodology references from FERC Tariff No. 20.0.0 to FERC Tariff No. 20.1.0. In compliance with 3 AAC 48.360(f), KTC is submitting a copy of FERC Tariff 20.1.0 for inclusion in KTC’s intrastate tariff. Consistent with the Commission’s past practice, KTC has added “RCA TL52-307” at the bottom of the enclosed copy of FERC Tariff No. 20.1.0. KTC requests that FERC Tariff No. 20.0.0 be replaced with FERC Tariff No. 20.1.0 in KTC’s effective intrastate tariff on file with the Commission.

- **“APUC” References and TAPS Carriers Tariff Numbers.**

FERC Tariff No. 20.1.0 changes all “APUC” references to “RCA.” *See* Sections II.C.1.b, II.C.3.d, and II.G. In Section II.D, the reference to the TAPS Carrier FERC quality bank methodology tariffs has been changed to reflect BP Pipelines (Alaska) Inc.’s currently effective tariff (FERC Tariff No. 44.2.0).

- **Definitions Section.**

Commission Staff observed that KTC’s FERC quality bank methodology tariff does not contain a definitions section. *See* Staff Memorandum at 5. KTC has included a definitions section in FERC Tariff No. 20.1.0. *See* Section I.D. The definitions in that section are generally consistent with the definitions contained in the TAPS Carriers’ quality bank methodology tariff, but exclude TAPS Carrier definitions that are inapplicable to KTC’s circumstances.

- **Consistency with TAPS Carriers Quality Bank Methodology.**

Commission Staff stated that a 1994 settlement agreement required that KTC’s quality bank methodology tariff be consistent with and effective at the same time as changes to the TAPS quality bank methodology, and noted that KTC had not updated its quality bank tariff as frequently as the TAPS Carriers have updated their quality bank tariff. *See* Staff Memorandum at 5. KTC understands that Commission Staff’s comment refers primarily to Attachment 2 of KTC’s FERC quality bank tariff. That attachment summarizes the component unit value pricing basis used in the KTC quality bank methodology.

To address this issue, KTC's FERC Tariff No. 20.1.0 has revised Attachment 2 to reference Attachment 2 of the TAPS Carriers' quality bank methodology tariffs. KTC believes that this is the most reasonable and efficient way to ensure consistency between the KTC and TAPS Carriers' quality bank methodologies with respect to component unit value for the following reasons.

First, it is not necessary for KTC's Attachment 2 to continuously restate all of the specific component unit value data that are set forth in the TAPS Carriers' quality bank tariff. By way of background, the settlement agreement referenced above provides, in relevant part:

2. As provided in Appendix B, it is the further intent of the Signatories that, during the term of this Agreement, the KTC Quality Bank methodology shall be as consistent as possible with the Quality Bank methodology maintained by the TAPS Carriers at TAPS Pump Station No. 1. To that end, if any changes are made to the TAPS Pump Station No. 1 Quality Bank methodology as it was adopted by the FERC in the TAPS Rehearing Order of May 12, 1994, it is the intent of the Signatories that such changes shall be reflected in the KTC Quality Bank methodology established by this Agreement and that such changes shall be effective as of the later of May 1, 1994 or the effective date of such changes to the TAPS Pump Station No. 1 Quality Bank. . . .

Order No. P-90-3(12) (Aug. 1, 1994), Appendix A at 7-8 (emphasis added).

To ensure that changes in the TAPS component unit value procedures are "reflected in the KTC quality bank methodology," Section II.D of the KTC quality bank tariff provides that "[t]he KTC Quality Bank will employ the same product prices, the same adjustments, and the same weighting as the TAPS Pump Station No. 1 Quality Bank, as set forth in [the currently effective quality bank tariffs of the TAPS Carriers]." The attachments to the KTC quality bank tariff summarize and provide examples of the data and calculation procedures required by the substantive provisions of the tariff, but Section II.D provides the substantive requirement for consistency with the TAPS component unit value data, prices, and weightings. See Section II.F, Quality Bank Calculation Procedures.¹ Thus, it is not necessary for KTC's

¹ Section II.F. states: "The assay data and calculation procedures required by this Methodology are summarized in the Attachments. The Attachments are for reference purposes only and are not intended to predict the impact of this procedure on any specific petroleum stream or any specific company. In the event of a conflict between the provisions of this Methodology as set forth above and the Attachments, the provisions of this Methodology shall control."

Attachment 2 to be continuously updated to restate all of the specific component unit value data that are set forth in the TAPS Carriers' quality bank tariff. Instead, the reference language on KTC's revised Attachment 2, and the substantive provisions of Section II.D, are sufficient to ensure that changes in the TAPS component unit value procedures are "reflected in the KTC quality bank methodology."

Second, requiring KTC to revise Attachment 2 simultaneously with any changes in the TAPS Carriers' component unit value data would impose unnecessary cost and administrative burden. In addition to the coordination among the TAPS Carriers that is already required to change the TAPS quality bank data, this would require KTC to coordinate changes to Attachment 2 with the TAPS Carriers prior to any tariff filings and to coordinate filing KTC's Attachment 2 changes with FERC and the Commission to ensure identical effective dates at FERC and the Commission. While that level of coordination can be accomplished as necessary for significant substantive changes in quality bank methodology, it imposes cost and administrative burden that can reasonably be avoided through the reference language KTC has added to Attachment 2 in its FERC Tariff No. 20.1.0.

- **Minor Textual Changes to FERC Tariff.**

In addition to the changes described above, KTC's FERC Tariff No. 20.1.0 contains other minor textual changes to correct internal section references in the tariff.

- **List of Locations Where Tariff is Available for Public Inspection.**

Commission Staff pointed out that KTC's intrastate tariff does not expressly list the locations where KTC's tariff is available for public inspection, as required by 3 AAC 48.250(a). Staff Memorandum at 5. To address this, enclosed is Sheet No. 1.1, which clearly states the physical address where KTC's tariff is available for inspection by the public.

Unless FERC suspends KTC's interstate Quality Bank Methodology Tariff filing, that filing will go into effect on July 25, 2011. Accordingly, KTC requests that the intrastate tariff revisions proposed by this filing also be approved effective July 25, 2011 to allow them to become effective at the same time as the interstate tariff revisions.

Please direct any questions regarding this filing to the undersigned at (907) 277-1604 or ddt@khe.com.

Regulatory Commission of Alaska
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June 22, 2011
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Sincerely yours,

KEMPEL, HUFFMAN AND ELLIS, P.C.
Counsel for Kuparuk Transportation Company



Dean D. Thompson

:tmg

Enclosures

RCA No. 307 Original
Canceling

Sheet No. 1.1

Sheet No. _____

Kuparuk Transportation Company

N

A copy of this Tariff is available for public inspection at the following location: N

Kuparuk Transportation Company N
700 G Street N
Ninth Floor N
Anchorage, Alaska 99501 N

Tariff Advice No. TL52-307 Effective: July 25, 2011

Issued by: Kuparuk Transportation Company

By: 
John M. Christal

Vice President of Kuparuk Pipeline Company,
Title: Managing Partner of Kuparuk Transportation Co.

KUPARUK TRANSPORTATION COMPANY LOCAL PIPELINE TARIFF

Containing the

QUALITY BANK METHODOLOGY

GENERAL APPLICATION

This tariff shall apply only to those tariffs which specifically incorporate this tariff, supplements to this tariff and successive issues hereof, by reference.

For rules and regulations other than the Kuparuk Transportation Company Quality Bank Methodology tariff, see F.E.R.C. No. 18.1.0, supplements thereto and reissues thereof.

NOTICES

This tariff is issued pursuant to the Settlement Agreement filed on May 23, 1994 by Kuparuk Transportation Company and to comply with the Order on Rehearing issued April 24, 1998, by the Federal Energy Regulatory Commission in Docket Nos. OR-2-013 et al. and the Order Changing Effective Date of Use of U.S. Gulf Coast Spot Quote for "Barge" High Sulfur VGO to Value the Gas Oil Component on the Gulf and West Coasts issued April 29, 1998, by the Alaska Public Utilities Commission in Docket Nos. P-89-1 et al.

[C] ~~This is a baseline tariff filing in compliance with FERC Order No. 714, 124 FERC ¶ 61,270 (2008).~~

The provisions published herein will, if effective, not result in an effect on the quality of the human environment.

ISSUED: June 22, 2011

EFFECTIVE: July 25, 2011

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EXPLANATION OF REFERENCE MARKS

[N] New
[W] Change in wording only
[C] Cancel

ITEM NO.	SUBJECT	KTC QUALITY BANK METHODOLOGY
Item 1	Quality Bank	<p data-bbox="548 254 865 277">I. GENERAL PROVISIONS</p> <p data-bbox="594 310 951 333">A. Quality Bank Administrator</p> <p data-bbox="667 367 1448 554">The Kuparuk Transportation Company (“KTC”) Quality Bank shall be administered by the Kuparuk Quality Bank Administrator, who shall be appointed by KTC, and by those designated by the Kuparuk Quality Bank Administrator to assist the Administrator (hereinafter collectively referred to as the “Kuparuk Quality Bank Administrator”). The name and address of KTC’s designated Quality Bank Administrator will be made available upon written request to KTC.</p> <p data-bbox="594 585 824 609">B. Cost Recovery</p> <p data-bbox="667 642 1287 665">1. KTC Quality Bank Operating and Administrative Costs</p> <p data-bbox="712 699 1448 1050">All reasonable and necessary costs of operating and administering the KTC Quality Bank Methodology, including and without limitation, costs incurred for obtaining, handling and processing samples of the various petroleum streams, assay costs, and costs incurred by the KTC Quality Bank Administrator as a result of administering the KTC Quality Bank, shall be recovered by KTC through the KTC Quality Bank debits and credits in the form of per-barrel charges on a monthly basis. The KTC Quality Bank Administrator will total all such costs incurred for each month and will divide those costs by the number of barrels transported in that month. The resulting per-barrel charge will then be added to all payments into the KTC Quality Bank and subtracted from all payments out of the KTC Quality Bank for that month.</p> <p data-bbox="667 1083 1297 1106">2. Kuparuk River Unit Continuous Sampling Capital Costs</p> <p data-bbox="609 1140 1448 1465">[W] In the event KTC acquires and installs additional continuous sampling equipment to sample the Kuparuk River Unit (“KRU”) stream pursuant to Section III.C.1.b <u>Section II.C.1.b</u> of this tariff, all reasonable and necessary costs relating to such acquisition and installation shall be recovered through per-barrel Quality Bank charges in a similar manner to that set forth in Section I.C.2 above (i.e., the KRU sampling capital costs will be recovered through direct billing of all KTC shippers over a three-month period, with interest at the then-current FERC interest rate on refunds as prescribed in 18 C.F.R. § 340.1, based on each shipper’s proportionate share of KTC total throughput over the six-month period immediately preceding the decision to install KRU sampling equipment.)</p> <p data-bbox="594 1499 935 1522">C. Other General Provisions</p> <p data-bbox="667 1556 1448 1766">1. In the event any payment is made to any shipper hereunder and it is subsequently determined by any Federal or state court, administrative agency or other governmental entity having jurisdiction that no other shipper was liable for the adjustment for which payment was made, the shipper receiving such payment shall upon receipt of an accounting from KTC return the same to KTC or its designee. KTC shall promptly utilize same to reimburse all shippers who made such payments.</p> <p data-bbox="667 1799 1448 1932">2. All payments due from any shipper under the KTC Quality Bank Methodology shall be made by such shipper within 20 days of receipt of each accounting and, for any delay in payment beyond such 20 day period, shall bear interest calculated at an annual rate equivalent to 125% of the prime rate of interest of Citibank N.A. of</p>

ITEM NO.	SUBJECT	KTC QUALITY BANK METHODOLOGY
Item 1	Quality Bank (continued)	<p>New York, New York, on ninety-day loans to substantial and responsible commercial borrowers as of the date of accounting.</p> <ol style="list-style-type: none"> 3. If any shipper fails to make payment due hereunder within 30 days of issuance of each accounting, KTC shall have the right to sell at public auction either directly or through an agent at any time after such 30 day period any Petroleum of the shipper in its custody. Such auction may be held on any day, except a legal holiday, and not less than 48 hours after publication of notice of such sale in a daily newspaper of general circulation published in the town, city or general area where the sale is to be held, stating the time and place of sale and the quality and location of Petroleum to be sold. At said sale KTC shall have the right to bid, and, if it is the highest bidder, to become the purchaser. From the proceeds of such sale, KTC will deduct all payments due and expenses incident to said sale, and the balance of the proceeds of the sale remaining, if any, shall be held for whomsoever may be lawfully entitled thereto. 4. KTC and its designee are authorized to receive through measurement, connecting carriers or otherwise all information and data necessary to make the computations under the KTC Quality Bank Methodology. All shippers will furnish KTC or its designated Quality Bank Administrator, and consents to KTC or its designated Quality Bank Administrator acquiring from other carriers or other persons, any additional information and data necessary to make the computations under this Methodology. Shippers also consent to KTC or its agents disclosing to the designated Quality Bank Administrator all information and data necessary to make the computations under this Methodology. 5. Adjustment payments and administrative costs in this Methodology are not a part of KTC's transportation tariff rates, and such shall not be an offset or other claim by any shipper against sums due KTC for transportation or other charges, costs, or fees due or collected under KTC's rate tariff.

[N] D. Definitions

"Barrel" – as used herein means forty-two (42) U.S. gallons at sixty degrees (60°) Fahrenheit and atmospheric pressure.

"LSR" – as used herein means Light Straight Run.

"Month or Monthly" – as used herein means a calendar month commencing at 0000 hours on the first day thereof and running until 2400 hours on the last day thereof according to Valdez, Alaska, local time.

"OPIS" – as used herein means Oil Price Information Service.

"Petroleum" – as used herein means unrefined liquid hydrocarbons including gas liquids.

"Pump Station No. 1" – as used herein means the pump station facilities near Prudhoe Bay, Alaska where Petroleum is received into TAPS.

"Kuparuk Quality Bank Administrator" – as used herein is defined in Section I.A.

"Quality Bank Value" – as used herein means the value of each Petroleum stream as calculated in Section II.

ITEM NO.	SUBJECT	KTC QUALITY BANK METHODOLOGY
Item 1	Quality Bank (continued)	<p><u>“Shipper” – as used herein means a party who tenders Petroleum to KTC for transportation and thereafter actually delivers Petroleum to KTC for transportation.</u></p> <p><u>“TAPS” – as used herein means the Trans Alaska Pipeline System.</u></p> <p><u>“TBP” – as used herein means True Boiling Point.</u></p> <p><u>“Volume” – as used herein means a quantity expressed in Barrels.</u></p>

II. QUALITY BANK PROCEDURES

A. Overview

A Distillation-based methodology consistent with the TAPS Pump Station No. 1 Quality Bank Methodology shall be implemented for KTC. This methodology for calculation of the KTC Quality Bank debits and credits is based on valuations of petroleum components. This methodology shall apply to the specific petroleum (as defined in the tariffs) streams identified in Section II.B. and also shall be applied to any streams tendered to KTC through a new connection. The Quality Bank value of each petroleum stream shall be the volume-weighted sum of the Quality Bank values of its components. The characteristics and volumes of components for each separate petroleum stream are based on assay information obtained using a defined set of testing procedures as set forth in Section II.C. Quality Bank credits and debits are determined by comparing the Quality Bank value of each petroleum stream to the appropriate KTC reference stream Quality Bank value.

B. KTC Quality Bank Streams

1. The KTC Quality Bank assesses the following streams: (1) the Kuparuk River Unit (“KRU”) stream which results from the combined output of Central Processing Facility-1 (“CPF-1”) and Central Processing Facility-2 (“CPF-2”) within the KRU; (2) the Milne Point stream, which is blended with the KRU stream at the interconnection of KTC and the Milne Point Pipeline; and (3) any new streams introduced into KTC.
2. The KTC Quality Bank reference stream is the blended common stream downstream of the KTC-Milne Point Pipeline interconnection point.

C. KTC Quality Bank Methodology

1. Assay Methodology – Sampling Procedure
 - a. Subject to Section II.C.1.b. below, the Kuparuk Quality Bank Administrator will sample the Milne Point stream, as well as any new streams, using continuous monthly composite samplers on a flow rate dependent basis, and assays of these continuously collected samples shall be performed monthly by the Kuparuk Quality Bank Administrator. The assay data regarding the KTC reference stream as received at TAPS Pump Station No. 1 used by the TAPS Quality Bank Administrator in the calculation of the TAPS Quality Bank adjustments shall be used by the Kuparuk Quality Bank Administrator for the KTC reference stream. Composition of the KRU stream will be determined by the Kuparuk Quality Bank Administrator based on the difference between the sample stream assay results and the KTC reference stream assay results. An illustration of this calculation appears in Attachment 1A hereto. Once the composition of the KRU stream is thus calculated, the Quality Bank Value of the KRU stream will be determined as if the assay values had been measured directly.

ITEM NO.	SUBJECT	KTC QUALITY BANK METHODOLOGY
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Item 1	Quality Bank (continued)	
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		<p>b. Upon the written request of any KTC shipper, KTC will promptly undertake to acquire and install the necessary equipment and facilities to permit continuous monthly composite sampling on a flow rate dependent basis of the KRU stream. KTC will exercise its best judgment in determining what facilities are necessary to sample the KRU stream on the most cost-effective and reliable basis. KTC shall notify the <u>APUC</u> <u>RCA</u> and the FERC of the date on which all facilities and technical arrangements are in place to permit such sampling, which shall be the "KRU Sample Implementation Date." From and after the KRU Sample Implementation Date, the Kuparuk Quality Bank Administrator will sample the KRU stream using continuous monthly composite sample[s] on a flow rate dependent basis, and assay[s] of these continuously collected sample[s] will be performed monthly by the Kuparuk Quality Bank Administrator. This assay data will be used thereafter to determine the Quality Bank value of the KRU stream, and the KTC reference stream value will thereafter be calculated using the volume weighted average of the KRU, Milne Point, and any new streams, rather than the data collected by the TAPS Quality Bank Administrator at TAPS Pump Station No. 1.</p>
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2. Assay Analysis Procedure

- a. Except as specified in paragraph b. below, the assays will include a true boiling point ("TBP") distillation and, as applicable, gas chromatograph analysis of each Quality Bank stream. Specifically, the TBP procedure will employ ASTM 2892 up to 650 F and ASTM 5236 for the 650 to 1050+ F range for the petroleum samples. The light ends (175 F minus) from the petroleum streams will be subject to gas chromatograph analysis to determine the volumes of the propane ("C3"), Iso-butane ("iC4"), and normal butane ("nC4"), with the light straight run ("LSR") (sometimes referred to as natural gasoline) volume determined by difference between the total of the three components and the measured 175 F minus volume.
- b. The specific gravities of C3, iC4, and nC4 will be derived from GPA Standard 2145.

3. Assay Data

- a. The following volume and quality data will be determined for each stream.

Component	TBP Boiling Range	% Vol.	Specific Gravity
Propane (C3)		X	X
I-Butane (iC4)		X	X
N-Butane (nC4)		X	X
LSR	C5-175	X	X
Naphtha	175-350	X	X
Light Distillate	350-450	X	X
Heavy Distillate	450-650	X	X
Gas Oil	650-1050	X	X
Resid	1050+	X	X
Full Petroleum Stream			X

ITEM NO.	SUBJECT	KTC QUALITY BANK METHODOLOGY
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Item 1 Quality Bank
(continued)

b. The total volume must add to 100% and the total component weighted mass must be checked against the mass of the full petroleum stream. These weight balances must be the same within calculation and assay precision. If the assay fails this threshold test of validity, a second assay shall be performed on the sample. An example of assay data required is presented in Attachment 1. These data are the basis for all calculations in this Quality Bank methodology. The KTC Quality Bank will operate on a calendar month basis, with the continuous samples retrieved for analysis on the last day of each month.

c. The Kuparuk Quality Bank Administrator shall investigate the validity of a sample that it takes or determines by difference (as opposed to the one taken by TAPS) if each of the following two tests is met.

(i) If one or more of an individual stream's reported component percentages for a month varies by more than the ranges indicated in the following table as compared to the prior month's assay.

<u>Component</u>	Variation in % of Stream Relative to Prior Month
Propane	+0.1
I-Butane	+0.1
N-Butane	+0.25
LSR	+0.5
Naphtha	+1.0
Light Distillate	+1.0
Heavy Distillate	+1.0
Gas Oil	+1.5
Resid	+1.0

As an example, if a petroleum stream's heavy distillate volume percent is 23% for the prior month, a heavy distillate volume percent less than 22% or greater than 24% (exceeding the +1% range) shall cause the Kuparuk Quality Bank Administrator to check the second test.

(ii) The second test is whether the volume change in the specific component has resulted in a significant change in the stream's relative value when compared to the prior month's relative value using the prior month's prices. If the change results in a price movement of more than +15 cents per barrel, then the sample's validity must be investigated.

(iii) The Kuparuk Quality Bank Administrator shall ascertain from the tendering shipper(s) possible causes for the change in the stream's assay. The Kuparuk Quality Bank Administrator may have a second assay performed for any sample it has taken. The Kuparuk Quality Bank Administrator may decide that the first assay is valid, that the second assay is valid, or that the sample is invalid.

(iv) Should the Kuparuk Quality Bank Administrator determine that a sample is invalid, the last assay results accepted and used in the KTC Quality Bank for the stream will be used instead of the invalid sample in the Quality Bank calculation.

ITEM NO.	SUBJECT	KTC QUALITY BANK METHODOLOGY												
Item 1	Quality Bank (continued)	<p data-bbox="656 262 1442 537">d. If, prior to the KRU Sample Implementation Date, the TAPS Quality Bank Administrator makes any changes to the assay results initially reported for the KTC stream as received at TAPS Pump Station No.1, or is ordered to make any such changes as the result of any order of the APUC <u>RCA</u> or FERC or any court of competent jurisdiction, the Kuparuk Quality Administrator will reflect any such changes in the KTC Quality Bank debits and credits, including making any retroactive readjustments necessary to maintain consistency with the TAPS Pump Station No. 1 Quality Bank for the period from May 1, 1994 forward.</p> <p data-bbox="594 562 1024 590">D. Component Unit Value Procedure</p> <p data-bbox="521 615 1442 940">[W] The Kuparuk Quality Bank Administrator will obtain from the TAPS Quality Bank Administrator all of the adjusted component unit values necessary to determine the Kuparuk Quality Bank stream values in accordance with the distillation methodology used at TAPS Pump Station No. 1. The KTC Quality Bank will employ the same product prices, the same adjustments, and the same weightings as the TAPS Pump Station No. 1 Quality Bank, as set forth in FERC No. 44.1.0 <u>FERC No. 44.2.0</u> (BP), FERC No. 21.2.0 (ConocoPhillips), FERC No. 404.1.0 (ExxonMobil), FERC No. 19.1.0 (Koch), and FERC No. 317.1.0 (Unocal), as well as supplements thereto and successive issues thereof, effective on the later of May 1, 1994 or the effective date on TAPS, for as long as a distillation methodology is maintained at TAPS Pump Station No. 1.</p> <p data-bbox="594 972 1256 999">E. Quality Bank Stream Component Calculation Procedure</p> <p data-bbox="521 1024 1442 1108">[W] After all volume, quality, and pricing data are collected, the Kuparuk Quality Bank Administrator will establish quality differentials for each stream identified in Section III.B <u>Section II.B</u>.</p> <p data-bbox="594 1140 1057 1167">F. Quality Bank Calculation Procedures</p> <p data-bbox="656 1192 1442 1381">The assay data and calculation procedures required by this Methodology are summarized in the Attachments. The Attachments are for reference purposes only and are not intended to predict the impact of this procedure on any specific petroleum stream or any specific company. In the event of a conflict between the provisions of this Methodology as set forth above and the Attachments, the provisions of this Methodology shall control.</p> <table data-bbox="656 1413 1442 1581"> <tr> <td>ATTACHMENT 1:</td> <td>Yield Data for Example Streams</td> </tr> <tr> <td>ATTACHMENT 1A:</td> <td>Calculation of Unsampled Stream</td> </tr> <tr> <td>ATTACHMENT 2:</td> <td>Component Unit Value Pricing Basis</td> </tr> <tr> <td>ATTACHMENT 3:</td> <td>Example Component Unit Values in \$/Bbl</td> </tr> <tr> <td>ATTACHMENT 4:</td> <td>Example Stream Values in \$/Bbl</td> </tr> <tr> <td>ATTACHMENT 5:</td> <td>Quality Bank Calculation Example</td> </tr> </table> <p data-bbox="594 1602 1057 1629">G. Unanticipated Implementation Issues</p> <p data-bbox="542 1654 1442 1902">[W] This Methodology is intended to contain a comprehensive treatment of the subject matter. However, unanticipated issues concerning implementation of this Methodology may arise. If so, the Kuparuk Quality Bank Administrator is authorized to resolve such issues in accordance with the goal of maintaining consistency with the distillation methodology applied by the TAPS Carriers at TAPS Pump Station No. 1. The Kuparuk Quality Bank Administrator's resolution of any such issue shall be final unless and until changed prospectively by orders of the FERC and APUC <u>RCA</u>.</p>	ATTACHMENT 1:	Yield Data for Example Streams	ATTACHMENT 1A:	Calculation of Unsampled Stream	ATTACHMENT 2:	Component Unit Value Pricing Basis	ATTACHMENT 3:	Example Component Unit Values in \$/Bbl	ATTACHMENT 4:	Example Stream Values in \$/Bbl	ATTACHMENT 5:	Quality Bank Calculation Example
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ATTACHMENT 5:	Quality Bank Calculation Example													

ATTACHMENT 1

YIELD DATA FOR EXAMPLE STREAMS⁽¹⁾

COMPONENT	DEFINITION BOILING RANGE (°F)	STREAM A	STREAM B ^{(2) (3)}
PROPANE (C₃)	-----	0.00	0.22
ISOBUTANE (iC₄)	-----	0.02	0.13
NORMAL BUTANE (nC₄)	-----	0.10	0.67
LSR	C5-175	3.50	4.93
NAPHTHA	175-350	11.00	14.57
LIGHT DISTILLATE	350-450	9.00	9.00
HEAVY DISTILLATE	450-650	22.00	20.57
GAS OIL	650-1050	30.38	31.62
RESID	1050+	24.00	18.29
TOTAL		100.00	100.00
EXAMPLE VOLUME, Thousand Barrels per Month		900	2,100

- (1) In this example, hypothetical streams are used to demonstrate the KTC Quality Bank calculations.
- (2) If Stream B is not sampled directly, its yield data are calculated by difference, as demonstrated in Attachment 1A
- (3) If Stream B is sampled via two samplers, installed at Kugaruk, its yield data are calculated as a volume weighted average of the two sample results.

ATTACHMENT 1A

CALCULATION OF UNSAMPLED STREAM

COMPONENT NAME	REFERENCE STREAM ⁽¹⁾	STREAM A	STREAM B ⁽³⁾
Propane (C3)	0.15	0.00	0.22
Isobutane (iC4)	0.10	0.02	0.13
Normal Butane (nC4)	0.50	0.10	0.67
LSR (C5 - 175°F)	4.50	3.50	4.93
Naphtha (175°F - 350°F)	13.50	11.00	14.57
Light Distillate (350°F - 450°F)	9.00	9.00	9.00
Heavy Distillate (450°F - 650°F)	21.00	22.00	20.57
Gas Oil (650°F - 1050°F)	31.25	30.38	31.62
Resid (1050°F and over)	20.00	24.00	18.29
TOTAL	100.00	100.00	100.00
EXAMPLE VOLUME, MBPM	3,000.00 ⁽²⁾	900.00	2,100.00

- (1) KTC PS#1 Reference Stream yield data to be obtained from the TAPS Quality Bank Administrator.
- (2) MBPM REFERENCE = MBPM A + MBPM B.
- (3) Planned calculation with a single KTC sampler at Milne Point: Stream B calculated by difference.

ATTACHMENT 2

COMPONENT UNIT VALUE PRICING BASIS

[C]

PROPANE (C₃)

United States Gulf Coast	United States West Coast
Platt's Mt. Belvieu, TX spot quote for Propane.	OPIS's (weekly) Los Angeles delivered spot quote for Propane.

ISOBUTANE (iC₄)

United States Gulf Coast	United States West Coast
Platt's Mt. Belvieu, TX spot quote for Isobutane.	OPIS's (weekly) Los Angeles delivered spot quote for Isobutane.

NORMAL BUTANE (nC₄)

United States Gulf Coast	United States West Coast
Platt's Mt. Belvieu, TX spot quote for Normal Butane.	OPIS's (weekly) Los Angeles delivered spot quote for Normal Butane.

LIGHT STRAIGHT RUN (C₅ - 175°F)

United States Gulf Coast	United States West Coast
Platt's Mt. Belvieu, TX spot quote for Natural Non-Warren.	OPIS's (weekly) Bakersfield delivered spot quote for Natural Gasoline.

NAPHTHA (175°F - 350°F)

United States Gulf Coast	United States West Coast
Platt's U.S. Gulf Coast spot quote for Waterborne Naphtha.	Platt's U.S. Gulf Coast spot quote for Waterborne Naphtha.

LIGHT DISTILLATE (350°F - 450°F)

United States Gulf Coast	United States West Coast
Platt's U.S. Gulf Coast spot quote for Waterborne Jet Kerosene 54 less 0.5082 cents per gallon.	Platt's U.S. West Coast spot quote for Waterborne Jet Fuel less 0.5082 cents per gallon.

HEAVY DISTILLATE (450°F - 650°F)

United States Gulf Coast	United States West Coast
Platt's U.S. Gulf Coast spot quote for Waterborne No. 2 less 2.0327 cents per gallon.	Platt's U.S. West Coast spot quote for Waterborne Gasoil less 1.0163 cents per gallon.

GAS OIL (650°F - 1050°F)

United States Gulf Coast	United States West Coast
OPIS's U.S. Gulf Coast spot quote for barge High Sulfur VGO.	OPIS's U.S. Gulf Coast spot quote for barge High Sulfur VGO.

RESID (1050°F and Over)

United States Gulf Coast	United States West Coast
Platt's U.S. Gulf Coast spot quote for Waterborne No. 6 Fuel Oil 3.0% Sulfur less 4.5735 cents per gallon.	Platt's U.S. West Coast spot quote for Pipeline 380 cst at Los Angeles converted to \$/Bbl using 6.37 Bbl/MT less 4.5735 cents per gallon.

[N] See Attachment 2, Component Unit Value Pricing Basis, of the TAPS Carriers' Quality Bank Methodology Tariffs, as referenced in Section II.D of this Tariff.

ATTACHMENT 3
EXAMPLE COMPONENT UNIT VALUES IN \$/Bbl

<u>COMPONENT NAME</u>	<u>WEST COAST</u> <u>(\$/Bbl)</u>	<u>GULF COAST</u> <u>(\$/Bbl)</u>	<u>WEIGHTED AVERAGE</u> <u>(\$/Bbl)</u>
Propane (C ₃)	19.7925	15.0442	19.68
Isobutane (iC ₄)	24.1238	18.4333	23.99
Normal Butane (nC ₄)	18.1125	18.4800	18.12
LSR (C ₅ - 175°F)	18.5850	19.5854	18.61
Naphtha (175°F - 350°F)	21.3383	21.3383	21.34
Light Distillate (350°F - 450°F)	25.9817	22.9396	25.91
Heavy Distillate (450°F - 650°F)	23.0000	22.1112	22.98
Gas Oil (650°F - 1050°F)	20.8133	21.8133	20.84
Resid (1050°F and over)	14.6349	15.0000	14.64
WEIGHTING FACTOR	97.71	2.29	

ATTACHMENT 4
EXAMPLE STREAM VALUES IN \$/Bbl

COMPONENT NAME	STREAM A	STREAM B
Propane (C3)	0.000000	0.043296
Isobutane (iC4)	0.004798	0.031187
Normal Butane (nC4)	0.018120	0.121404
LSR (C5 - 175°F)	0.651350	0.917473
Naphtha (175°F - 350°F)	2.347400	3.109238
Light Distillate (350°F - 450°F)	2.331900	2.331900
Heavy Distillate (450°F - 650°F)	5.055600	4.726986
Gas Oil (650°F - 1050°F)	6.331192	6.589608
Resid (1050°F and over)	3.513600	2.677656
TOTAL	20.253960	20.548748

**ATTACHMENT 5
QUALITY BANK CALCULATION EXAMPLE**

QUALITY BANK REFERENCE STREAM VALUE CALCULATION

	<u>VOLUME (MBPM)</u>	<u>VALUE (\$/Bbl)</u>
STREAM A	900	20.253960
STREAM B	2,100	20.548748
<hr/>		
TOTAL: (REFERENCE STREAM)	3,000	20.460312 ⁽¹⁾

⁽¹⁾ Reference Stream Value from TAPS PS #1 for Kuparuk Pipeline Stream

QUALITY BANK PAYMENT/RECEIPT CALCULATIONS

	<u>DIFFERENTIAL</u> ⁽²⁾	<u>(MBPM)</u>	<u>PAYMENT OR RECEIPT (M\$/Month)</u> ⁽³⁾
STREAM A	(0.206352)	900	\$ (185.72)
STREAM B	0.088436	2,100	\$ 185.72

(2) Stream value minus reference value.
(3) Differential times volume.